

## **MANAGEMENT'S DISCUSSION AND ANALYSIS**

This discussion and analysis of financial condition and results of operations of Ballard Power Systems Inc. ("Ballard", "the Company", "we", "us" or "our") is prepared as at February 24, 2016 and should be read in conjunction with our audited consolidated financial statements and accompanying notes for the year ended December 31, 2015. The results reported herein are presented in U.S. dollars unless otherwise stated and have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. Additional information relating to the Company, including our Annual Information Form, is filed with Canadian ([www.sedar.com](http://www.sedar.com)) and U.S. securities regulatory authorities ([www.sec.gov](http://www.sec.gov)) and is also available on our website at [www.ballard.com](http://www.ballard.com).

## **BUSINESS OVERVIEW**

At Ballard, we are building a clean energy growth company. We are recognized as a world leader in proton exchange membrane ("PEM") fuel cell development and commercialization. Our principal business is the design, development, manufacture, sale and service of fuel cell products for a variety of applications, focusing on our power product markets of Heavy-Duty Motive (consisting of bus and tram applications), Portable Power, Material Handling and Telecom Backup Power, as well as the delivery of Technology Solutions including engineering services and the license and sale of our extensive intellectual property portfolio and fundamental knowledge for a variety of fuel cell applications.

A fuel cell is an environmentally clean electrochemical device that combines hydrogen fuel with oxygen (from the air) to produce electricity. The hydrogen fuel can be obtained from natural gas, kerosene, methanol or other hydrocarbon fuels, or from water through electrolysis. Ballard fuel cell products feature high fuel efficiency, low operating temperature, low noise and vibration, compact size, quick response to changes in electrical demand, modular design and environmental cleanliness. Embedded in each Ballard PEM fuel cell product lies a stack of unit cells designed with our proprietary technology which draws on intellectual property from our patent portfolio together with our extensive experience and know-how in key areas of fuel cell stack design, operation, system integration, and fuel processing.

We provide our customers with the positive economic and environmental benefits unique to fuel cell power. We plan to build value for our shareholders by developing, manufacturing, selling and servicing industry-leading fuel cell products to meet the needs of our customers in select target markets.

Our business strategy is a two-pronged approach to build shareholder value through the sale and service of power products and the delivery of technology solutions. In power product sales, our focus is on meeting the power needs of our customers by delivering high value, high reliability, high quality and innovative clean energy power products that reduce customer costs and risks. Through technology solutions, our focus is on enabling our customers to solve their technical and business challenges and accelerate their fuel cell programs by delivering customized, high value, bundled technology solutions, including specialized engineering services, access to our deep intellectual property portfolio and know-how through licensing or sale, and providing technology component supply.

We are based in Canada, with head office, research and development, testing, manufacturing and service facilities in Burnaby, British Columbia. In the United States, we have research and development facilities in Bend, Oregon, and have a sales, manufacturing, and research and development facility in Southborough, Massachusetts. We use a contract manufacturing facility in Tijuana, Mexico. We also have a sales, service and research and development facility in Hobro, Denmark.

## **RECENT DEVELOPMENTS**

As part of the Company's rationalization and renewal initiatives, Ballard announces that three executives – Paul Cass, COO, Dr. Christopher Guzy, CTO, and Steve Karaffa, CCO – will be departing from the Company by March 31, 2016. Responsibilities of the departing executives have now been assumed by internal personnel: David Whyte has been promoted from Director, Operations to VP, Operations, flattening and eliminating duplication in the Operations reporting structure; Dr. Kevin Colbow is now VP, Technology and Product Development, also retaining his current responsibility for Technology Solutions; and Karim Kassam is now VP, Commercial, also retaining his current responsibility for Business and Corporate Development. These senior management changes eliminate three C-level positions through rationalization and consolidation, while providing an opportunity for new approaches in these roles.

On December 31, 2008, we completed a restructuring agreement ("Arrangement") with Superior Plus Income Fund ("Superior Plus"), whereby Ballard caused its entire business and operations, including all assets and liabilities, to be transferred to a new corporate entity, such that the new corporate entity held all of the same assets, liabilities, directors, management and employees as Ballard formerly had under its old corporate entity, except for its tax attributes. The Arrangement included an indemnification agreement (the "Indemnity Agreement") which set out each party's continuing obligations to the other including a provision for adjustments to be paid by us, or to us, depending on the final determination of the amount of our Canadian non-capital losses, scientific research and development expenditures and investment tax credits generated to December 31, 2008, to the extent that such amounts are more or less than the amounts estimated at the time the Arrangement was executed. In 2015, we reached agreement and signed mutual releases with Superior Plus as to the full and final amount payable to us under the Indemnity Agreement and received additional cash proceeds of approximately \$3.3 million (Canadian \$4.6 million) in February 2016. The cash proceeds receivable have been recorded as a credit to shareholders' equity as of December 31, 2015 consistent with the accounting for the original transaction in 2008.

On January 21, 2016, we announced the signing of an equipment supply agreement, valued at \$12 million, with an existing partner in China, Guangdong Synergy Hydrogen Power Technology Co., Ltd. ("Synergy") to provide FCvelocity™-9SSL fuel cell stacks for range extension applications in commercial vehicles in China. Ballard expects to deliver the stacks in 2016 and 2017. Synergy will collaborate with Dongfeng Xiangyangtouring Car Co., Ltd. ("DFAC"), which is part of Dongfeng Motor Corporation, a Chinese state-owned automobile manufacturer headquartered in Wuhan. Dongfeng Motor Corporation is the largest manufacturer of commercial vehicles in China. Amounts earned from this agreement (nil in fiscal 2015) will be recorded as Heavy-Duty Motive revenues.

On December 29, 2015, we announced that our subsidiary, Protonex Technology Corporation (“Protonex”), had received a follow-on purchase order from the U.S. Army for more than 400 Squad Power Manager (SPM-622) Special Operations Kits, with a value of approximately \$2.8 million. The purchase order was issued by the Program Executive Office – Soldier which has responsibility for acquiring man-worn and carried equipment utilized by U.S. Army Soldiers. The SPM-622 product has been developed and is produced by the Protonex engineering and operations team at the company’s facility in Southborough, Massachusetts for Military use. To date more than 4,000 Power Managers have been trialed and deployed by the United States and allied Militaries. Amounts earned from this agreement (\$1.7 million in the fourth quarter of 2015) are recorded as Portable Power revenues.

On November 10, 2015, we announced that we had closed a \$5 million strategic equity investment in Ballard by Nisshinbo Holdings Inc. (“Nisshinbo”) in Japan, as previously announced on October 27, 2015. The investment was made through a private placement subscription of approximately 3.3 million Ballard common shares issued from treasury at \$1.5049 per share (based on a 10-day volume weighted average share price calculation). We intend to use the proceeds from the financing for general corporate purposes, including the potential funding of future acquisitions or investments in complementary businesses, products or technologies. The common shares issued are subject to a four-month hold period expiring on March 10, 2016 in accordance with applicable securities laws. Nisshinbo is an “Environmental and Energy Company” providing low-carbon, optimized products across a range of business lines, including chemicals, precision instruments, electronics, automotive brakes, textiles and paper. Nisshinbo has been a long-time leading global supplier of carbon plates, used in the construction of membrane electrode assemblies (“MEA’s”), to the fuel cell industry. On January 20, 2016, we announced that we had received a follow-on purchase order from Nisshinbo for a further phase of a Technology Solutions program related to the development of a breakthrough catalyst technology intended to reduce the cost of certain proton exchange membrane (PEM) fuel cells. The program, now entering its seventh phase, has been underway for approximately 2.5 years.

On November 1, 2015, we announced that the signing of a definitive agreement with Tangshan Railway Vehicle Company, Limited (“TRC”) for the development of a new fuel cell module that will be designed to meet the requirements of tram or Modern Ground Rail Transit Equipment applications. This agreement, with a value of approximately \$3 million, contemplates that TRC trams will use next-generation Ballard fuel cell power modules designed specifically for the Modern Ground Rail Transit Equipment application, with a target of powering the initial prototype by 2016. The purpose-designed product is expected to deliver at least 200 kilowatts of power. Amounts earned from this agreement (\$0.5 million in the fourth quarter of 2015) are recorded as Technology Solutions revenue.

On October 1, 2015, we completed the acquisition of Protonex, a leading designer and manufacturer of advanced power management products and portable fuel cell solutions. The signing of a definitive agreement to acquire Protonex was previously announced on June 29, 2015. As consideration for the transaction, we assumed and paid certain of Protonex’ debt obligations and transaction costs on closing of approximately \$3.8 million, and issued approximately 11.4 million of Ballard shares at fair value of \$1.20 per share, or

approximately \$13.7 million, for total purchase consideration of \$17.5 million.

On September 28, 2015, we announced the signing of a joint development agreement and a supply agreement to develop and commercialize a fuel cell engine specifically designed for integration into low floor trams manufactured by CRRC Qingdao Sifang Company, Ltd. (CRRC Sifang), a Chinese rolling stock manufacturer. The agreements include delivery expected in 2016 of ten customized FCvelocity® modules and have an initial expected value of approximately \$6 million. Ballard plans to develop a new prototype configuration of its FCvelocity® fuel cell module to deliver 200 kilowatts of net power for use in powering trams in urban deployments. An initial deployment of eight fuel cell-powered trams is planned by CRRC Sifang and the City of Foshan on the Gaoming Line starting in 2017. Amounts earned from this agreement (nil in fiscal 2015) will be recorded as either Heavy-Duty Motive or Technology Solutions revenues depending on the nature of work performed.

On September 25, 2015, we announced the signing of a long-term license and supply agreement with Synergy to provide fuel cell power products and technology solutions in support of the planned deployment of approximately 300 fuel cell-powered buses in the cities of Foshan and Yunfu, China. The agreement has an estimated initial value of approximately \$17 million expected through 2016, with the opportunity for significant recurring royalties starting in 2017. The agreement includes supply and sale of fully-assembled fuel cell power modules, ready-to-assemble module kits, a technology license for localization of assembly, supply of proprietary fuel cell stacks and long-term recurring royalties leveraged to unit volumes of locally assembled modules. Amounts earned from this agreement (\$2.9 million in the fourth quarter of 2015) are recorded as either Heavy-Duty Motive or Technology Solutions revenues depending on the nature of work performed.

On September 24, 2015, we announced that we are developing, and plan to launch, two new configurations of our FCvelocity®-HD7 fuel cell module in 2016. The two new module configurations will expand Ballard's product portfolio and provide customers with increased flexibility to address a range of emerging power needs in heavy-duty transit applications, such as buses. Ballard's latest-generation FCvelocity®-HD7 was launched in a 90kW net power configuration in June 2015 at the UITP World Congress and Exhibition in Milan, Italy. This initial 90kW configuration will typically be used to power large urban transit buses. The two new product configurations are expected to deliver net power of 30kW and 60kW, respectively, and are expected to be launched for commercial deployments in 2016 to power smaller buses and provide range extension solutions. During fiscal 2015, \$1.4 million of FCvelocity®-HD7 development costs were capitalized as fuel cell technology intangible assets.

On July 22, 2015, we announced the signing of an agreement to provide a 1 megawatt (1MW) ClearGen™ fuel cell distributed generation system for Hydrogène de France ("HDF") which will be deployed at an AkzoNobel sodium chlorate chemical plant in Bordeaux Métropole, France. In addition, Ballard will provide engineering services support for the program. The program will be partially funded by the EU Fuel Cells and Hydrogen Joint Undertaking (FCH-JU), with the remaining funding expected to be provided by HDF and its partners. The program agreement is structured in two phases. Under the first phase, targeted for completion in mid-2016, Ballard received an initial payment of €1.7 million to undertake engineering services and core component development work. Under the second

phase, targeted for completion in 2017, Ballard is expected to receive an additional €1.7 million for onsite assembly and commissioning, subject to HDF securing necessary funding to complete the project. Amounts earned from this agreement (\$0.7 million in the fourth quarter of 2015 and \$0.8 million in fiscal 2015) are recorded as Technology Solutions revenue.

On July 7, 2015, we closed an underwritten offering (“July 2015 Offering”) of 9.3 million common shares for gross proceeds of approximately \$15.0 million, which included the exercise in full by the underwriters of their option to purchase up to an additional 15% of common shares to cover over-allotments. Net proceeds to Ballard were approximately \$13.4 million, after deducting underwriting discounts, commissions and other offering expenses. During fiscal 2015, we used the net proceeds of \$13.4 million in pursuit of our ongoing general business objectives including the funding of our 2015 working capital requirements, and for the continuing development and marketing of our proprietary technologies and core products.

On June 8, 2015, we announced the signing of definitive license and supply agreements with Nantong Zehe New Energy Technology Co., Ltd. (“Nantong Zehe”) and Synergy to provide fuel cell power products and technology solutions to support the planned deployment of an initial 33 fuel cell-powered buses in two Chinese cities. The agreements have an estimated value of approximately \$10 million, the majority of which was recognized in 2015. The agreements include an initial order from Nantong Zehe (announced in April 2015) for the supply of FCvelocity®-HD7 bus power modules to power eight buses in addition to new orders for the supply of additional power products and technology solutions including a non-exclusive license for local assembly of FCvelocity®-HD7 bus power modules for use in clean energy buses in China. In addition, Ballard will be the exclusive supplier of its proprietary fuel cell stacks for use in power modules assembled in China under these agreements. Amounts earned from these agreements (\$0.9 million in the fourth quarter of 2015 and \$8.6 million in fiscal 2015) are recorded as either Heavy-Duty Motive or Technology Solutions revenues depending on the nature of work performed.

On February 11, 2015, we entered into a transaction with Volkswagen Group (“Volkswagen”) to transfer certain automotive-related fuel cell intellectual property for an aggregate amount of approximately \$80 million including the benefits of a two-year extension of our existing technology development and engineering services agreement with Volkswagen previously announced on March 6, 2013 (see below for additional details). Under the transfer agreement (“Volkswagen IP Agreement”), Ballard will transfer to Volkswagen the ownership of the automotive-related portion of the fuel cell intellectual property assets previously acquired by us from United Technologies Corporation (“UTC”) on April 24, 2014 (the “UTC Portfolio”) through two separate transactions for total gross proceeds of \$50 million:

- (i) On the closing of the initial transaction on February 23, 2015, Ballard transferred ownership of the automotive-related patents and patent applications of the UTC Portfolio in exchange for gross proceeds of \$40 million. This receipt triggered a 25%, or \$10.0 million, license fee payment to UTC. Although ownership of the patents and patent applications was transferred to Volkswagen, Ballard received a royalty-free back-license to all the transferred patents and patent applications for use in all non-

automotive applications, in bus applications and in certain limited pre-commercial automotive applications.

- (ii) On the closing of the second transaction on December 2, 2015, Ballard transferred a copy of the automotive-related know-how of the UTC Portfolio in exchange for gross proceeds receivable of \$10 million. This receipt (expected to be collected in the first quarter of 2016 net of applicable withholding taxes that are expected to be recovered in fiscal 2016) will trigger a 9%, or \$0.9 million, payment to UTC in fiscal 2016. On the closing of the sale of a copy of the know-how, Ballard retained full ownership of the know-how including the right to sell additional copies of the know-how to third parties as well as retaining the right to use the know-how in all our applications.

On the closing of the sale of the automotive-related patents and patent applications of the UTC Portfolio in the first quarter of 2015, we recognized a gain on sale of intellectual property of \$14.2 million on net proceeds received of \$29.5 million. On the closing of the sale of a copy of the automotive-related know-how in the fourth quarter of 2015, we recognized an additional gain on sale of intellectual property of \$5.4 million on net proceeds receivable of approximately \$9.1 million.

On January 2, 2015, we announced that we had given termination notice on two licensing agreements in the China market as a result of material breaches of these agreements by Azure Hydrogen Energy Science and Technology Corporation ("Azure"). The first license agreement (the "Azure Bus Licensing Agreement"), originally announced on September 26, 2013, related to the assembly of Ballard's FCvelocity®-HD7 Bus power modules for the Chinese market. The second license agreement (the "Azure Telecom Backup Power Licensing Agreement"), announced on June 19, 2014, related to the assembly of Ballard's ElectraGen® Telecom Backup Power systems in China for the Chinese market. As a result of Azure's breaches under both contracts, and notwithstanding Ballard's good faith efforts to reach a settlement, we provided notice of termination of both agreements and recorded an impairment loss on trade receivables of \$4.4 million in the fourth quarter of 2014 as we fully impaired all outstanding amounts owed by Azure. In June 2015, we agreed to a mutual release with Azure ("Azure Mutual Release Agreement") whereby each party mutually released and forever discharged each other from any and all liability arising from the above noted licensing agreements. Pursuant to the Azure Mutual Release Agreement, Azure returned for cancellation its 10% ownership position in Dantherm Power to Dantherm Power for \$nil proceeds, upon which the shares were cancelled by Dantherm Power. Following such cancellation, Ballard's controlling ownership position in Dantherm Power was increased from 52% to 57%. Amounts earned from the Azure Bus Licensing Agreement (nil in fiscal 2015, nil in the fourth quarter of 2014, and \$4.9 million in fiscal 2014) and the Azure Telecom Backup Power Licensing Agreement (nil in fiscal 2015, nil in the fourth quarter of 2014, and \$3.8 million in fiscal 2014) prior to the contract termination and subsequent mutual release are recorded as Technology Solutions revenues.

During 2015, a total of 0.1 million share purchase warrants were exercised for Ballard common shares generating net proceeds of \$0.2 million. During 2014, a total of 7.9 million share purchase warrants were exercised for Ballard common shares generating net proceeds of \$12.3 million. The share purchase warrants were issued as part of two

underwritten offerings which closed in March 2013 and October 2013. As of December 31, 2015, 0.1 million share purchase warrants (exercisable at \$1.50 per share to March 2018) from the March 2013 underwritten offering and 1.7 million share purchase warrants (exercisable at \$2.00 per share to October 2018) from the October 2013 underwritten offering remain outstanding.

During 2015, a total of 0.3 million employee share purchase options were exercised for Ballard common shares generating proceeds of \$0.4 million. During 2014, a total of 3.6 million employee share purchase options were exercised for Ballard common shares generating proceeds of \$6.8 million. As of December 31, 2015, 5.5 million share purchase options at a variety of prices and vesting dates remain outstanding.

On October 8, 2014, we completed a long term supply agreement with Plug Power Inc (“Plug Power”) to provide fuel cell stacks for use in Plug Power’s GenDrive™ systems deployed in forklift trucks. The new supply agreement replaced an existing agreement and runs to the end of 2017, with the provision for two 1-year potential extensions.

On April 24, 2014, we acquired the transportation and stationary related fuel cell intellectual property assets of United Technologies Corporation (“UTC”) for total consideration of \$22.3 million. The UTC Portfolio consisted of approximately 800 patents and patent applications, as well as patent licenses, invention disclosures and know-how primarily related to PEM fuel cell technology. In addition to incremental intellectual property licensing revenue or sale opportunities, the acquired intellectual property assets will support other key elements of Ballard’s corporate strategy: engineering service capabilities will be expanded in both automotive and non-automotive markets; and fuel cell product sales will be accelerated through product development initiatives in areas such as durability and balance of plant simplification. As consideration for the acquired intellectual property assets, UTC received 5.1 million Ballard common shares valued at \$20.3 million, \$2 million in cash, a grant back license to use the patent portfolio in UTC’s existing businesses, and a portion (typically 25%) of Ballard’s future intellectual property sale and licensing income generated from the combined intellectual property portfolio for a period of 15-years expiring in April 2029. On February 11, 2015, we entered into an agreement with Volkswagen to transfer the automotive-related portion of the UTC Portfolio to Volkswagen in two separate transactions for total payments of \$50 million (which will trigger total payments to UTC of \$10.9 million; of which \$10.0 million was paid in fiscal 2015) while retaining a royalty-free back-license to utilize the entire UTC Portfolio in all non-automotive applications, in bus applications and in certain limited pre-commercial purposes in automotive applications. We retain a royalty obligation to pay UTC a portion (typically 25%) of any additional future intellectual property sale and licensing income generated from our intellectual property portfolio until April 2029.

On March 6, 2013, we entered into a technology development and engineering services agreement with Volkswagen to advance development of fuel cells for use in powering demonstration cars in Volkswagen’s fuel cell automotive research program. The initial contract term was 4-years commencing in March 2013, with an option by Volkswagen for a 2-year extension. The initial expected 4-year contract value was in the range of approximately \$60 - \$100 million Canadian. On closing of the Volkswagen IP Agreement in February 2015, this technology development and engineering services was extended 2-years to February 2019. Over the full 6-years, this technology development and engineering

services contract now has an estimated value of Canadian \$100-140 million and is focused on the design and manufacture of next-generation fuel cell stacks for use in Volkswagen's fuel cell demonstration car program. Volkswagen also retains an option to further extend this program by 2-years to February 2021. Amounts earned from this agreement (approximately \$3.6 million in the fourth quarter of 2015, \$14.5 million in fiscal 2015, \$4.0 million in the fourth quarter of 2014, and \$18.5 million in fiscal 2014) are recorded as Technology Solutions revenues.

## OPERATING SEGMENTS

We report our results in the single operating segment of Fuel Cell Products and Services. Our Fuel Cell Products and Services segment consists of the sale and service of fuel cell products for our power product markets of Heavy-Duty Motive (consisting of bus and tram applications), Portable Power, Material Handling and Telecom Backup Power, as well as the delivery of Technology Solutions including engineering services and the license and sale of our extensive intellectual property portfolio and fundamental knowledge for a variety of fuel cell applications.

We made changes to the composition of revenues in our Fuel Cell Products and Services segment in 2015. As a result, licensing revenues of nil for the fourth quarter of 2014 and \$6.3 million for fiscal 2014 previously recorded as either Heavy-Duty Motive revenues, Material Handling revenues, or Telecom Backup Power revenues have been retroactively reclassified as Technology Solutions revenues.

## SELECTED ANNUAL FINANCIAL INFORMATION

Results of Operations	Year ended,		
	2015	2014	2013
(Expressed in thousands of U.S. dollars, except per share amounts and gross margin %)			
<b>From continuing operations</b>			
Revenues	\$ 56,463	\$ 68,721	\$ 61,251
Gross margin	\$ 9,974	\$ 10,246	\$ 16,759
Gross margin %	18%	15%	27%
Cash Operating Costs <sup>(1)</sup>	\$ 29,050	\$ 26,367	\$ 28,084
Adjusted EBITDA <sup>(1)</sup>	\$ (15,259)	\$ (18,635)	\$ (8,188)
Normalized Net Loss <sup>(1)</sup>	\$ (24,791)	\$ (21,833)	\$ (18,056)
Normalized Net Loss per share	\$ (0.18)	\$ (0.17)	\$ (0.18)
Net loss from continuing operations attributable to Ballard	\$ (5,815)	\$ (28,188)	\$ (19,988)
Net loss per share attributable to Ballard, basic and diluted	\$ (0.04)	\$ (0.22)	\$ (0.20)
<b>From discontinued operations</b>			
Net earnings (loss) from discontinued operations	\$ -	\$ 320	\$ 24
Net earnings (loss) per share from discontinued operations	\$ -	\$ -	\$ -
<b>Financial Position</b> (expressed in thousands of U.S. dollars)			
	2015	At December 31, 2014	2013
Total assets	\$ 161,331	\$ 127,949	\$ 120,214
Cash, cash equivalents and short-term investments	\$ 40,049	\$ 23,671	\$ 30,301

<sup>1</sup> Cash Operating Costs, Adjusted EBITDA, Normalized Net Loss and Normalized Net Loss per share are non-GAAP measures. We use certain Non-GAAP measures to assist in assessing our financial performance. Non-GAAP measures do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other companies. See reconciliation to GAAP in the Supplemental Non-GAAP Measures section.



## 2015 Performance compared to 2015 Business Outlook

Although we did not provide formal revenue guidance for 2015, we did indicate that we expected the positive top-line growth trends in 2012 through 2014 to continue in 2015 as we continued to pursue our growth strategy for fuel cell product sales, engineering services and intellectual property licensing and sale. While our strategic focus on multiple fuel cell product markets, engineering services and intellectual property monetization serves to mitigate risk, the resulting cadence in customer demand can be uneven through the early stages of market development. As such and given this early stage of fuel cell market development and adoption rate, our financial results on a quarterly basis are subject to a high degree of variability.

Actual revenues of \$56.5 million in 2015 declined (18%), or (\$12.3) million, compared to 2014. Actual revenues in 2015 were lower than internal revenue expectations for 2015, primarily as a result of lower than planned Telecom Backup Power revenues driven by a significant decline in shipments of methanol-based backup power systems and hydrogen-based backup power stacks. New customer deployments of Telecom Backup Power system and stack solutions also continued to be negatively impacted by the relatively long, protracted sales cycle that includes additional time required for qualification, onsite testing, field trialing and certification. We continue to review strategic alternatives for our Telecom Backup Power business, including a possible sale, joint venture or orderly wind-up of this business.

## RESULTS OF OPERATIONS – Fourth Quarter of 2015

### Revenue and gross margin

(Expressed in thousands of U.S. dollars)

Three months ended December 31,

Fuel Cell Products and Services	2015	2014	\$ Change	% Change
Heavy-Duty Motive	\$ 4,068	\$ 2,120	\$ 1,948	92%
Portable Power	3,398	-	3,398	100%
Material Handling	4,053	4,316	(263)	(6%)
Telecom Backup Power	1,622	3,116	(1,494)	(48%)
Technology Solutions	6,844	6,095	749	12%
<b>Revenues</b>	<b>19,986</b>	<b>15,647</b>	<b>4,339</b>	<b>28%</b>
Cost of goods sold	16,168	18,680	(2,512)	(13%)
<b>Gross Margin</b>	<b>\$ 3,818</b>	<b>\$ (3,033)</b>	<b>\$ 6,851</b>	<b>226%</b>
Gross Margin %	19%	(19%)	n/a	38 pts

Fuel Cell Products and Services Revenues of \$20.0 million for the fourth quarter of 2015 increased 28%, or \$4.3 million, compared to the fourth quarter of 2014. The 28% increase was driven by higher Heavy-Duty Motive, Portable Power and Technology Solutions revenues, which more than offset a decrease in Telecom Backup Power revenues as Material Handling revenues were relatively flat.

Technology Solutions revenues of \$6.8 million increased \$0.7 million, or 12%, due primarily to amounts earned in 2015 on the HDF distributed generation project, the TRC tram project and from Nantong Zehe for bus licensing and engineering services work. These increases

more than offset a decline in Volkswagen service revenues which were negatively impacted by approximately (\$0.6) million in the fourth quarter of 2015, as compared to the fourth quarter of 2014, as a result of an approximate (18%) lower Canadian dollar, relative to the U.S. dollar, as the Volkswagen Agreement is priced in Canadian dollars. The underlying costs to satisfy the Volkswagen Agreement are primarily denominated in Canadian dollars.

Heavy-Duty Motive revenues of \$4.1 million increased \$1.9 million, or 92%, due to higher bus revenues as a result of significantly higher shipments of FCvelocity®-HD7 bus power modules and FCvelocity®-HD7 bus module part kits in the fourth quarter of 2015 primarily to our customers, Synergy and Nantong Zehe in China.

Material Handling revenues of \$4.1 million decreased (\$0.3) million, or (6%), primarily as a result of the pass-through of the benefit of lower platinum commodity prices to our customer, Plug Power, as overall stack shipments were relatively flat.

Portable Power revenues of \$3.4 million in the fourth quarter of 2015 were generated by Protonex subsequent to our acquisition on October 1, 2015. Protonex is a leading designer and manufacturer of advanced power management products and portable fuel cell solutions.

Telecom Backup Power revenues of \$1.6 million decreased (\$1.5) million, or (48%), due to a significant decline in shipments of methanol-based backup power systems, which more than offset the increase in shipments of hydrogen-based backup power systems. New customer deployments of Telecom Backup Power system and stack solutions also continued to be negatively impacted by the relatively long, protracted sales cycle that includes additional time required for qualification, onsite testing, field trialing and certification. We continue to review strategic alternatives for our Telecom Backup Power business, including a possible sale, joint venture or orderly wind-up of this business.

Fuel Cell Products and Services gross margins improved to \$3.8 million, or 19% of revenues, for the fourth quarter of 2015, compared to (\$3.0) million, or (19%) of revenues, for the fourth quarter of 2014. The significant improvement in gross margin of \$6.9 million, or 226%, was driven by the 28% increase in overall revenues combined with the 38 point improvement in gross margin as a percent of revenues.

Gross margin in the fourth quarter of 2015 benefited from the increase in shipments of higher margin Heavy-Duty Motive products and services and by the increase in Portable Power shipments and services as a result of the recent acquisition of Protonex. In addition, gross margin in the fourth quarter of 2014 was adversely impacted by negative warranty and inventory charges. Negative net warranty adjustments of (\$3.7) million were recognized in the fourth quarter of 2014 relating primarily to an increase in customer service related expenses in our Telecom Backup Power market as a result of fuel processor issues in a select Asian deployment, compared to net positive warranty adjustments of \$0.5 million in the fourth quarter of 2015. Negative inventory impairments of (\$0.6) million were recognized in the fourth quarter of 2014 relating primarily to excess distributed generation and other excess and obsolete inventory, compared to negative inventory impairments of (\$0.4) million in the fourth quarter of 2015 relating primarily to excess bus inventory as we transition from FCvelocity®-HD6 bus products to FCvelocity®-HD7 bus products.

## Cash Operating Costs

		Three months ended December 31,			
<i>(Expressed in thousands of U.S. dollars)</i>					
	2015	2014	\$ Change	% Change	
Research and Product Development (operating cost)	\$ 3,065	\$ 3,700	\$ (635)	(17%)	
General and Administrative (operating cost)	2,806	2,545	261	10%	
Sales and Marketing (operating cost)	1,858	1,586	272	17%	
<b>Cash Operating Costs</b>	<b>\$ 7,729</b>	<b>\$ 7,831</b>	<b>\$ (102)</b>	<b>(1%)</b>	

Cash Operating Costs is a non-GAAP measure. We use certain Non-GAAP measures to assist in assessing our financial performance. Non-GAAP measures do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other companies. See reconciliation to GAAP in the Supplemental Non-GAAP Measures section. Cash Operating Costs adjusts operating expenses for stock-based compensation expense, depreciation and amortization, impairment losses on trade receivables, restructuring charges, acquisition costs and financing charges.

Cash Operating Costs (see Supplemental Non-GAAP Measures) for the fourth quarter of 2015 were \$7.7 million, a decrease of (\$0.1) million, or (1%), compared to the fourth quarter of 2014. The (1%) decrease in the fourth quarter of 2015 was driven by lower research and product development operating costs which were partially offset by slightly higher general and administrative and sales and marketing operating costs.

Research and product development operating costs for the fourth quarter of 2015 were \$3.1 million, a decrease of (\$0.6) million, or (17%), compared to the fourth quarter of 2014. The (17%) decrease was driven primarily by increased government funding as recoveries in Denmark by Dantherm Power were up significantly, by the capitalization in the fourth quarter of 2015 of \$0.8 million of FCvelocity®-HD7 development costs as fuel cell technology intangible assets, and by lower labour costs in Canada as a result of an approximate (18%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base. These costs savings in the fourth quarter of 2015 were partially offset by increased costs as a result of the acquisition of Protonex on October 1, 2015 which contributed approximately \$0.7 million of research and product development operating costs in the quarter.

General and administrative operating costs for the fourth quarter of 2015 were \$2.8 million, an increase of 10% compared to the fourth quarter of 2014. The 10% increase was driven primarily by the acquisition of Protonex on October 1, 2015 which contributed approximately \$0.6 million of general and administrative operating costs in the quarter. This cost pressure in the fourth quarter of 2015 was partially offset by lower labour costs in Canada as a result of an approximate (18%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base.

Sales and marketing operating costs for the fourth quarter of 2015 were \$1.9 million, an increase of 17% compared to the fourth quarter of 2014. The 17% increase was driven primarily by increased investment in sales and marketing capacity primarily in the Telecom Backup Power market, combined with the acquisition of Protonex on October 1, 2015 which contributed approximately \$0.3 million of sales and marketing operating costs in the quarter. This cost pressure in the fourth quarter of 2015 was partially offset by lower labour costs in Canada as a result of an approximate (18%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base.

As noted above, operating costs in the fourth quarter of 2015 benefited from the positive

impact of a weaker Canadian dollar, relative to the U.S. dollar. As a significant amount of our net operating costs (primarily labour) are denominated in Canadian dollars, operating expenses and Adjusted EBITDA are impacted by changes in the Canadian dollar relative to the U.S. dollar. As the Canadian dollar relative to the U.S. dollar was approximately (18%) lower in the fourth quarter of 2015 as compared to the fourth quarter of 2014, positive foreign exchange impacts on our Canadian operating cost base and Adjusted EBITDA were approximately \$1.3 million. A \$0.01 decrease in the Canadian dollar, relative to the U.S. dollar, positively impacts annual Cash Operating Costs and Adjusted EBITDA by approximately \$0.2 million to \$0.3 million.

### **Adjusted EBITDA**

	Three months ended December 31,			
	2015	2014	\$ Change	% Change
<b>Adjusted EBITDA</b>	\$ (2,936)	\$ (16,057)	\$ 13,121	82%

*(Expressed in thousands of U.S. dollars)*

EBITDA and Adjusted EBITDA are non-GAAP measures. We use certain Non-GAAP measures to assist in assessing our financial performance. Non-GAAP measures do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other companies. See reconciliation to GAAP in the Supplemental Non-GAAP Measures section. Adjusted EBITDA adjusts EBITDA for stock-based compensation expense, transactional gains and losses, finance and other income, and acquisition costs.

Adjusted EBITDA (see Supplemental Non-GAAP Measures) for the fourth quarter of 2015 was (\$2.9) million, compared to (\$16.1) million for the fourth quarter of 2014. The \$13.1 million reduction in Adjusted EBITDA loss in the fourth quarter of 2015 was driven by the \$6.9 million increase in gross margin primarily as a result of the 28% increase in revenue combined with lower net negative warranty and inventory charges of \$4.2 million, by lower impairment losses on trade receivables included in other operating expenses of \$6.2 million, and by the decline in Cash Operating Costs of \$0.1 million.

Impairment loss on trade receivables for the three months ended December 31, 2015 were nil, compared to (\$6.2) million for the corresponding period of 2014. Impairment loss on trade receivables in 2014 consists of a (\$4.4) million impairment charge as a result of material breaches by Azure of the Azure Telecom Backup Power Licensing Agreement and the Azure Bus Licensing Agreement, and by additional impairment charges of (\$1.8) related to non-collection of certain of our customers primarily in Asia. In the event that we are able to recover on an impaired trade receivable through legal or other means, the recovered amount is recognized in the period of recovery as a reversal of the impairment loss.

### **Net income (loss) attributable to Ballard**

	Three months ended December 31,			
	2015	2014	\$ Change	% Change
<b>Net income (loss) attributable to Ballard from continuing operations</b>	\$ (1,355)	\$ (17,467)	\$ 16,122	92%

*(Expressed in thousands of U.S. dollars)*

Net income (loss) attributable to Ballard from continuing operations for the fourth quarter of 2015 was (\$1.4) million, or (\$0.01) per share, compared to a net loss of (\$17.5) million, or (\$0.13) per share, in the fourth quarter of 2014. The \$16.1 million reduction in net loss was driven by the reduction in Adjusted EBITDA loss of \$13.1 million, combined with the gain on sale of intellectual property of \$5.4 million related to the closing of the sale of a copy of the automotive-related know-how of the UTC Portfolio to Volkswagen pursuant to the Volkswagen IP Agreement. These fourth quarter of 2015 net income improvements were partially offset by acquisition costs of (\$0.9) million in 2015 related to the Protonex

acquisition, by higher income taxes of (\$0.5) million related to withholding taxes incurred on Chinese licensing income, and by higher stock-based compensation expense of (\$0.6) million.

As noted above, net loss attributable to Ballard in the fourth quarter of 2015 was positively impacted by the gain on sale of intellectual property of \$5.4 million, and negatively impacted by acquisition costs of (\$0.9) million. Adjusted EBITDA and net loss attributable to Ballard in the fourth quarter of 2014 was negatively impacted by impairment loss on trade receivables of (\$6.2) million. Excluding the impact of the gain on sale of intellectual property and the impact from acquisition costs and impairment losses on trade receivables, Normalized Net Loss (see Supplemental Non-GAAP Measures) in the fourth quarter of 2015 was (\$5.9) million, or (\$0.04) per share, compared to (\$11.3) million, or (\$0.09) per share, for the fourth quarter of 2014.

Net loss attributable to Ballard from continuing operations excludes the net loss attributed to the non-controlling interests in the losses of Dantherm Power related to their 43% equity interest in Dantherm Power. Net income (loss) attributed to non-controlling interests for the fourth quarter of 2015 was \$0.1 million, compared to (\$0.6) million for the fourth quarter of 2014. The improvement in performance at Dantherm Power in the fourth quarter of 2015, as compared to the fourth quarter of 2014, is primarily a result of cost reduction efforts combined with an increase in government funding recoveries on research and product development activities.

### **Cash used in operating activities**

*(Expressed in thousands of U.S. dollars)*

	Three months ended December 31,			
	2015	2014	\$ Change	% Change
<b>Cash (used in) provided by operating activities</b>	<b>\$ (10,566)</b>	<b>\$ (8,195)</b>	<b>\$ (2,371)</b>	<b>(29%)</b>

Cash used in operating activities in the fourth quarter of 2015 was (\$10.6) million, consisting of cash operating losses of (\$4.6) million and net working capital outflows of (\$5.9) million. Cash used in operating activities in the fourth quarter of 2014 was (\$8.2) million, consisting of cash operating losses of (\$10.8) million partially offset by net working capital inflows of \$2.6 million. The (\$2.4) million increase in cash used by operating activities in the fourth quarter of 2015, as compared to the fourth quarter of 2014, was driven by the relative increase in working capital requirements of (\$8.6) million, partially offset by the relative reduction in cash operating losses of \$6.2 million. The \$6.2 million reduction in cash operating losses in the fourth quarter of 2015 was due primarily to the \$13.1 million reduction in Adjusted EBITDA loss, partially offset by lower impairment losses on trade receivables of (\$6.1) million which while included in the Adjusted EBITDA loss, are excluded from cash operating losses.

The total change in working capital of (\$5.9) million in the fourth quarter of 2015 was driven by higher accounts receivable of (\$2.2) million primarily as a result of the timing of Portable Power and Heavy-Duty Motive revenues and the related customer collections, by lower accounts payable and accrued liabilities of (\$1.8) million due primarily to the timing of purchases and supplier payments including the payment of acquisition and transaction related costs incurred on the Protonex acquisition, and by lower deferred revenue of (\$1.5)

million as we completed the contract work on certain Technology Solutions, Heavy-Duty Motive and government grant contracts for which we received pre-payments in an earlier period.

This compares to a total change in working capital of \$2.6 million in the fourth quarter of 2014 which was due to higher accrued warranty provisions of \$3.5 million primarily as a result of an adjustment for an expected increase in customer service related expenses in our Telecom Backup Power market in Asia, combined with lower inventory of \$2.6 million as we shipped product purchased and built in prior quarters. These fourth quarter of 2014 working capital inflows were partially offset by lower accounts payable and accrued liabilities of (\$3.7) million as a result of increased supplier payments made for higher inventory purchases in the first three quarters of 2014 and by a downward adjustment to accrued cash-based compensation expense in the fourth quarter of 2014.

## RESULTS OF OPERATIONS – Year ended December 31, 2015

### Revenue and gross margin

	(Expressed in thousands of U.S. dollars)		Year ended December 31,	
Fuel Cell Products and Services	2015	2014	\$ Change	% Change
Heavy-Duty Motive	\$ 11,953	\$ 5,140	\$ 6,813	133%
Portable Power	3,398	-	3,398	100%
Material Handling	12,710	13,946	(1,236)	(9%)
Telecom Backup Power	5,737	13,099	(7,362)	(56%)
Technology Solutions	22,665	36,536	(13,871)	(38%)
<b>Revenues</b>	<b>56,463</b>	<b>68,721</b>	<b>(12,258)</b>	<b>(18%)</b>
Cost of goods sold	46,489	58,475	(11,986)	(20%)
<b>Gross Margin</b>	<b>\$ 9,974</b>	<b>\$ 10,246</b>	<b>\$ (272)</b>	<b>(3%)</b>
Gross Margin %	18%	15%	n/a	3 pts

Fuel Cell Products and Services Revenues of \$56.5 million in 2015 declined (18%), or (\$12.3) million, compared to 2014. The (18%) decline was driven by lower Technology Solutions, Telecom Backup Power and Material Handling revenues, which more than offset an increase in Heavy-Duty Motive and Portable Power revenues. As a result of the termination of the Azure contracts in the fourth quarter of 2014, we did not record any revenue in 2015 from the Azure Bus and Azure Telecom Backup Power Agreements as compared to a total of \$8.7 million recognized in 2014.

Technology Solutions revenues of \$22.7 million decreased (\$13.9) million, or (38%), due primarily to the absence in 2015 of licensing and engineering services revenues under the Azure Bus Licensing Agreement (nil in 2015 as compared to \$4.9 million in 2014) and the Azure Telecom Backup Power Licensing Agreement (nil in 2015 as compared to \$3.9 million in 2014), and by the increased allocation of engineering resources during 2015 to corporate research and product development activities. In addition, Volkswagen service revenues were negatively impacted by approximately (\$2.3) million in 2015, as compared to 2014, as a result of an approximate (16%) lower Canadian dollar, relative to the U.S. dollar, as the Volkswagen Agreement is priced in Canadian dollars. The Volkswagen Agreement is priced in Canadian dollars as a majority of the underlying costs to satisfy the agreement are

denominated in Canadian dollars.

Material Handling revenues of \$12.7 million decreased (\$1.2) million, or (9%), primarily as a result of the pass through of the benefit of lower platinum commodity prices to our customer, Plug Power, as overall stack shipments were relatively flat.

Heavy-Duty Motive revenues of \$12.0 million increased \$6.8 million, or 133%, due to higher shipments of fuel cell bus products to our customers primarily in Asia, North America and Europe. Bus product shipments in 2015 included significantly higher shipments of FCvelocity®-HD7 bus power modules and FCvelocity®-HD7 bus module part kits primarily to our customers, Nantong Zehe and Synergy in China.

Telecom Backup Power revenues of \$5.7 million declined (\$7.4) million, or (56%), due to a significant decline in shipments of methanol-based backup power systems and hydrogen-based backup power stacks, combined with a lower average selling price in 2015 on sales of methanol-based backup power systems driven by the completed shipment of an initial order from RJIL of 100 ElectraGen™-ME 2.5kW fuel cell backup power systems to be deployed in RJIL's wireless telecom network in India. The lower average selling price of methanol-based backup power systems in 2015 was due primarily to product mix as the 100-system RJIL order was for 2.5kW systems compared to predominately 5.0kW system shipments in 2014. New customer deployments of Telecom Backup Power system and stack solutions also continued to be negatively impacted in 2015 by the relatively long, protracted sales cycle that includes additional time required for qualification, onsite testing, field trialing and certification, as well as by our actions to correct certain product quality issues discovered in 2014.

Portable Power revenues of \$3.4 million in 2015 were generated by Protonex subsequent to our acquisition on October 1, 2015. Protonex is a leading designer and manufacturer of advanced power management products and portable fuel cell solutions.

Fuel Cell Products and Services gross margins were \$10.0 million, or 18% of revenues, for 2015, compared to \$10.2 million, or 15% of revenues, for 2014. The minor decline in overall gross margin of (\$0.3) million, or (3%), was driven by the (18%) decline in overall revenues offset by the 3 point improvement in gross margin as a percent of revenues from 15% in 2014 to 18% in 2015.

Gross margin in 2015 was negatively impacted by a significant reduction in higher margin Technology Solutions licensing revenues as licensing amounts earned in 2015 on the Nantong Zehe agreements were significantly lower than amounts earned in 2014 on the breached Azure Bus and Azure Telecom Backup Power Agreements totaling \$8.7 million. This negative gross margin impact in 2015 was partially offset by improvements in 2015 as a result of the significant increase in shipments of higher margin Heavy-Duty Motive bus products and by the increase in Portable Power shipments and services as a result of the recent acquisition of Protonex. In addition, gross margin in 2014 was negatively impacted by negative warranty and inventory charges. Negative net warranty adjustments of (\$3.5) million were recognized in 2014 relating primarily to an increase in customer service related expenses in our Telecom Backup Power market as a result of fuel processor issues in a select Asian deployment, compared to net positive warranty adjustments of \$1.3 million in 2015 relating primarily to warranty expirations and reduced product costs. Negative

inventory impairments of (\$1.3) million were recognized in 2014 relating primarily to excess distributed generation and other excess and obsolete inventory, compared to negative inventory impairments of (\$0.6) million in 2015 relating primarily to excess bus inventory as we transition from FCvelocity®-HD6 bus products to FCvelocity®-HD7 bus products.

### Cash Operating Costs

<i>(Expressed in thousands of U.S. dollars)</i>		Year ended December 31,			
	2015	2014	\$ Change	% Change	
Research and Product Development (operating cost)	\$ 13,301	\$ 10,436	\$ 2,865	27%	
General and Administrative (operating cost)	9,022	9,451	(429)	(5%)	
Sales and Marketing (operating cost)	6,727	6,480	247	4%	
<b>Cash Operating Costs</b>	<b>\$ 29,050</b>	<b>\$ 26,367</b>	<b>\$ 2,683</b>	<b>10%</b>	

Cash Operating Costs is a non-GAAP measure. We use certain Non-GAAP measures to assist in assessing our financial performance. Non-GAAP measures do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other companies. See reconciliation to GAAP in the Supplemental Non-GAAP Measures section. Cash Operating Costs adjusts operating expenses for stock-based compensation expense, depreciation and amortization, impairment losses on trade receivables, restructuring charges, acquisition costs and financing charges.

Cash Operating Costs (see Supplemental Non-GAAP Measures) in 2015 were \$29.0 million, an increase of \$2.7 million, or 10%, compared to 2014. The 10% increase in 2015 was driven by significantly higher research and product development operating costs, and by slightly higher sales and marketing operating costs, which more than offset the reduction in general and administrative costs.

Research and product development operating costs in 2015 were \$13.3 million, an increase of \$2.9 million, or 27%, compared to 2014. The 27% increase was driven primarily by the (38%) decline in Technology Solutions revenues resulting in significantly fewer engineering staff resources being directed to revenue generating engineering service projects as engineering resources were instead redirected to research and product development activities. Labour and material costs incurred on revenue producing engineering services projects are reallocated from research and product development expenses to cost of goods sold. These cost pressures in 2015 were partially offset by the capitalization in 2015 of \$1.6 million of FCvelocity®-HD7 development costs as fuel cell technology intangible assets, and by lower labour costs in Canada as a result of an approximate (16%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base.

General and administrative operating costs in 2015 were \$9.0 million, a decline of (\$0.4) million, or (5%), compared to 2014. The (5%) decrease was driven by lower labour costs in Canada as a result of an approximate (16%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base. These cost savings in 2015 were partially offset by higher legal and patent renewal expenses in 2015 and by additional expenses assumed on the acquisition of Protonex on October 1, 2015.

Sales and marketing operating costs in 2015 were \$6.7 million, an increase of 4% compared to 2014. The 4% increase was driven by increased investment in sales and marketing capacity primarily in the Telecom Backup Power market, and by the additional expenses assumed on the acquisition of Protonex on October 1, 2015. These cost pressures in 2015 were partially offset by lower labour costs in Canada as a result of an approximate (16%)



lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base.

As noted above, operating costs in 2015 benefited from the positive impact of a weaker Canadian dollar, relative to the U.S. dollar. As a significant amount of our net operating costs (primarily labour) are denominated in Canadian dollars, operating expenses and Adjusted EBITDA are impacted by changes in the Canadian dollar relative to the U.S. dollar. As the Canadian dollar relative to the U.S. dollar was approximately (16%) lower in 2015 as compared to 2014, positive foreign exchange impacts on our Canadian operating cost base and Adjusted EBITDA were approximately \$4.3 million. A \$0.01 decrease in the Canadian dollar, relative to the U.S. dollar, positively impacts annual Cash Operating Costs and Adjusted EBITDA by approximately \$0.2 million to \$0.3 million.

### **Adjusted EBITDA**

	Year ended December 31,			
	2015	2014	\$ Change	% Change
<b>Adjusted EBITDA</b>	\$ (15,259)	\$ (18,635)	\$ 3,376	18%

*(Expressed in thousands of U.S. dollars)*

EBITDA and Adjusted EBITDA are non-GAAP measures. We use certain Non-GAAP measures to assist in assessing our financial performance. Non-GAAP measures do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other companies. See reconciliation to GAAP in the Supplemental Non-GAAP Measures section. Adjusted EBITDA adjusts EBITDA for stock-based compensation expense, transactional gains and losses, finance and other income, and acquisition costs.

Adjusted EBITDA (see Supplemental Non-GAAP Measures) in 2015 was (\$15.3) million, compared to (\$18.6) million for 2014. The \$3.4 million reduction in Adjusted EBITDA loss in the 2015 was driven by lower impairment losses on trade receivables included in other operating expenses of \$7.1 million, partially offset by the increase in Cash Operating Costs of (\$2.7) million primarily as a result of significantly fewer engineering staff resources being directed to revenue generating engineering service projects, and by the minor decline in gross margin of (\$0.3) million.

Impairment (loss) recovery on trade receivables in 2015 were \$0.9 million, compared to (\$6.2) million for 2014. Impairment recovery on trade receivables in 2015 of \$0.9 million resulted primarily from the collection of certain accounts principally in Asia that were considered impaired and written down 2014. Impairment loss on trade receivables in 2014 of (\$6.2) million consist primarily of a (\$4.4) million impairment charge as a result of material breaches by Azure of the Azure Telecom Backup Power Licensing Agreement and the Azure Bus Licensing Agreement, and by additional impairment charges of (\$1.8) related to non-collection of certain of our customers primarily in Asia. In the event that we are able to recover on an impaired trade receivable through legal or other means, the recovered amount is recognized in the period of recovery as a reversal of the impairment loss.

### **Net income (loss) attributable to Ballard**

	Year ended December 31,			
	2015	2014	\$ Change	% Change
<b>Net income (loss) attributable to Ballard from continuing operations</b>	\$ (5,815)	\$ (28,188)	\$ 22,373	79%

*(Expressed in thousands of U.S. dollars)*

Net income (loss) attributable to Ballard from continuing operations in 2015 was (\$5.8) million, or (\$0.04) per share, compared to a net loss of (\$28.2) million, or (\$0.22) per share, in 2014. The \$22.4 million reduction in net loss for 2015 was driven primarily by the

gain on sale of intellectual property of \$19.6 million related to the closing of the sale of the automotive-related patents and patent applications of the UTC Portfolio and the closing of the sale of a copy of the automotive-related know-how of the UTC Portfolio to Volkswagen pursuant to the Volkswagen IP Agreement, combined with the reduction in Adjusted EBITDA loss of \$3.4 million, and the decline in depreciation and amortization expense of \$1.2 million primarily as a result of lower intangible asset amortization after the Volkswagen IP Agreement. These 2015 net income improvements were partially offset by acquisition costs of (\$1.5) million in 2015 related to the Protonex acquisition.

As noted above, net loss attributable to Ballard in 2015 was positively impacted by the gain on sale of intellectual property of \$19.6 million, and negatively impacted by acquisition costs of (\$1.5) million. Adjusted EBITDA and net loss attributable to Ballard in 2015 were also positively impacted by net impairment recoveries on trade receivables of \$0.9 million. Adjusted EBITDA and net loss attributable to Ballard 2014 was negatively impacted by impairment loss on trade receivables of (\$6.2) million. Excluding the impact of the gain on sale of intellectual property and the impact from acquisition costs, impairment (losses) recoveries (losses) on trade receivables, and other minor asset impairment charges, Normalized Net Loss (see Supplemental Non-GAAP Measures) in 2015 was (\$24.8) million, or (\$0.18) per share, compared to (\$21.8) million, or (\$0.17) per share, for 2014.

Net loss attributable to Ballard from continuing operations excludes the net loss attributed to the non-controlling interests in the losses of Dantherm Power related to their 48% equity interest in Dantherm Power. Net loss attributed to non-controlling interests for 2015 was (\$0.8) million, compared to (\$1.6) million for 2014. The improvement in performance at Dantherm Power in 2015, as compared to 2014, is primarily a result of cost reduction efforts combined with an increase in government funding recoveries on research and product development activities.

### ***Cash used in operating activities***

*(Expressed in thousands of U.S. dollars)*

	Year ended December 31,			
	2015	2014	\$ Change	% Change
<b>Cash (used in) provided by operating activities</b>	<b>\$ (25,364)</b>	<b>\$ (20,671)</b>	<b>\$ (4,693)</b>	<b>(23%)</b>

Cash used in operating activities in 2015 was (\$25.4) million, consisting of cash operating losses of (\$19.3) million and net working capital outflows of (\$6.0) million. Cash used in operating activities in 2014 was (\$20.7) million, consisting of cash operating losses of (\$15.7) million and net working capital outflows of (\$5.0) million. The (\$4.7) million increase in cash used by operating activities in 2015, as compared to 2014, was driven by the relative increase in cash operating losses of (\$3.6) million, combined with the relative increase in working capital requirements of (\$1.0) million. The (\$3.6) million increase in cash operating losses in 2015 was due primarily to lower impairment losses on trade receivables of (\$5.8) million which while included in the Adjusted EBITDA loss, are excluded from cash operating losses, partially offset by the \$3.4 million reduction in Adjusted EBITDA loss.

The total change in working capital of (\$6.0) million in 2015 was driven by higher inventory of (\$5.6) million primarily to support expected Heavy-Duty Motive and Power Products

shipments in the first quarter of 2016 to Synergy, the U.S. Army and other customers and as a result of delayed but expected Telecom Backup Power system shipments, by lower accrued warranty provisions of (\$3.6) million due primarily to customer service related expenses incurred in our Telecom Backup Power market in Asia and by Heavy-Duty Motive warranty contract expirations, and by lower accounts payable and accrued liabilities of (\$1.3) million due primarily to the timing of purchases and supplier payments. These 2015 working capital outflows were partially offset by higher deferred revenue of \$4.0 million as we collected pre-payments on certain Heavy-Duty Motive and Technology Solutions contracts in advance of work performed.

This compares to a total change in working capital of (\$5.0) million in 2014 which was driven by lower accounts receivable of (\$4.1) million primarily as a result of impairment losses on trade receivables of (\$6.2) million and the timing of Technology Solutions, Heavy-Duty Motive and Telecom Backup Power revenues and the related customer collections, and by lower deferred revenue of (\$4.4) million as we completed the contract work on Technology Solutions and certain government grant contracts for which we received pre-payments in an earlier period. These working capital outflows in 2014 were partially offset by working capital inflows related to higher accrued warranty provisions of \$2.4 million primarily as a result of an adjustment for an expected increase in customer service related expenses in our Telecom Backup Power market in Asia, and by lower inventory of \$1.5 million as we shipped product purchased and built in prior quarters.

## OPERATING EXPENSES AND OTHER ITEMS

### *Research and product development expenses*

<i>(Expressed in thousands of U.S. dollars)</i>		Three months ended December 31,		
<b>Research and product development</b>	<b>2015</b>	<b>2014</b>	<b>\$ Change</b>	<b>% Change</b>
Research and product development expense	\$ 3,461	\$ 4,510	\$ (1,049)	(23%)
Less: Depreciation and amortization expense	\$ (321)	\$ (914)	\$ 593	65%
Less: Stock-based compensation expense	\$ (74)	\$ 104	\$ (178)	(171%)
Research and product development (operating cost)	\$ 3,066	\$ 3,700	\$ (634)	(17%)

<i>(Expressed in thousands of U.S. dollars)</i>		Year ended December 31,		
<b>Research and product development</b>	<b>2015</b>	<b>2014</b>	<b>\$ Change</b>	<b>% Change</b>
Research and product development expense	\$ 16,206	\$ 14,294	\$ 1,912	13%
Less: Depreciation and amortization expense	\$ (1,947)	\$ (3,209)	\$ 1,262	39%
Less: Stock-based compensation expense	\$ (957)	\$ (649)	\$ (308)	(47%)
Research and product development (operating cost)	\$ 13,302	\$ 10,436	\$ 2,866	27%

**Research and product development** expenses for the three months ended December 31, 2015 were \$3.5 million, a decline of (\$1.0) million, or 23%, compared to the corresponding period of 2014. Excluding depreciation and amortization expense of (\$0.3) million and (\$0.9) million, respectively, in each of the periods and excluding stock-based compensation (expense) recovery of (\$0.1) million and \$0.1 million, respectively, in each of the periods, research and product development operating costs were \$3.1 million in the fourth quarter of 2015, a decline of (\$0.6) million, or (17%), compared to the fourth quarter of 2014.

The (17%) decline in research and development operating costs in the fourth quarter of 2015 was driven primarily by increased government funding as recoveries in Denmark by Dantherm Power were up significantly, by the capitalization in the fourth quarter of 2015 of \$0.8 million of FCvelocity®-HD7 development costs as fuel cell technology intangible assets, and by lower labour costs in Canada as a result of an approximate (18%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base. These costs savings in the fourth quarter of 2015 were partially offset by increased costs as a result of the acquisition of Protonex on October 1, 2015 which contributed approximately \$0.7 million of research and product development operating costs in the quarter.

Research and product development expenses for the year ended December 31, 2015 were \$16.2 million, an increase of \$1.9 million, or 13%, compared to the corresponding period of 2014. Excluding depreciation and amortization expense of (\$1.9) million and (\$3.2) million, respectively, in each of the periods and excluding stock-based compensation expense of (\$1.0) million and (\$0.6) million, respectively, in each of the periods, research and product development operating costs were \$13.3 million in 2015, an increase of \$2.9 million, or 27%, compared to 2014.

The 27% increase in research and development operating costs in 2015 was driven primarily by the (38%) decline in Technology Solutions revenues resulting in fewer engineering staff resources being directed to revenue generating engineering service projects. These engineering resources were instead redirected to corporate research and product development activities. In addition, costs increased in 2015 as a result of the acquisition of Protonex on October 1, 2015 which contributed approximately \$0.7 million of research and product development operating costs in 2015. These cost pressures in 2015 were partially offset by the capitalization in 2015 of \$1.6 million of FCvelocity®-HD7 development costs as fuel cell technology intangible assets, and by lower labour costs in Canada as a result of an approximate (16%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base. Government funding recoveries in were effectively flat year over year as increased government funding recoveries in Denmark by Dantherm Power in 2015 were offset by lower government funding recoveries in Canada in 2015 primarily as a result of the conclusion of the multi-year SDTC Bus award in the fourth quarter of 2014 with the introduction of the FCvelocity®-HD7, Ballard's next-generation of fuel cell bus power module.

Government research funding is reflected as a cost offset to research and product development expenses, whereas labour and material costs incurred on revenue producing engineering services projects are reallocated from research and product development expenses to cost of goods sold.

Depreciation and amortization expense included in research and product development expense for the three months and year ended December 31, 2015 was \$0.3 million and \$1.9 million, respectively, compared to \$0.9 million and \$3.2 million, respectively, for the corresponding periods of 2014. Depreciation and amortization expense relates primarily to amortization expense on our intangible assets and depreciation expense on our manufacturing equipment. Depreciation and amortization expense has declined in 2015 as a result of the Volkswagen IP Agreement whereby in the first quarter of 2015 we transferred

to Volkswagen the ownership of the automotive-related portion of the fuel cell intellectual property assets previously acquired by us from UTC in the second quarter of 2014. Although ownership of the patents and patent applications was transferred to Volkswagen, Ballard received a royalty-free back-license to all the transferred patents and patent applications to utilize all non-automotive applications, in bus applications and in certain limited pre-commercial purposes for automotive applications.

Stock-based compensation expense (recovery) included in research and product development expense for the three months and year ended December 31, 2015 was \$0.1 million and \$1.0 million, respectively, compared to (\$0.1) million and \$0.6 million, respectively, for the corresponding periods of 2014. Stock-based compensation increased in 2015 primarily as a result of a change in compensation structure from cash incentive awards to share-compensation awards for certain employees combined with new awards granted on the acquisition of Protonex to certain Protonex employees. In addition, a downward adjustment to accrued stock-based compensation expense was made in the fourth quarters of both 2015 and 2014 as certain outstanding restricted share units failed to meet the vesting criteria.

### **General and administrative expenses**

<i>(Expressed in thousands of U.S. dollars)</i>		Three months ended December 31,		
<b>General and administrative</b>	<b>2015</b>	<b>2014</b>	<b>\$ Change</b>	<b>% Change</b>
General and administrative expense	\$ 3,028	\$ 2,157	\$ 871	40%
Less: Depreciation and amortization expense	\$ (140)	\$ (44)	\$ (96)	(218%)
Less: Stock-based compensation expense	\$ (82)	\$ 432	\$ (514)	(119%)
General and administrative (operating cost)	\$ 2,806	\$ 2,545	\$ 261	10%

<i>(Expressed in thousands of U.S. dollars)</i>		Year ended December 31,		
<b>General and administrative</b>	<b>2015</b>	<b>2014</b>	<b>\$ Change</b>	<b>% Change</b>
General and administrative expense	\$ 10,594	\$ 10,450	\$ 144	1%
Less: Depreciation and amortization expense	\$ (280)	\$ (183)	\$ (97)	(53%)
Less: Stock-based compensation expense	\$ (1,292)	\$ (816)	\$ (476)	(58%)
General and administrative (operating cost)	\$ 9,022	\$ 9,451	\$ (429)	(5%)

**General and administrative** expenses for the three months ended December 31, 2015 were \$3.0 million, an increase of \$0.9 million, or 40%, compared to the corresponding period of 2014. Excluding relatively insignificant depreciation and amortization expense in each of the periods, and excluding stock-based compensation (expense) recovery of (\$0.1) million and \$0.4 million, respectively, in each of the periods, general and administrative operating costs were \$2.8 million in the fourth quarter of 2015, an increase of \$0.3 million, or 10%, compared to the fourth quarter of 2014.

The 10% increase in general and administrative operating costs in the fourth quarter of 2015 was driven primarily by the acquisition of Protonex on October 1, 2015 which contributed approximately \$0.6 million of general and administrative operating costs in the quarter. This cost pressure in the fourth quarter of 2015 was partially offset by lower labour costs in Canada as a result of an approximate (18%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base.

General and administrative expenses for year ended December 31, 2015 were \$10.6 million, an increase of \$0.1 million, or 1%, compared to the corresponding period of 2014. Excluding relatively insignificant depreciation and amortization expense in each of the periods, and excluding stock-based compensation expense of (\$1.3) million and (\$0.8) million, respectively, in each of the periods, general and administrative operating costs in the 2015 were \$9.0 million, a decrease of (\$0.4) million, or (5%), compared to 2014.

The (5%) decrease in general and administrative operating costs in 2015 was driven primarily by lower labour costs in Canada as a result of an approximate (16%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base. These cost savings in 2015 were partially offset by added expenses assumed on the acquisition of Protonex on October 1, 2015 and by higher patent renewal costs in 2015 related to the acquired UTC intellectual property portfolio prior to its sale in February 2015 in the Volkswagen IP Agreement. Higher legal and transaction related expenses incurred in 2015, primarily as a result of the Azure contract breaches, were offset by lower human resources expenses in 2015 due to CEO search expenses incurred in 2014.

Depreciation and amortization expense included in general and administrative expense relates primarily to depreciation expense on our office equipment and was relatively consistent period over period.

Stock-based compensation expense (recovery) included in general and administrative expense for the three months and year ended December 31, 2015 was \$0.1 million and \$1.3 million, respectively, compared to (\$0.4) million and \$0.8 million, respectively, for the corresponding periods of 2014. Stock-based compensation increased in 2015 primarily as a result of a change in compensation structure from cash incentive awards to share-compensation awards for certain employees combined with new awards granted on the acquisition of Protonex to certain Protonex employees. In addition, a downward adjustment to accrued stock-based compensation expense was made in the fourth quarters of both 2015 and 2014 as certain outstanding restricted share units failed to meet the vesting criteria.

### **Sales and marketing expenses**

<i>(Expressed in thousands of U.S. dollars)</i>		Three months ended December 31,			
<b>Sales and marketing</b>	<b>2015</b>	2014	\$ Change	% Change	
Sales and marketing expense	\$ 1,951	\$ 1,755	\$ 196	11%	
Less: Stock-based compensation expense	\$ (93)	\$ (169)	\$ 76	45%	
Sales and marketing (operating cost)	\$ 1,858	\$ 1,586	\$ 272	17%	

  

<i>(Expressed in thousands of U.S. dollars)</i>		Year ended December 31,			
<b>Sales and marketing</b>	<b>2015</b>	2014	\$ Change	% Change	
Sales and marketing expense	\$ 7,428	\$ 7,265	\$ 163	2%	
Less: Stock-based compensation expense	\$ (701)	\$ (785)	\$ 84	11%	
Sales and marketing (operating cost)	\$ 6,727	\$ 6,480	\$ 247	4%	

**Sales and marketing** expenses for the three months ended December 31, 2015 were \$2.0 million, an increase of \$0.2 million, or 11%, compared to the corresponding period of 2014. Excluding stock-based compensation expense of (\$0.1) million and (\$0.2), respectively, in

each of the periods, sales and marketing operating costs were \$1.9 million in the fourth quarter of 2015, an increase of 17% compared to the fourth quarter of 2014.

Sales and marketing expenses for the year ended December 31, 2015 were \$7.4 million, an increase of 2%, compared to the corresponding period of 2014. Excluding stock-based compensation expense of (\$0.7) million and (\$0.8) million, respectively, in each of the periods, sales and marketing operating costs were \$6.7 million in 2015, an increase of 4% compared to 2014.

The respective 17% and 4% increases in sales and marketing operating costs in 2015 were driven by increased investment in sales and marketing capacity primarily in the Telecom Backup Power market, combined with the acquisition of Protonex on October 1, 2015 which contributed approximately \$0.3 million of sales and marketing operating costs in the quarter. This cost pressure in the fourth quarter of 2015 was partially offset by lower labour costs in Canada as a result of an approximate (18%) lower Canadian dollar, relative to the U.S. dollar, and the resulting positive impact on our Canadian operating cost base.

**Other (expense) recovery** for the three months and year ended December 31, 2015 was (\$0.9) million and \$0.6 million, respectively, compared to (\$6.2) million and (\$6.3) million for the corresponding periods of 2014. The following tables provide a breakdown of other (expense) recovery for the reported periods:

<i>(Expressed in thousands of U.S. dollars)</i>		Three months ended December 31,		
	2015	2014	\$ Change	% Change
Impairment (loss) recovery on trade receivables	\$ 39	\$ (6,159)	\$ 6,198	101%
Restructuring (expense) recovery	-	(78)	78	100%
Acquisition charges	(902)	-	(902)	(100%)
<b>Other (expenses) recovery</b>	<b>\$ (863)</b>	<b>\$ (6,237)</b>	<b>\$ (5,374)</b>	<b>(86%)</b>

<i>(Expressed in thousands of U.S. dollars)</i>		Year ended December 31,		
	2015	2014	\$ Change	% Change
Impairment (loss) recovery on trade receivables	\$ 899	\$ (6,206)	\$ 7,105	114%
Restructuring (expense) recovery	13	(85)	98	115%
Acquisition charges	(1,542)	-	(1,542)	(100%)
<b>Other (expenses) recovery</b>	<b>\$ 630</b>	<b>\$ (6,291)</b>	<b>\$ (5,661)</b>	<b>(90%)</b>

Impairment (loss) recovery on trade receivables of \$0.9 million for the year ended December 31, 2015 consist of a \$1.5 million impairment recovery as we collected on certain accounts in 2015 principally in Asia that were considered impaired and written down in 2014, less new impairment charges in 2015 of (\$0.6) million related to non-collection of certain other accounts primarily in Asia. In the event that we are able to recover on an impaired trade receivable through legal or other means, the recovered amount is recognized in the period of recovery as a reversal of the impairment loss.

Impairment loss on trade receivables for the three months and year ended December 31, 2014 was (\$6.2) million and consist of a (\$4.4) million impairment charge as a result of material breaches by Azure of the Azure Telecom Backup Power Licensing Agreement and

the Azure Bus Licensing Agreement, and by additional impairment charges of (\$1.8) million related to non-collection of certain of our customers primarily in Asia.

Acquisition charges for the three months and year ended December 31, 2015 of (\$0.9) million and (\$1.5) million, respectively, consist of brokerage, legal and other costs incurred related to the acquisition of Protonex which closed on October 1, 2015. Acquisition costs are expensed as incurred.

Restructuring charges of (\$0.1) million in 2014 relate primarily to minor restructurings focused on overhead cost reduction.

**Finance income (loss) and other** for the three months and year ended December 31, 2015 was (\$1.0) million and (\$0.3) million, respectively, compared to (\$0.5) million and (\$0.1) million, respectively, for the corresponding periods of 2014. The following tables provide a breakdown of finance and other income (loss) for the reported periods:

		Three months ended December 31,			
		2015	2014	\$ Change	% Change
<i>(Expressed in thousands of U.S. dollars)</i>					
Employee future benefit plan expense	\$	(77)	\$ (48)	\$ (29)	(60%)
Pension administration expense		(27)	(7)	(20)	(286%)
Investment and other income		44	44	-	-
Foreign exchange gain (loss)		(890)	(490)	(400)	(82%)
<b>Finance income (loss) and other</b>	<b>\$</b>	<b>(950)</b>	<b>\$ (501)</b>	<b>\$ (449)</b>	<b>(90%)</b>

		Year ended December 31,			
		2015	2014	\$ Change	% Change
<i>(Expressed in thousands of U.S. dollars)</i>					
Employee future benefit plan expense	\$	(292)	\$ (183)	\$ (109)	(60%)
Pension administration expense		(103)	(100)	(3)	(3%)
Investment and other income		143	139	4	3%
Foreign exchange gain (loss)		(53)	31	(84)	(271%)
<b>Finance income (loss) and other</b>	<b>\$</b>	<b>(305)</b>	<b>\$ (113)</b>	<b>\$ (192)</b>	<b>(170%)</b>

Employee future benefit plan expense for the three months and year ended December 31, 2015 were (\$0.1) million and (\$0.3) million, respectively, relatively consistent with the corresponding periods of 2014. Employee future benefit plan expense primarily represents the excess of expected interest cost on plan obligations in excess of the expected return on plan assets related to a curtailed defined benefit pension plan for certain former United States employees. Pension administration expense of approximately (\$0.1) million for the years ended December 31, 2015 and 2014 represent administrative costs incurred in managing the plan.

Foreign exchange gains (losses) for the three months and year ended December 31, 2015 were (\$0.9) million and \$0.1 million, respectively, compared to (\$0.5) million and nil, respectively, for the corresponding periods of 2014. Foreign exchange gains and losses are attributable primarily to the effect of the changes in the value of the Canadian dollar, relative to the U.S. dollar, on our Canadian dollar-denominated net monetary position and on any outstanding foreign exchange currency contracts that are marked to market each



reporting period if not qualified for hedge accounting treatment. Foreign exchange gains and losses are also impacted by the conversion of Dantherm Power's assets and liabilities from the Danish Kroner to the U.S. dollar at exchange rates in effect at each reporting date.

Investment and other income for the three months and years ended December 31, 2015 and 2014 were nominal and were earned primarily on our cash, cash equivalents and short-term investments.

**Finance expense** for the three months and year ended December 31, 2015 was (\$0.2) million and (\$0.8) million, respectively, compared to (\$0.2) million and (\$0.9) million, respectively, for the corresponding periods of 2014. Finance expense relates primarily to the sale and leaseback of our head office building in Burnaby, British Columbia which was completed on March 9, 2010. Due to the long term nature of the lease, the leaseback of the building qualifies as a finance (or capital) lease.

**Gain on sale of Intellectual Property** for the three months and year ended December 31, 2015 was \$5.4 million and \$19.6 million, respectively, and resulted from the transfer of ownership of the UTC Portfolio previously acquired by us from UTC in 2014 to Volkswagen in 2015 through two separate transactions under the Volkswagen IP Agreement for total gross proceeds of \$50 million.

On the closing of the sale of the automotive-related patents and patent applications of the UTC Portfolio in the first quarter of 2015, we recognized a gain on sale of intellectual property of \$14.2 million on net proceeds received of \$29.5 million. On the closing of the initial transaction on February 23, 2015, Ballard transferred ownership of the automotive-related patents and patent applications of the UTC Portfolio in exchange for gross proceeds of \$40 million. This receipt triggered a 25%, or \$10.0 million, license fee payment to UTC. Although ownership of the patents and patent applications was transferred to Volkswagen, Ballard received a royalty-free back-license to all the transferred patents and patent applications for use in all non-automotive applications, in bus applications and in certain limited pre-commercial automotive applications. The gain on sale of intellectual property of \$14.2 million represents gross proceeds received on the sale of the automotive-related patents and patent applications from Volkswagen of \$40.0 million, net of the license fee paid to UTC of (\$10.0) million, transaction costs of approximately (\$0.5) million, and the ascribed cost of the patents and patent applications in the UTC Portfolio of approximately (\$15.3) million.

On the closing of the sale of a copy of the automotive-related know-how of the UTC Portfolio in the fourth quarter of 2015, we recognized an additional gain on sale of intellectual property of \$5.4 million. On the closing of the second tranche on December 2, 2015, Ballard transferred a copy of the automotive-related know-how of the UTC Portfolio in exchange for gross proceeds receivable of \$10 million. This receivable is recorded in trade and other receivables at December 31, 2015 and is expected to be collected in the first quarter of 2016, net of applicable withholding taxes, which are expected to be recovered in fiscal 2016. The receipt will trigger a 9%, or \$0.9 million, payment to UTC in fiscal 2016 which is recorded in accounts payable and accrued liabilities as of December 31, 2015. On the closing of the sale of a copy of the automotive-related know-how of the UTC Portfolio, Ballard retained full ownership of the know-how including the right to sell additional copies

of the know-how to third parties as well as retaining the right to use the know-how in all our applications. The gain on sale of intellectual property of \$5.4 million represents gross proceeds receivable from Volkswagen of \$10.0 million, net of a fee payable to UTC of (\$0.9) million, and the ascribed cost of the automotive-related know-how of the UTC Portfolio previously classified as assets held for sale of approximately (\$3.8) million.

**Impairment loss on investment** for the year ended December 31, 2014 was (\$0.1) million and consists of an impairment charge related to our non-core investment in Chrysalix Energy Limited Partnership which was written down in 2014 to its net realizable value of nil.

**Net income (loss) attributed to non-controlling interests** for the three months and year ended December 31, 2015 was \$0.1 million and (\$0.8) million, respectively, compared to (\$0.6) million and (\$1.6) million, respectively, for the corresponding periods of 2014. Amounts primarily represent the non-controlling interest of Dantherm A/S in the losses of Dantherm Power as a result of their 43% total equity interest in Dantherm Power. The improvement in performance at Dantherm Power in 2015, as compared to 2014, is primarily a result of cost reduction efforts combined with an increase in government funding recoveries on research and product development activities.

**Net earnings from Discontinued Operations** for the year ended December 31, 2014 was \$0.3 million and consists of additional proceeds received in the form of a 12-month product credit on the disposition of our former Materials Product division. As a result of the disposition of our Materials Products segment on January 31, 2013, the former Material Products segment has been classified as a discontinued operation in our consolidated financial statements. As such, the operating results of the former Material Products segment have been removed from our results from continuing operations and are instead presented separately in the statement of comprehensive income as income from discontinued operations. The former Materials Product segment sold carbon fiber products primarily for automotive transmissions, and GDL's for fuel cells.

## **PROTONEX ACQUISITION PURCHASE PRICE ALLOCATION**

On October 1, 2015, we completed the acquisition of Protonex, a leading designer and manufacturer of advanced power management products and portable fuel cell solutions. During the fourth quarter of 2015, we completed detailed valuation studies and prepared the preliminary purchase price allocation for Protonex using the acquisition method of accounting in accordance with *IFRS 3 Business Combinations*, with Ballard Power considered as the accounting acquirer and Protonex as the accounting acquiree. As the accounting acquirer, consideration given by Ballard to acquire Protonex has been allocated to the assets acquired, and the liabilities assumed, based on their fair values as of the acquisition date of October 1, 2015.

As consideration for the transaction, we assumed and paid certain of Protonex' debt obligations and transaction costs on closing of approximately \$3.8 million, and issued approximately 11.4 million of Ballard shares at fair value of \$1.20 per share, or approximately \$13.7 million, for total purchase consideration of \$17.5 million. In accordance with *IAS 3*, the fair value of the 11.4 million Ballard shares has been measured for accounting purposes using the \$1.20 closing price of the Ballard shares on the day

immediately preceding the acquisition date.

In accordance with IFRS 3, the identifiable assets acquired and liabilities assumed as part of a business combination are recognized separately from goodwill at the acquisition date if they meet the definition of an asset or liability and are exchanged as part of the business combination. The identifiable assets acquired and liabilities assumed are then measured at their acquisition date fair values based on the contractual terms, economic conditions, Ballard's operating and accounting policies and other pertinent conditions as of the acquisition date. The fair value review of Protonex' assets and liabilities commenced with a review of the carrying amount of each respective asset and liability. The carrying amounts of all assets and liabilities were audited as of September 30, 2015 (the former fiscal year-end of Protonex) and included confirmation of existence and a review of potential impairment of all significant assets and a review for completeness of all liabilities. Each asset and liability was then reviewed and measured for potential fair value adjustments from carrying cost to arrive at the preliminary fair value of each asset and liability as of the acquisition date of October 1, 2015.

<i>(Expressed in thousands of U.S. dollars)</i>		
<b>Fair Value of Assets acquired and Liabilities assumed</b>		
		<b>Oct-01-15</b>
Cash and cash equivalents	\$	1,464
Accounts receivable		558
Inventory		2,330
Other current assets		167
Property, plant and equipment		1,223
Intangible assets		11,138
Goodwill		4,272
Other long-term assets		22
Accounts payable and accrued liabilities		(2,654)
Deferred revenue		(275)
Capital lease payable		(22)
Accrued warranty obligations		(47)
Payable to Ballard Power		(703)
Other long-term liabilities		(2)
<b>Fair Value (preliminary) of Assets acquired and Liabilities assumed</b>	<b>\$</b>	<b>17,471</b>

The preliminary fair value of each of the acquired identifiable assets and liabilities assumed was determined as follows:

- The fair value of certain of the acquired working capital balances including accounts receivable, other current assets, accounts payable and accrued liabilities and accrued warranty obligations have been assessed at their respective audited carrying amount on September 30, 2015 which is considered to approximately equate to fair value as a result of the short-term to maturity of each of these accounts.
- The fair value of acquired raw material inventory has been assessed at its audited carrying amount on September 30, 2015 which is considered to approximately equate to fair value. A cost-based approach has been used for raw material inventory as market information to utilize a market approach is not available. Furthermore, an audit of

Protonex as of September 30, 2015 included a net realizable value assessment of the inventory.

- The fair value of acquired finished goods and work-in-progress inventory has been calculated using the market or income approach. Under this approach, the fair value of the finished goods and work-in-progress inventory has been calculated equal to the estimated selling price of the finished units less the sum of the estimated (i) costs to complete; (ii) costs of disposal, and (iii) a reasonable profit allowance for the completion and selling effort of the acquirer, all of which are estimated from the perspective of a market participant. The fair value of finished goods and work-in-progress inventory of includes a fair value adjustment of \$0.1 million from its original audited carrying amount.
- The fair value of other assets, deferred revenues, and capital lease obligations have been assessed at their respective audited carrying amounts on September 30, 2015 as any fair value adjustment would be insignificant.
- Acquired property, plant and equipment consist primarily of specialized manufacturing and research and development equipment, as well as miscellaneous leasehold improvements, computer hardware, computer software and office equipment, all physically located in Protonex' operating facility in Southborough, MA. As there is no market-based evidence of fair value for these specialized assets that are rarely sold other than as part of a continuing business, fair value was estimated using a depreciated replacement cost approach in accordance with *IAS 16*. A depreciated replacement cost approach considers how much it would cost to reproduce an asset after adjusting for depreciation and optimization. The adjustment for depreciation takes into account the age of the asset in relation to its useful life and its residual value. The adjustment for optimization takes into account situations in which the asset is obsolete, over-engineered or has capacity greater than that required. The fair value of property, plant and equipment includes a fair value adjustment of \$1.0 million from its original audited net book value carrying amount.
- Acquired identified intangible assets consist of patents, know-how and in-process research and development, customer base and relationships, trademarks and service marks, non-compete arrangements, and domain names. We have concluded that each of the identified intangible assets meet the definition of an identified intangible asset (or non-monetary asset without physical substance) under *IAS 38 Intangible Assets* as the acquired IP meets the definition of an asset and is identifiable. The fair value of all identified intangible assets includes a fair value adjustment of \$11.1 million from their original audited carrying amount.

*(Expressed in thousands of U.S. dollars)*

<b>Fair Value of Identified Intangible Assets</b>	<b>Amount</b>	<b>Amortization Period</b>
Patents, know-how and in-process research & development	\$ 8,973	20-years
Customer base and relationships	986	10-years
Trademarks and service marks	1,135	15-years
Non-compete agreements	27	1-year
Domain names	17	15-years
<b>Fair Value (preliminary) of Identified Intangible Assets</b>	<b>\$ 11,138</b>	

The preliminary fair value of acquired identified intangible assets were calculated with the assistance of an independent valuator and were determined through a variety of valuation techniques.

- o The fair value of the acquired product and patent portfolio including know-how and in-process R&D totaling \$9.0 million has been calculated using the Relief from Royalty approach which is a variant of the Income Approach. The application of the Relief from Royalty approach involves estimating the value of an intangible asset by quantifying the present value of the stream of market-derived royalty payments that the owner of the intangible asset is exempted or 'relieved' from paying. The method entails the determination of the avoided cost as if the Company did not own any patents, and instead was required to make royalty payments for their use. The basic tenet of this method is that without the ownership of the subject intangible asset, the user of that intangible asset would have to make payments to the owner in return for the rights to use it.
- o The fair value of the acquired customer contracts and relationships totaling \$1.0 million has been calculated using the Multi-Period Excess Earnings Method ("MPEEM") approach which is a variant of the Income Approach. The basic principle of the MPEEM Approach is that a single asset, in isolation, is not capable of generating cash flow for an enterprise. Several assets are brought together and exploited to generate cash flow. Therefore, to determine cash flow from the exploitation of existing customer contracts/relationships, one must deduct the related expenses incurred for the exploitation of other assets used for the generation of overall cash flow and revenues. The fair value of existing customer contracts/relationships was estimated by discounting the net cash flow derived from the expected revenues attributable to the acquired customer contracts/relationships.
- o The fair value of the acquired trademarks and service marks totaling \$1.1 million has been calculated using the Price Premium approach which is a variant of the Income Approach as reasonable market data to enable use of the Relief of Royalty approach was not available. Under the Price Premium approach, the Company is expected to be able to charge a minimal price premium (vis-à-vis competitors) attributable to the acquired trademarks/trade names.
- o The fair value of the acquired non-compete covenants were nominal and were calculated using the Income Approach whereby the fair value of the non-compete covenants was estimated by calculating the expected decrease or loss in forecasted cash flows if the employees compete with the target's business sans the non-compete covenants.

- o The fair value of the acquired website and domain names were nominal and were calculated using the Replacement Cost Approach which considers the value based on the cost of reproducing or replacing the asset.

The remaining unallocated \$4.3 million of the total purchase price consideration of \$17.5 million has been ascribed as Goodwill. The goodwill of \$4.3 million resulting from the acquisition consists largely of the expectation that the acquisition will complement the Corporation's Fuel Cell Products and Services growth platform by delivering strategic benefits in diversification, growth, scale, and profitability.

### SUMMARY OF QUARTERLY RESULTS FROM CONTINUING OPERATIONS

The following table provides summary financial data for our last eight quarters from continuing operations:

	Quarter ended,			
	Dec 31, 2015	Sep 30, 2015	Jun 30, 2015	Mar 31, 2015
<i>(Expressed in thousands of U.S. dollars, except per share amounts and weighted average shares outstanding which are expressed in thousands)</i>				
Revenues from continuing operations	\$ 19,986	\$ 16,037	\$ 11,177	\$ 9,263
Net income (loss) attributable to Ballard from continuing operations	\$ (1,355)	\$ (4,135)	\$ (7,342)	\$ 7,017
Net income (loss) per share attributable to Ballard from continuing operations, basic and diluted	\$ (0.01)	\$ (0.03)	\$ (0.06)	\$ 0.05
Weighted average common shares outstanding	155,188	141,253	132,595	132,276
	Dec 31, 2014	Sep 30, 2014	Jun 30, 2014	Mar 31, 2014
Revenues	\$ 15,647	\$ 20,611	\$ 18,471	\$ 13,992
Net income (loss) attributable to Ballard	\$ (17,467)	\$ (2,423)	\$ (4,457)	\$ (3,841)
Net income (loss) per share attributable to Ballard from continuing operations, basic and diluted	\$ (0.13)	\$ (0.02)	\$ (0.03)	\$ (0.03)
Weighted average common shares outstanding	132,104	132,049	130,392	114,756

**Summary of Quarterly Results:** There were no significant seasonal variations in our quarterly results from continuing operations. Variations in our net loss for the above periods were affected primarily by the following factors:

- **Revenues:** Variations in fuel cell revenues reflect the demand and timing of our customers' fuel cell vehicle, bus and fuel cell product deployments as well as the demand and timing of their engineering services projects.

Variations in fuel cell revenues also reflect the timing of work performed and the achievements of milestones under long-term fixed price contracts including the contract with Volkswagen which commenced in the first quarter of 2013, the Azure Bus Licensing Agreement which commenced in the third quarter of 2013 and the Azure Telecom Backup Power Licensing Agreement which commenced in the second quarter of 2014 prior to breaches by Azure of both the Azure Bus Licensing Agreement and the Azure Telecom Backup Power Licensing Agreement in the fourth quarter of 2014. Revenues were positively impacted as of the fourth quarter of 2015 by the acquisition and integration of Protonex on October 1, 2015.

- **Operating expenditures:** Operating expenses were negatively impacted as of the fourth quarter of 2015 by the acquisition and integration of Protonex on October 1, 2015, including the incurrence of acquisition related expenses totaling \$1.5 million incurred in the second and third quarters of 2015. Operating expenses were positively impacted in the first quarter of 2015 by net recoveries of previously impaired trade receivables of \$1.0 million. Operating expenses were negatively impacted in the fourth quarter of 2014 by impairment losses on trade receivables of (\$6.2) million consisting of a (\$4.4) million impairment charge as a result of material breaches by Azure of the Azure Telecom Backup Power Licensing Agreement and the Azure Bus Licensing Agreement, and by additional impairment charges of (\$1.8) million related to non-collection of certain of our customers primarily in Asia. Impairment losses on trade receivables are recognized in other income (expense). Operating expenses also include the impact of changes in the value of the Canadian dollar, versus the U.S. dollar, on our Canadian dollar denominated expenditures.
- **Net income (loss):** The net income for the first quarter of 2015 was positively impacted by a gain on sale of intellectual property of \$14.2 million resulting from the sale of the automotive-related patents and patent applications of the UTC Portfolio transferred to Volkswagen on the closing of the initial tranche of the Volkswagen IP Agreement. Net income for the fourth quarter of 2015 was positively impacted by a gain on sale of intellectual property of \$5.4 million resulting from the sale of a copy of the automotive-related know-how of the UTC Portfolio to Volkswagen on the closing of the second and final tranche of the Volkswagen IP Agreement.

## CASH FLOWS

Cash, cash equivalents and short-term investments were \$40.0 million at December 31, 2015, compared to \$23.7 million at December 31, 2014. The \$16.4 million increase in cash, cash equivalents and short-term investments in 2015 was driven by net proceeds on the sale of intellectual property of \$29.5 million received on the closing of the initial tranche of the Volkswagen IP Agreement, combined with net proceeds from the July 2015 Offering of \$13.3 million, net proceeds from the Nisshinbo strategic equity investment of \$5.0 million, net proceeds from share purchase warrant exercises of \$0.2 million and employee share purchase option proceeds of \$0.4 million. These inflows were partially offset by a net loss (excluding non-cash items) of (\$19.3) million, working capital outflows of (\$6.0) million, purchases in property, plant and equipment of (\$2.3) million, the acquisition of Protonex of (\$3.8) million partially offset by acquired Protonex cash of \$1.5 million, and investments in fuel cell technology intangible assets of (\$1.6) million.

For the three months ended December 31, 2015, cash used by operating activities was (\$10.6) million, consisting of cash operating losses of (\$4.6) million and net working capital outflows of (\$5.9) million. For the three months ended December 31, 2014, cash used by operating activities was (\$8.2) million, consisting of cash operating losses of (\$10.8) million partially offset by net working capital inflows of \$2.6 million. The (\$2.4) million increase in cash used by operating activities in the fourth quarter of 2015, as compared to the fourth quarter of 2014, was driven by the relative increase in working capital requirements of (\$8.6) million, partially offset by the relative reduction in cash operating losses of \$6.2 million. The \$6.2 million reduction in cash operating losses in the fourth quarter of 2015 was

due primarily to the \$13.1 million reduction in Adjusted EBITDA loss, partially offset by lower impairment losses on trade receivables of (\$6.1) million which while included in the Adjusted EBITDA loss, are excluded from cash operating losses.

In the fourth quarter of 2015, net working capital cash outflows of (\$5.9) million were driven by higher accounts receivable of (\$2.2) million primarily as a result of the timing of Portable Power and Heavy-Duty Motive revenues and the related customer collections, by lower accounts payable and accrued liabilities of (\$1.8) million due primarily to the timing of purchases and supplier payments including the payment of acquisition and transaction related costs incurred on the Protonex acquisition, and by lower deferred revenue of (\$1.5) million as we completed the contract work on certain Technology Solutions, Heavy-Duty Motive and government grant contracts for which we received pre-payments in an earlier period. Working capital inflows of \$2.6 million in the fourth quarter of 2014 was due to higher accrued warranty provisions of \$3.5 million primarily as a result of an adjustment for an expected increase in customer service related expenses in our Telecom Backup Power market in Asia, combined with lower inventory of \$2.6 million as we shipped product purchased and built in prior quarters. These fourth quarter of 2014 working capital inflows were partially offset by lower accounts payable and accrued liabilities of (\$3.7) million as a result of increased supplier payments made for higher inventory purchases in the first three quarters of 2014 and by a downward adjustment to accrued cash-based compensation expense in the fourth quarter of 2014.

For the year ended December 31, 2015, cash used in operating activities was (\$25.4) million, consisting of cash operating losses of (\$19.3) million and net working capital outflows of (\$6.0) million. For the year ended December 31, 2014, cash used in operating activities was (\$20.7) million, consisting of cash operating losses of (\$15.7) million and net working capital outflows of (\$5.0) million. The (\$4.7) million increase in cash used by operating activities in 2015, as compared to 2014, was driven by the relative increase in cash operating losses of (\$3.6) million, combined with the relative increase in working capital requirements of (\$1.0) million. The (\$3.6) million increase in cash operating losses in 2015 was due primarily to lower impairment losses on trade receivables of (\$5.8) million which while included in the Adjusted EBITDA loss, are excluded from cash operating losses, partially offset by the \$3.4 million reduction in Adjusted EBITDA loss.

In 2015, net working capital outflows of (\$6.0) million were driven by higher inventory of (\$5.6) million primarily to support expected Heavy-Duty Motive and Power Products shipments in the first quarter of 2016 to Synergy, the U.S. Army and other customers and as a result of delayed but expected Telecom Backup Power system shipments, by lower accrued warranty provisions of (\$3.6) million due primarily to customer service related expenses incurred in our Telecom Backup Power market in Asia and by Heavy-Duty Motive warranty contract expirations, and by lower accounts payable and accrued liabilities of (\$1.3) million due primarily to the timing of purchases and supplier payments. These 2015 working capital outflows were partially offset by higher deferred revenue of \$4.0 million as we collected pre-payments on certain Heavy-Duty Motive and Technology Solutions contracts in advance of work performed. Working capital outflows of (\$5.0) million in 2014 was driven by lower accounts receivable of (\$4.1) million primarily as a result of impairment losses on trade receivables of (\$6.2) million and the timing of Technology Solutions, Heavy-



Duty Motive and Telecom Backup Power revenues and the related customer collections, and by lower deferred revenue of (\$4.4) million as we completed the contract work on Technology Solutions and certain government grant contracts for which we received pre-payments in an earlier period. These working capital outflows in 2014 were partially offset by working capital inflows related to higher accrued warranty provisions of \$2.4 million primarily as a result of an adjustment for an expected increase in customer service related expenses in our Telecom Backup Power market in Asia, and by lower inventory of \$1.5 million as we shipped product purchased and built in prior quarters.

Investing activities resulted in net cash inflows (outflows) of (\$3.6) million and \$23.3 million, respectively, for the three months and year ended December 31, 2015, compared to cash outflows (\$0.5) million and (\$4.2) million, respectively, for the corresponding periods of 2014. Investing activities in 2015 of \$23.2 million consist primarily of net proceeds on the sale of intellectual property of \$29.5 million received on the closing of the initial tranche of the Volkswagen IP Agreement, partially offset by capital expenditures of (\$2.3) million, by the acquisition of Protonex of (\$3.8) million partially offset by acquired Protonex cash of \$1.5 million, and by investments in fuel cell technology intangible assets of (\$1.6) million. Investing activities in 2014 of (\$4.2) million consist primarily of the investment in fuel cell technology intangible assets of (\$3.4) million related primarily to the acquisition and integration of the UTC intellectual property assets, and capital expenditures of (\$0.8) million.

Financing activities resulted in cash inflows of \$4.9 million and \$18.1 million, respectively, for the three months and year ended December 31, 2015 compared to cash (outflows) inflows of (\$0.2) million and \$18.5 million for the corresponding periods of 2014. Financing activities in 2015 of \$18.1 million consist of net proceeds received from the July 2015 Offering of \$13.4 million, net proceeds from the November 2015 Nisshinbo strategic equity investment of \$5.0 million, net proceeds from share purchase warrant exercises of \$0.2 million, proceeds from employee share purchase option exercises of \$0.4 million, partially offset by capital lease payments of (\$0.8) million. Financing activities in 2014 of \$18.5 million consist of net proceeds from share purchase warrant exercises of \$12.3 million, proceeds from employee share purchase option exercises of \$6.8 million, proceeds on sale of treasury shares of \$0.4 million, partially offset by capital lease payments of (\$0.9) million.

## **LIQUIDITY AND CAPITAL RESOURCES**

At December 31, 2015, we had total Liquidity of \$40.0 million. We measure Liquidity as our net cash position, consisting of the sum of our cash, cash equivalents and short-term investments of \$40.0 million, net of amounts drawn on our \$7 million Canadian demand revolving facility ("Operating Facility") of nil. The Operating Facility is occasionally used to assist in financing our short term working capital requirements and is secured by a hypothecation of our cash, cash equivalents and short-term investments. Our Liquidity position was subsequently augmented in February 2016 by approximately \$3.3 million (Canadian \$4.6 million) as we reached payment under a settlement agreement with Superior Plus as to the full and final amount payable to us under the Indemnity Agreement. Our Liquidity position is expected to be further augmented in 2016 by the additional net proceeds receivable of approximately \$9 million due from the sale of the automotive-related

know-how of the UTC Portfolio to Volkswagen pursuant to the Volkswagen IP Agreement.

We also have a \$1.8 million Canadian capital leasing facility (“Leasing Facility”) which is occasionally used to finance the acquisition and / or lease of operating equipment and is secured by a hypothecation of our cash, cash equivalents and short-term investments. At December 31, 2015, \$0.7 million Canadian was outstanding on the Leasing Facility.

Our Liquidity objective is to maintain cash balances sufficient to fund at least six quarters of forecasted cash used by operating activities at all times. Our strategy to attain this objective is to continue our drive to attain profitable operations that are sustainable by executing a business plan that continues to focus on Fuel Cell Products and Services revenue growth, improving overall gross margins, minimizing Cash Operating Costs, managing working capital requirements, and securing additional financing to fund our operations as needed until we do achieve profitable operations that are sustainable. As a result of our recent actions to bolster our cash balances including the net proceeds received, and receivable, pursuant to the Volkswagen IP Agreement, the July 2015 Offering, the November 2015 Nisshinbo equity investment, and the settlement of the Superior Plus Indemnity Agreement, we believe that we have adequate liquidity in cash and working capital to meet this Liquidity objective and to finance our operations.

Failure to achieve or maintain this Liquidity objective could have a material adverse effect on our financial condition and results of operations including our ability to continue as a going concern. There are also various risks and uncertainties affecting our ability to achieve this Liquidity objective including, but not limited to, the market acceptance and rate of commercialization of our products, the ability to successfully execute our business plan, and general global economic conditions, certain of which are beyond our control. While we continue to make significant investments in product development and market development activities necessary to commercialize our products, and make increased investments in working capital as we grow our business, our actual liquidity requirements will also vary and will be impacted by our relationships with our lead customers and strategic partners, our success in developing new channels to market and relationships with customers, our success in generating revenue growth from near-term product, service and licensing opportunities, our success in managing our operating expense and working capital requirements, foreign exchange fluctuations, and the progress and results of our research, development and demonstration programs.

In addition to our existing cash reserves of \$40.0 million at December 31, 2015, there are 0.1 million warrants outstanding (expire on March 27, 2018) from the March 2013 underwritten offering each of which enables the holder to purchase one common share at a fixed price of \$1.50 per common share, and 1.7 million warrants outstanding (expire on October 9, 2018) from the October 2013 underwritten offering each of which enable the holder to purchase one common share at a fixed price of \$2.00 per common share. If any of these warrants are exercised, our liquidity position would be further augmented. We may also choose to pursue additional liquidity through the issuance of debt or equity in private or public market financings. To enable such an action and to allow the exercise of warrants, we filed a short form base shelf prospectus (“Prospectus”) in May 2014 in each of the provinces and territories of Canada, except Quebec, and a corresponding shelf registration statement on Form F-10 (“Registration Statement”) with the United States Securities and Exchange

Commission. These filings enable offerings of equity securities during the effective period (to June 2016) of the Prospectus and Registration Statements. However, no assurance can be given that any such additional liquidity will be available or that, if available, it can be obtained on terms favorable to the Company.

## **2016 BUSINESS OUTLOOK**

In 2016, we expect to grow revenue, improve gross margin and rationalize certain operating costs. We expect to see revenue growth in our Heavy-Duty Motive market as well as a full-year contribution from our Portable Power market. On gross margin improvement, we plan to generate further product cost reductions and improve operating efficiencies while realizing benefits from expected increased volumes and improved product mix, including important contributions from Portable Power, Technology Solutions and Heavy-Duty Motive. Finally, on operating costs, we have initiated a review of strategic alternatives for our Telecom Backup Power business and will rationalize our Telecom Backup Power and executive team cost structures in 2016.

Given the early stage of fuel cell market development and adoption rate and consistent with 2015, we have decided not to provide specific revenue and Adjusted EBITDA guidance for 2016. While our strategic focus on multiple fuel cell product markets, engineering services and intellectual property monetization serves to mitigate risk, the resulting cadence in customer demand can be uneven through the early stages of market development. As such, our financial results on a quarterly basis are subject to a high degree of variability.

Our outlook for 2016 is based on our internal forecast which reflects an assessment of overall business conditions and takes into account actual sales and financial results in the first six weeks of 2016, sales orders received for units and services to be delivered in the remainder of 2016, an estimate with respect to the generation of new sales and the timing of deliveries in each of our markets for the balance of 2016, and assumes an average U.S. dollar exchange rate in the low 70's in relation to the Canadian dollar for the remainder of 2016. The primary risk factors to our business outlook expectations for 2016 are delays from forecast in terms of closing and delivering expected sales primarily in our Heavy-Duty Motive and Portable Power markets, potential adverse macro-economic conditions negatively impacting our Chinese customer's access to capital and program plans which could adversely impact our Heavy-Duty market, potential disruptions in the Material Handling market as a result of our reliance on a single customer in this market and that customer's internal stack development and commercialization plans, and fluctuations in the Canadian dollar, relative to the U.S. dollar, as a significant portion of our Technology Solutions revenues (including the technology development and engineering services agreement with Volkswagen) are priced in Canadian dollars.

Furthermore, potential fluctuations in our financial results make financial forecasting difficult. The Company's revenues, cash flows and other operating results can vary significantly from quarter to quarter. Sales and margins may be lower than anticipated due to general economic conditions, market-related factors and competitive factors. Cash receipts may also vary from quarter to quarter due to the timing of cash collections from customers. As a result, quarter-to-quarter comparisons of revenues, cash flows and other operating results may not be meaningful. In addition, due to the early stage of development

of the market for hydrogen fuel cell products, it is difficult to accurately predict future revenues, cash flows or results of operations on a quarterly basis. It is likely that in one or more future quarters, financial results will fall below the expectations of securities analysts and investors. If this occurs, the trading price of the Company's shares may be materially and adversely affected.

## OFF-BALANCE SHEET ARRANGEMENTS & CONTRACTUAL OBLIGATIONS

Periodically, we use forward foreign exchange and forward platinum purchase contracts to manage our exposure to currency rate fluctuations and platinum price fluctuations. We record these contracts at their fair value as either assets or liabilities on our balance sheet. Any changes in fair value are either (i) recorded in our statement of comprehensive income if formally designated and qualified under hedge accounting criteria; or (ii) recorded in our statement of operations if either not designated, or not qualified, under hedge accounting criteria. At December 31, 2015, we had outstanding foreign exchange currency contracts to purchase a total of Canadian \$10.8 million at an average rate of 1.33 Canadian per U.S dollar, resulting in an unrealized loss of (\$0.3) million at December 31, 2015. The outstanding foreign exchange currency contracts are not qualified under hedge accounting.

At December 31, 2015, we did not have any other material obligations under guarantee contracts, retained or contingent interests in transferred assets, outstanding derivative instruments or non-consolidated variable interests.

At December 31, 2015, we had the following contractual obligations and commercial commitments:

<b>Contractual Obligations</b>	<b>Total</b>	Payments due by period,			
		Less than one year	1-3 years	4-5 years	After 5 years
Operating leases	\$ 11,447	\$ 2,409	\$ 4,532	\$ 2,616	\$ 1,890
Capital leases	10,536	1,524	2,014	2,167	4,830
Asset retirement obligations	4,245	-	-	-	4,245
<b>Total contractual obligations</b>	<b>\$ 26,228</b>	<b>\$ 3,993</b>	<b>\$ 6,546</b>	<b>\$ 4,783</b>	<b>\$ 10,965</b>

In addition, we have outstanding commitments of \$0.4 million related primarily to purchases of capital assets at December 31, 2015. Capital expenditures pertain to our regular operations and are expected to be funded through cash on hand.

In connection with the acquisition of intellectual property from UTC on April 24, 2014, we retain a royalty obligation to pay UTC a portion (typically 25%) of any future intellectual property sale and licensing income generated from our intellectual property portfolio for a period of 15-years expiring in April 2029.

As at December 31, 2015, we retain a previous funding obligation to pay royalties of 2% of revenues (to a maximum of Canadian \$5.4 million) on sales of certain fuel cell products for commercial distributed utility applications. No royalties have been incurred to date as a result of this agreement. We also retain a previous funding obligation to pay royalties of 2% of revenues (to a maximum of Canadian \$2.2 million) on sales of certain fuel cell products for commercial transit applications. No royalties have been incurred to date as a result of this agreement.

In the ordinary course of business or as required by certain acquisition or disposition agreements, we are periodically required to provide certain indemnities to other parties.

Our Arrangement with Superior Plus included an Indemnity Agreement which set out each party's continuing obligations to the other. The Indemnity Agreement included two basic elements to the final determination date of December 31, 2015: it provided for the indemnification of each party by the other for breaches of representations and warranties or covenants as well as, in our case, any liability relating to our business which is suffered by Superior Plus. Our indemnity to Superior Plus with respect to our representation relating to the existence of our tax pools immediately prior to the completion of the Arrangement is limited to an aggregate of Canadian \$7.4 million with a threshold amount of Canadian \$0.5 million before there is an obligation to make a payment. Second, the Indemnity Agreement provided for adjustments to be paid by us, or to us, depending on the final determination of the amount of our Canadian non-capital losses, scientific research and development expenditures and investment tax credits generated to December 31, 2008, to the extent that such amounts are more or less than the amounts estimated at the time the Arrangement was executed. In 2015, we reached agreement and signed mutual releases with Superior Plus as to the full and final amount payable to us under the Indemnity Agreement and received additional cash proceeds of approximately \$3.3 million (Canadian \$4.6 million) in February 2016. The cash proceeds receivable have been recorded as a credit to shareholders' equity as of December 31, 2015 consistent with the accounting treatment for the original transaction in 2008.

At December 31, 2015, we have not accrued any other amount owing, or receivable, as a result of any other indemnity agreements undertaken in the ordinary course of business.

## RELATED PARTY TRANSACTIONS

Related parties include shareholders with a significant ownership interest in either us or Dantherm Power, together with their subsidiaries and affiliates. Revenues and costs recognized from such transactions reflect the prices and terms of sale and purchase transactions with related parties, which are in accordance with normal trade practices at fair value. For the three months and year ended December 31, 2015 and 2014, related party transactions and balances are limited to transactions between Dantherm Power and its non-controlling interests as follows:

<i>(Expressed in thousands of U.S. dollars)</i>	Three Months Ended December 31,	
<b>Transactions with related parties</b>	<b>2015</b>	2014
Purchases	\$ 61	\$ 39
Finance expense on Dantherm Power debt to Dantherm Power non-controlling interests	\$ 8	\$ 8

<i>(Expressed in thousands of U.S. dollars)</i>	Year Ended December 31,	
<b>Transactions with related parties</b>	<b>2015</b>	2014
Purchases	\$ 172	\$ 175
Finance expense on Dantherm Power debt to Dantherm Power non-controlling interests	\$ 30	\$ 34

(Expressed in thousands of U.S. dollars)

<b>Balances with related parties</b>	As at December 31,	
	2015	2014
Trade accounts payable	\$ 24	\$ 70
Interest payable	\$ 69	\$ 45
Dantherm Power debt to Dantherm Power non-controlling interests	\$ 433	\$ 484

As at December 31, 2015, Ballard holds a controlling 57% ownership interest in Dantherm Power as compared to a 43% interest held by Dantherm A/S. Ballard's ownership position increased in mid-June 2015 from 52% to 57% when pursuant to a mutual release agreement, Azure returned its 10% ownership position in Dantherm Power to Dantherm Power for nil proceeds, upon which the shares were cancelled by Dantherm Power. As of December 31, 2015, the outstanding Dantherm Power debt (including interest) to Dantherm Power's non-controlling interests totals \$0.5 million, bears interest at 6.0% per annum, is non-convertible, and is repayable by December 31, 2016.

## **OUTSTANDING SHARE DATA**

### **As at February 24, 2016**

Common share outstanding	156,839,687
Warrants outstanding	1,797,563
Options outstanding	5,503,000
DSU's outstanding	917,625
RSU's outstanding (subject to vesting criteria)	1,708,626

## **CRITICAL ACCOUNTING POLICIES AND KEY SOURCES OF ESTIMATION UNCERTAINTY**

Our consolidated financial statements are prepared in accordance with IFRS, which require us to make estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

### ***Critical Judgments in Applying Accounting Policies:***

Critical judgments that we have made in the process of applying our accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements is limited to our assessment of the Corporation's ability to continue as a going concern (See Note 2 (e) to our annual consolidated financial statements).

Our significant accounting policies are detailed in note 4 to our annual consolidated financial statements for the year ended December 31, 2015.

### ***Key Sources of Estimation Uncertainty:***

The following are key assumptions concerning the future and other key sources of estimation uncertainty that have a significant risk of resulting in a material adjustment to the reported amount of assets, liabilities, income and expenses within the next financial year.

## REVENUE RECOGNITION

Revenues are generated primarily from product sales and services, the license and sale of intellectual property, and the provision of engineering services. Product and service revenues are derived primarily from standard equipment and material sales contracts and from long-term fixed price contracts. Intellectual property license and sale revenues are derived primarily from licensing and sale agreements and from long-term fixed price contracts. Engineering service revenues are derived primarily from cost-plus reimbursable contracts and from long-term fixed price contracts.

On standard equipment and material sales contracts, revenues are recognized when (i) significant risks and rewards of ownership of the goods has been transferred to the buyer; (ii) we retain neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold; (iii) the amount of revenue can be measured reliably; (iv) it is probable that the economic benefits associated with the sale will accrue to us; and (v) the costs incurred, or to be incurred, in respect of the transaction can be measured reliably. Provisions are made at the time of sale for warranties. Revenue recognition for standard equipment and material sales contracts does not usually involve significant estimates.

On standard licensing and sale agreements, revenues are recognized on the transfer of the rights to the licensee if (i) the rights to the assets are assigned to the licensee in return for a fixed fee or a non-refundable guarantee; (ii) the contract is non-cancellable; (iii) the licensee is able to exploit its rights to the asset freely; and (iv) the Company has no remaining obligations to perform. Otherwise, the proceeds are considered to relate to the right to use the asset over the license period and the revenue is recognized over that period. Revenue recognition for license and sale agreements does not usually involve significant estimates.

On cost-plus reimbursable contracts, revenues are recognized as costs are incurred, and include applicable fees earned as services are provided. Revenue recognition for cost-plus reimbursable contracts does not usually involve significant estimates.

On long-term fixed price contracts, revenues are recorded on the percentage-of-completion basis over the duration of the contract, which consists of recognizing revenue on a given contract proportionately with its percentage of completion at any given time. The percentage of completion is determined by dividing the cumulative costs incurred as at the balance sheet date by the sum of incurred and anticipated costs for completing a contract.

- The determination of anticipated costs for completing a contract is based on estimates that can be affected by a variety of factors such as variances in the timeline to completion, the cost of materials, the availability and cost of labour, as well as productivity.
- The determination of potential revenues includes the contractually agreed amount and may be adjusted based on the estimate of our attainment on achieving certain defined contractual milestones. Management's estimation is required in determining the probability that the revenue will be received and in determining the measurement of that amount.

Estimates used to determine revenues and costs of long-term fixed price contracts involve uncertainties that ultimately depend on the outcome of future events and are periodically revised as projects progress. There is a risk that a customer may ultimately disagree with our assessment of the progress achieved against milestones, or that our estimates of the work required to complete a contract may change. The cumulative effect of changes to anticipated revenues and anticipated costs for completing a contract are recognized in the period in which the revisions are identified. If the anticipated costs exceed the anticipated revenues on a contract, such loss is recognized in its entirety in the period it becomes known.

During the three months and year ended December 31, 2015 and 2014, there were no material adjustments to revenues relating to revenue recognized in a prior period.

#### ASSET IMPAIRMENT

The carrying amounts of our non-financial assets other than inventories are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For goodwill and intangible assets that have indefinite useful lives, the recoverable amount is estimated at least annually.

The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. 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. In assessing fair value less costs to sell, the price that would be received on the sale of an asset in an orderly transaction between market participants at the measurement date is estimated. For the purposes of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other groups of assets. The allocation of goodwill to cash-generating units reflects the lowest level at which goodwill is monitored for internal reporting purposes. Many of the factors used in assessing fair value are outside the control of management and it is reasonably likely that assumptions and estimates will change from period to period. These changes may result in future impairments. For example, our revenue growth rate could be lower than projected due to economic, industry or competitive factors, or the discount rate used in our value in use model could increase due to a change in market interest rates. In addition, future goodwill impairment charges may be necessary if our market capitalization decreased due to a decline in the trading price of our common stock, which could negatively impact the fair value of our business.

An impairment loss is recognized if the carrying amount of an asset or its cash-generating unit exceeds its estimated recoverable amount. Impairment losses are recognized in net loss. Impairment losses recognized in respect of the cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the units, and then to reduce the carrying amounts of the other assets in the unit on a pro-rata basis.

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognized in prior periods are assessed at each reporting date for any



indications that the cumulative loss has decreased or no longer exists. 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.

We perform the annual review of goodwill as at December 31 of each year, more often if events or changes in circumstances indicate that it might be impaired. Under IFRS, the annual review of goodwill requires a comparison of the carrying value of the asset to the higher of (i) value in use; and (ii) fair value less costs to sell. Value in use is defined as the present value of future cash flows expected to be derived from the asset in its current state. As of December 31, 2015, our consolidated goodwill balance of \$40.6 million relates solely to our Fuel Cell Products and Services segment. Based on the impairment test performed as at December 31, 2015, we have concluded that no goodwill impairment charge is required for the year ending December 31, 2015. Details of our 2015 goodwill impairment tests are as follows:

- One of the methods used to assess the recoverable amount of the goodwill is a fair value, less costs to sale, test. Our fair value test is in effect a modified market capitalization assessment, whereby we calculate the fair value of the Fuel Cell Products and Services segment by first calculating the value of the Company at December 31, 2015 based on the average closing share price in the month of December, add a reasonable estimated control premium of 25% to determine the Company's enterprise value on a controlling basis after adjusting for excess cash balances, and then deducting the estimated costs to sell from this enterprise value to arrive at the fair value of the Fuel Cell Products and Services segment. As a result of this assessment, we have determined that the fair value of the Fuel Cell Products and Services segment exceeds its carrying value as of December 31, 2015 indicating that no impairment charge is required for 2015.
- In addition to this fair value test, we also performed a value in use test on our Fuel Cell Products and Services segment that compared the carrying value of the segment to the present value of future cash flows expected to be derived from the segment. The principal factors used in this discounted cash flow analysis requiring significant estimation are the projected results of operations, the discount rate based on the weighted average cost of capital ("WACC"), and terminal value assumptions. Our value in use test was based on a WACC of 15%; an average estimated compound annual growth rate of approximately 27% from 2016 to 2021; and a terminal year EBITDA multiplied by a terminal value multiplier of 10. Our value in use assessment resulted in an estimated fair value for the Fuel Cell Products and Services segment that is consistent with that as determined under the above fair value, less costs to sell, assessment. As a result of this assessment, we have determined that the fair value of the Fuel Cell Products segment exceeds its carrying value by a significant amount as of December 31, 2015 indicating that no impairment charge is required in 2015.

In addition to the above goodwill impairment test, we perform a quarterly assessment of the carrying amounts of our non-financial assets (other than inventories) to determine whether there is any indication of impairment. During the three months and years ended December, 2015 and 2014, there was no material adjustments to non-financial assets

(other than inventories) relating to these reviews.

#### WARRANTY PROVISION

A provision for warranty costs is recorded on product sales at the time of shipment. In establishing the accrued warranty liabilities, we estimate the likelihood that products sold will experience warranty claims and the cost to resolve claims received.

In making such determinations, we use estimates based on the nature of the contract and past and projected experience with the products. Should these estimates prove to be incorrect, we may incur costs different from those provided for in our warranty provisions. During the three months and year ended December 31, 2015, we recorded provisions to accrued warranty liabilities of \$0.3 million and \$0.9 million, respectively, for new product sales, compared to \$0.5 million and \$1.0 million, respectively, for the three months and year ended December 31, 2014.

We review our warranty assumptions and make adjustments to accrued warranty liabilities quarterly based on the latest information available and to reflect the expiry of contractual obligations. Adjustments to accrued warranty liabilities are recorded in cost of product and service revenues. As a result of these reviews and the resulting adjustments, our warranty provision and cost of revenues for the three months and year ended December 31, 2015 were adjusted downwards by a net amount of \$0.5 million and \$1.3 million, respectively, compared to a net adjustment (upwards) downwards of (\$3.7) million and (\$3.5) million for the three months and year ended December 31, 2014. The adjustments to the accrued warranty liability provisions in 2015 were due primarily due to contractual warranty expirations and improved lifetimes and reliability of our Heavy-Duty Motive and Telecom Backup Power products, whereas the negative adjustments to the accrued warranty liability provisions in 2014 were primarily due to an increase in customer service related expenses for our Telecom Backup Power products in Asia.

#### INVENTORY PROVISION

In determining the lower of cost and net realizable value of our inventory and establishing the appropriate provision for inventory obsolescence, we estimate the likelihood that inventory carrying values will be affected by changes in market pricing or demand for our products and by changes in technology or design which could make inventory on hand obsolete or recoverable at less than cost. We perform regular reviews to assess the impact of changes in technology and design, sales trends and other changes on the carrying value of inventory. Where we determine that such changes have occurred and will have a negative impact on the value of inventory on hand, appropriate provisions are made. If there is a subsequent increase in the value of inventory on hand, reversals of previous write-downs to net realizable value are made. Unforeseen changes in these factors could result in additional inventory provisions, or reversals of previous provisions, being required. During the three months and year ended December 31, 2015, negative inventory adjustments of (\$0.4) million and (\$0.6) million, respectively, were recorded as a charge to cost of product and service revenues, compared to negative inventory adjustments of (\$0.6) million and (\$1.3) million, respectively, for the three months and year ended December 31, 2014.

## IMPAIRMENT RECOVERIES (LOSSES) ON TRADE RECEIVABLES

Trade and other receivables are recognized initially at fair value and subsequently at amortized cost using the effective interest method, less any impairment losses. Fair value is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date. In determining the fair value of our trade and other receivables and establishing the appropriate provision for doubtful accounts, we perform regular reviews to estimate the likelihood that our trade and other accounts receivable will ultimately be collected in a timely manner. Where we determine that customer collectability issues have occurred and will have a negative impact on the value of trade and other receivables, appropriate provisions are made. If there is a subsequent recovery in the value of trade and other receivables, reversals of previous write-downs to fair value are made. Unforeseen changes in these factors could result in additional impairment provisions, or reversals of previous impairment provisions, being required. During the three months and year ended December 31, 2015, net impairment recoveries on trade receivables of nil and \$0.9 million, respectively, were recorded as other operating income, compared to compared to net impairment (charges) of (\$6.2) million and (\$6.2) million, respectively, for the three months and year ended December 31, 2014.

## EMPLOYEE FUTURE BENEFITS

The present value of our defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that have terms to maturity approximating the terms of the related pension liability. Determination of benefit expense requires assumptions such as the discount rate to measure obligations, expected plan investment performance, expected healthcare cost trend rate, and retirement ages of employees. Actual results will differ from the recorded amounts based on these estimates and assumptions.

## INCOME TAXES

We use the asset and liability method of accounting for income taxes. Under this method, deferred income taxes are recognized for the deferred income tax consequences attributable to differences between the financial statement carrying values of assets and liabilities and their respective income tax bases (temporary differences) and for loss carry-forwards. The resulting changes in the net deferred tax asset or liability are included in income.

Deferred tax assets and liabilities are measured using enacted, or substantively enacted, tax rates expected to apply to taxable income in the years in which temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities, of a change in tax rates, is included in income in the period that includes the substantive enactment date. Deferred income tax assets are reviewed at each reporting period and are reduced to the extent that it is no longer probable that the related tax benefit will be realized. As of December 31, 2015 and 2014, we have not recorded any deferred income tax assets on our consolidated statement of financial position.

## NEW AND FUTURE IFRS ACCOUNTING POLICIES

### **Recently Adopted Accounting Policy Changes:**

We did not adopt any new accounting standard changes or amendments effective January

1, 2015 that had a material impact on our consolidated financial statements.

### **Future Accounting Policy Changes:**

The following is an overview of accounting standard changes that we will be required to adopt in future years. We do not expect to adopt any of these standards before their effective dates and we continue to evaluate the impact of these standards on our consolidated financial statements.

#### **IFRS 11 (Amendments) – BUSINESS COMBINATION ACCOUNTING FOR INTERESTS IN A JOINT OPERATION**

On May 6, 2014, the IASB issued amendments to *IFRS 11 Accounting for Acquisitions of Interests in Joint Operations*. The amendments require business combination accounting to be applied to acquisitions of interests in a joint operation that constitute a business.

The amendments apply prospectively for annual periods beginning on or after January 1, 2016. The Corporation intends to adopt the amendments to IFRS 11 in its financial statements for the fiscal year beginning on January 1, 2016. We do not expect the amendments to have a material impact on the financial statements.

#### **IAS 16 and IAS 38 (Amendments) – METHODS OF DEPRECIATION AND AMORTISATION**

On May 12, 2014, the IASB issued amendments to *IAS 16 Property, Plant and Equipment* and *IAS 38 Intangible Assets*. The amendment made to IAS 16 explicitly state that revenue-based methods of depreciation cannot be used for property, plant and equipment. This is because such methods reflect factors other than the consumption of economic benefits embodied in the asset. The amendments in IAS 38 introduce a rebuttable presumption that the use of revenue-based amortization methods for intangible assets is inappropriate. This presumption could be overcome only when revenue and consumption of the economic benefits of the intangible asset are highly correlated or when the intangible asset is expressed as a measure of revenue.

The amendments apply prospectively for annual periods beginning on or after January 1, 2016. The Corporation intends to adopt the amendments to IAS 16 and IAS 38 in its financial statements for the fiscal year beginning on January 1, 2016. We do not expect the amendments to have a material impact on the financial statements.

#### **ANNUAL IMPROVEMENTS TO IFRS (2012 – 2014) CYCLE**

On September 25, 2014, the IASB issued narrow-scope amendments to a total of four standards as part of its annual improvements process. Amendments were made to clarify the following in their respective standards:

- Changes in method for disposal under IFRS 5 Non-current Assets Held for Sale and Discontinued Operations;
- Continuing involvement' for servicing contracts and offsetting disclosures in condensed interim financial statements under IFRS 7 Financial Instruments: Disclosures;
- Discount rate in a regional market sharing the same currency under IAS 19 Employee Benefits; and
- Disclosure of information 'elsewhere in the interim financial report' under IAS 34 Interim Financial Reporting;

The amendments will apply for annual periods beginning on or after January 1, 2016. Each of the amendments has its own specific transition requirements. The Corporation intends to adopt the amendments in its financial statements for the fiscal year beginning on January 1, 2016. We do not expect the amendments to have a material impact on the financial statements.

#### IAS 1 (Amendments) - DISCLOSURE INITIATIVE

On December 18, 2014, the IASB issued amendments to *IAS 1 Presentation of Financial Statements* as part of its major initiative to improve presentation and disclosure in financial reports (the "Disclosure Initiative"). The amendments will not require any significant change to current practice, but should facilitate improved financial statement disclosures.

The amendments are effective for annual periods beginning on or after January 1, 2016. The Corporation intends to adopt the amendments to IAS 16 and IAS 38 in its financial statements for the fiscal year beginning on January 1, 2016. The extent of the impact of adoption of the amendments has not yet been determined.

#### IFRS 15 – REVENUE FROM CONTRACTS WITH CUSTOMERS

On May 28, 2014, the IASB issued *IFRS 15 Revenue from Contracts with Customers*, which replaces *IAS 11 Construction Contracts*, *IAS 18 Revenue*, *IFRIC 13 Customer Loyalty Programmes*, *IFRIC 15 Agreements for the Construction of Real Estate*, *IFRIC 18 Transfer of Assets from Customers*, and *SIC 31 Revenue – Barter Transactions Involving Advertising Services*.

IFRS 15 contains a single model that applies to contracts with customers and two approaches to recognizing revenue: at a point in time or over time. The model features a contract-based five-step analysis of transactions to determine whether, how much, and when revenue is recognized. New estimates and judgmental thresholds have been introduced, which may affect the amount and/or timing of revenue recognized. The new standard applies to contracts with customers. It does not apply to insurance contracts, financial instruments or lease contracts, which fall in the scope of other IFRSs.

The new standard is effective for fiscal years ending on or after December 31, 2018 and is available for early adoption. The Corporation intends to adopt IFRS 15 in its financial statements for the fiscal year beginning on January 1, 2018. The extent of the impact of adoption of the standard has not yet been determined.

#### IFRS 9 – FINANCIAL INSTRUMENTS

On July 24, 2014, the IASB issued the complete *IFRS 9 Financial Instruments* ("IFRS 9 (2014)"). IFRS 9 (2014) introduces new requirements for the classification and measurement of financial assets. Under IFRS 9 (2014), financial assets are classified and measured based on the business model in which they are held and the characteristics of their contractual cash flows.

The standard introduces additional changes relating to financial liabilities. It also amends the impairment model by introducing a new 'expected credit loss' model for calculating impairment.

IFRS 9 (2014) also includes a new general hedge accounting standard which aligns hedge accounting more closely with risk management. This new standard does not fundamentally change the types of hedging relationships or the requirement to measure and recognize ineffectiveness; however it will provide more hedging strategies that are used for risk management to qualify for hedge accounting and introduce more judgment to assess the effectiveness of a hedging relationship. Special transitional requirements have been set for the application of the new general hedging model.

The mandatory effective date of IFRS 9 (2014) is for annual periods beginning on or after January 1, 2018 and must be applied retrospectively with some exemptions. Early adoption is permitted. The restatement of prior periods is not required and is only permitted if information is available without the use of hindsight. The Corporation intends to adopt IFRS 9 (2014) in its financial statements for the fiscal year beginning on January 1, 2018. The extent of the impact of adoption of the standard has not yet been determined.

### IFRS 16 – LEASES

On January 13, 2016, the IASB issued IFRS 16 Leases. IFRS 16 standard introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments.

This standard substantially carries forward the lessor accounting requirements of IAS 17, while requiring enhanced disclosures to be provided by lessors. Other areas of the lease accounting model have been impacted, including the definition of a lease. Transitional provisions have been provided.

The new standard is effective for annual periods beginning on or after January 1, 2019. Early adoption is permitted for entities that apply *IFRS 15 Revenue from Contracts with Customers* as at or before the date of initial adoption of IFRS 16. IFRS 16 will replace *IFRS 17 Leases*. The Corporation intends to adopt IFRS 16 in its financial statements for the fiscal year beginning on January 1, 2019. The extent of the impact of adoption of the standard has not yet been determined.

### **SUPPLEMENTAL NON-GAAP MEASURES**

In addition to providing measures prepared in accordance with GAAP, we present certain supplemental non-GAAP measures. These measures are Cash Operating Costs, EBITDA and Adjusted EBITDA, and Normalized Net Loss. These non-GAAP measures do not have any standardized meaning prescribed by GAAP and therefore are unlikely to be comparable to similar measures presented by other companies. We believe these measures are useful in evaluating the operating performance and liquidity of the Company's ongoing business. These measures should be considered in addition to, and not as a substitute for, net income, cash flows and other measures of financial performance and liquidity reported in accordance with GAAP.

#### **Cash Operating Costs**

This supplemental non-GAAP measure is provided to assist readers in determining our operating costs on a cash basis. We believe this measure is useful in assessing performance

and highlighting trends on an overall basis.

We also believe Cash Operating Costs is frequently used by securities analysts and investors when comparing our results with those of other companies. Cash Operating Costs differs from the most comparable GAAP measure, operating expenses, primarily because it does not include stock-based compensation expense, depreciation and amortization, impairment losses or recoveries on trade receivables, restructuring charges, acquisition costs, and financing charges. The following tables show a reconciliation of operating expenses to Cash Operating Costs for the three months and year ended December 31, 2015 and 2014:

<i>(Expressed in thousands of U.S. dollars)</i>			
<b>Cash Operating Costs</b>	Three months ended December 31,		
	2015	2014	\$ Change
Total Operating Expenses	\$ 9,303	\$ 14,659	\$ (5,356)
Stock-based compensation (expense) recovery	(248)	367	(615)
Impairment recovery (losses) on trade receivables	39	(6,159)	6,198
Acquisition and integration costs	(902)	-	(902)
Restructuring (charges) recovery	-	(78)	78
Financing charges	-	-	-
Depreciation and amortization	(463)	(958)	495
<b>Cash Operating Costs</b>	<b>\$ 7,729</b>	<b>\$ 7,831</b>	<b>\$ (102)</b>

<i>(Expressed in thousands of U.S. dollars)</i>			
<b>Cash Operating Costs</b>	Year ended December 31,		
	2015	2014	\$ Change
Total Operating Expenses	\$ 34,858	\$ 38,300	\$ (3,442)
Stock-based compensation expense	(2,949)	(2,249)	(700)
Impairment recovery (losses) on trade receivables	899	(6,206)	7,105
Acquisition and integration costs	(1,542)	-	(1,542)
Restructuring (charges) recovery	13	(85)	98
Financing charges	-	-	-
Depreciation and amortization	(2,229)	(3,393)	1,164
<b>Cash Operating Costs</b>	<b>\$ 29,050</b>	<b>\$ 26,367</b>	<b>\$ 2,683</b>

### **EBITDA and Adjusted EBITDA**

These supplemental non-GAAP measures are provided to assist readers in determining our operating performance and ability to generate operating cash flow. We believe this measure is useful in assessing performance and highlighting trends on an overall basis. We also believe EBITDA and Adjusted EBITDA are frequently used by securities analysts and investors when comparing our results with those of other companies. EBITDA differs from the most comparable GAAP measure, net loss attributable to Ballard from continuing operations, primarily because it does not include finance expense, income taxes, depreciation of property, plant and equipment, amortization of intangible assets, and goodwill impairment charges. Adjusted EBITDA adjusts EBITDA for stock-based compensation expense, transactional gains and losses, asset impairment charges, finance and other income, and acquisition costs. The following tables show a reconciliation of net income attributable to Ballard to EBITDA and Adjusted EBITDA for the three months and year ended December 31, 2015 and 2014:

*(Expressed in thousands of U.S. dollars)*

EBITDA and Adjusted EBITDA	Three months ended December 31,		
	2015	2014	\$ Change
Net (loss) from continuing operations attributable to Ballard	\$ (1,355)	\$ (17,467)	\$ 16,112
Depreciation and amortization	1,536	1,448	88
Finance expense	208	234	(26)
Income taxes	(1)	(477)	476
EBITDA attributable to Ballard	\$ 388	\$ (16,262)	\$ 16,650
Stock-based compensation expense (recovery)	248	(367)	615
Acquisition and integration costs	902	-	902
Finance and other (income) loss	950	501	449
Gain on sale of intellectual property	(5,424)	-	(5,424)
Loss on sale of property, plant and equipment	-	71	(71)
<b>Adjusted EBITDA</b>	<b>\$ (2,936)</b>	<b>\$ (16,057)</b>	<b>\$ 13,121</b>

*(Expressed in thousands of U.S. dollars)*

EBITDA and Adjusted EBITDA	Year ended December 31,		
	2015	2014	\$ Change
Net (loss) from continuing operations attributable to Ballard	\$ (5,815)	\$ (28,188)	\$ 22,373
Depreciation and amortization	4,375	5,610	(1,235)
Finance expense	794	942	(148)
Income taxes	211	417	(206)
EBITDA attributable to Ballard	\$ (435)	\$ (21,219)	\$ 20,784
Stock-based compensation expense	2,949	2,249	700
Acquisition and integration costs	1,542	-	1,542
Finance and other (income) loss	305	113	192
Gain on sale of intellectual property	(19,619)	-	(19,619)
Impairment of equity investment	-	149	(149)
Loss (gain) on sale of property, plant and equipment	(1)	73	(74)
<b>Adjusted EBITDA</b>	<b>\$ (15,259)</b>	<b>\$ (18,635)</b>	<b>\$ 3,376</b>

### Normalized Net Loss

This supplemental non-GAAP measure is provided to assist readers in determining our financial performance. We believe this measure is useful in assessing our actual performance by adjusting our results from continuing operations for one-time transactional gains and losses and impairment losses. Normalized Net Loss differs from the most comparable GAAP measure, net loss attributable to Ballard from continuing operations, primarily because it does not include impairment losses or recoveries on trade receivables, transactional gains and losses, asset impairment charges, and acquisition costs. The following table shows a reconciliation of net loss attributable to Ballard from continuing operations to Normalized Net Loss for the three months and year ended December 31, 2015 and 2014.



<i>(Expressed in thousands of U.S. dollars)</i>		Three months ended December 31,		
<b>Normalized Net Loss</b>	<b>2015</b>	2014	<b>\$ Change</b>	
Net (loss) attributable to Ballard from continuing operations	\$ (1,355)	\$ (17,467)	\$ 16,112	
Impairment loss (recovery) on trade receivables	(39)	6,159	(6,198)	
Acquisition and integration costs	902	-	902	
Gain on sale of intellectual property	(5,424)	-	(5,424)	
<b>Normalized Net Loss</b>	<b>\$ (5,916)</b>	<b>\$ (11,308)</b>	<b>\$ 5,392</b>	
<b>Normalized Net Loss per share</b>	<b>\$ (0.04)</b>	<b>\$ (0.09)</b>	<b>\$ 0.05</b>	

  

<i>(Expressed in thousands of U.S. dollars)</i>		Year ended December 31,		
<b>Normalized Net Loss</b>	<b>2015</b>	2014	<b>\$ Change</b>	
Net (loss) attributable to Ballard from continuing operations	\$ (5,815)	\$ (28,188)	\$ 22,373	
Impairment loss (recovery) on trade receivables	(899)	6,206	(7,105)	
Impairment of equity investment	-	149	(149)	
Acquisition and integration costs	1,542	-	1,542	
Gain on sale of intellectual property	(19,619)	-	(19,619)	
<b>Normalized Net Loss</b>	<b>\$ (24,791)</b>	<b>\$ (21,833)</b>	<b>\$ (2,958)</b>	
<b>Normalized Net Loss per share</b>	<b>\$ (0.18)</b>	<b>\$ (0.17)</b>	<b>\$ (0.01)</b>	

## MANAGEMENT'S REPORT ON DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

### Disclosure controls and procedures

Our disclosure controls and procedures are designed to provide reasonable assurance that relevant information is gathered and reported to senior management, including the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO"), on a timely basis so that appropriate decisions can be made regarding public disclosures.

As of the end of the period covered by this report, we evaluated, under the supervision and with the participation of management, including the CEO and the CFO, the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934 ("Exchange Act"). The CEO and CFO have concluded that as of December 31, 2015, our disclosure controls and procedures were effective to ensure that information required to be disclosed in reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified therein, and accumulated and reported to management to allow timely discussions regarding required disclosure.

### Internal control over financial reporting

The CEO and CFO, together with other members of management, are responsible for establishing and maintaining adequate internal control over the Company's financial reporting. Internal control over financial reporting is designed under our supervision, and effected by the Company's board of directors, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS.

There are inherent limitations in the effectiveness of internal control over financial reporting, including the possibility that misstatements may not be prevented or detected. Accordingly, even effective internal controls over financial reporting can provide only reasonable assurance with respect to financial statement preparation. Furthermore, the effectiveness of internal controls can change with circumstances.

Management, including the CEO and CFO, have evaluated the effectiveness of internal control over financial reporting, as defined in Rules 13a–15(f) of the Exchange Act, in relation to criteria described in *Internal Control–Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”). Based on this evaluation, Management has determined that internal control over financial reporting was effective as of December 31, 2015.

As Protonex was acquired in the last 365 days, we have limited the scope of our design of disclosure controls and procedures and internal controls over financial reporting to exclude controls, policies and procedures of Protonex. Summary financial information of Protonex consolidated in our year ended December 31, 2015 consolidated financial statements are as follows:

<b>Select Protonex financial information</b> (Expressed in thousands of U.S. dollars)		<b>2015</b>
Revenues	\$	3,397
Cash Operating Costs (1)	\$	1,518
Adjusted EBITDA (1)	\$	(260)
Net loss	\$	(652)
Cash used by operating activities	\$	(2,363)
Cash and cash equivalents	\$	303
Total assets	\$	17,802

<sup>1</sup> Cash Operating Costs, Adjusted EBITDA, Normalized Net Loss and Normalized Net Loss per share are non-GAAP measures. We use certain Non-GAAP measures to assist in assessing our financial performance. Non-GAAP measures do not have any standardized meaning prescribed by GAAP and are therefore unlikely to be comparable to similar measures presented by other companies. See reconciliation to GAAP in the Supplemental Non-GAAP Measures section.

KPMG LLP, our independent registered public accounting firm, has audited our consolidated financial statements and expressed an unqualified opinion thereon. KPMG has also expressed an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2015.

#### Changes in internal control over financial reporting

During the year ended December 31, 2015, there were no changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting. Our design of disclosure controls and procedures and internal controls over financial reporting includes controls, policies and procedures covering Dantherm Power.

#### **RISKS & UNCERTAINTIES**

An investment in our common shares involves risk. Investors should carefully consider the risks and uncertainties described below and in our Annual Information Form which remain substantively unchanged. The risks and uncertainties described in our Annual Information Form are not the only ones we face. Additional risks and uncertainties, including those that we do not know about now or that we currently deem immaterial, may also adversely affect

our business. For a more complete discussion of the risks and uncertainties which apply to our business and our operating results, please see our Annual Information Form and other filings with Canadian ([www.sedar.com](http://www.sedar.com)) and U.S. securities regulatory authorities ([www.sec.gov](http://www.sec.gov)).

A summary of our identified risks and uncertainties are as follows:

- We may not be able to achieve commercialization of our products on the timetable we anticipate, or at all;
- We expect our cash reserves will be reduced due to future operating losses and working capital requirements, and we cannot provide certainty as to how long our cash reserves will last or that we will be able to access additional capital when necessary;
- A mass market for our products may never develop or may take longer to develop than we anticipate;
- We have limited experience manufacturing fuel cell products on a commercial basis;
- Warranty claims could negatively impact our gross margins and financial performance;
- We may not be able to successfully execute our business plan;
- Global macro-economic conditions are beyond our control and may have an adverse impact on our business or on our key suppliers and / or customers;
- In our Heavy-Duty Motive market, we depend on Chinese customers for a majority of our revenues. Global macro-economic conditions, including significant and recent volatility in China's capital markets, may adversely impact our Chinese customer's access to capital and program plans which could adversely impact our business;
- In our Technology Solutions market, we depend on a single customer for the majority of our revenues;
- In our Material Handling market, we depend on a single customer for the majority of our revenues and on that customer's internal stack development and commercialization plans;
- We may not be able to successfully conclude and realize any benefits or value from our ongoing review of strategic alternatives for our Telecom Backup Power business;
- In our Portable Power market, defense spending volatility could have an adverse impact on our business;
- In our Portable Power market, defense acquisition process changes could have an adverse impact on our business;
- Potential fluctuations in our financial and business results make forecasting difficult and may restrict our access to funding for our commercialization plan;
- We could be adversely affected by risks associated with acquisitions;
- We are subject to risks inherent in international operations;
- Exchange rate fluctuations are beyond our control and may have a material adverse effect on our business, operating results, financial condition and profitability;
- Commodity price fluctuations are beyond our control and may have a material

adverse effect on our business, operating results, financial condition and profitability;

- We are dependent upon Original Equipment Manufacturers and Systems Integrators to purchase certain of our products;
- We are dependent on third party suppliers for the supply of key materials and components for our products and services;
- We currently face and will continue to face significant competition;
- We could lose or fail to attract the personnel necessary to run our business;
- Public Policy and regulatory changes could hurt the market for our products;
- We depend on our intellectual property, and our failure to protect that intellectual property could adversely affect our expected future growth and success;
- We could be liable for environmental damages resulting from our research, development or manufacturing operations; and
- Our products use flammable fuels and some generate high voltages, which could subject our business to product liability claims.

#### **FORWARD-LOOKING STATEMENTS DISCLAIMER**

This document contains forward-looking statements that are based on the beliefs of management and reflect our current expectations as contemplated under the safe harbor provisions of Section 21E of the United States Securities Exchange Act of 1934, as amended. Such statements include, but are not limited to, statements with respect to our objectives, goals, liquidity, sources of capital and our outlook including our estimated revenue and gross margins, cash flow from operations, Cash Operating Costs, EBITDA and Adjusted EBITDA (see Non-GAAP Measures) as well as statements with respect to our beliefs, plans, objectives, expectations, anticipations, estimates and intentions. Words such as "estimate", "project", "believe", "anticipate", "intend", "expect", "plan", "predict", "may", "should", "will", the negatives of these words or other variations thereof and comparable terminology are intended to identify forward-looking statements. These statements are not guarantees of future performance and involve assumptions, risks and uncertainties that are difficult to predict.

In particular, these forward-looking statements are based on certain factors and assumptions relating to our expectations with respect to the generation of new sales, producing, delivering and selling the expected product and service volumes at the expected prices, controlling our costs, and obtaining the expected benefits arising from the Protonex acquisition. They are also based on a variety of general factors and assumptions including, but not limited to, our expectations regarding product development efforts, manufacturing capacity, product and service pricing, market demand, and the availability and prices of raw materials, labour and supplies. These assumptions have been derived from information available to the Company including information obtained by the Company from third parties. These assumptions may prove to be incorrect in whole or in part. In addition, actual results may differ materially from those expressed, implied, or forecasted in such forward-looking statements. Factors that could cause our actual results or outcomes to differ materially from the results expressed, implied or forecasted in such forward-looking statements include, but are not limited to: the condition of the global economy; the rate of mass adoption of our products; changes in product or service pricing; changes in our customers' requirements,

the competitive environment and related market conditions; product development delays; changes in the availability or price of raw materials, labour and supplies; our ability to attract and retain business partners, suppliers, employees and customers; changing environmental regulations including subsidies or incentives associated with the adoption of clean energy products; our access to funding and our ability to provide the capital required for product development, operations and marketing efforts, and working capital requirements; our ability to protect our intellectual property; risks relating to the Company's successful integration of Protonex and its operations, such as the loss of key personnel due to the transaction, the disruption to the operations of the Company and Protonex' respective businesses, the cost of integration exceeding that projected by Ballard, and the integration failing to achieve the expected benefits of the transaction; risks related to our ongoing strategic review of our telecom backup power business, including our ability to identify, pursue and realize the benefits of strategic alternatives being explored by us (which could include possible joint ventures, strategic partnerships or alliances, a sale of the business or other possible transactions), as well as the risk that uncertainty relating to the strategic review process may impact our business, existing and future relationships with business partners and customers, and ability to attract and retain key employees; the magnitude of the rate of change of the Canadian dollar versus the U.S. dollar; and the general assumption that none of the risks identified in the Risks and Uncertainties section of this report or in our most recent Annual Information Form will materialize. Readers should not place undue reliance on Ballard's forward-looking statements.

The forward-looking statements contained in this document speak only as of the date of this Management Discussion and Analysis. Except as required by applicable legislation, Ballard does not undertake any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date of this Management Discussion and Analysis, including the occurrence of unanticipated events.