

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549FORM S-3
REGISTRATION STATEMENT
Under The Securities Act of 1933**GLOBAL CLEAN ENERGY HOLDINGS, INC.**

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)87-0407858
(I.R.S. Employer Identification Number)2790 Skypark Drive
Suite 105
Torrance, California 90505
(310) 641-4234

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Richard Palmer
Chief Executive Officer
2790 Skypark Drive, Suite 105
Torrance, California 90505
(310) 641-4234

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Chief Financial Officer
2790 Skypark Drive, Suite 105
Torrance, California 90505
(310) 641-4234**Approximate date of commencement of proposed sale to the public:** From time to time, after the effective date of this Registration Statement.If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | |
|-------------------------|-------------------------------------|---------------------------|-------------------------------------|
| Large Accelerated filer | <input type="checkbox"/> | Accelerated filer | <input type="checkbox"/> |
| Non-accelerated filer | <input checked="" type="checkbox"/> | Smaller reporting company | <input checked="" type="checkbox"/> |
| | | Emerging growth company | <input type="checkbox"/> |

If an emerging growth company, indicate by check mark if the registrant has selected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. **The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

The information in this prospectus is not complete and may be changed. The selling securityholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED SEPTEMBER 29, 2022

PROSPECTUS



29,989,295 Shares of Common Stock

This prospectus relates to the sale from time to time by the selling securityholders identified in this prospectus of up to an aggregate of 29,989,295 shares of our common stock, par value \$0.001 per share, issuable upon exercise of outstanding common stock purchase warrants. We are not offering any shares of common stock under this prospectus and will not receive any proceeds from the sale or other disposition of the shares covered hereby.

The selling securityholders (which term includes their respective donees, pledgees, transferees or other successors-in-interest) may, from time to time, sell, transfer or otherwise dispose of the shares or interests therein on any stock exchange, market or trading facility on which the shares are traded or in private transactions at fixed prices, at market prices prevailing at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The selling securityholders will bear all fees, discounts, concessions or commissions of broker-dealers or agents in connection with the offering of the shares by the selling securityholders. See "Plan of Distribution" beginning on page 12 of this prospectus for more information about how the selling securityholders may sell their shares of common stock.

Our common stock is traded on the OTCQB Venture Market under the symbol "GCEH". On September 26, 2022, the last reported sale price of our common stock on the OTCQB Venture Market was \$2.03 per share.

Investing in our common stock involves a high degree of risk. You should carefully read and consider the risk factors described in, and incorporated by reference under, "Risk Factors" beginning on page 5 of this prospectus and in the applicable prospectus supplement before investing in any securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2022.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the United States Securities and Exchange Commission (the “SEC”). Under this registration statement, the selling securityholders may sell, at any time and from time to time, in one or more offerings, up to 29,989,295 shares of common stock. When the selling securityholders elect to make an offer of any common stock described in this prospectus, pursuant to this registration statement, a prospectus supplement, if required, may be distributed that will contain specific information about the terms of that offering. Any required prospectus supplement may also add, update or change information contained in this prospectus.

You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement. No person has been authorized to give any information or make any representations other than those contained or incorporated by reference in this prospectus or any accompanying prospectus supplement in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us or the selling securityholders.

You should read the entire prospectus and any prospectus supplement, as well as the documents incorporated by reference into this prospectus or any prospectus supplement, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement is correct as of any date subsequent to the date hereof or of such prospectus supplement, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

This prospectus may be supplemented from time to time by one or more prospectus supplements. Any such prospectus supplements may include additional or different information, such as additional or different risk factors or other special considerations applicable to us or our business, financial condition or results of operations. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information contained in the prospectus supplement.

A prospectus supplement may add to, update or change the information contained in this prospectus. You should read both this prospectus and any applicable prospectus supplement together with additional information described below under the heading “Where You Can Find Additional Information.”

This prospectus is neither an offer to sell nor a solicitation of an offer to buy any securities other than those registered by this prospectus, nor it is an offer to sell or a solicitation of an offer to buy securities where an offer or solicitation would be unlawful.

Unless the context otherwise requires, references in this prospectus to “we,” “us,” “our,” the “Registrant”, the “Company,” refer to Global Clean Energy Holdings, Inc. and its subsidiaries. All references to “GCEH” refer only to Global Clean Energy Holdings, Inc., the entity that is issuing the shares of common stock registered hereby.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain forward-looking statements. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results to be materially different from any future results expressed or implied by the forward-looking statements. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “expect” and the negative and plural forms of these words and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. Those statements appear in this prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference, particularly in the sections titled “Prospectus Summary” and “Risk Factors,” and include statements regarding the intent, belief or current expectations of the Company and management that are subject to known and unknown risks, uncertainties and assumptions.

This prospectus, any prospectus supplement and the information incorporated by reference in this prospectus and any prospectus supplement also contain statements that are based on the current expectations of our Company and management. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially from those projected in the forward- looking statements as a result of various factors.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained herein after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

PROSPECTUS SUMMARY

This summary description about us and our business highlights selected information contained elsewhere in this prospectus or incorporated in this prospectus by reference. This summary does not contain all of the information you should consider before investing in our common stock. You should carefully read this entire prospectus and any applicable prospectus supplement, including each of the documents incorporated herein or therein by reference, before making an investment decision.

Overview

GCEH is a uniquely positioned, vertically integrated renewable fuels innovator producing ultra-low carbon renewable fuels from patented nonfood camelina varieties. Our farm-to-fuel business model is designed to allow greater efficiencies throughout the value chain, lowering our finished fuels' carbon intensity and streamlining our operations at every step. Our patented camelina varieties are purposefully bred to increase yield, quicken maturity, and enhance tolerance to drought and pests. Today, GCEH owns the world's largest portfolio of patented camelina genetics, and we contract directly with farmers around the globe to grow our proprietary camelina crop on fallow land so as not to displace food products. Once online, the 15,000 barrels per day ("BPD") nameplate Bakersfield Renewable Fuels Refinery will sell up to its full production capacity, which will initially be limited to approximately 9,000 BPD due to a hydrogen constraint, of renewable diesel ("RD") to ExxonMobil Oil Corporation ("EMOC") through a pair of long-term supply agreements.

Our focus is to be an economically viable solution in reducing global greenhouse gas ("GHG") emissions via sustainable, more environmentally friendly alternatives to conventional petroleum-based fuels. The three pillars of sustainability — environmental, social, and economic — anchor our business philosophy. Through the implementation of these principals across our vertically integrated asset platform, we seek to drive long-term stakeholder value while creating a positive impact on food security by easing the demand on food crops for fuel production. By creating additive feedstock volume into an undersupplied market, our platform positions us as a globally scalable solution to the "Food vs. Fuel" quandary, while allowing us to continuously lower the carbon intensity of our finished fuels. We believe we can eventually achieve "net zero" GHG footprint on all our finished fuels, including renewable diesel, renewable propane, renewable naphtha, and in the future, sustainable aviation fuel ("SAF"). By eliminating inefficiencies throughout the value chain and leveraging a vertically integrated model, we expect to maintain significant control of the full value chain which allows us to produce highly sustainable, low cost and high margin ultra-low carbon finished fuels.

Over the past 15 years we have developed a portfolio of proprietary elite varieties of *Camelina sativa* ("camelina") to be used as a feedstock for our Bakersfield Renewable Fuels Refinery, providing us with feedstock certainty unmatched in the industry. Our camelina holds several advantages over traditional feedstocks, such as soybean oil, yielding additional Low Carbon Fuel Standard ("LCFS") credits through a lower carbon intensity score, adding significant value to our end products. As a dryland farmed rotational crop grown on idle land, camelina does not impact food production or compete with other crops for scarce water resources. The cropland available for potential camelina production in the Great Plains and Pacific northwest totals approximately 19 million acres. The result of our vertically integrated farm-to-fuel strategy is a highly sustainable, low cost, and ultra-low carbon finished fuel.

Utilizing a vertically integrated farm-to-fuels strategy meaningfully differentiates our platform from our competition. Our strategy is to manage all aspects of the renewable fuels value chain: (i) our upstream operations, anchored in plant and soil science, develop and produce a patented, low cost, proprietary crop for use in our downstream operations; (ii) our midstream operations efficiently handle, aggregate, store, and transport feedstock to our downstream operations; and (iii) our downstream operations process and convert feedstock into drop-in renewable fuels at our Bakersfield Renewable Fuels Refinery. By eliminating inefficiencies throughout the value chains and leveraging a vertically integrated model, we have unparalleled oversight throughout the value chain to maximize margin generation through operational and logistical efficiencies while simultaneously minimizing feedstock costs and our GHG footprint.

Corporate Information

GCEH is incorporated in the State of Delaware. GCEH's principal executive offices are located at 2790 Skypark Drive, Suite 105, Torrance, California 90505, and its telephone number at that address is (310) 641-4234. GCEH maintains a website at: www.gceholdings.com. Information contained on, or accessible through, our website is not a part of, and are not incorporated by reference into, this prospectus.

The Offering

- The selling securityholders named in this prospectus may offer and sell up to 29,989,295 shares of our common stock, par value \$0.001 per share, issuable upon the exercise of certain common stock purchase warrants held by the selling securityholders (the “Warrants”). The selling securityholders will determine when and how they will sell the common stock covered by this prospectus, as described in “Plan of Distribution.”
- Our common stock is currently traded on the OTCQB Venture Market under the symbol “GCEH.”
- We will not receive any of the proceeds of sales by the selling securityholders of any of the common stock covered by this prospectus. We will, however, receive the exercise price paid upon the exercise of the Warrants to the extent any such Warrants are exercised for cash.
- See “Risk Factors” beginning on page 5 for a discussion of factors you should carefully consider before deciding to invest in our common stock.

When we refer to the selling securityholders in this prospectus, we are referring to the holders of registration rights under (i) the registration rights agreement, dated as of August 5, 2022, by and among the Company and ExxonMobil Renewables LLC (the “EM RRA”), and (ii) the registration rights agreement, dated as of February 23, 2022, by and among the Company and the Lenders (defined below), as amended by the Amendment Agreement, dated as of August 5, 2022 (as amended, the “Lender RRA”), and, as applicable, any permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part. “Lenders” means Orion Energy Credit Opportunities Fund II, L.P., Orion Energy Credit Opportunities Fund II PV, L.P., Orion Energy Credit Opportunities Fund II GPFA, L.P., Orion Energy Credit Opportunities Fund GCE Co-Invest, L.P., Orion Energy Credit Opportunities Fund GCE Co-Invest B, L.P., Orion Energy Credit Opportunities Fund III PV, L.P., Orion Energy Credit Opportunities Fund III GPFA, L.P., Orion Energy Credit Opportunities Fund III, L.P., Orion Energy Credit Opportunities Fund III GPFA PV, L.P., LIF AIV 1, L.P., Voya Renewable Energy Infrastructure Originator I LLC and Voya Renewable Energy Infrastructure Originator L.P. See “Selling Securityholders” beginning on page 9 of this prospectus.

RISK FACTORS

Investing in our common stock involves risks. Before deciding to invest in our common stock, please read carefully the risks and uncertainties described below and incorporated by reference in this prospectus or any prospectus supplement. These risks and uncertainties include those discussed in our Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on April 4, 2022 and our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2022 and June 30, 2022 filed with the SEC on May 16, 2022 and August 15, 2022, respectively, which are incorporated herein by reference and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future and any prospectus supplement related to a particular offering. See “Information Incorporation by Reference” and “Where You Can Find More Information.” These risks are not the only risks that we may face. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, may also become important factors that affect us. If any of the risks or uncertainties described in this prospectus or our SEC filings or any such additional risks and uncertainties actually occur, our business, financial condition or results of operations could be materially and adversely affected which could cause our actual operating results to differ materially from those indicated or suggested by forward-looking statements made in this prospectus or our SEC filings or presented elsewhere by management from time to time. In that case, the trading price of our common stock could decline and you could lose all or part of your investment. See “Cautionary Statement Regarding Forward-Looking Statements” on page 2.

Risks Related to this Offering

The selling securityholders named in this prospectus have the right to acquire a significant number of shares of common stock upon the exercise of the Warrants, and any sale of such shares into the market in the future could cause the market price of our common stock to drop significantly.

The selling securityholders named in this prospectus may offer and sell up to 29,989,295 shares of our common stock upon the exercise of the Warrants. Sales of a substantial number of shares of our common stock in the public market by the selling securityholders named in this prospectus, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales by the selling securityholders may have on the prevailing market price of our common stock.

USE OF PROCEEDS

We are registering these shares of our common stock pursuant to registration rights granted to the selling securityholders in the EM RRA and the Lender RRA. We are not selling any securities under this prospectus, and we will not receive any of the proceeds from the sale or other disposition by the selling securityholders or their transferees of the shares of common stock covered hereby.

We have agreed to pay all costs, expenses and fees relating to registering the shares of our common stock referenced in this prospectus. The selling securityholders will pay any brokerage commissions and/or similar charges incurred in connection with the sale or other disposition by them of the shares covered hereby.

We may, however, receive cash proceeds equal to the exercise price of the Warrants that the selling securityholder may exercise, to the extent any such Warrants are exercised for cash. The Warrants may be exercised for cash or by means of cashless exercise. If all of the Warrants are exercised for cash, then we will receive gross proceeds of approximately \$67,475,914. We expect to use any proceeds received by us from the cash exercise of these Warrants for general corporate purposes.

We cannot predict when or if these Warrants will be exercised, and it is possible that these Warrants may expire and never be exercised. The Warrants are exercisable under certain circumstances on a cashless basis, and if the Warrants are exercised on a cashless basis we will not receive any proceeds from the exercise of the Warrants. As a result, we may never receive meaningful, or any, cash proceeds from the exercise of these Warrants, and we cannot plan on any specific uses of any proceeds we may receive beyond the purposes described herein.

See “Selling Securityholders” and “Plan of Distribution” below.

DESCRIPTION OF CAPITAL STOCK

The following description of our common stock and preferred stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Certificate of Incorporation (the "Certificate of Incorporation"), as amended by our Certificate of Amendment, the Certificate of Designations of Series C Preferred Stock, and our Bylaws (the "Bylaws"), each of which is filed as an exhibit to our registration statement, of which this prospectus forms a part. We encourage you to read the Certificate of Incorporation, Certificate of Designations of Series C Preferred Stock, and the Bylaws, as well as the applicable provisions of the Delaware General Corporation Law (the "DGCL"), for additional information.

General

Our authorized capital stock consists of 500,000,000 shares of common stock and 50,000,000 shares of preferred stock, par value \$0.001 per share (the "preferred stock"). As of September 26, 2022, 42,323,933 shares of our common stock were issued and outstanding. The shares of Series C Preferred Stock were created on February 23, 2022. As of September 26, 2022, a total of 145,000 shares of Series C Preferred Stock were issued and outstanding.

Common Stock

Voting Rights

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election.

Dividend Rights

Holders of common stock are entitled to receive proportionately any dividends that may be declared by our Board of Directors (the "Board"), subject to any preferential dividend rights of any series of preferred stock that may be outstanding.

Liquidation Rights

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately our net assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the preferential rights of any outstanding preferred stock.

Absence of Other Rights

Holders of common stock have no preemptive, subscription, redemption, or conversion rights. The rights, preferences, and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue.

Trading Symbol and Transfer Agent

Our common stock is traded on the OTCQB Venture Market under the symbol "GCEH." The transfer agent and registrar for our common stock is Colonial Stock Transfer Co, Inc. The address of our transfer agent and registrar is 7840 S. 700 E. Sandy, Utah 84070, and its telephone number is (801) 355-5740.

Preferred Stock

Under our Certificate of Incorporation, our Board has the authority, without further action by stockholders, to designate one or more series of preferred stock and to fix the voting powers, designations, preferences, limitations, restrictions, and relative rights granted to or imposed upon the preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preference, and sinking fund terms, any or all of which may be preferential to or greater than the rights of the common stock.

The authority possessed by our Board to issue preferred stock could potentially be used to discourage attempts by third parties to obtain control of our company through a merger, tender offer, proxy contest, or otherwise by making such attempts more difficult or more costly. Our Board may issue preferred stock with voting rights, conversion rights, and other rights that, if exercised, could adversely affect the voting power of the holders of common stock.

Series C Preferred Stock

On February 23, 2022, we filed a Certificate of Designations of Series C Preferred Stock (the "Certificate of Designations") with the Delaware Secretary of State pursuant to which we authorized the issuance of 145,000 shares of Series C Preferred Stock ("Series C Preferred"). The shares of Series C Preferred Stock have a stated value of \$1,000 per share for the purpose of calculating amounts payable upon liquidation, dissolution or winding up. ExxonMobil Renewables LLC ("EM Renewables"), a subsidiary of Exxon Mobil Corporation ("EMC"), purchased, and currently owns a majority of the issued and outstanding shares of Series C Preferred. The holders of the Series C Preferred Stock have the rights, preferences and privileges described in the following paragraphs.

Under the Certificate of Designations, the holders of the Series C Preferred are entitled to receive dividends at a rate of 15%, compounded quarterly; provided, however, until March 31, 2024 we may elect not to pay some or all of the accrued dividends in cash, in which case the unpaid dividends shall accrue and be added to the original issuance price of the shares of Series C Preferred.

The shares of Series C Preferred are not convertible into shares of our common stock.

Except as otherwise required by law or with respect to certain protective provisions included in the Certificate of Designations, the holders of Series C Preferred shall have no right to vote on matters submitted to a vote of our stockholders. Notwithstanding the foregoing, so long as any shares of Series C Preferred are outstanding, without the prior written consent of EM Renewables we may not take certain actions, including the following: (i) amend our Certificate of Incorporation, our bylaws, the Certificate of Designations or the governing documents of our principal subsidiaries in a manner that would be adverse to any holder of such shares in any material respect; (ii) commence any proceeding or action under applicable bankruptcy law, (iii) enter into a change of control transaction, (iv) authorize or issue other securities or securities convertible into or exercisable for any equity security, in each case if such security is on parity with or senior to, the shares of the Series C Preferred, or increase the authorized number of shares of any such equity securities; (v) permit the Company or any of its subsidiaries to incur additional indebtedness in excess of \$15,000,000 other than indebtedness contemplated by our annual budget, (vi) declare any dividend on any securities that are on parity with, or junior to the Series C Preferred, (vii) increase the size of the Board, (viii) hire or terminate our Chief Executive Officer, Chief Financial Officer, or Executive Vice President, or materially change the authority or responsibilities of such officers, (ix) enter into certain related party transactions, or (x) adopt an annual operating budget, make material changes to that approved annual budget, or sell or pledge assets other than as provided in the approved annual budget, among other things. In addition, for so long as EM Renewables holds any shares of Series C Preferred, EM Renewables shall have the right, exercisable at its option, to appoint two directors to the Board and, if the Series C Preferred shares have not been redeemed prior to the fifth anniversary of issuance, or upon an event of default under the Certificate of Designations, EM Renewables will have the right to appoint a majority of the Board.

Upon the liquidation of the Company, available cash proceeds will first be distributable to the holders of the Series C Preferred until they have received an amount equal to the Corporation Redemption Price. The "Corporation Redemption Price" is an amount of cash that would have to be distributed so that the aggregate of all cash distributions paid to the holders of Series C Preferred since the date of issuance equals the greater of (i) the original issuance price, as adjusted, and (ii) (x) until the second anniversary of its issuance, an amount equal to 1.85 times the initial purchase price, as adjusted, and (y) from and after the second anniversary of its issuance, an amount equal to two times the initial purchase price, as adjusted.

The Certificate of Designations provides that we will have the right, at any time, to redeem/repurchase the outstanding shares of Series C Preferred (in increments of no less than \$25,000,000), for an amount equal to the Corporation Redemption Price.

Warrants

On February 23, 2022, the Company issued warrants to purchase up to an aggregate of 18,547,731 shares of common stock to EM Renewables and the Lenders, all of whom are lenders under the Company's existing senior secured term loan credit agreement (the "Senior Credit Agreement"), of which warrants to purchase 13,530,723 shares were issued to EM Renewables (the "Tranche I Warrants"), and warrants to purchase 5,017,008 shares were issued to the Lenders (the "Lender I Warrants"). On February 23, 2022, the Company also issued EM Renewables warrants to purchase 6,500,000 shares of the Company's common stock (the "Tranche II Warrants").

In consideration of an increase in the commitment under the Senior Credit Agreement as set forth in Amendment No. 9 to the Senior Credit Agreement, dated as of August 5, 2022 ("Amendment No. 9"), the Company issued to the Lenders warrants to purchase up to 7,468,929 shares of common stock (the "Lender II Warrants").

In connection with transactions contemplated by Amendment No. 9, the Company also entered into a transaction agreement, dated as of August 5, 2022 (the "Transaction Agreement") with EM Renewables and EMOC pursuant to which, among other things, the Company issued EM Renewables warrants to purchase up to 2,489,643 shares of the Company's common stock (the "EM Warrants").

All of the foregoing warrants have a per share exercise price of \$2.25, an exercise period that ends on December 23, 2028, and the right to be exercised for cash or by means of cashless exercise. The exercise price and number of shares of common stock issuable under the warrants are subject to adjustments for stock dividends, splits, combinations and similar events.

On April 13, 2021, the Company issued common stock purchase warrants for the purchase of 19,840 shares to three accredited investors. The warrants have an exercise price of \$6.25 per share and a five-year term. The exercise price and number of shares of common stock issuable under the Warrants are subject to adjustments for stock dividends, splits, combinations and similar events.

SELLING SECURITYHOLDERS

On February 23, 2022, we issued and sold in a private placement 145,000 shares of Series C Preferred Stock and common stock warrants to EM Renewables and the Lenders (the “Preferred Stock Offering”). The Tranche I Warrants and the Tranche II Warrants were issued to EM Renewables in connection with the Preferred Stock Offering.

On August 5, 2022, we entered into the Transaction Agreement with EM Renewables and EMOC, pursuant to which, among other things, we issued EM Renewables the EM Warrants.

On August 5, 2022, the Company and EM Renewables entered into the EM RRA pursuant to which the Company agreed, among other things, to file a registration statement, of which this prospectus forms a part, to register the resale of shares of 13,530,723 shares of common stock underlying the Tranche I Warrants, 6,500,000 shares of common stock underlying the Tranche II Warrants, and 2,489,643 shares of common stock underlying the EM Warrants on or before September 30, 2022, and to keep such registration statement effective for a period equal to the earlier of five years from the date of effectiveness of this registration statement and on which all shares issuable under such Warrants have been sold.

On August 5, 2022, certain of our subsidiaries and the Lenders entered into Amendment No. 9 and Waiver No. 6, and in connection therewith the Company entered into an amendment agreement dated as of August 5, 2022 (the “Amendment Agreement”) pursuant to which we amended the Lender RRA as follows: (i) we agreed to file a registration statement, of which this prospectus forms a part, to register the resale of 7,468,929 shares of common stock underlying the Lender II Warrants, and (ii) made certain administrative changes to the Lender I Warrants.

We are registering the shares in accordance with the terms of the EM RRA and the Lender RRA to permit each of the selling securityholders identified below, or their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part, to sell, resell or otherwise dispose of the shares in a manner contemplated under “Plan of Distribution” in this prospectus (as may be supplemented and amended). Throughout this prospectus, when we refer to the selling securityholders in this prospectus we are referring to the holders of registration rights under the EM RRA and the Lender RRA and, as applicable, their permitted transferees or other successors-in-interest that may be identified in a supplement to this prospectus or, if required, a post-effective amendment to the registration statement of which this prospectus is a part.

The selling securityholders may sell some, all or none of their shares. We do not know how long the selling securityholders will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the selling securityholders regarding the sale or other disposition of any of the shares. The shares covered hereby may be offered from time to time by the selling securityholders. None of the selling securityholders is a broker-dealer or an affiliate of a broker-dealer.

The following table sets forth the name of each selling securityholders, the number and percentage of common stock beneficially owned by the selling securityholders as of September 26, 2022 (without regard to any limitations upon the exercise of the warrants owned by such selling securityholders), the number of shares that may be offered under this prospectus, and the number and percentage of our common stock beneficially owned by the selling securityholders assuming all of the shares covered hereby are sold. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our common stock.

All information contained in the table below and the footnotes thereto is based upon information provided to us by the selling securityholders for use in this prospectus. Percentage ownership is based on 42,323,933 shares of common stock outstanding as of September 26, 2022. Unless otherwise indicated in the footnotes to this table, we believe that each of the selling securityholder named in this table has sole voting power with respect to the shares of common stock indicated as beneficially owned.

| Name of Selling Stockholders(1) | Beneficial Ownership Prior to the Offering | | Shares Beneficially Owned After Offering(3) | | |
|--|---|--|--|--|--|
| | Number of Shares Beneficially Owned Prior to the Offering(2) | Percentage of Outstanding Common Stock | Number of Shares Being Registered Hereby | Number of Shares Beneficially Owned After the Offering(2) | Percentage of Outstanding Common Stock(4) |
| ExxonMobil Renewables LLC(5) | 22,520,366 | 34.73% | 22,520,366 | — | — |
| Orion Energy Credit Opportunities Fund II, L.P.(4)(6) | 1,059,823 | 2.44% | 824,587 | 235,236 | * |
| Orion Energy Credit Opportunities Fund II PV, L.P.(4)(6) | 1,703,079 | 3.87% | 1,325,067 | 378,012 | * |
| Orion Energy Credit Opportunities Fund II GPFA, L.P.(4)(6) | 104,411 | * | 81,236 | 23,175 | * |
| Orion Energy Credit Opportunities GCE Co-Invest, L.P.(4)(6) | 2,333,917 | 5.23% | 736,088 | 1,597,829 | 3.58% |
| Orion Energy Credit Opportunities GCE Co-Invest B, L.P.(4)(6) | 79,116 | * | 24,952 | 54,164 | * |
| Orion Energy Credit Opportunities Fund III PV, L.P.(4)(7) | 869,434 | 2.01% | 676,456 | 192,978 | * |
| Orion Energy Credit Opportunities Fund III GPFA, L.P.(4)(7) | 65,922 | * | 51,290 | 14,632 | 1.00% |
| Orion Energy Credit Opportunities Fund III, L.P.(4)(7) | 1,896,237 | 4.29% | 1,475,352 | 420,885 | * |
| Orion Energy Credit Opportunities Fund III GPFA PV, L.P.(4)(7) | 35,719 | * | 27,791 | 7,928 | * |
| LIF AIV 1, L.P.(4)(8) | 2,515,864 | 5.61% | 1,431,545 | 1,084,319 | 2.42% |
| Voya Renewable Energy Infrastructure Originator I LLC(4)(9) | 696,163 | 1.62% | 311,164 | 384,999 | * |
| Voya Renewable Energy Infrastructure Originator L.P.(4)(9) | 1,126,252 | 2.59% | 503,401 | 622,851 | 1.43% |
| Total | 35,006,303 | 45.27 | 29,989,295 | 5,017,008 | 11.36% |

(*) Indicates beneficial ownership of less than 1%.

- (1) Information concerning named selling securityholder or future transferees, pledgees, assignees, distributees, donees or successors of or from any such stockholder or others who later hold any selling securityholders' interests will be set forth in supplements to this prospectus, absent circumstances indicating that the change is material. In addition, post-effective amendments to the registration statement of which this prospectus forms a part will be filed to disclose any material changes to the plan of distribution from the description in the final prospectus.
- (2) Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, securities that are currently convertible or exercisable into shares of our common stock, or convertible or exercisable into shares of our common stock within 60 days of September 26, 2022 are deemed outstanding. Such shares, however, are not deemed outstanding for the purposes of computing the percentage ownership of any other person.
- (3) Assumes the sale of all shares of common stock being offered pursuant to this prospectus.

- (4) Pursuant to the terms of the Lender II Warrants, unless all of the Lenders as selling securityholders (together with any other “attribution parties”) file any SEC reports required as a result of such selling securityholder and such other “attribution parties” collectively beneficially owning in the aggregate in excess of 4.99% of the number of shares of common stock, the Lender II Warrants shall not be exercisable by any selling securityholders if such selling stockholders together with any other “attribution parties” collectively would beneficially own in the aggregate in excess of 4.99% (the “Maximum Percentage”) of the number of shares of common stock outstanding immediately after giving effect to such exercise. At any time, upon written notice to the Company, the selling securityholder may increase or decrease the Maximum Percentage to any other percentage; provided that any increase to the Maximum Percentage shall not be effective until the sixty-first (61st) day after such written notice is delivered to the Company. The percentages in this column reflect the percentage owned by each selling stockholder individually as if the Maximum Percentage has not been reached.
- (5) Exxon Mobil Corporation is the sole member of ExxonMobil Renewables LLC. 6,500,000 shares of common stock underlying the Tranche II Warrants are only deemed beneficially owned by Exxon Mobil Corporation, and not ExxonMobil Renewables LLC, because only Exxon Mobil Corporation, as the sole member of ExxonMobil Renewables LLC, has the power to control the exercisability of such warrants at its option.
- (6) Orion Energy Credit Opportunities Fund II GP, L.P. is the general partner of the named selling securityholder. Orion Energy Credit Opportunities Fund II Holdings, LLC is the General Partner of Orion Energy Credit Opportunities Fund II GP, L.P. Nazar Massouh and Gerrit Nicholas are the Chief Executive Officer and Chief Investment Officer, respectively, of Orion Energy Credit Opportunities Fund II Holdings, LLC, each of whom disclaims beneficial ownership of the shares of common stock issuable to the named selling stockholder.
- (7) Orion Energy Credit Opportunities Fund III GP, L.P. is the general partner of the named selling stockholder. Orion Energy Credit Opportunities Fund III Holdings, LLC is the General Partner of Orion Energy Credit Opportunities Fund III GP, L.P. Nazar Massouh and Gerrit Nicholas are the Chief Executive Officer and Chief Investment Officer, respectively, of Orion Energy Credit Opportunities Fund III Holdings, LLC, each of whom disclaims beneficial ownership of the shares of common stock issuable to the named selling stockholder.
- (8) GCM Investments GP, LLC is the general partner of LIF AIV 1, L.P. The sole member of GCM Investments GP, LLC is Grosvenor Capital Management Holdings, LLLP. The general partner of Grosvenor Capital Management Holdings, LLLP is GCM Grosvenor Holdings, LLC, which is wholly owned by GCM Grosvenor Inc., a Delaware corporation whose Class A common stock is publicly traded on the Nasdaq Stock Market (Nasdaq: GCMG). Michael J. Sacks is the Board Chairman and Chief Executive Officer of GCMG. Mr. Sacks disclaims beneficial ownership of the shares of common stock issuable to LIF AIV 1, L.P.
- (9) Voya Alternative Asset Management LLC is the agent of the named selling stockholder. Thomas Emmons and Edward Levin are both Senior Vice Presidents of Voya Alternative Asset Management LLC, each of whom disclaims beneficial ownership of the shares of common stock issuable to the named selling stockholder.

Relationship with the Selling Securityholders

Other than as discussed below, no selling securityholder has had any position, office, or other material relationship with us or any of our affiliates within the past three years. Based on representations made to us by the selling securityholders, except as noted below, no selling securityholder is a registered broker-dealer or an affiliate of a registered broker-dealer.

The selling securityholders purchased 145,000 shares of our Series C Preferred Stock in the Preferred Stock Offering for \$145,000,000.

In connection with a securities purchase agreement dated February 2, 2022 (the "Purchase Agreement") that the Company entered into with EM Renewables and the Lenders, and in accordance with the Company's Certificate of Designations, on February 23, 2022 the Board appointed EM Renewables designees, Amy K. Wood and E. Nicholas Jones, to serve as directors of the Company. Ms. Wood and Mr. Jones are employees of EMC or one of its affiliates. Neither Ms. Wood nor Mr. Jones is a party to any current or proposed transactions with the Company for which disclosure is required under Item 404(a) of Regulation S-K.

The Company is party to a product take-off agreement, dated effective April 10, 2019, and most recently amended by Amendment No. 3, dated August 5, 2022, pursuant to which the Company and EMOC have an agreement whereby the Company agrees for a period of 66 months to a committed volume of 135 million gallons of renewable diesel for the first five years of the term and 67.5 gallons of renewable diesel for the final six-month period for the initial term. The Company and EMOC are further parties to a term purchase agreement, dated effective April 21, 2021 ("TPA"), as amended by Amendment No. 2 dated as of August 5, 2022 ("Amendment No. 2 to TPA") pursuant to which, among other things, the initial term of the TPA was extended by six months to 66 months and EMOC was granted rights to future U.S. federal credits, benefits or other incentives related to the production, manufacture, or sale of renewable fuels, including a national low carbon fuel standard (to the extent related to volumes of production sold to EMOC under the TPA).

The selling securityholders that are Lenders have agreed to lend us up to \$397.6 million in a senior secured loan evidenced by the Senior Credit Agreement, which loan is currently outstanding. On May 4, 2020, through our newly formed special purpose subsidiaries, we entered into the Senior Credit Agreement with a group of lenders pursuant to which the lenders agreed to provide us with a \$300 million senior secured term loan facility. The Senior Credit Agreement has been amended nine times, pursuant to which, among other things, the total amount available to us under the Senior Credit Agreement was increased from \$300 million to \$397.6 million. The selling securityholders in this prospectus currently constitute all of the senior lenders under the Senior Credit Agreement. Orion Energy Partners TP Agent, LLC acts as the administrative agent for the senior lenders in their capacity as lenders under the Senior Credit Facility. As of September 26, 2022, \$367.6 million has been borrowed under the Senior Credit Agreement. As of September 26, 2022, we have paid or accrued to such selling securityholders (in their capacities as lenders) an aggregate of \$61.1 million in interest and \$0.4 million in other fees.

The Senior Credit Agreement is secured by all of the assets of our Bakersfield Renewable Fuels Refinery and by all of the ownership interests of our subsidiaries that own the Bakersfield Renewable Fuels Refinery. The Senior Credit Agreement matures on November 4, 2026, and bears interest at the rate of 12.5% per annum. As additional consideration for the Senior Credit Agreement BKRF HCB LLC, one of our subsidiaries that is a party to the Senior Credit Agreement, issued its Class B Unit membership interests to the senior lenders. The Class B Units will provide the senior lenders with certain cash distributions in addition to the principal and interest payments required under the Senior Credit Agreement. Until the later of (i) seven years from the commercial operations date of the Bakersfield Renewable Fuels Refinery and (ii) the date the senior lenders have received two times the loan amount under the Senior Credit Facility (the "Termination Date"), the senior lenders, as holders of the Class B Units, are entitled to receive quarterly distributions of 35% of the free cash flow until the senior lenders have received (collectively, from these cash distributions plus all principal and interest on the senior loan) an amount equal to a 2X multiple of invested capital (two times the amount of the senior loan), for a total of up to \$795.2 million, and, if the Termination Date has not occurred, thereafter quarterly distributions of 5% of the free cash flow until the Termination Date.

Concurrently with entering into the Senior Credit Agreement, through our special purpose subsidiaries, on May 4, 2020 we also entered into a mezzanine credit facility (“Mezzanine Credit Facility”) with a group of mezzanine lenders, including the Lenders, pursuant to which we had the right to borrow up to \$60 million. As of February 23, 2022, the selling securityholders also were all of the mezzanine lenders. Between May 4, 2020 and February 23, 2022, the Mezzanine Credit Facility was amended to increase the maximum amount available under the Mezzanine Credit Facility from \$60 million to \$67.4 million. We did not utilize the Mezzanine Credit Facility prior to February 23, 2022, no mezzanine loans were ever advanced to us under that facility, and we made no payments to the selling securityholders/mezzanine lenders under the Mezzanine Credit Facility. On February 23, 2022, the selling securityholders/mezzanine lenders assigned all of the rights and obligations under the Mezzanine Credit Facility to the Company and we assumed the obligations of the mezzanine lenders. As a result, since February 23, 2022 the selling securityholders no longer maintain any relationship with us under the Mezzanine Credit Facility. On February 23, 2022, GCEH fully funded the \$67.4 million mezzanine loan and became a lender to the subsidiaries.

LIF AIV 1, L.P. is an affiliate of GRV Securities LLC, a registered broker-dealer. Voya Alternative Asset Management LLC, agent for Voya Renewable Energy Infrastructure Originator I LLC and Voya Renewable Energy Infrastructure Originator L.P., is an affiliate of Voya Investments Distributor, LLC, a registered broker dealer.

PLAN OF DISTRIBUTION

We are registering the shares of common stock issuable upon exercise of the Warrants to permit the resale of these shares of common stock by the holders thereof, from time to time after the date of this prospectus. We will receive proceeds from the exercise of any Warrants (except where cashless exercise is permitted). We will not receive any of the proceeds from the sale by the selling securityholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling securityholders may sell all or a portion of the shares of common stock held by them and offered hereby from time to time in one or more transactions directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling securityholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- through one or more underwriters or dealers in a public offering and sale by them, whether individually or through an underwriting syndicate led by one or more managing underwriters;
- in "at the market offerings" within the meaning of Rule 415(a)(4) under the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales after the date the Registration Statement is declared effective by the SEC;
- in transactions through broker-dealers that agree with the selling securityholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling securityholders may also sell shares of common stock under Rule 144 promulgated under the Securities Act, as amended (the "Securities Act"), if available, rather than under this prospectus. In addition, the selling securityholders may transfer the shares of common stock by other means not described in this prospectus. If the selling securityholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling securityholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the selling securityholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling securityholders may also sell shares of common stock short and deliver shares of common stock, as applicable, covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling securityholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares.

The selling securityholders may pledge or grant a security interest in some or all of the preferred stock, preferred warrants, or shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending, if necessary, the list of selling securityholders to include the pledgee, transferee or other successors in interest as selling securityholders under this prospectus. The selling securityholders also may transfer or donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be included in the term “selling securityholders” for purposes of this prospectus.

To the extent required by the Securities Act and the rules and regulations thereunder, the selling securityholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling securityholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers. Selling securityholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling securityholders will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling securityholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of preferred stock or common stock by the selling securityholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We will pay all expenses of the registration of the shares of common stock, including, without limitation, SEC filing fees, fees and expenses of our legal counsel and accountants in connection with the registration, fees and expenses incurred in connection with listing the shares of common stock, and expenses of compliance with state securities or “blue sky” laws; provided, however, a selling securityholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling securityholders against liabilities, including some liabilities under the Securities Act in accordance with the registration rights agreement or the selling securityholders will be entitled to contribution. We may be indemnified by the selling securityholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling securityholders specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon by TroyGould PC, Los Angeles, California. As of September 29, 2022, TroyGould PC owned an option to acquire 20,000 shares of common stock and Istvan Benko, Of Counsel to TroyGould PC, owned 10,000 shares and an option to acquire 45,000 shares of common stock.

EXPERTS

The audited financial statements as of and for the year ended December 31, 2021, incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

Macias Gini & O'Connell LLP, independent registered public accounting firm, has audited the consolidated balance sheet of the Company as of December 31, 2020, the related consolidated statements of operations, changes in stockholders' deficit, and cash flows for the year ended December 31, 2020, and the related notes in our Annual Report on Form 10-K for the year ended December 31, 2021, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Such financial statements are incorporated by reference in reliance on Macias Gini & O'Connell LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed above. The registration statement and the documents referred to below under "Information Incorporated by Reference" are also available on our website at www.gceholdings.com. We have not incorporated by reference into this prospectus the information on, or that can be accessed through, our website, and it is not a part of this prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

- [Our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 that was filed with the SEC on April 4, 2022](#) including the information specifically incorporated by reference into the Annual Report on Form 10-K from [our definitive proxy statement on Schedule 14A, filed on April 29, 2022](#);
- Our Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2022](#) and [June 30, 2022](#), that were filed with the SEC on May 16, 2022 and August 15, 2022, respectively.
- Our Current Reports on Form 8-K filed with the SEC on [January 3, 2022](#), [January 6, 2022](#), [February 8, 2022](#), [February 28, 2022](#), [March 22, 2022](#), [April 29, 2022](#), [May 2, 2022](#), [June 9, 2022](#), [June 24, 2022](#), [August 11, 2022](#) and [September 19, 2022](#); and
- The description of our common stock contained in [Exhibit 4.2 of our Annual Report](#) on Form 10-K for the year ended December 31, 2021 that was filed with the SEC on April 4, 2022.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information deemed furnished and not filed with the SEC. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

This prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus. You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus.

Requests for such documents should be directed to:

Global Clean Energy Holdings, Inc.
2790 Skypark Drive, Suite 105
Torrance, California 90505
Attention: Chief Administrative Officer

You may also access certain of the documents incorporated by reference in this prospectus through our website at www.gceholdings.com. Except for the specific incorporated documents listed above, no information available on, or that can be accessed through, our website shall be deemed to be incorporated by reference into this prospectus or the registration statement of which it forms a part.



Part II

Information Not Required in the Prospectus

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth an estimate of the registrant's expenses, other than any sales commissions or discounts, in connection with the issuance and distribution of the securities being registered hereby. All amounts are estimates except the SEC registration fee.

| | | |
|---|----|--------|
| Securities and Exchange Commission registration fee | \$ | 6,255 |
| Accounting fees and expenses | \$ | 35,000 |
| Legal fees and expenses | \$ | 50,000 |
| Miscellaneous | \$ | — |
| Total | \$ | 91,255 |

Item 15. Indemnification of Directors and Officers

GCEH is incorporated under the laws of the State of Delaware. Reference is made to Section 102(b)(7) of the General Corporation Law of the State of Delaware, as amended (the "DGCL"), which enables a corporation in its original certificate of incorporation or an amendment thereto to eliminate or limit the personal liability of a director for violations of the director's fiduciary duty, except (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL, which provides for liability of directors for unlawful payments of dividends or unlawful stock purchase or redemptions or (iv) for any transaction from which the director derived an improper personal benefit.

Section 145(a) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses which the adjudicating court shall deem proper.

Section 145(g) of the DGCL provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the DGCL.

Our Certificate of Incorporation (as amended) provides that no director of our company shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to us or our stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) in respect of unlawful dividend payments or stock redemptions or repurchases or other distributions pursuant to Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit. Our charter further provides that any amendment, repeal or modification of such article unless otherwise required by law will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or amendment of a director serving at the time of such repeal or modification.

Our charter further provides that we shall indemnify each of our directors and executive officers, and shall have power to indemnify our other officers, employees and agents, to the fullest extent permitted by Section 145 of the DGCL as the same may be amended (except that in the case of an amendment, only to the extent that the amendment permits us to provide broader indemnification rights than the DGCL permitted us to provide prior to such the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director's, officer's or employee's behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of our company, or at our request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of our company and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. Accordingly, GCEH may advance expenses to each of our directors and, in the discretion of the board of directors, to certain officers and employees, in advance of the final disposition of such action, suit or proceeding only upon receipt of an undertaking by such person to repay all amounts advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such person is not entitled to be indemnified for such expenses.

In addition, as permitted under Section 145(f) of the DGCL, the right of each of our directors and officers to indemnification and advancement of expenses shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the charter or bylaws, agreement, vote of stockholders or otherwise. Furthermore, our Certificate of Incorporation authorizes us to provide insurance for our directors, officers, employees and agents against any liability, whether or not we would have the power to indemnify such person against such liability under the DGCL or the Bylaws.

We have entered into, and intend to continue to enter into separate indemnification agreements with our directors and executive officers to provide these directors and executive officers additional contractual assurances regarding the scope of the indemnification set forth in our Certificate of Incorporation and bylaws and to provide additional procedural protections. The indemnification provisions in our Certificate of Incorporation, bylaws and the indemnification agreements may be sufficiently broad to permit indemnification of our directors and executive officers for liabilities arising under the Securities Act.

We maintain a liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 16. Exhibits

| Exhibit Number | Description of Document |
|-----------------------|--|
| 3.1 | Certificate of Incorporation (incorporated herein by reference to Appendix D to the Company's Definitive Proxy Statement on Schedule 14A filed with the Commission on June 2, 2010). |
| 3.2 | Certificate of Amendment to the Company's Certificate of Incorporation (incorporated by reference herein to Exhibit 3.2 to the Company's Form 10-K filed on April 13, 2021). |
| 3.3 | Certificate of Designations of the Company's Series C Preferred Stock (incorporated here by reference to Exhibit 3.1 in the Company's Form 8-K filed on February 8, 2022) |
| 3.4 | Bylaws (incorporated herein by reference to Appendix E to the Company's Definitive Proxy Statement on Schedule 14A filed with the Commission on June 2, 2010). |
| 4.1 | Specimen stock certificate (filed as Exhibit 4.1 to the Company's Annual Report on Form 10-K filed on October 6, 2020, and incorporated herein by reference). |
| 4.2 | Registration Rights Agreement, dated February 23, 2022, among the Company and the Lenders (filed as Exhibit 4.4 to the Company's Form S-3 filed on June 1, 2022, and incorporated herein by reference). |
| 4.3 | Registration Rights Agreement, dated August 5, 2022, among the Company and ExxonMobil Renewables LLC (incorporated here by reference to the Company's Form 8-K filed on August 11, 2022). |
| 4.4 | Amendment No. 9 to Credit Agreement, dated as of August 5, 2022, by and among BKRF OCB, LLC, BKRF OCP, LLC, Orion Energy Partners TP Agent, LLC, in its capacity as the administrative agent, and the lenders referred to therein (incorporated here by reference to the Company's Form 8-K filed on August 11, 2022). |
| 4.5 | Waiver No. 6 to Credit Agreement, dated as of August 5, 2022, by and among BKRF OCB, LLC, BKRF OCP, LLC, Orion Energy Partners TP Agent, LLC, in its capacity as the administrative agent, and the lenders referred to therein (incorporated here by reference to the Company's Form 8-K filed on August 11, 2022). |
| 4.6 | Form of Tranche I Warrant (incorporated here by reference to Exhibit 3.2 in the Company's Form 8-K filed on February 8, 2022). |
| 4.7 | Form of Tranche II Warrant (incorporated here by reference to Exhibit 3.3 in the Company's Form 8-K filed on February 8, 2022). |
| 4.8 | Form of Lender II Warrant (incorporated here by reference to Exhibit 10.3 in the Company's Form 8-K filed on August 11, 2022). |
| 4.9 | Amendment Agreement, dated as of August 5, 2022, by and among the Company and the lenders referred to therein (incorporated here by reference to Exhibit 10.4 in the Company's Form 8-K filed on August 11, 2022). |
| 4.10 | Transaction Agreement, dated as of August 5, 2022, by and among the Company, EM Renewables and ExxonMobil Oil Corporation (incorporated here by reference to Exhibit 10.5 in the Company's Form 8-K filed on August 11, 2022). |
| 4.11 | Amendment No. 3 to Product Off-Take Agreement, dated as of August 5, 2022, by and between Bakersfield Renewable Fuels, LLC and ExxonMobil Oil Corporation ** (incorporated here by reference to Exhibit 10.6 in the Company's Form 8-K filed on August 11, 2022). |
| 4.12 | Amendment No. 2 to Term Purchase Agreement, dated as of August 5, 2022, by and between Bakersfield Renewable Fuels, LLC and ExxonMobil Oil Corporation** (incorporated here by reference to Exhibit 10.7 in the Company's Form 8-K filed on August 11, 2022). |
| 4.13 | EM Warrant (incorporated here by reference to Exhibit 10.8 in the Company's Form 8-K filed on August 11, 2022). |
| 4.14 | Omnibus Amendment to Warrant Agreements, dated as of August 5, 2022, by and between Global Clean Energy Holdings, Inc. and ExxonMobil Renewables LLC (incorporated here by reference to Exhibit 10.9 in the Company's Form 8-K filed on August 11, 2022). |
| 5.1* | Opinion of TroyGould PC. |
| 23.1* | Consent of Grant Thornton LLP. |
| 23.2* | Consent of Macias Gini & O'Connell LLP. |
| 23.3* | Consent of TroyGould PC (included in Exhibit 5.1). |
| 24.1* | Power of Attorney (included on the signature page of this registration statement). |
| 107* | Filing Fee Table |

* Filed herewith

**Certain portions of the Exhibit have been redacted pursuant to Reg. 8-K Item 601(6)(10)

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) If the registrant is relying on Rule 430B,

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to the effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer and sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding), is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Torrance, California, on September 29, 2022.

GLOBAL CLEAN ENERGY HOLDINGS, INC.

By: /s/ Richard Palmer
Richard Palmer
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Richard Palmer and Ralph Goehring, and each of them acting individually, jointly and severally, as his true and lawful attorneys-in-fact and agents, with full power of each to act alone, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement on Form S-3 (including post-effective amendments), and to sign any registration statement for the same offering covered by this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, with full power of each to act alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933 this registration statement has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---|---|--------------------|
| <u>/s/ Richard Palmer</u> Richard Palmer | Chief Executive Officer and Director (Principal Executive Officer) | September 29, 2022 |
| <u>/s/ Ralph Goehring</u> Ralph Goehring | Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) | September 29, 2022 |
| <u>/s/ David R. Walker</u> David R. Walker | Chairman, the Board of Directors | September 29, 2022 |
| <u>/s/ Susan L. Anhalt</u> Susan L. Anhalt | Director | September 29, 2022 |
| <u>/s/ Phyllis E. Currie</u> Phyllis E. Currie | Director | September 29, 2022 |
| <u>/s/ E. Nicholas Jones</u> E. Nicholas Jones | Director | September 29, 2022 |
| <u>/s/ Martin Wenzel</u> Martin Wenzel | Director | September 29, 2022 |
| <u>/s/ Amy K. Wood</u> Amy K. Wood | Director | September 29, 2022 |

TroyGould PC
1801 Century Park East, 16th Floor
Los Angeles, California 90067

September 29, 2022

Global Clean Energy Holdings, Inc.
 2790 Skypark Drive, Suite 105
 Torrance, CA 90505

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Global Clean Energy Holdings, Inc., a Delaware corporation (the “**Company**”), in connection with a Registration Statement on Form S-3 (the “**Registration Statement**”), under the Securities Act of 1933, as amended (the “**Securities Act**”), filed by the Company with the Securities and Exchange Commission (the “**Commission**”) on the date hereof. The Registration Statement relates to the registration for resale by the selling stockholders named in the Registration Statement (the “**Selling Stockholders**”) of up to an aggregate of 29,989,295 shares of the Company’s common stock, \$0.001 par value per share (the “**Shares**”), which are issuable upon the exercise of warrants issued by the Company to the Selling Stockholders on February 23, 2022 and August 5, 2022 (collectively, the “**Warrants**”).

This opinion letter is furnished to you at your request and in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or prospectus forming a part of the Registration Statement, other than as to the validity of the Shares.

We are familiar with the corporate actions taken and proposed to be taken by the Company in connection with the authorization, issuance and sale of the Shares and have made such other legal and factual inquiries as we deem necessary for purposes of rendering this opinion. We have relied upon certificates and other assurances of officers of the Company and others as to factual matters; we have not independently verified such matters. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies and the authenticity of the originals of such copied documents. We have also assumed that the Shares are and will be evidenced by appropriate certificates that have been properly executed and delivered.

Our opinion is limited to the General Corporation Law of the State of Delaware and we express no opinion with respect to the laws, rules or regulations of any other jurisdiction, including, without limitation, the federal laws of the United States of America. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

Global Clean Energy Holdings, Inc.
 September 29, 2022
 Page 2 of 2

The Shares may be issued from time to time on a delayed or continuous basis, and the opinions expressed below concern only laws that are in effect on the date of this opinion letter. We undertake no, and hereby disclaim any, obligation to advise you of any change in any matter set forth in this opinion letter, whether based on a change in laws, a change in any fact relating to the Company, or any other circumstance. This opinion letter is limited to the matters expressly stated herein, and no opinions are to be inferred or may be implied beyond the opinions expressly set forth below. Without limiting the generality of the foregoing, we neither express nor imply any opinion regarding the contents of the Registration Statement, the Prospectus, or any Prospectus Supplement other than as expressly stated in this opinion letter with respect to the issuance of the Securities.

Based on the foregoing and in reliance thereon, and subject to the qualifications and limitations set forth below, we are of the opinion that the Shares, when issued upon exercise of the Warrants in accordance with their respective terms, will be validly issued, fully paid and non-assessable.

This opinion letter is rendered to you in connection with the Registration Statement and may not be relied upon by you for any other purpose. We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and further consent to the reference to our name under the caption “Legal Matters” in the Prospectus. In giving our consent, we do not thereby admit that we are included within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission under the Securities Act.

Very truly yours,

/s/ TROYGOULD PC
 TROYGOULD PC

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated April 4, 2022 with respect to the consolidated financial statements of Global Clean Energy Holdings, Inc. included in the Annual Report on Form 10-K for the year ended December 31, 2021, which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference of the aforementioned report in this Registration Statement, and to the use of our name as it appears under the caption "Experts."

/s/ GRANT THORNTON LLP

Kansas City, Missouri

September 29, 2022



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the caption "Experts" in this Registration Statement (Form S-3) of Global Clean Energy Holdings, Inc. and to the incorporation by reference therein of our report dated April 12, 2021, included in its Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Macias Gini & O'Connell LLP

Irvine, CA

September 29, 2022

Calculation of Filing Fee Tables

Form S-3
(Form Type)Global Clean Energy Holdings, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

| | Security Type | Security Class Title | Fee Calculation or Carry Forward Rule | Amount Registered (1) | Proposed Maximum Offering Price Per Share (2) | Maximum Aggregate Offering Price (2) | Fee Rate | Amount of Registration Fee | Carry Forward Form Type | Carry Forward File Number | Carry Forward Initial effective date | Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward |
|-----------------------------|---------------|---------------------------------|---------------------------------------|-----------------------|---|--------------------------------------|-----------|----------------------------|-------------------------|---------------------------|--------------------------------------|---|
| Newly Registered Securities | | | | | | | | | | | | |
| Fees to be Paid | Equity | Common Stock, \$0.001 par value | Other | 29,989,295 | \$ 2.25 | \$ 67,475,913.80 | 0.0000927 | \$ 6,255.02 | | | | |
| Fees Previously Paid | — | — | — | — | — | — | — | — | | | | |
| Carry Forward Securities | | | | | | | | | | | | |
| Carry Forward Securities | — | — | — | — | — | — | — | — | — | — | — | — |
| | | Total Offering Amounts | | | | \$ 67,475,913.80 | | \$ 6,255.02 | | | | |
| | | Total Fees Previously Paid | | | | | | — | | | | |
| | | Total Fee Offsets | | | | | | — | | | | |
| | | Net Fee Due | | | | | | \$ 6,255.02 | | | | |

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), the number of shares of the registrant's common stock being registered hereunder includes such indeterminate number of additional shares of common stock as may become issuable as a result of any stock splits, stock dividends or similar transactions.
- (2) In accordance with Rule 457(g) under the Securities Act of 1933, as amended, the aggregate offering price of the shares of common stock is estimated solely for the calculation of the registration fee due for this filing. This estimate was based on the price at which the warrants may be exercised, which is \$2.25.