

CAUTIONARY STATEMENT REGARDING FORWARD LOOKING STATEMENTS

This presentation includes forward-looking information and statements (together, "forward-looking statements"), which may include, but are not limited to, the plans, intentions, expectations, estimates, and beliefs of Ascend Wellness Holdings, Inc. ("AWH", "Ascend" or the "Company"). Words such as "expects", "continue", "will", "anticipates" and "intends" or similar expressions are intended to identify forward-looking statements. Without limiting the generality of the preceding statement, all statements in this presentation relating to estimated and projected revenue, expectations regarding production capacity, anticipated capital expenditures, expansion, profit, product demand, margins, costs, cash flows, sources of capital, growth rates, potential acquisitions, closing dates for transactions, regulatory approvals, future facility openings, and future financial and operating results are forward-looking statements. We caution investors that any such forward-looking statements are based on the Company's current projections, run rates, or expectations about future events and financial trends, the receipt of all required regulatory approvals, and on certain assumptions and analysis made by the Company in light of the experience of the Company and perception of historical trends, current conditions and expected future developments and other factors management believes are appropriate. Forward-looking statements involve and are subject to assumptions and known and unknown risks, uncertainties, and other factors which may cause actual events, results, performance, or achievements of the Company to be materially different from future events, results, performance, and achievements expressed or implied by forward-looking statements herein. Such factors include, among other, the risks and uncertainties identified in the Company's Annual Report on Form 10-K for the year ended December 31, 2023, and in the Company's other reports and filings with the applicable Canadian securities administrators on its profile on SEDAR+ at https://www.sedarplus.ca/ and the United States Securities and Exchange Commission ("SEC") on its profile on EDGAR at www.sec.gov. Although the Company believes that any forward-looking statements herein are reasonable, in light of the use of assumptions and the significant risks and uncertainties inherent in such statements, there can be no assurance that any such forward-looking statements will prove to be accurate, and accordingly readers are advised to rely on their own evaluation of such risks and uncertainties and should not place undue reliance upon such forward-looking statements. Any forward-looking statements herein are made as of the date hereof, and except as required by applicable laws, the Company assumes no obligation and disclaims any intention to update or revise any forward-looking statements herein or to update the reasons that actual events or results could or do differ from those projected in any forward looking statements herein, whether as a result of new information, future events or results, or otherwise, except as required by applicable laws. No securities regulator nor the Canadian Securities Exchange has reviewed, approved or disapproved the content of this presentation.

To the extent any forward-looking statement in this presentation constitutes "future-oriented financial information" or "financial outlooks" within the meaning of applicable securities laws, such information is being provided for the purpose of providing information about management's current expectations and goals relating to the future of the Company and the reader is cautioned that this information may not be appropriate for any other purpose and the reader should not place undue reliance on such future-oriented financial information and financial outlooks. Future-oriented financial information and financial outlooks, as with forward-looking statements, generally are, without limitation, based on the assumptions and subject to the risks set out above, among others. The Company's actual financial position and results of operations may differ materially from management's current expectations and, as a result, the Company's financial position may differ materially from what is provided in this presentation. Such information is presented for illustrative purposes only and may not be an indication of the Company's actual financial position or results of operations. Any financial outlook or future-oriented financial information, has been approved by management of the Company as of the date hereof and the Company disclaims any obligation to update such outlooks or information, execpt as required by applicable securities laws.

Certain information in this presentation, including industry information and estimates, is obtained from third-party sources, including public sources, and there can be no assurance as to the accuracy or completeness of such information. Although believed to be reliable, management of the Company has not independently verified any of the data from third party sources unless otherwise stated.





POSITIVE MOMENTUM ACROSS MARKET AND AWH1

Federal reform on the horizon

- Hopeful for rescheduling ahead of general election
- Historic mention of cannabis at State of the Union address
- Continue to pursue DOJ lawsuit

Adult-use approaching in Ohio

- Expect adult-use by Q3
- Anticipate ability to add additional owned dispensaries

Progress made in Pennsylvania regulatory environment

• Pleased to see Governor call on state legislators to pass an adult-use bill









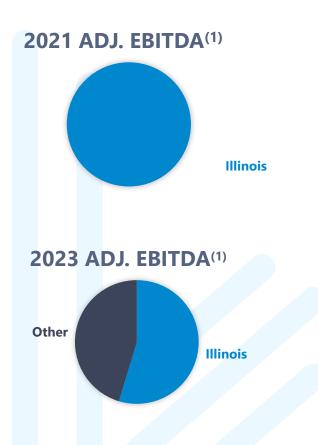
POSITIVE MOMENTUM ACROSS MARKET AND AWH



AWH Highlights

- ✓ First full-year generating positive Cash from Operations and positive Free Cash Flow
- ✓ Proactively addressing Term Loan Re-financing
- ✓ Aggressive strategy to grow and protect larger mature markets
- ✓ Continue to diversify cash flow by acceleration of new or near adultuse states

✓ Higher return, lower risk capital allocation strategy





YEAR OF NOTABLE GROWTH ACROSS KEY METRICS



	2022 YE	3/12/24	Net Revenue ⁽¹⁾ US\$ Millions	
Open Dispensaries	24	35 ⁽³⁾	+28%	
% Retail Revenue From AWH Wanufactured Products	44%	49%	\$406	\$519
.bs Sold	68,000	146,000	2022	2023
Medical States	PA, OH	PA, OH ⁽⁴⁾	Adj. EBITDA ⁽²⁾	
Recreational States	NJ, MI, MA, IL	MD, NJ, MI, MA, IL	US\$ Millions +14%	
Cash from Operations	Negative	4Q23: \$16.7M	\$93	\$10
ree Cash Flow	Negative	4Q23: \$8.4M	2022	2023

⁽¹⁾ Net revenue excludes revenue from intercompany sales.

 ⁽²⁾ Please see appendix of this presentation for reconciliation of "non-GAAP" to "GAAP" measures.
 (3) Includes Cincinnati, Ohio store which opened subsequent to year end. AWH is under definitive agreement to acquire 3 Ohio dispensaries and 2 Illinois dispensaries. Acquisitions are subject to regulatory approvals.

⁽⁴⁾ Ohio voters approved adult-use on the November 2023 ballot. The rules and regulations are being finalized. We expect adult-use sales will begin in Q3 2024.





Meaningful expansion achieved across the retail business

4

\$11M

STORES OPENED SINCE THE END OF 3Q23 AVERAGE ANNUALIZED REVENUE PER DISPENSARY



Cincinnati, OH



Piqua, OH



Retail revenue down 4% Q/Q but up 15% Y/Y to \$97M

FY:

Retail revenue up 21% Y/Y to \$371M; 72% of total net revenue



Sandusky, OH



Northlake, IL

WHOLESALE UPDATE

AWH

Stand-out gross and third-party wholesale growth

2X

125%

GROSS WHOLESALE POUNDS SOLD Y/Y

INCREASE IN 3rd PARTY WHOLESALE ORDERS Y/Y



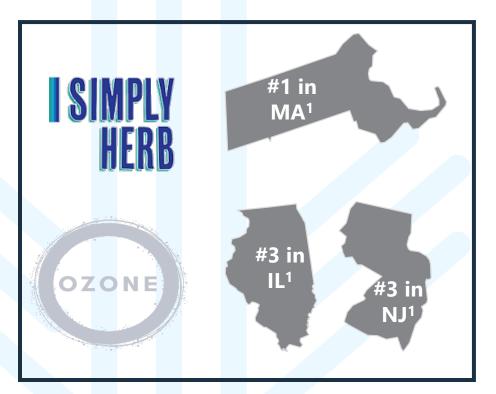


Q4:

- Gross wholesale revenue up 10% Q/Q and 51% Y/Y to \$76M
- Net wholesale revenue up 7% Q/Q and 54% Y/Y to \$43M

FY:

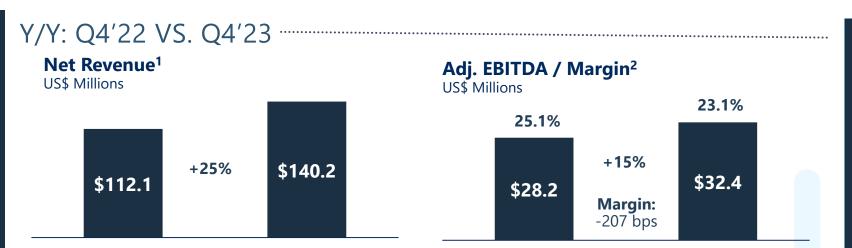
- Gross wholesale revenue up 45% Y/Y to \$264M
- Net wholesale revenue up 47% Y/Y to \$147M; 28% of total





Q4 FINANCIAL HIGHLIGHTS





Q4 '22

Q4 '23

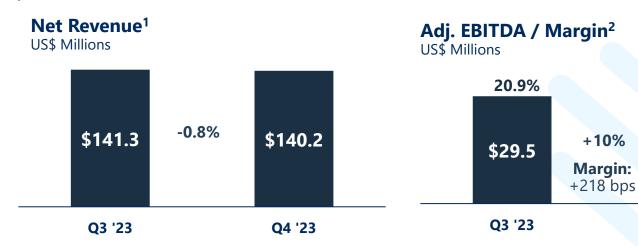
23.1%

\$32.4

Q4 '23



Q4 '22



Q4 '23

Y/Y

- Revenue growth driven by opening of 6 new stores; acquisition of 4 MD stores; increases in third party wholesale sales in NJ, MA, and IL and increase in intercompany sales in MA; partially offset by decline in retail sales in Illinois.
- Adj. EBITDA dollars down driven by Franklin production relative to last year, declines in Illinois retail, and pricing trends across the retail footprint.

Q/C

- Revenue declines driven by Illinois retail, which was partially offset by new stores and gross wholesale growth in NJ, MA and MI.
- Adj. EBITDA margin up driven by sequential margin improvements at Athol and Franklin, partially offset by margin declines in Illinois.

⁽¹⁾ Net revenue excludes revenue from intercompany sales.

⁽²⁾ Please see appendix of this presentation for reconciliation of "non-GAAP" to "GAAP" measures.

Q4 2023 BALANCE SHEET AND CASH FLOW



12/31/23

(in millions)	12/31/23
Cash & Equivalents	\$72.5
Fully Diluted Shares Outstanding Basic & Diluted ⁽¹⁾	222.9
Total Debt, net ⁽²⁾	\$308.7
Net Debt ⁽³⁾	\$236.2
Enterprise Value ⁽⁴⁾	\$452.4

- (1) Includes 206.8M Class A Common Shares, 65k Class B shares, 16.0M of unvested Restricted Stock Units and/or Restricted Stock Awards. There are also 4.6M warrants outstanding, none of which were in the money at quarter-end; 1.3M have an exercise price of \$4.00/sh; 3.1M have an exercise price of \$3.10/sh; and 0.2M have an exercise price of \$2.64/sh. There are also 507k options exercisable, none of which were in the money at quarter-end. Dilution was calculated using the treasury stock method and a 12/31/23 share price of US\$0.97 on the CSE.
- Total Debt, net is equal to Total debt less unamortized deferred financing costs.
- Net debt is equal to Total Debt net less Cash & Equivalents.
- Enterprise value is calculated by adding net debt of \$236.2M to this market value.

Market cap equals \$216.2M or 222.9 million FDSO times 12/31/23 share price of US\$0.97 on the CSE.



Q4:

9/30/23

0

\$16.7M net Cash from Operations (CFFO) generated

Cash inflow /

(use) from

Operations

\$8.4M Free Cash Flow (FCF) generated, inclusive of \$8.2M in net CapEx used to support dispensary builds and cultivation improvements

Cash inflow /

(use) from

Investing

Cash inflow /

(use) from

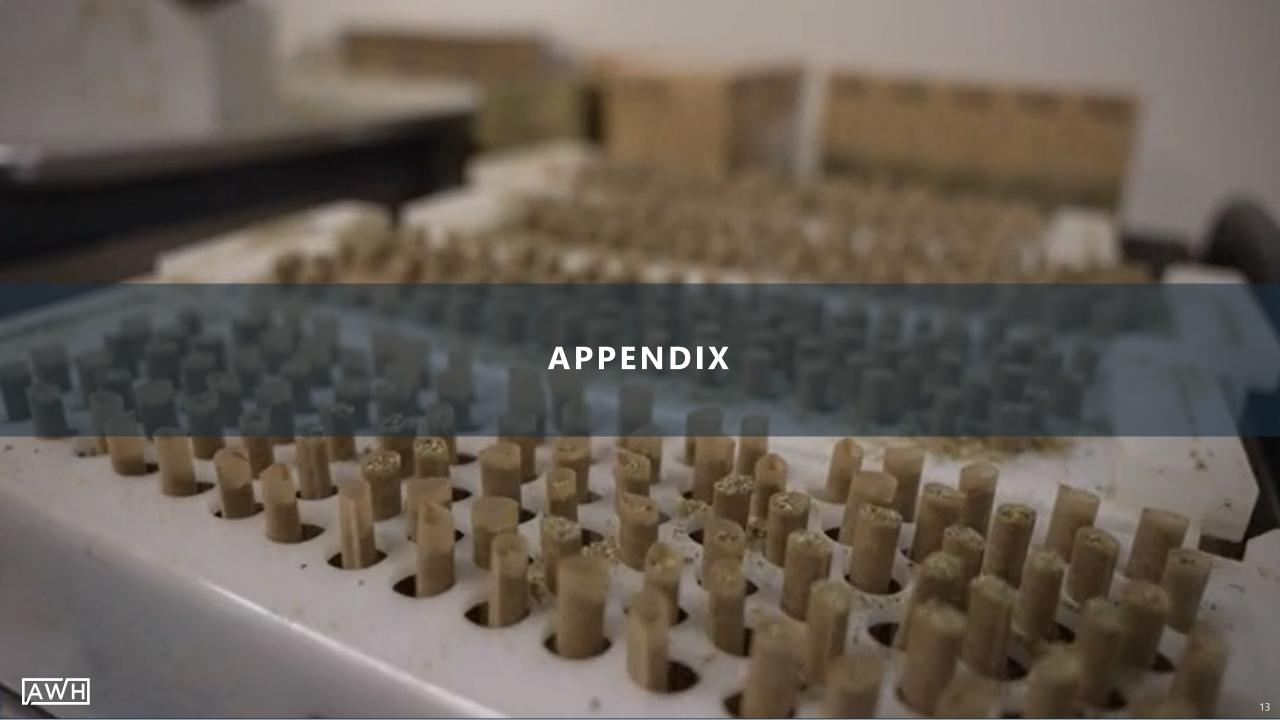
Financing

FY:

- \$55M net Cash from Operations (CFFO) generated*
- \$30M FCF generated*, inclusive of \$24M in net CapEx
- \$60M Cash used for Financing inclusive of net CapEx and acquisition related payments such as MD and PA
- \$17M Cash used for Investing, inclusive of ERTC repayment to lender

Note: waterfall may not foot due to rounding.

^{*}Exclusive of \$21M Employee Retention Tax Credit inflows



ASCEND INVESTMENT THESIS



ENTERING PERIOD OF SIGNIFICANT CASH FLOW GENERATION

FOCUS ON ACHIEVING SCALE IN SELECT LIMITED LICENSE MARKETS AND FURTHER DENSIFYING EXISTING MARKETS

KEY FLAGSHIP LOCATIONS IN MARKETS WITH HIGH BARRIERS TO ENTRY PROVEN BY HIGHEST REVENUE PER DISPENSARY IN THE INDUSTRY

DISCIPLINED CAPITAL ALLOCATION; SUCCESSFUL EXECUTION OF ACCRETIVE M&A

STRENGTHENED MANAGEMENT WITH PROVEN TRACK RECORD OF OPERATIONAL EXCELLENCE

ABILITY TO LEVERAGE CORE INFRASTRUCTURE AS MORE ASSETS AND ADULT-USE MARKETS ARE "TURNED ON"

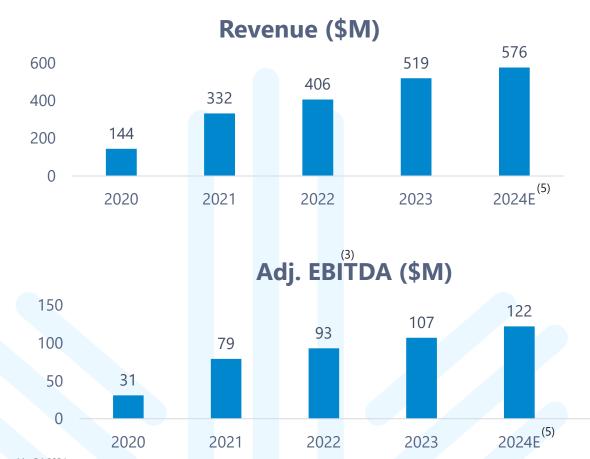
OVERVIEW



Vertically integrated operator with assets in Illinois, Michigan, Ohio, Massachusetts, New Jersey, Pennsylvania, and Maryland.

Owns and operates state-of-the-art cultivation facilities; grows award-winning strains and produces a curated selection of products.

Founded	2018
Headquarters	New York
Employees	~2,300
States of Operation	IL, MD, MA, MI, OH NJ, PA
Dispensaries / Cultivation	35 operating ⁽¹⁾ / 6 operating
EV ⁽²⁾	\$452M
Market Cap ⁽²⁾	\$216M
EV / 2023 Revenue	0.9x
EV / 2023 Adj. EBITDA	4.2x
Total Debt, net ⁽⁴⁾ / Net Debt ⁽⁴⁾	\$309M / \$236M



⁽¹⁾ Includes 4 stores which opened subsequent to end of Q3 (Northlake, IL; Piqua, OH; Sandusky, OH; and Cincinnati, OH). Cincinnati, OH opened in Q1 2024.

Includes 206.8M Class A Common Shares, 65k Class B shares, 16.0M of unvested Restricted Stock Units and/or Restricted Stock Awards. There are also 4.6M warrants outstanding, none of which were in the money at quarter-end; 1.3M have an exercise price of \$4.00/sh; 3.1M have an exercise price of \$3.10/sh; and 0.2M have an exercise price of \$2.64/sh. There are also 507k options exercisable, none of which were in the money at quarter-end. Dilution was calculated using the treasury stock method and a 12/31/23 share price of US\$0.97 on the CSE.

Please see appendix of this presentation for reconciliation of "non-GAAP" to "GAAP" measures. We have not presented a quantitative reconciliation of the forward-looking non-GAAP financial measure because it is impracticable to forecast certain items without unreasonable efforts due to the uncertainty and inherent difficulty of predicting the occurrence and financial impact of the periods in which such financial impact might be recognized.

⁽⁴⁾ Total Debt, net is equal to Total Debt less unamortized deferred financing costs. Net Debt is equal to Total Debt, net less Cash & Equivalents.
(5) Based on consensus estimates as of 2/16/24. See discussion of forward-looking statements on slide 2.

EXPANDING FOOTPRINT

7 States35 operating dispensaries

ILLINOIS

10 retail 1 partner retail planned¹ 1 cultivation / processing

MASSACHUSETTS

3 retail 2 cultivation / processing⁴

NEW JERSEY

3 retail 1 partner retail planned¹ 1 cultivation / processing

OHIO

5 medical retail² 1 cultivation / processing

MICHIGAN

8 retail 1 cultivation / processing

PENNSYLVANIA

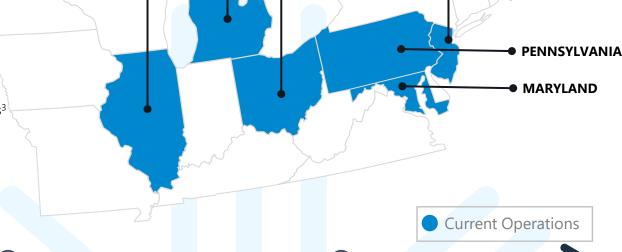
2 retail

4 planned medical retail licenses³

1 cultivation / processing

MARYLAND

4 retail



2020 YE
12 Dispensaries
74,000 ft² Canopy

2021 YE
 20 Dispensaries
 175,000 ft² Canopy

• CURRENT (3/12/24)

35 Operating Dispensaries⁽²⁾
4 Additional Dispensary Licenses⁽³⁾
245,000 ft² Canopy

ILLINOIS

MICHIGAN

OHIO

PIPELINE

MASSACHUSETTS

NEW JERSEY

39 Operating Dispensaries^(2,3)

+ 2 Partner Dispensaries⁽¹⁾

(1) Includes partnership transactions in Illinois and New Jersey, which are not yet closed and subject to regulatory approval.

(2) Includes pending acquisition of Ohio Patient Access LLC.

(3) License is owned by AWH, but the site is not yet operational and/or under construction. Includes 4 Pennsylvania dispensaries.

(4) Includes the expected build out of the second cultivation facility in Massachusetts. Company is under definitive agreement to acquire this facility. Note: Timeline illustrative; does not necessarily reflect scale. Canopy includes total canopy (vegetation, flower, and propagation).

UPSIDE IN TODAY'S PORTFOLIO¹



Significant upside from assets "turning on" and Markets flipping to adult-use

















OH Adult-Use Commence²

PA Adult-Use Commence³

1Q24 2Q24 3Q24 4Q24 2025

⁽¹⁾ See discussion of forward-looking statements on slide 2.

⁽²⁾ OH has legalized adult-use. The state is still in process of creating the rules & regulations. It is commonly believed that adult-use sales will commence in OH by Q3.

⁽³⁾ PA has not yet legalized adult-use. The Company anticipates adult-use to commence in 2025.



STRENGTHENING IN-HOUSE PRODUCT BENCH

Completing the good-better-best spectrum; continue to complement with partner brands

#1 in MA¹

#3 in IL¹
#3 in NJ¹



GOOD











BEST

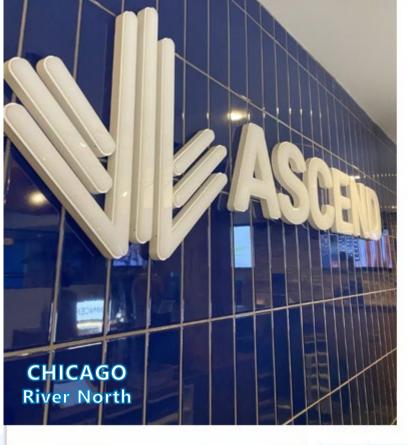
Grab n' Go, Ready to Rip	The easy way iin I smoke when		Putting you in the zone to get sh*t Done	Only the finest cannabis products	Curated fire phenos		
IL, MA, NJ, OH, PA	IL, MA, MI, NJ, OH, PA	IL, MA, MI, NJ, OH, PA	IL, MA	IL, MI, NJ, PA	IL, MA		
\$ \$\$\$\$	\$\$ \$\$\$	\$\$\$\$\$	\$\$\$\$ \$	\$\$\$\$\$	\$\$\$\$\$		
Flower, Pre-rolls	Flower, Pre-rolls, Vapes	Flower, Pre-rolls, Concentrates, Vapes and Gummies	THC-V products	Premium flower, Pre- rolls, Concentrates, Vapes	Super-premium flower, Pre-rolls		

BETTER

FLAGSHIP LOCATIONS

From strategically located in the retail corridor near St. Louis to minutes from the George Washington Bridge, NJ Turnpike, and NJ Rt. 46

- ✓ Prioritize high-traffic locations
- ✓ Significant parking
- ✓ Optimized retail footprint















USE OF NON-GAAP FINANCIAL METRICS AND ADDITIONAL INFORMATION

USE OF NON-GAAP FINANCIAL METRICS AND ADDITIONAL INFORMATION

Financial results are reported in accordance with U.S. generally accepted accounting principles ("GAAP") and all currency is in U.S. dollars. This presentation includes certain non-GAAP financial measures, as defined by the SEC, including Adjusted Gross Profit, Adjusted Gross Margin, Adjusted EBITDA, and Adjusted EBITDA Margin. We present these non-GAAP financial measures because we believe they assist investors and analysts in comparing our operating performance across reporting periods on a consistent basis by excluding items that we do not believe are indicative of our core operating performance. Reconciliations of these non-GAAP financial measures to the most directly comparable financial measures calculated and presented in accordance with GAAP are included in this appendix. We have not presented a quantitative reconciliation of the forward-looking non-GAAP financial measures to their most directly comparable GAAP financial measures because it is impracticable to forecast certain items without unreasonable efforts due to the uncertainty and inherent difficulty of predicting the occurrence and financial impact of and the periods in which such items may be recognized.

We define "Adjusted Gross Profit" as gross profit excluding non-cash inventory costs, which include depreciation and amortization included in cost of goods sold, equity-based compensation included in cost of goods sold, start-up costs included in cost of goods sold, and other non- cash inventory adjustments. We define "Adjusted Gross Margin" as Adjusted EBITDA as a percentage of net revenue. We define "Adjusted EBITDA Margin" as Adjusted EBITDA as a percentage of net revenue. Management calculates Adjusted EBITDA as the reported net loss, adjusted to exclude: income tax expense, other (income) expense, interest expense, depreciation and amortization and amortization included in cost of goods sold, non-cash inventory adjustments, equity-based compensation, equity-based compensation included in cost of goods sold, start-up costs, start-up costs included in cost of goods sold, transaction-related and other non-recurring expenses, litigation settlement, and gain or loss on sale of assets. Accordingly, management believes that Adjusted EBITDA provides meaningful and useful financial information, as this measure demonstrates the operating performance of the business.

Investors should be cautioned that Adjusted Gross Profit, Adjusted Gross Margin, Adjusted EBITDA and Adjusted EBITDA Margin should not be construed as alternatives for, or superior to, earnings, cash flow from operating activities or other measures of financial results determined in accordance with GAAP and may not be comparable to similar non-GAAP measures presented by other companies.



GAAP RECONCILIATIONS



	Q1 2022	Q2 2022	Q3 2022	Q4 2022	FY2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	FY 2023
Adjusted Gross Profit										
Gross Profit	\$ 23,447	\$ 32,968	\$ 36,636	\$ 41,512	\$ 134,563	\$ 35,704	\$ 28,319	\$ 43,556	\$ 47,541	\$ 155,120
Gross Margin	27.6%	33.8%	32.9%	37.0%	33.1%	31.3%	23.0%	30.8%	33.9%	29.9%
Depreciation and amortization included in cost of goods sold	2,943	3,953	4,722	3,742	15,360	6,327	8,503	7,435	7,184	29,449
Equity-based compensation included in cost of goods sold	3,995	3,167	2,629	1,836	11,627	50	1,931	2,476	2,054	6,511
Start-up costs included in cost of goods sold ⁽¹⁾	3,923	4,248	2,610	2,263	13,044	1,570	-	-	-	1,570
Non-cash inventory adjustments ⁽²⁾	2,204	112	4,049	4,113	10,478	3,942	6,172	2,938	3,298	16,350
Adjusted Gross Profit	\$ 36,513	\$ 44,448	\$ 50,646	\$ 53,466	\$ 185,072	\$ 47,593	\$ 44,925	\$ 56,405	\$ 60,077	\$ 209,000
Adjusted Gross Margin	42.9%	45.6%	45.5%	47.7%	45.6%	41.7%	36.5%	39.9%	42.9%	40.3%
Adjusted EBITDA	Q1 2022	Q2 2022	Q3 2022	Q4 2022	FY2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	FY 2023
	♠ (07.045)	¢ (04.470)	# (40,000)	\$ (45.050)	# (00.000)	¢ (40, 470)	. 044	¢ (44.040)	# (40.040)	
Net Income / (Loss) Income tax expense	\$ (27,815) 7,107	\$ (21,172) 11,472	\$ (16,862) 11,178	11,936	41,693	\$ (18,472) 10,017	\$ 841 4,737	\$ (11,240) 6,726	\$ (19,343) 11,974	\$ (48,214) 33,454
Other, net	(103)	(151)	(273)	(229)		(265)	(24,044)		(632)	(25,843)
Interest expense	6,031	9,246	8,434	8,725	32,436	8,975	10,481	8,963	8,565	36,984
Depreciation and amortization	5,675	7,010	7,994	8,776	29,455	13,719	15,543	14,930	14,791	58,983
Non-cash inventory adjustments (2)	2,204	112	4,049	4,113	10,478	3,942	6,172	2,938	3,298	16,350
Equity-based compensation	6,499	7,055	6,382	3,059	22,995	3,005	4,129	5,610	5,600	18,344
Start-up costs ⁽³⁾	4,760	5,364	6,563	6,669	23,356	2,527	278	504	579	3,888
Transaction-related and other non-recurring expenses (4)	6,194	2,027	601	297	9,119	302	2,971	1,996	7,519	12,788
(Gain) / loss on sale of assets	818	(72)	(296)	(105)	345	(442)	216	-	-	(226)
Litigation settlement	5,000				5,000	-	-	-	-	-
Adjusted EBITDA	\$ 16,370	\$ 20,891	\$ 27,770	\$ 28,191	\$ 93,222	\$ 23,308	\$ 21,324	\$ 29,525	\$ 32,351	\$ 106,508
Adjusted EBITDA Margin	19.2%	21.4%	25.0%	25.1%	23.0%	20.4%	17.3%	20.9%	23.1%	20.5%

⁽¹⁾ Incremental expenses associated with the expansion of activities at our cultivation facilities that are not yet operating at scale, including excess overhead expenses resulting in delays from regulatory approvals at certain cultivation facilities.

⁽²⁾ Consists of write-offs of expired products, obsolete packaging, and net realizable value adjustments related to certain inventory items.

⁽³⁾ One-time costs associated with acquiring real estate, obtaining licenses and permits, and other costs incurred before commencement of operations at certain locations, as well as incremental expenses associated with the expansion of activities at our cultivation facilities that are not yet operating at scale, including excess overhead expenses resulting from delays in regulatory approvals at certain cultivation facilities. Also includes other one-time expenses related to certain reserves, as well as fair value adjustments related to earn-outs, as applicable.

21

