Registration Number 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-1 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Polar Power, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or other jurisdiction of incorporation or organization)

3621

(Primary Standard Industrial Classification Code Number)

33-0479020

(I.R.S. Employer Identification Number)

249 E. Gardena Boulevard Gardena, CA 90248 (310) 830-9153

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

Arthur D. Sams
President and Chief Executive Officer
Polar Power, Inc.
249 E. Gardena Boulevard
Gardena, CA 90248
(310) 830-9153

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

Copies to:

Larry A. Cerutti, Esq. Lisa A. Raines, Esq. Troutman Sanders LLP 5 Park Plaza, Suite 1400 Irvine, California 92614 (949) 622-2700/(949) 622-2739 (fax) Mitchell S. Nussbaum, Esq. Giovanni Caruso, Esq. Loeb & Loeb LLP 345 Park Avenue New York, New York 10154 (212) 407-4000/(212) 407-4990 (fax)

Approximate date of commencement	t of proposed sale to the public: As soon a	s practicable after the eff	ective date of this
Registration Statement.			

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, check the following box. \Box

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. $\boxtimes 333-213572$

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

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

Large accelerated filer □		Accelerated filer □
Non-accelerated filer □	(Do not check if a smaller reporting company)	Smaller reporting company X

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate fering Price ⁽²⁾	Res	Amount of gistration Fee ⁽⁴⁾
Common stock, \$0.0001 par value per share	460,000	\$ 7.00	\$ 3,220,000	\$	373.20
Representative's Warrants to purchase common stock	_	_	—(3)		_
Shares of common stock underlying Representatives'					
Warrants	5,000	\$ 7.00	\$ 35,000	\$	4.06
Total	465,000	\$ 7.00	\$ 3,255,000	\$	377.26

- (1) Represents only the additional number of shares being registered, including 60,000 additional shares that the underwriters have the option to purchase to cover over-allotments, if any. Does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1, as amended (File No. 333-213572).
- (2) The registration fee is calculated in accordance with Rule 457(o) under the Securities Act of 1933, as amended, or the Securities Act, based on the proposed maximum aggregate offering price. The Registrant previously registered securities with an aggregate offering price not to exceed \$19,320,000 on a Registration Statement on Form S-1, as amended (File No. 333-213572), which was declared effective by the Securities and Exchange Commission on December 6, 2016. In accordance with Rule 462(b) under the Securities Act, an additional amount of securities having a proposed maximum aggregate offering price of \$3,255,000 is hereby registered, which includes the additional shares that the underwriters have the option to purchase to cover over-allotments, if any.
- (3) We have agreed to issue warrants exercisable within five years after the effective date of this registration statement representing 5% of the securities issued in the offering (the "Representatives' Warrants") to Roth Capital Partners, LLC and Joseph Gunnar & Co., LLC. The Representatives' Warrants are exercisable at a per share price equal to 125% of the common stock public offering price. Resales of the Representatives' Warrants on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, are registered hereby. Resales of shares issuable upon exercise of the Representatives' Warrants are also being similarly registered on a delayed or continuous basis hereby. See "Underwriting." In accordance with Rule 457(g) under the Securities Act, because the shares of the Registrant's common stock underlying the Representatives' Warrants are registered hereby, no separate registration fee is required with respect to the warrants registered hereby.
- (4) The Registrant previously paid \$106.46 in connection with the filing of Registration Statement on Form S-1, as amended (File No. 333-213572).

This Registration Statement shall become effective upon filing in accordance with Rule 462(b) under the Securities Act.

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

Pursuant to Rule 462(b) under the Securities Act of 1933, as amended ("Securities Act"), Polar Power, Inc. ("Registrant") is filing this Registration Statement on Form S-1 (this "Registration Statement") with the Securities and Exchange Commission ("Commission"). This Registration Statement relates to the public offering of securities contemplated by the Registration Statement on Form S-1, as amended (File No. 333-213572) (the "Prior Registration Statement"), which the Registrant originally filed with the Commission on September 9, 2016, and which the Commission declared effective on December 6, 2016.

The Registrant is filing this Registration Statement for the sole purpose of increasing the aggregate number of shares of common stock offered by the Registrant by 465,000 shares, 60,000 of which are subject to purchase upon the exercise of the underwriters' option to purchase additional shares of the Registrant's common stock to cover over-allotments, if any, and 5,000 of which are subject to purchase upon the exercise of the Representatives' Warrants. The additional shares that are being registered for sale are in an amount and at a price that together represent no more than 20% of the maximum aggregate offering price set forth in the Calculation of Registration Fee table contained in the Prior Registration Statement. The information set forth in the Prior Registration Statement and all exhibits to the Prior Registration Statement are incorporated by reference into this Registration Statement.

The required opinions and consents are listed on the Exhibit Index attached hereto and filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Gardena, State of California, on this 7th day of December, 2016.

POLAR POWER, INC.

By: /s/ Arthur D. Sams

Arthur D. Sams,

President, Chief Executive Officer and Secretary

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities indicated on December 7, 2016.

Signature	Title	_
/s/ Arthur D. Sams Arthur D. Sams	Chief Executive Officer, President, Secretary and Chairman of the Board of Directors (principal executive officer)	
/s/ Luis Zavala Luis Zavala	Vice President Finance and Acting Chief Financial Officer (principal financial and accounting officer)	
/s/ Matthew Goldman Matthew Goldman	Director	
/s/ Keith Albrecht Keith Albrecht	Director	

EXHIBIT INDEX

Exhibit Number	Description
5.1	Opinion of Troutman Sanders LLP
23.1	Consent of Troutman Sanders LLP (included in Exhibit 5.1).
23.2	Consent of Weinberg & Company, P.A.

TROUTMAN SANDERS

TROUTMAN SANDERS LLP
Attorneys at Law
5 Park Plaza
Suite 1400
Irvine, California 92614
949.622.2700 telephone
troutmansanders.com

December 7, 2016

Polar Power, Inc. 249 E. Gardena Blvd. Gardena, CA 90248

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

This opinion is furnished to you in connection with the filing by Polar Power, Inc., a Delaware corporation (the "Company"), of a Registration Statement on Form S-1 (the "Additional Registration Statement") with the Securities and Exchange Commission pursuant to Rule 462(b) of the Securities Act of 1933, as amended. The Additional Registration Statement relates to the proposed offer and sale by the Company of (i) 460,000 shares (the "Shares") of the Company's common stock (including up to 60,000 Shares issuable upon exercise of an option granted to the underwriters by the Company) and (ii) a warrant to purchase up to 5,000 shares of the Company's common stock issued to the representatives of the underwriters (the "Representatives' Warrant," and the shares of the Company's common stock underlying the Representatives' Warrant, the "Representatives' Warrant Shares"). The Shares, the Representatives' Warrant, and the Representatives' Warrant Shares shall be referred to herein collectively as the "Securities." The Additional Registration Statement incorporates by reference the Registration Statement on Form S-1 (File No. 333-213572) (the "Prior Registration Statement" and, together with the Additional Registration Statement, the "Registration Statement"), which was declared effective by the Securities and Exchange Commission on December 6, 2016, including the prospectus which forms a part of the Registration Statement (the "Prospectus").

We are acting as counsel for the Company in connection with the sale of the Shares and Representatives' Warrant and the registration of the Shares and the Representatives' Warrant (including the Representatives' Warrant Shares) by the Company. In such capacity, we have examined originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates of public officials and other instruments as we have deemed necessary for the purposes of rendering this opinion. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity with the originals of all documents submitted to us as copies, the authenticity of the originals of such documents and the legal competence of all signatories to such documents.

We are members of the Bar of the State of California and this opinion is limited solely to the federal laws of the United States of America, the General Corporation Law of the State of Delaware (including the statutory provisions and all applicable judicial decisions interpreting those laws), and, as to the Representatives' Warrant constituting a valid and legally binding obligation of the Company, solely to the laws of the State of New York.

ATLANTA BEIJING CHICAGO HONG KONG NEW YORK NORFOLK ORANGE COUNTY PORTLAND RALEIGH RICHMOND SAN DIEGO SHANGHAI TYSONS CORNER VIRGINIA BEACH WASHINGTON, DC



Polar Power, Inc. December 7, 2016 Page 2

On the basis of the foregoing, we are of the opinion that:

- 1. The Securities have been duly authorized for issuance by all necessary corporate action by the Company.
- 2. The Shares, when issued and sold by the Company in accordance with and in the manner described in the Registration Statement, will be validly issued, fully paid and non-assessable.
- 3. The Representatives' Warrant, when issued and sold by the Company in accordance with the Underwriting Agreement, will be validly issued and will constitute a valid and binding agreement of the Company enforceable against the Company in accordance with its terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally and equitable principles of general applicability.
- 4. The Representatives' Warrant Shares, when issued and sold by the Company in accordance with the Representatives' Warrant, will be validly issued, fully paid, and non-assessable.

We consent to the use of this opinion as an exhibit to the Registration Statement, and we consent to the reference of our name under the caption "Legal Matters" in the Prospectus forming part of the Registration Statement.

Very truly yours,

/s/ Troutman Sanders LLP

TROUTMAN SANDERS LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-1 of our report dated September 9, 2016, except for the reverse stock split discussed in Note 1, as to which the date is November 18, 2016, relating to the balance sheets of Polar Power, Inc. as of December 31, 2015 and 2014, and the related statements of operations, shareholder's equity, and cash flows for the years then ended. We also consent to the reference to our firm under the caption "Experts" in the Prospectus forming a part of the Registration Statement.

/s/ Weinberg & Company, P.A.

Los Angeles, California December 7, 2016