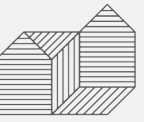


GLASS HOUSE BRANDS

NEO: GLAS.A.U

OTCQX: GLAS.F

Q4 2021 INVESTOR PRESENTATION



DISCLAIMERS

Cautionary Statements

This document is for information purposes only and should not be considered a recommendation to purchase, sell or hold a security. This presentation has been prepared for discussion purposes only and is not , and in no circumstances is to be construed as an advertisement, public offering, or prospectus related to the securities of Glass House Brands Inc. (the "Company" or "GHB") in any jurisdiction. No securities commission or similar authority in Canada, the United States or elsewhere has reviewed or in any way passed upon this presentation or the merits thereof and any representation to the contrary is an offence.

This presentation also contains or references certain market, industry and peer group data which is based upon information from independent industry publications, market research, analyst reports and surveys and other publicly available sources. Any third-party information has not been independently verified. While the Company may not have verified the third-party information, they believe that it obtained the information from reliable sources and have no reason to believe it is not accurate in all material respects. No warranties or representations can be made as to the origin, validity, accuracy, completeness, currency or reliability of the information. The Company disclaims and excludes all liability (to the maximum extent permitted by law), for losses, claims, damages, demands, costs and expenses of whatever nature arising in any way out of or in connection with the information in this presentation, its accuracy, completeness or by reason of reliance by any person on any of it including, without limitation, the choice of comparable companies, or any information related thereto. This presentation should not be construed as legal, financial or tax advice to any investor, as each investor's circumstances are different. Readers should consult with their own professional advisors regarding their particular circumstances. In making an investment decision, investors should not rely solely on the information contained in this presentation.

Neither the delivery of this presentation, at any time, nor any trade in securities made in reliance on this presentation, will imply that the information contained in the presentation is correct as of any time subsequent to the date set forth on the cover page of the presentation or the date at which such information is expressed to be stated, as applicable. Investing in securities of the Company involves risks. See "Risk Factors included in our Q3 2021 Management's Discussion and Analysis ("MD&A") and the Non-Offering Prospectus dated May 6th 2021 on SEDAR at www.sedar.com (the "**Risk Factors**"). This presentation does not constitute an offer to sell or the solicitation of an offer to buy any securities.

All financial information is in U.S. dollars, unless otherwise indicated.

Forward Looking Information

Certain information set forth in this presentation and any other information that may be furnished to prospective investors by the Company in connection therewith, other than statements of historical fact, may be considered "forward-looking **statements**" and "**forward-looking information**" within the meaning of applicable Canadian securities legislation (referred to herein as forward-looking statements). Forward-looking statements include but are not limited to statements related to activities, events or developments that the Company expects or anticipates will or may occur in the future, statements related to the Corporation's business strategy objectives and goals, and the Corporation's management's assessment of future plans and operations which are based on management's current internal expectations, estimates, projections, assumptions and beliefs, which may prove to be incorrect. Forward-looking statements can often be identified by the use of words such as "may", "will", "could", "would", "should", "anticipate", "believe", "expect", "intend", "potential", "estimate", "budget", "scheduled", "plans", "planned", "forecasts", "goals" and similar expressions or the negatives thereof.

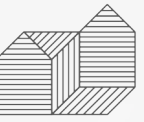
In particular, and without limiting the generality of the foregoing, forward looking statements in this presentation include statements related to the buildout and development of the cultivation facility owned by the Company in Camarillo, California (referred to herein as SoCal); the Company's business plans and strategies; the addressable markets for the Company's products; the Company's competitive position; the ability to develop products, scale production and distribute products; the expected outcome of the litigation with Element 7 CA, LLC; the Company's retail expansion strategy and plans to grow its market share in existing and new markets; the Company's investment in new technologies and products; the Company's expansion of production capacity; the development and expansion of the Company's brands; strategic acquisition opportunities; the future size of the cannabis market in California and the United States; the receipt of licenses from regulatory authorities; the proposed Element 7 mergers and associated litigation; and the Company's future financial performance. In addition, the financial projections and estimates contained under "Pro Forma Wholesale Biomass Economics" and elsewhere in this presentation, including proforma gross profit and gross profit margin constitute "**forward looking information**" within the meaning of applicable securities laws. Such information is being provided to demonstrate potential future outcomes and may not be appropriate for other purposes and should not be relied upon as necessarily being indicative of future financial results. Forward looking statements involve known and unknown risks and uncertainties, many of which are beyond our control, that could cause actual results to differ materially from those that are disclosed in or implied by such forward looking statements. These risks and uncertainties include, but are not limited to, those described in the Risk Factors and the other risk factors identified in this presentation. Although the Company has attempted to identify the main risk factors that could cause actual results to differ materially from those contained in forward looking statements, there may be other risk factors not presently known to the Company or that they presently believe are not material that could also cause actual results or future events to differ materially from those expressed in such forward-looking information. Although the forward-looking statements contained in this presentation are based upon what the Company believes are reasonable assumptions, you are cautioned against placing undue reliance on these statements since actual results may vary from the forward-looking statements. Any data demonstrating the historical performance contained in this presentation are intended only to illustrate past performance and are not necessarily indicative of the future performance of the Company. Consequently, all of the forward-looking statements contained in this presentation are qualified by the foregoing cautionary statements, and there can be no guarantee that the results or developments that the Company anticipate will be realized or, even if substantially realized, that they will have the expected consequences or effects on our business, financial condition or results of operation.

Non-GAAP Measures

This presentation makes reference to certain non-U.S. GAAP measures, such as proforma gross profit and gross profit margin, among other non-GAAP measures that may be identified herein. These measures are not recognized under U.S. GAAP and do not have a standardized meaning prescribed by U.S. GAAP. Rather, these measures are provided as additional information to complement U.S. GAAP measures by providing further understanding of GH Group's results of operations from management's perspective. Market participants frequently use non-U.S. GAAP measures in the evaluation of issuers. The Company's management uses these non-GAAP measures for trend analyses and for budgeting and planning purposes. The Company believes that the use of these non-GAAP financial measures provides an additional tool for investors to use in evaluating projected operating results and trends in and in comparing the Company's financial measures with other similar companies, many of which present similar non-GAAP financial measures to investors. Management of the Company do not consider these non-GAAP measures in isolation or as an alternative to financial measures determined in accordance with GAAP. The principal limitation of these non-GAAP financial measures is that they exclude significant expenses and income that are required by GAAP to be recorded in the Company's financial statements. In addition, they are subject to inherent limitations as they reflect the exercises of judgments by management about which expense and income are excluded or included in determining these non-GAAP financial measures. You should review the Company's current financial statements and not rely on any single financial measure to evaluate the Company's business. Readers are also referred to the heading "Non-GAAP Financial Measures" in the Company's Q3 2021 MD&A at www.Sedar.com.

Cannabis-related Activities are Illegal Under U.S. Federal Laws

The Company derives 100% of its revenues from doing business in the cannabis industry in the U.S. The concepts of "medical cannabis" and "adult-use cannabis" do not exist under U.S. federal law. The U.S. Federal Controlled Substances Act classifies "marihuana" as a Schedule I drug. Accordingly, cannabis-related practices or activities, including, without limitation, the manufacture, sale, importation, possession, use or distribution of cannabis and its derivatives, are illegal under U.S. federal law and the enforcement of the relevant laws poses a significant risk. These laws and their enforcement are in flux and vary dramatically from jurisdiction to jurisdiction. The enforcement of these laws and its effect on the Company and its business, employees, directors and shareholders are uncertain, and accordingly, involve considerable risk. Strict compliance with state laws with respect to cannabis will neither absolve the Company of liability under U.S. federal law, nor will it provide a defense to any federal proceeding which may be brought against the Company. Any such proceedings brought against the Company may adversely affect the Company's operations and financial performance.



LARGEST CULTIVATION FOOTPRINT, UNMATCHED CAPACITY

UP TO 6M SQ. FT. OF BEST-IN-
CLASS CULTIVATION FACILITIES



A BRAND-BUILDING MACHINE IN THE #1 US MARKET

CRAFT CANNABIS AT SCALE AND
PREDICTABLE SUPPLY CAPABILITY
SUPPORT THE SUCCESS OF OUR
BRANDED PRODUCTS



CALL OPTION ON INTERSTATE COMMERCE

STRONGLY POSITIONED TO
CARRY LEADING MARKET SHARE
AND COST ADVANTAGE
NATIONWIDE



COMPELLING COST STRUCTURE

100% OWNED CULTIVATION
ASSETS



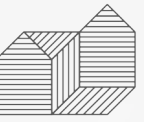
DEVELOPING THE LARGEST RETAIL, DELIVERY AND DISTRIBUTION NETWORK

STRONG ACCESS TO CUSTOMER
TOUCH AND SHELF SPACE TO
DRIVE BRAND AWARENESS AND
PLACEMENT



TOP ESG PLAY IN CALIFORNIA CANNABIS

95% LOWER CO₂ EMISSIONS
AND ENERGY USE THAN THE
AVERAGE INDOOR GROW



1

CANNABIS
COMPANY

IN THE

1

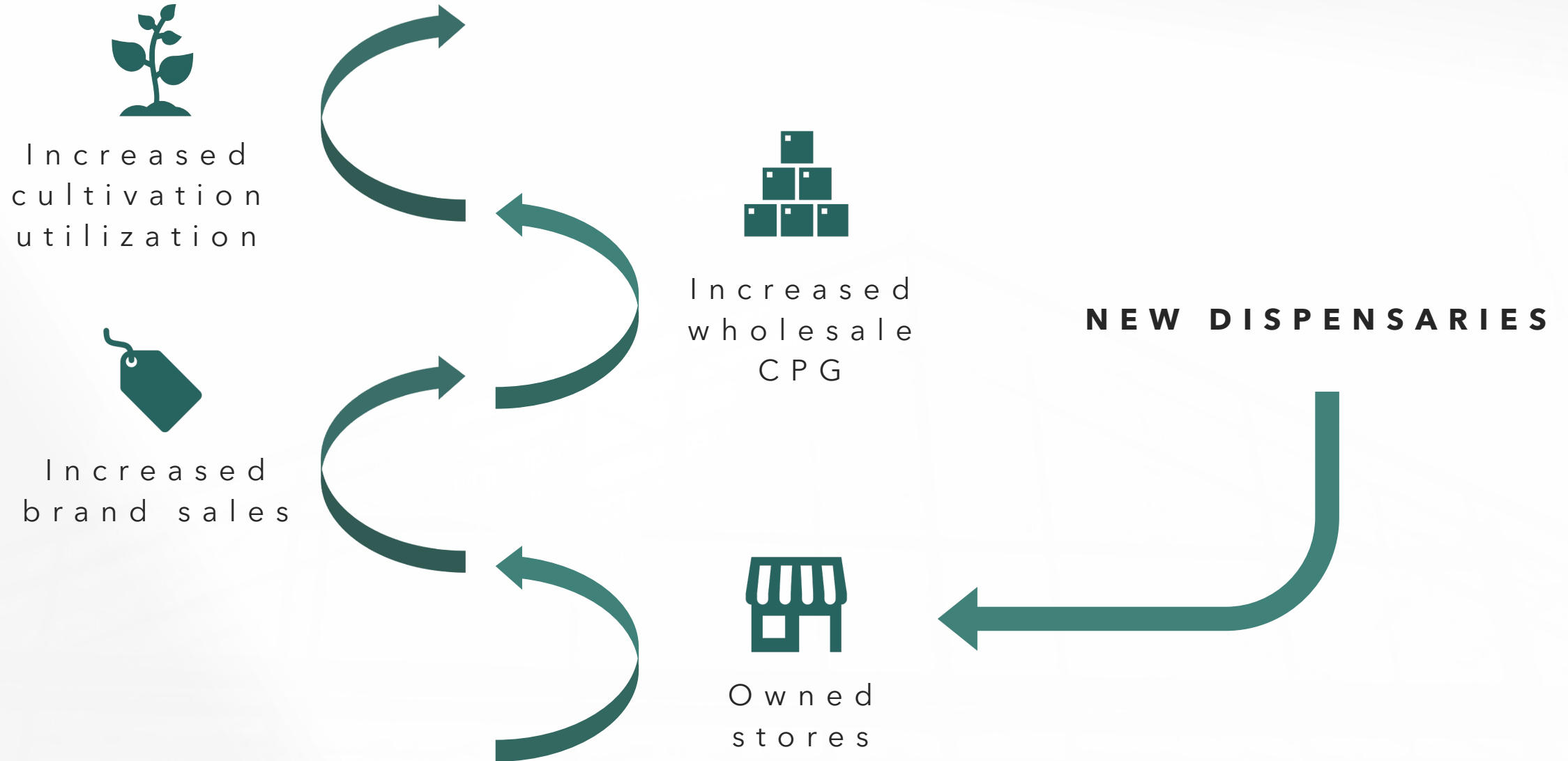
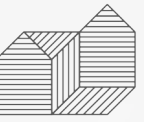
MARKET IN
THE
WORLD



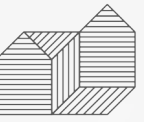
MISSION

BECOME THE LARGEST AND MOST
PROFITABLE VERTICALLY-INTEGRATED
CANNABIS COMPANY IN CALIFORNIA,
DELIVERING BRANDS TO CONSUMERS
ACROSS ALL SEGMENTS

THE VERTICAL ADVANTAGE



CALIFORNIA: HIGH GROWTH & CONSOLIDATION POTENTIAL



31 M

ADULTS



280 M

TOURISTS



> 8,500

CULTIVATORS



> 1,000

DISTRIBUTORS



> 1,250

RETAILERS ¹

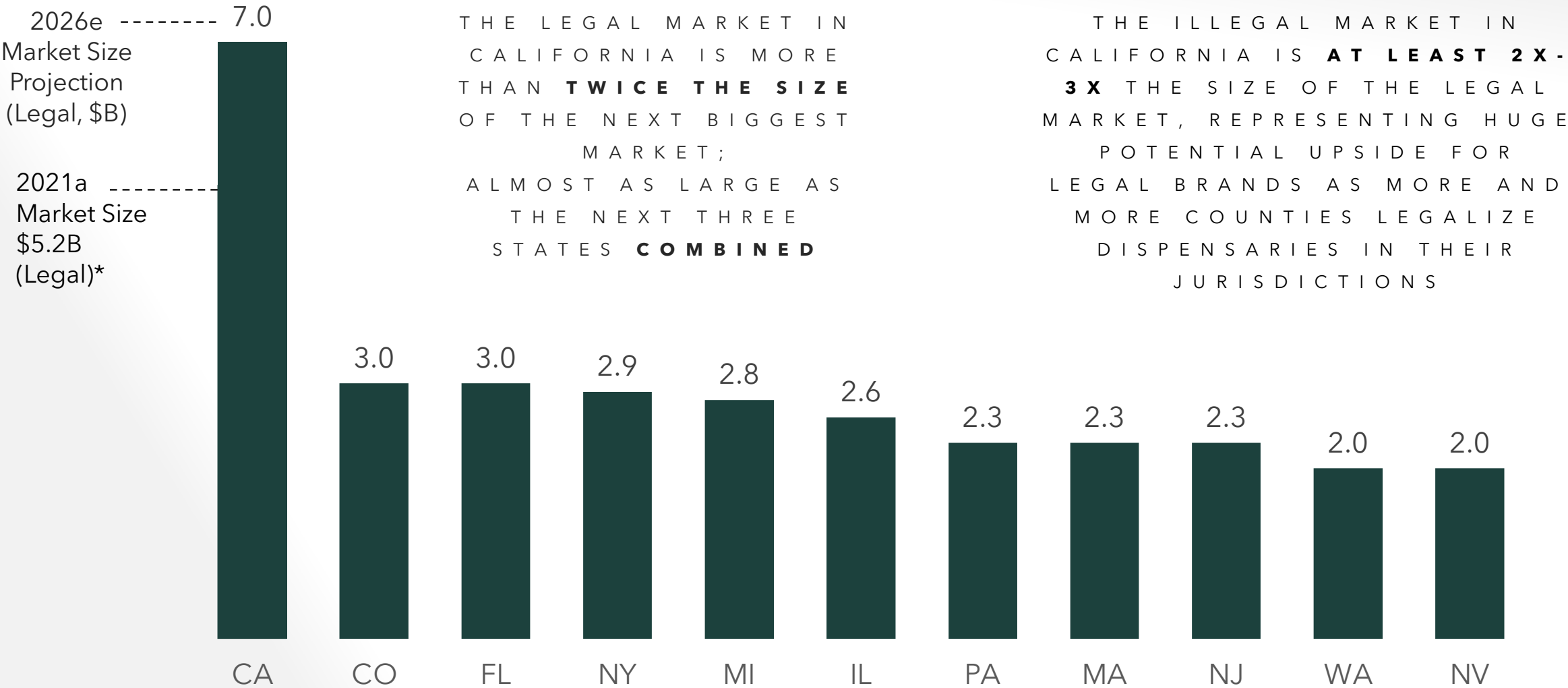
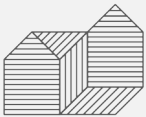


> 1,600

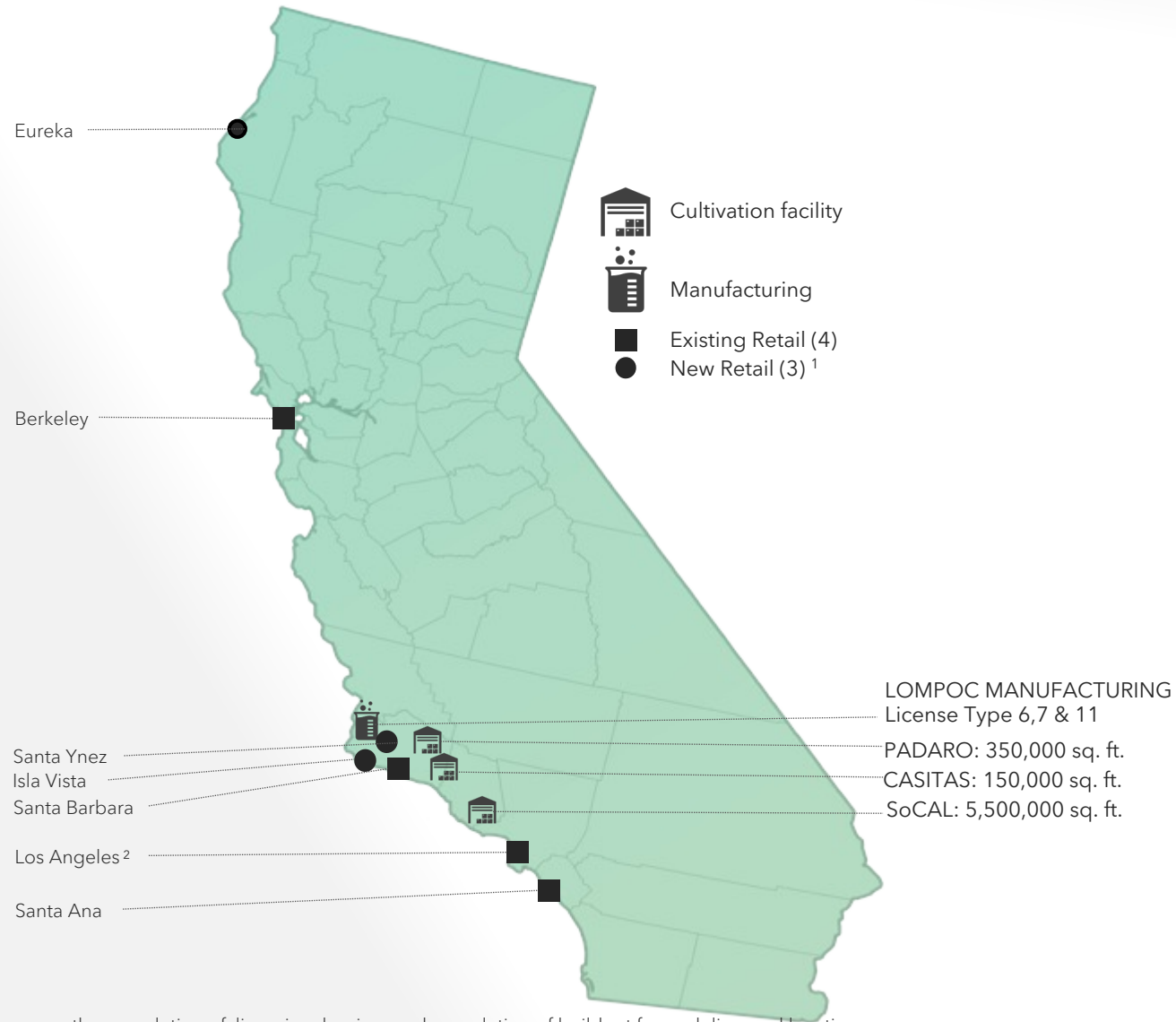
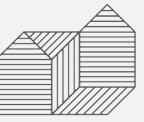
BRANDS

¹ Source: California Department of Cannabis Control Website. There are 907 active retail licenses and 389 active delivery licenses.

CALIFORNIA: LARGEST SINGLE US CANNABIS MARKET



Source: BDSA forecast for 2026e legal market size in each of the top state markets, as of September 2021
* California Department of Tax and Fee Administration, Legal Retail Revenues for 2021.



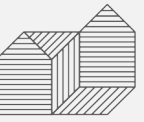
EXPANDING RETAIL FOOTPRINT

- 3 new retail locations
 - 2 new GHB licenses (Isla Vista and Santa Ynez) and 1 acquired from Element 7 (Eureka)^{1, 3}
 - After further review of the economics of the Dunsmuir location, we decided not to move ahead.
 - Projected \$15M in additional revenue in 2023
 - Actively seeking other new retail locations via M&A.

1. Assumes the completion of, licensing, leasing, and completion of buildout for each licensed location.

2. Partially owned but managed by the Company, this asset is not consolidated in Company Financial Statements.

3. The transfer of 17 total licenses from E7 is pending the outcome of a legal suit GHB filed against E7. It is difficult to project the timing for resolution of the suit or its outcome, as a result we do not display any of the 15 licenses at issue in that litigation in this retail footprint map.

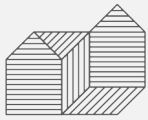


OPERATIONS: THE SOCAL GREENHOUSE-UNMATCHED CAPACITY

5.5M SQ. FT. OF HIGH-TECH, BEST-IN-CLASS, CONTROLLED-ENVIRONMENT GREENHOUSES
20 ACRES OF SUPPLEMENTAL LIGHT: INDOOR QUALITY AT CLOSE-TO-OUTDOOR COSTS

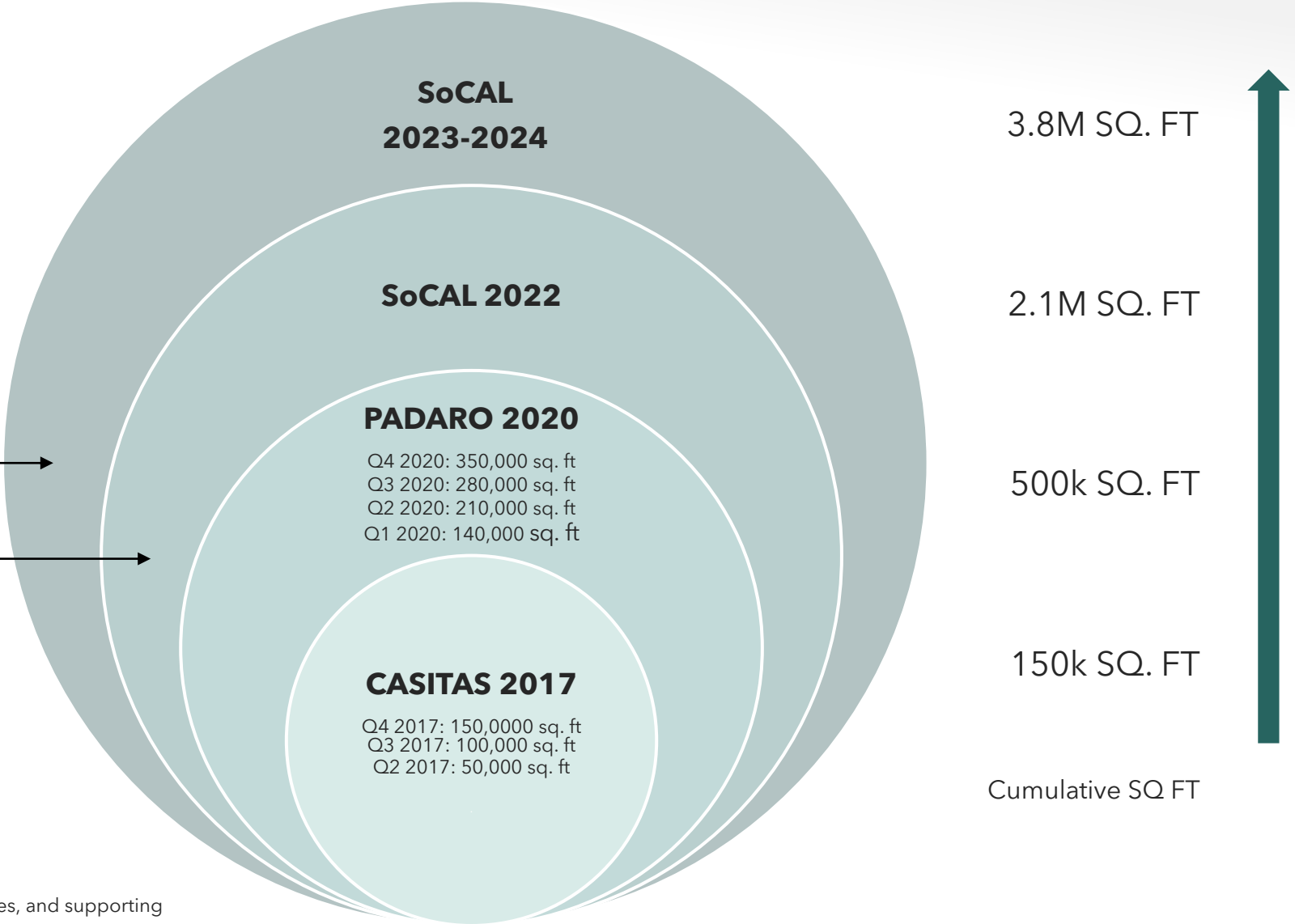


UNMATCHED CAPACITY

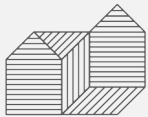


NEW, UNMATCHED CAPACITY

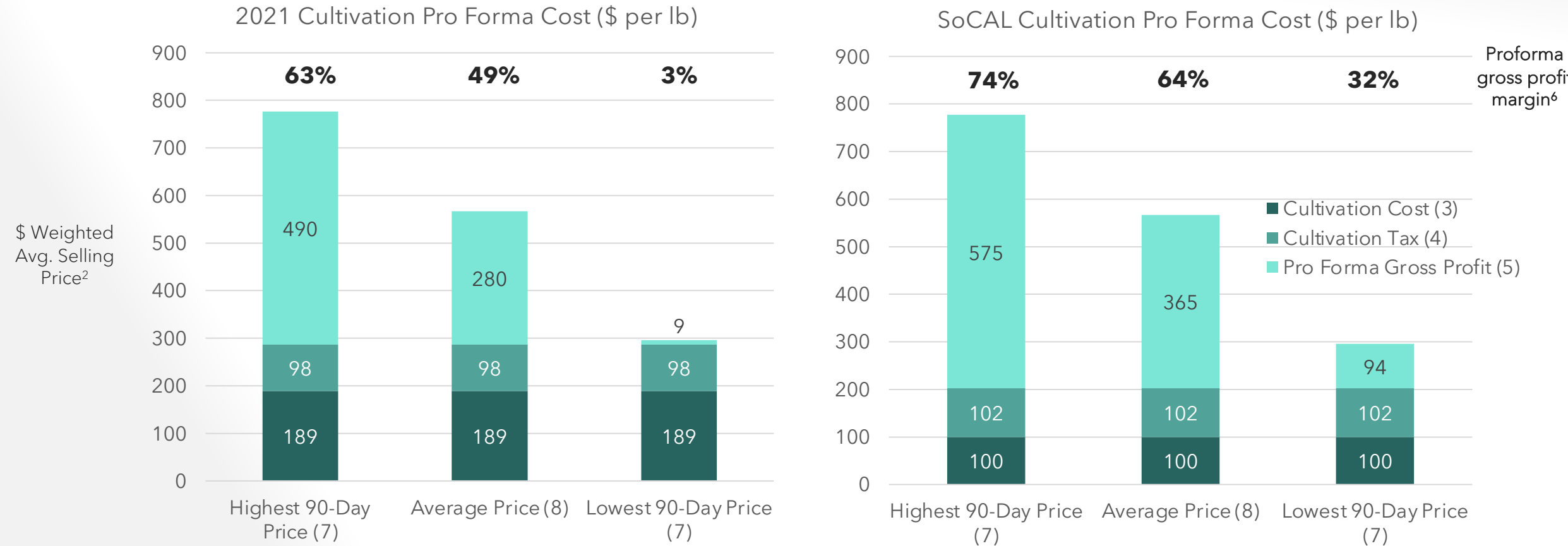
- 165-acre property in Southern California (SoCAL)
- Planned 5.5M sq. ft. of cultivation across 6 state-of-the-art greenhouses to be built out in 3 Phases.
- 1.7M dry pounds of cannabis per annum after full greenhouse conversion
- **Phase 2:** +1.7MM SQ. FT. (2 greenhouses)¹
- **Phase 1:** +1.6MM SQ. FT. (1 nursery and 1 greenhouse, retrofit commenced in 2H 2021)¹



1. Assumes sufficient capital for conversion, the availability of additional licenses, and supporting market conditions



PRO FORMA WHOLESALE BIOMASS ECONOMICS¹



1. This table includes forward-looking information that is disclosed using non-GAAP measures. These non-GAAP measures are described in the notes below. For more information on non-GAAP measures and forward-looking statements, please see disclaimer on Slide 2.

2. Weighted Average Selling Price = the individual selling price for flower, smalls and trim multiplied by the expected mix of product for each product sold. Actual product mix may not match the expected product mix, please see disclaimer on Slide 2.

3. Cultivation cost includes all expenses from nurse and cultivation to curing and trimming at which point the product is ready for sale as wholesale cannabis or to be transferred to CPG.

4. Cultivation Tax = the weighted cultivation tax due based on the proforma expected mix.

5. Proforma Gross Profit = Weighted Average Selling Price minus Cultivation Cost minus Cultivation Tax.

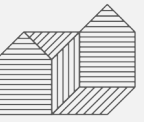
6. Proforma Gross Profit Margin = Proforma Gross Profit divided by Weighted Average Selling Price.

7. Highest 90-day price / lowest 90-day price = the period from Jan 20 to Dec 21 where we had the highest and lowest weighted average selling price for 3 contiguous months.

8. Average Price = the remaining time periods excluding the highest and lowest periods from Jan. 20 to Dec 21

9. The purpose of this financial analysis is to provide investors with a basis for analysis of the Company's proforma cost structure once the SoCal Facility begins production. Readers are cautioned that the information may not be appropriate for other purposes.

RETAIL AND DISTRIBUTION



DELIVERY



THE FARMACY - SANTA ANA

11 coolest dispensaries - VenueReport



THE FARMACY SANTA YNEZ^{1,3}



THE FARMACY ISLA VISTA^{1,3}



THE FARMACY EUREKA^{1,3}



THE FARMACY - SANTA BARBARA

Voted best local dispensary 2020 and 2021



THE POTTERY - LOS ANGELES²

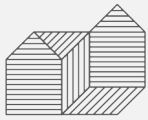
Listed in Top 17 best dispensaries in LA by Thrillist and L.A. Times



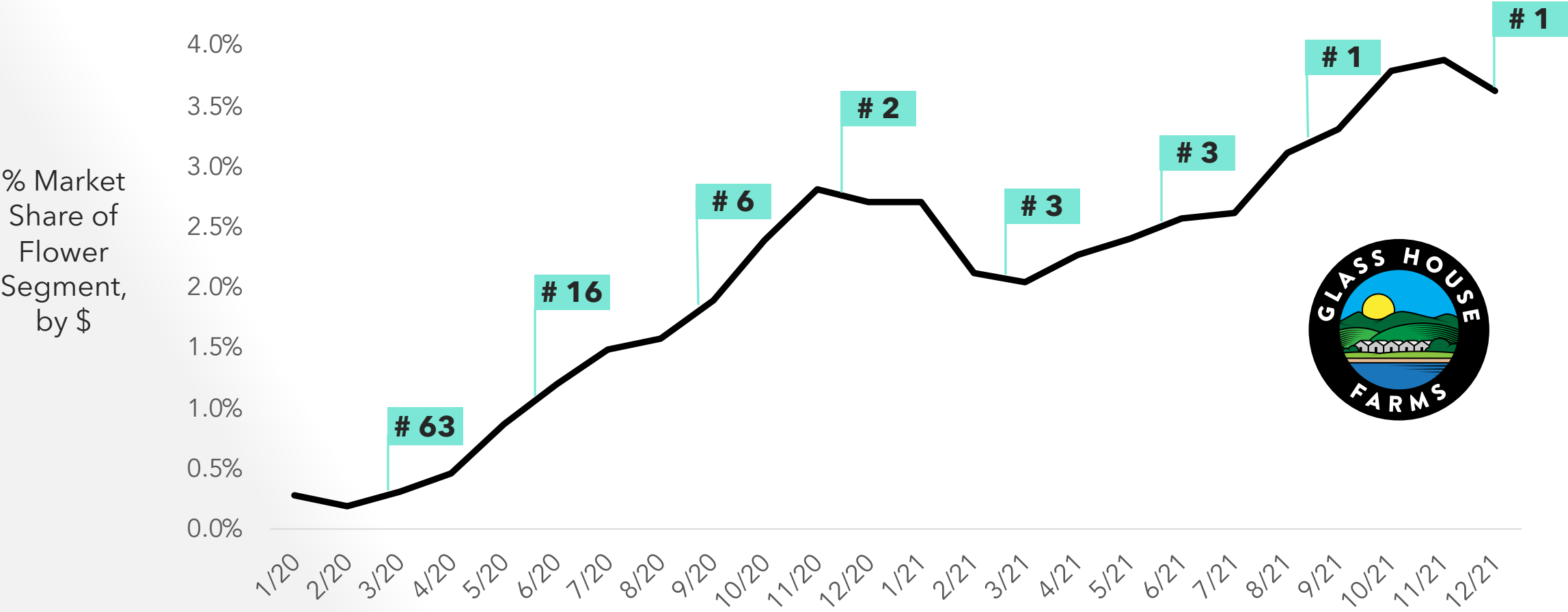
THE FARMACY - BERKELEY

Best delivery East Bay 2021

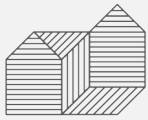
1. Pending final land use permits and state licenses. See Forward-Looking Statements
2. Partially owned and not consolidated in Company Financial Statements
3. Rendering of proposed improvement plan.



**IN LESS THAN 20 MONTHS, OUR FIRST BRAND REACHED #1 FLOWER RANK
AND DEMONSTRATED STEADINESS IN A VOLATILE AND VERY COMPETITIVE MARKET**



STRONG BRANDS ACROSS ALL SEGMENTS

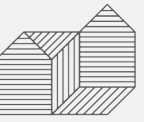


EXISTING BRANDS COVER 70% OF CANNABIS CATEGORIES



GOOD. HONEST. CANNABIS.





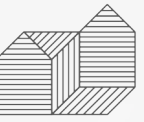
PLUS ACQUISITION: ENTRY INTO EDIBLES SEGMENT

GLASS HOUSE BRANDS TO BECOME THE ONLY CALIFORNIA COMPANY WITH A TOP 5 POSITION IN BOTH FLOWER AND EDIBLES

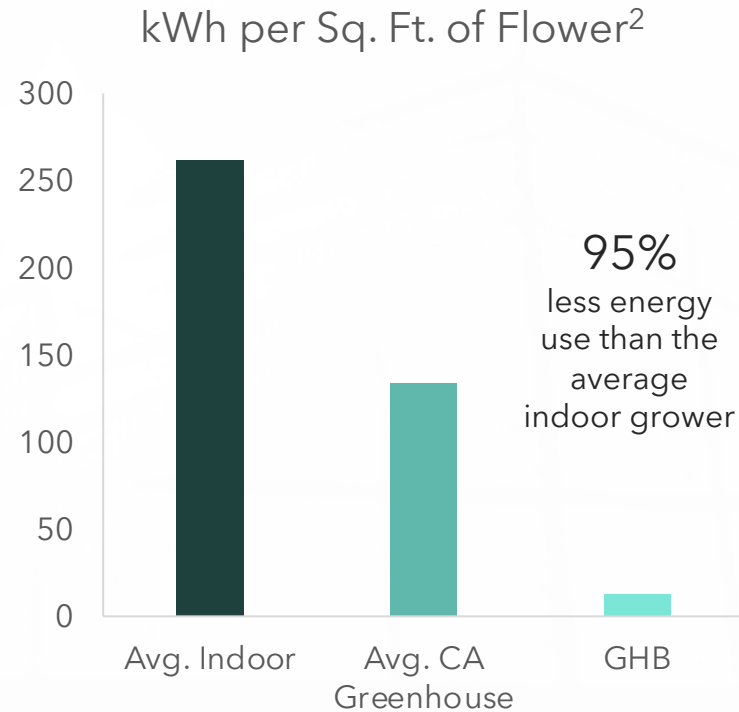
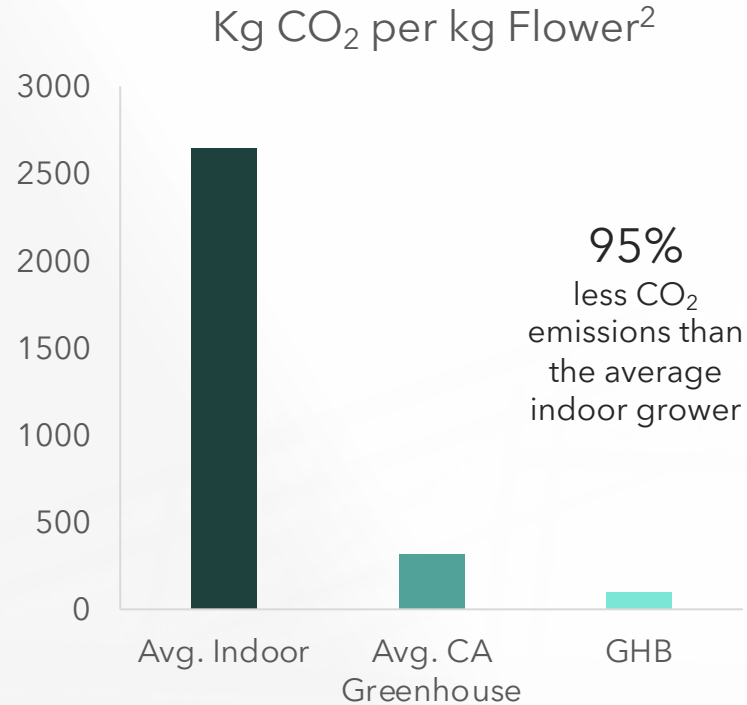
- PLUS was the No. 4 ranked edibles brand in California by sales in Q4 2021¹
- Potential \$14M in incremental annual revenue, based on PLUS 2021 run rate
- Geographic synergy: building a platform for future interstate Glass House Farms flower sales
- Acquisition is expected to close in Q2 2022



1. Based on BDSA retail sales tracking



- **STRATEGICALLY LOCATED IN CALIFORNIA, WHERE GROWING CONDITIONS ARE OPTIMAL**
- **FOCUS ON ENERGY EFFICIENCY WITH SOLAR AND COGENERATION CAPABILITIES**
- **ESG MANDATED U.S. AUM ARE FORECAST TO REACH \$53 TRILLION BY 2025¹**



SUSTAINABLE LEADERSHIP

AWARD WINNER

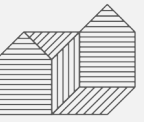
2020: Stewardship

2021: Energy

1. Bloomberg: <https://www.bloomberg.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/>

2. Seinergy July-2021, GHB commissioned study

MEET THE GLASS HOUSE TEAM



KYLE KAZAN
Co-founder, Chairman & CEO



GRAHAM FARRAR
Co-founder, President & Board Director



MARK VENDETTI
Chief Financial Officer



DARYL KATO
Chief Operating Officer



ERIK THORESEN
Chief Business Development Officer



JOHN
BREBECK
VP Investor Relations



BEN
VASQUEZ
VP Farm Operations



JENNIFER
BARRY
VP Retail



GERRIT
VANDERKOOY
VP Cultivation



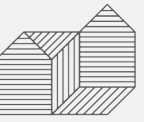
JACQUELINE
DE GINESTET
VP Sales



FRANCESCA
BROOKS
VP Human Resources



JAMIN
HORN
General Counsel



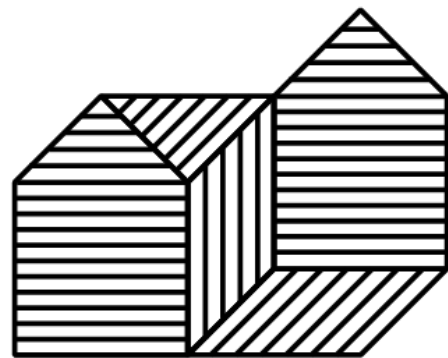
CAP TABLE (YEAR-END 2021)

	NUMBER	REFERENCE PRICE	NOTES
Securities			
Subordinate voting shares (SVSs)	56,820,189		
Restricted stock units	3,230,948		
Stock options	2,087,784	\$2.78	
Assumed warrants ¹	28,489,500	\$11.50	SVSs issuable; June 29, 2026 expiry
Issued warrants	4,928,578	\$10.00	SVSs issuable; June 29, 2024 expiry
WhiteHawk warrants	2,000,000	\$11.50	SVS, restricted or limited voting share issuable; June 29, 2026 expiry
Contingencies			
Contingent earnout ¹	6,306,095	\$13.00 or \$15.00	June 29, 2023 expiry
Capital-based earnout ¹	616,156		June 29, 2022 expiry
Contingent shares ²	3,500,000	\$10.00	
Contingent earnout ²	7,500,000	\$10.00	

1. Associated with business combination with Mercer Park SPAC, which closed on June 29, 2021

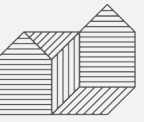
2. Associated with the Southern California greenhouse facility acquisition which closed on September 14, 2021. Assumes \$10 / share.

As at December 31, 2021, the Company had: (i) 4,754,979 Multiple Voting Shares outstanding, which are excluded from capitalization as they have no economic rights (50 common equivalent voting rights only), and (ii) 159,736 Stock Appreciation Rights which are excluded from capitalization as they are cash-settled.



GLASS HOUSE
BRANDS

APPENDIX



KYLE KAZAN

- Co-founder, Chairman & CEO of Glass House Group
- 30+ years of successful Private Equity & investment experience with focus on real estate
- Launched 23 PE funds, over \$2.75B current value owned & managed properties
- Joined cannabis industry in 2016, co-founding what would become Glass House Group
- Former law enforcement officer & special ed teacher
- Frequent guest professor in business; graduate of and former varsity basketball player for USC



GRAHAM FARRAR

- Co-founder, President & Board Director of Glass House Group
- 20+ years of serial entrepreneurship, including taking two companies public
- Part of original/founding teams at Software.com, Sonos, & iStoryTime Inc. (zuuka)
- Joined cannabis industry by founding Elite Garden Wholesale, an ag-tech hydroponics supply company
- Board member of Seacology, Heal the Ocean, and Santa Barbara Bowl Foundation



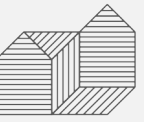
JAMIE MENDOLA

- Head of Strategy and M&A at Mercer Park LP and AYR Wellness
- 20 years of experience as a private and public equity investor
- Founder and CEO of Pacific Grove Capital, a long-short hedge fund that also launched one of the earliest dedicated SPAC funds in the United States
- Former Partner at Scout Capital, a \$7B hedge fund
- Previous experience at J.P. Morgan, JLL Partners, and Watershed Capital
- B.S. from Binghamton University and 4-year baseball letterman; M.B.A. from Stanford's Graduate School of Business



HUMBLE LUKANGA

- Founder of Life Line Financial Group, premiere wealth management firm servicing some of the best-known performers & leaders in business, sports & entertainment
- Trustee of the University of New Mexico; Board Director for several companies & foundations
- B.A. & M.B.A. University of New Mexico; certified CFP; UCLA Personal Finance Planning degree
- Named to The Hollywood Reporter's Top Business Managers list for 3 years running; New Mexico Business Weekly's "Top 40 Under 40"



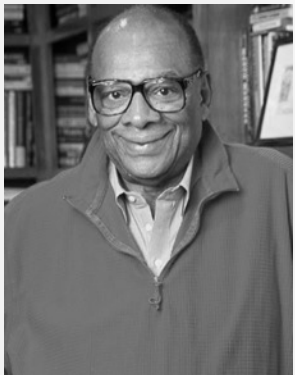
JOCELYN ROSENWALD

- Co-founder and Board Director of Glass House Group
- Veteran of real estate investment industry; most recently, successfully managed \$500M portfolio
- Since 2016, supervised operations of the 4 funds that would become Glass House Group
- B.A. University of Pennsylvania; M.A. in Education, Hunter College; M.B.A UCLA Anderson School of Business
- Teach for America alumna, founding teacher at KIPP Star Elementary School



HECTOR DE LA TORRE

- Member of California State Assembly representing L.A. 2004-2010; member of South Gate City Council for 8 years, including 2 as Mayor
- Current Chair of L.A. Care, the largest public health plan in U.S.; Trustee of Occidental College; former Executive Director of national nonprofit Transamerica Center for Health Studies
- Former Chair of state Budget Subcommittee on Health & Human Services, Rules Committee, and Accountability & Administrative Review Committee, among others
- Assembly-Appointed Member of California Air Resources Board since 2011, with focus on goods movement, the environment and green tech
- Graduate of Occidental College; graduate work at the Elliott School of International Affairs at the George Washington University
- Early, vocal advocate for cannabis policy reform



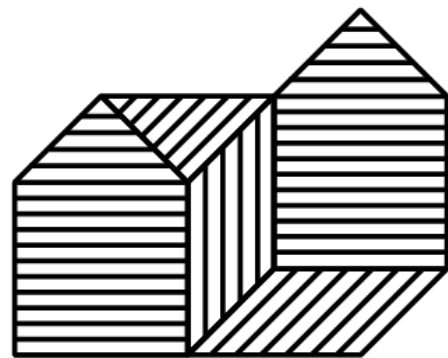
GEORGE RAVELING

- First African American basketball coach in the Pac-8 (now Pac-12); head coach at Washington State, University of Iowa, & USC; assistant coach of medal-winning 1984 and 1988 US Olympic teams
- Nike's former Director of International Basketball; former commentator for Fox Sports & CBS
- Inducted into Naismith Memorial Basketball Hall of Fame, National Collegiate Hall of Fame; recipient of John W. Bunn Lifetime Achievement Award
- Author of two books; co-founder (w/Michael Lombardi) of The Daily Coach leadership program
- B.S. in Economics from Villanova University, where he is also in the Villanova Hall of Fame



BOB HOBAN

- 12-year veteran of the cannabis industry and Founder of Hoban Law Group, a leading global full-service commercial cannabis law firm and the first of its kind
- Co-Founder of Gateway Proven Strategies, a leading global cannabis industry consulting firm
- Has founded, created, bought, and sold over 15 of his own cannabis companies
- Crafted cannabis policy solutions for over 30 countries
- Widely recognized by a variety of publications and organizations as one of the most influential people in the global cannabis industry



GLASS HOUSE

BRANDS

NEO: GLAS.A.U

OTCQX: GLAS.F
