SENESCO TECHNOLOGIES INC
Form PRER14A
October 30, 2007

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

SCHEDULE 14A

(Rule 14a-101)

(Amendment No. 2)

INFORMATION REQUIRED IN PROXY STATEMENT

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of
the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant x

Filed by a Party other than the Registrant o

Check the appropriate box:

x	Preliminary Proxy Statement
o	**Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
o	Definitive Proxy Statement
o	Definitive Additional Materials
o	Soliciting Material Pursuant to §240.14a-12

SENESCO TECHNOLOGIES, INC.
(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

x	No fee required.	
o	Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.	
	(1)	Title of each class of securities to which transaction applies:
	(2)	Aggregate number of securities to which transaction applies:
	(3)	Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
	(4)	Proposed maximum aggregate value of transaction:
	(5)	Total fee paid:

o Fee paid previously with preliminary materials.

o Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

SENESCO TECHNOLOGIES, INC.

303 George Street, Suite 420

New Brunswick, New Jersey 08901

To Our Stockholders:

You are cordially invited to attend the Special Meeting of Stockholders of Senesco Technologies, Inc. at 10:00 A.M., local time, on December 13, 2007, at the American Stock Exchange, 86 Trinity Place, New York, NY 10006.

The Notice of Meeting and Proxy Statement on the following pages describe the matters to be presented at the meeting.

It is important that your shares be represented at this meeting to assure the presence of a quorum. Whether or not you plan to attend the meeting, we hope that you will have your stock represented by voting *as soon as possible,* by signing, dating and returning your proxy card in the enclosed envelope, which requires no postage if mailed in the United States. Your stock will be voted in accordance with the instructions you have given in your proxy.

Thank you for your continued support.

Sincerely,

/s/ Rudolf Stalder

Rudolf Stalder
Chairman of the Board

SENESCO TECHNOLOGIES, INC.

303 George Street, Suite 420

New Brunswick, New Jersey 08901

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

To Be Held December 13, 2007

The Special Meeting of Stockholders (the Meeting) of Senesco Technologies, Inc., a Delaware corporation (the Company), will be held at the American Stock Exchange, 86 Trinity Place, New York, NY 10006 on December 13, 2007, at 10:00 A.M., local time, for the following purposes:

(1) To approve the issuance and sale of up to $2,000,000 of secured convertible debentures of the Company in the third closing of the financing described below and the issuance and sale of up to an additional $5,000,000 of the secured convertible debentures and warrants of the Company in the second financing described below. The following table sets forth each investor s current and potential ownership of the Company:

	Beneficial Ownership of Investor Prior to Financing(1)		Beneficial Ownership of Shares After Financing(2)	
Investor	**Number**	**Percent**	**Number**	**Percent**
YA Global Investments, L.P.	0	0%	11,105,555	26.2%
Stanford Venture Capital Holdings	2,470,535	14.1%	16,359,423	38.5%

(1) Ownership is based upon the number of outstanding shares of common stock as of September 30, 2007.

(2) Ownership is based upon the sum of (a) the number of outstanding shares of common stock as of September 30, 2007 and (b) the total number of shares underlying the convertible debentures and warrants issued, and to be issued, in the financing, assuming full conversion at the fixed conversion price (as defined below) and full exercise at the current applicable exercise price, and excluding interest shares (as defined below) and other additional shares issuable pursuant to potential adjustments to the exercise and conversion prices.

(2) To approve the potential issuance of 62,388,888 shares of our common stock resulting from: (i) certain adjustments to the exercise price of the Series B warrants and to the conversion price of the secured convertible debentures pursuant to the antidilution adjustment provisions of the respective securities and the milestone adjustment provision of the secured convertible debentures; and (ii) pursuant to the interest shares provision of the secured convertible debentures.

(3) To approve an amendment to the Company s Certificate of Incorporation to increase the total authorized shares of common stock, $0.01 par value per share, of the Company from 60,000,000 to 100,000,000.

(4) To transact such other business as may properly come before the Meeting or any adjournment or adjournments thereof.

The holders (the Stockholders) of the Company s common stock, $0.01 par value per share, of record at the close of business on October 19, 2007 (the Record Date), are entitled to notice of and to vote at the Meeting, or any adjournment or adjournments thereof. A complete list of such Stockholders will be open to the examination of any Stockholder at the Company s principal executive offices at 303 George Street, Suite 420, New Brunswick, New Jersey 08901 for a period of ten (10) days prior to the Meeting and at the American Stock Exchange in New York on the day of the Meeting. The Meeting may be adjourned from time to time without notice other than by announcement at the Meeting; *provided, however*, if the adjournment is for more than thirty (30) days after the date of the Meeting, or if after

the adjournment a new Record Date is fixed for the adjourned meeting, a notice of the adjourned meeting is required to be given to each Stockholder.

IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED REGARDLESS OF THE NUMBER OF SHARES YOU MAY HOLD. WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING IN PERSON, PLEASE COMPLETE, DATE, SIGN AND RETURN THE ENCLOSED PROXY CARD PROMPTLY IN THE ENCLOSED RETURN ENVELOPE. THE PROMPT RETURN OF PROXIES WILL ENSURE A QUORUM AND SAVE THE COMPANY THE EXPENSE OF FURTHER SOLICITATION. EACH PROXY GRANTED MAY BE REVOKED BY THE STOCKHOLDER APPOINTING SUCH PROXY AT ANY TIME BEFORE IT IS VOTED. IF YOU RECEIVE MORE THAN ONE PROXY CARD BECAUSE YOUR SHARES ARE REGISTERED IN DIFFERENT NAMES OR ADDRESSES, EACH PROXY SHOULD BE SIGNED AND RETURNED TO ENSURE THAT ALL OF YOUR SHARES WILL BE VOTED.

By Order of the Board of Directors

/s/ Sascha P. Fedyszyn

Sascha P. Fedyszyn
Secretary

New Brunswick, New Jersey
November 2, 2007

SENESCO TECHNOLOGIES, INC.

303 George Street, Suite 420

New Brunswick, New Jersey 08901

PROXY STATEMENT

This proxy statement is furnished in connection with the solicitation by the board of directors of Senesco Technologies, Inc., a Delaware corporation, referred to herein as Senesco, we, us or our, of proxies to be voted at our special meeting of stockholders to be held on December 13, 2007, referred to herein as the meeting, at the American Stock Exchange, 86 Trinity Place, New York, NY 10006, at 10:00 A.M., local time, and at any adjournment or adjournments thereof. The holders of record of our common stock, $0.01 par value per share, as of the close of business on October 19, 2007, referred to herein as the record date, will be entitled to notice of and to vote at the meeting and any adjournment or adjournments thereof. As of the record date, there were [17,473,694] shares of our common stock issued and outstanding and entitled to vote. Each share of our common stock is entitled to one vote on any matter presented at the meeting.

If proxies in the accompanying form are properly voted and received, the shares of our common stock represented thereby will be voted in the manner specified therein. If not otherwise specified, the shares of our common stock represented by the proxies will be voted: (1) FOR a proposal to issue and sell up to $2,000,000 of our secured convertible debentures in the third closing of the financing described below, referred to herein as the first financing, and to issue and sell up to an additional $5,000,000 of our secured convertible debentures and warrants in the second financing described below, referred to herein as the second financing; (2) FOR a proposal to approve the potential issuance of 62,388,888 shares of our common stock: (i) resulting from certain adjustments to the exercise price of the Series B warrants and to the conversion price of the secured convertible debentures pursuant to the antidilution adjustment provisions of the respective securities and the milestone adjustment provision of the secured convertible debentures; and (ii) pursuant to the interest shares provision of the secured convertible debentures; (3) FOR a proposal to amend Senesco s Certificate of Incorporation to increase the total authorized shares of common stock, $0.01 par value per share, of Senesco from 60,000,000 to 100,000,000; and (4) in the discretion of the persons named in the enclosed form of proxy, on any other proposals which may properly come before the meeting or any adjournment or adjournments thereof. Any stockholder who has submitted a proxy may revoke it at any time before it is voted, by written notice addressed to and received by our Corporate Secretary, by submitting a duly executed proxy bearing a later date or by electing to vote in person at the meeting. The mere presence at the meeting of the person appointing a proxy does not, however, revoke the appointment.

The presence, in person or by proxy, of holders of shares of our common stock having a majority of the votes entitled to be cast at the meeting shall constitute a quorum. If such a quorum is present, Proposals 1, 2 and 4 herein may be taken upon the affirmative vote of our stockholders possessing a majority of the voting power represented at the meeting, but Proposal 3 requires the affirmative vote of our stockholders possessing a majority of the shares of our common stock issued and outstanding as of the record date.

Abstentions are included in the shares present at the meeting for purposes of determining whether a quorum is present, and are counted as a vote against for purposes of determining whether any of the foregoing proposals are approved. Broker non-votes are when shares are represented at the meeting by a proxy specifically conferring only limited authority to vote on certain matters and no authority to vote on other matters. Brokers may vote on Proposal 3, but they may not vote on Proposals 1, 2 and 4. Therefore, broker non-votes are included in the determination of the number of shares represented at the meeting for purposes of determining whether a quorum is present but are not counted for purposes of determining whether a proposal has been approved in matters where the proxy does not confer the authority to vote on such proposal, and thus have no effect on the outcome of Proposals 1, 2 and 4, but are deemed a vote against Proposal 3.

On or about November 2, 2007, this proxy statement, together with the related proxy card, is being mailed to our stockholders of record as of the record date.

Solicitation of proxies may be made by directors and officers of Senesco by mail, telephone, facsimile transmission or other electronic media and in person for which they will receive no additional compensation. The entire cost of soliciting proxies will be borne by us.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Our common stock is the only class of stock entitled to vote at the meeting. Only our stockholders of record as of the close of business on the record date are entitled to receive notice of and to vote at the meeting. As of the record date, there were [306] holders of record of our common stock, and we had outstanding [17,473,694] shares of our common stock and each outstanding share is entitled to one (1) vote at the meeting. The following table sets forth certain information, as of the record date, with respect to holdings of our common stock by (i) each person known by us to be the beneficial owner of more than 5% of the total number of shares of our common stock outstanding as of such date; (ii) each of our directors, which includes all nominees, and our executive officers; and (iii) all of our directors and our current executive officers as a group.

Name and Address of Beneficial Owner (1)		Amount and Nature of Beneficial Ownership(2)	Percent of Class(3)
(i)	Certain Beneficial Owners:		
YA Global Investments, L.P. 101 Hudson Street Jersey City, NJ 07302		6,108,333(4)	25.9
Stanford International Bank Limited No 11 Pavilion Drive St. John s Antigua, West Indies		2,470,535(5)	13.6
Heartland Advisors, Inc. 789 North Water Street Milwaukee, WI 53202		1,329,925(6)	7.6
(ii)	Directors (which includes all nominees), Named Executives and Chief Executive Officer:		
Rudolf Stalder.		794,323(7)	4.4
Bruce C. Galton.		718,005(8)	4.0
John E. Thompson, Ph.D		783,667(9)	4.4
Christopher Forbes		2,189,895(10)	12.1
Thomas C. Quick		717,085(11)	4.0
David Rector		146,000(12)	*
John N. Braca		113,000(13)	*
Sascha P. Fedyszyn		215,027(14)	1.2
Joel P. Brooks		153,167(15)	*
Richard Dondero		51,667(16)	*
Jack VanHulst		5,000(17)	*
(iii)	All Directors and current executive officers as a group (11 persons)	5,881,836(18)	28.7

* Less than 1%

(1) Unless otherwise provided, all addresses should be care of Senesco Technologies, Inc., 303 George Street, Suite 420, New Brunswick, New Jersey 08901.

(2) Except as otherwise indicated, all shares are beneficially owned and sole investment and voting power is held by the persons named.

(3) Applicable percentage of ownership is based on 17,473,694 shares of our common stock outstanding as of the Record Date, plus any common stock equivalents and options or warrants held by such holder which are presently or will become exercisable within sixty (60) days after the Record Date.

(4) Includes 3,333,333 shares issuable upon conversion of convertible debentures and 1,387,500 shares issuable pursuant to warrants that will become exercisable on March 20, 2008 and 1,387,500 shares issuable pursuant to warrants that will become exercisable on April [10], 2008.

(5) Includes 750,000 shares issuable pursuant to presently exercisable warrants issued to Stanford Venture Capital Holdings, Inc. and 6,248 shares issuable pursuant to presently exercisable warrants issued to Stanford Group Company.

(6) Represents 1,279,925 shares held by Heartland Advisors, Inc. and its affiliates and 50,000 shares issuable pursuant to presently exercisable warrants issued to Heartland Advisors, Inc.

(7) Includes 582,552 shares issuable pursuant to presently exercisable warrants and options or options which will become exercisable within sixty (60) days after the Record Date.

(8) Includes 658,113 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 13,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.

(9) Represents 572,000 shares held by 2091794 Ontario Ltd. and 211,667 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date issued to John E. Thompson, Ph.D. Excludes 8,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.

(10) Includes 657,324 shares issuable pursuant to presently exercisable warrants and options or options which will become exercisable within sixty (60) days after the Record Date.

(11) Represents 264,901 shares and 132,450 shares issuable pursuant to warrants issued to Thomas C. Quick Charitable Foundation. Represents 139,734 shares and 180,000 shares issuable pursuant to presently exercisable warrants and options or options which will become exercisable within sixty (60) days after the Record Date issued to Thomas C. Quick.

(12) Includes 125,000 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date.

(13) Includes 95,000 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date.

(14) Includes 185,000 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 8,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.

(15) Includes 157,500 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 8,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.

(16) Represents 51,667 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 8,333 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.

(17) Represents 5,000 shares issuable pursuant to presently exercisable options or options which will become exercisable within sixty (60) days after the Record Date. Excludes 5,000 shares underlying options which become exercisable over time more than sixty (60) days after the Record Date.

(18) See Notes 9 through 16.

PROPOSAL ONE

APPROVAL AND RATIFICATION OF THE THIRD CLOSING OF THE FIRST FINANCING AND THE SECOND FINANCING

The American Stock Exchange, referred to herein as the AMEX, requires stockholder approval of the sale, issuance, or potential issuance in a transaction or related transactions by a listed company of shares of common stock and shares issuable upon conversion or exercise of other securities which amount to at least 20% of the then presently outstanding shares of common stock for a consideration which is less than the greater of book or market value of a share of common stock, referred to herein as the 20% rule. AMEX interprets the 20% rule to include issuances of common stock as dividends and issuances of common stock upon conversion or exercise of other securities issued in connection with a transaction.

In the private placement transaction described below, the number of shares of common stock issuable upon conversion of the convertible debentures at the fixed conversion price (defined below) and exercise of warrants issued, and to be issued, to the investors and the placement agent represents, in the aggregate, 25,772,220 shares (plus an additional 2,000,000 shares for the payment of interest in stock under the convertible debentures), or more than 20% of the shares of our common stock, outstanding on the first signing date (defined below) and the second signing date (defined below), on an as converted basis. The convertible debentures convert into shares of our common stock at a fixed price of $0.90 per share subject to certain adjustments, referred to herein as the fixed conversion price, for a period of two years immediately following each respective signing date, provided that we have achieved the following milestones by January 31, 2008:

(1) successful completion of animal studies, other than toxicology studies, necessary for the advancement of Factor 5A-1 in human clinical trials;

(2) the engagement of a contract research organization for human clinical studies for Factor 5A-1; and

(3) the signing of at least one (1) corporate partnership or license agreement after August 1, 2007 with agricultural companies utilizing our proprietary platform.

After the second anniversary of each respective signing date, or if we do not achieve the foregoing milestones by January 31, 2008, the convertible debentures may convert into shares of our common stock at the lower of the fixed conversion price or 80% of the lowest daily volume-weighted average price, referred to herein as the VWAP, of the common stock during the five trading days prior to the conversion date, referred to herein as the market conversion price. As a result, in the future, the conversion price of the convertible debentures may be less than the closing sales price of a share of common stock on AMEX. The convertible debentures issued and to be issued and the Series B warrants to be issued, pursuant to the private placement transaction have antidilution rights which could, in the future, result in the adjusted applicable conversion price or exercise price being less than the closing sales price of a share of common stock on AMEX. The occurrence of any of the above scenarios could result in AMEX deeming the private placement transaction in violation of the 20% rule. To date, we have issued convertible debentures in the private placement transaction that can be converted into the aggregate of 3,333,333 shares or 19.1% of the shares of our common stock. We believe that this issuance is in compliance with the 20% rule. Pursuant to the rules of the AMEX, the Series A warrants previously issued are excluded from this threshold because they were issued at an exercise price in excess of the market price of the common stock on the date of signing and are not exercisable for a period of six months and one day from the date of issuance. However, issuing convertible debentures and warrants in the third closing of the first financing and the second financing will cause us to exceed the number of shares that we can issue under the 20% rule in the absence of stockholder approval. Accordingly, we must obtain stockholder approval in order to complete the third closing of the first financing and the second financing.

Description of Securities

Convertible Debentures

On August 1, 2007, referred to herein as the first signing date, and August 29, 2007, referred to herein as the second signing date, we entered into binding Securities Purchase Agreements to sell, in a private placement through H.C. Wainwright & Co., Inc., the placement agent, up to $10,000,000 of secured convertible debentures, referred to herein as the convertible debentures, convertible into shares of our common stock at either the fixed conversion price or the market conversion price. The maturity date of each of the convertible debentures issued, and to be issued, to a certain investor, referred to herein as the first investor, is December 30, 2010. The maturity date of each of the convertible debentures to be issued to another investor, referred to herein as the second investor, is December 31, 2010. Pursuant to a Securities Purchase Agreement, we have issued $3,000,000 of convertible debentures and accompanying warrants to the first investor and to the placement agent with a cap on the number of shares of common stock that can be issued upon conversion or exercise of these instruments. The cap of 3,493,000 shares was equal to 19.99% of our outstanding common stock on the signing dates. We have agreed to obtain stockholder approval prior to issuing convertible debentures and warrants in the third closing of the first financing and the second financing. In the third closing of the first financing, we will issue and sell a convertible debenture in the principal amount of $2,000,000 to the first investor. The third closing of the first financing will take place on the later of (A) the date the registration statement is declared effective by the Securities and Exchange Commission, referred to herein as the SEC, or (B) the date we obtain stockholder approval for the financing. We will sell up to $5,000,000 of the convertible debentures and warrants in the second financing to the second investor, as follows:

(1) we will issue a convertible debenture in the amount of $2,000,000 and warrants within two business days of the later of (a) the date stockholders approve the transaction or (b) the date that the initial registration statement relating to the first financing is filed with the SEC;

(2) we will issue a convertible debenture in the amount of $1,500,000 on the date that we enter into a supply agreement with a third party manufacturer for sufficient quantity and quality of nano-particle for encapsulation of Factor 5A gene to be used in toxicology and proof of concept human studies under a United States Food and Drug Administration, referred to herein as FDA, accepted Investigational New Drug application, referred to herein as IND application; and

(3) we will issue a convertible debenture in the amount of $1,500,000 on the date that we enter into a supply agreement with a third party manufacturer to provide sufficient quantity and quality of Factor 5A DNA to carry out toxicology and proof of concept human studies under a FDA accepted IND application.

Pursuant to the Securities Purchase Agreements, the convertible debentures and warrants are subject to a cap on the maximum number of shares of common stock that can be issued upon the conversion of the convertible debentures and exercise of the warrants. A maximum of 30,500,000 shares can be issued pursuant to the first financing and a maximum of 31,888,888 shares can be issued pursuant to the second financing.

The convertible debentures accrue interest on their outstanding principal balances at an annual rate of 8%. We have the option to pay interest in cash or, upon certain conditions, shares of common stock. If we pay interest in shares of common stock, the stock will be valued at a 10% discount to the average daily VWAP for the five day trading period prior to the interest payment date, referred to herein as interest shares.

At our option, we can redeem a portion of, or all of, the principal owed under the convertible debentures by providing an investor with at least 30 business days written notice; provided that, at the time of receipt of the notice, either: (A)(i) the VWAP of the common stock exceeds 130% of the fixed conversion price for at least 20 of 30 prior trading days and (ii) there is an effective registration statement for the resale of the common stock that will be issued under the redemption; or (B) we redeem a portion, or all, of the principal owed at a 20% premium above the principal then outstanding and any accrued interest thereupon. If we redeem all or any of the principal

outstanding under the convertible debentures, we will pay an amount equal to the principal being redeemed plus accrued interest.

If there is an effective registration statement for the resale of the shares underlying the convertible debentures or if such shares become 144(K) eligible, we will have the option to force an investor to convert 50% and 100% of our then-outstanding convertible debentures if our common stock price exceeds 150% and 175% of the fixed conversion price, respectively, for any 20 out of 30 trading days; provided that such forced conversion meets certain conditions, referred to herein as the call option. If we exercise our call option prior to the third anniversary of the applicable signing date, we will issue additional warrants to the investor equal to 50% of the number of shares underlying the convertible debenture subject to the forced conversion. These warrants will be exercisable at the fixed conversion price and will have the same maturity as the other warrants issued under the private placement.

Our obligations under the convertible debentures are secured by all of our and our subsidiary s assets and intellectual property, as evidenced by the Security Agreements and the Patent Security Agreements.

The first investor was issued warrants, and the second investor will be issued warrants, to purchase our common stock, exercisable six months and one day from the date of issuance until their expiration on the date that is five years from the date of issuance. The warrants represent the right to purchase the aggregate of 13,888,888 shares of our common stock. The warrants are issued in two series. Generally, Series A warrants may be issued prior to stockholder approval, while Series B warrants will only be issued after we receive stockholder approval for the financing. The exercise price of the Series A warrants is $1.01 per share, and the exercise price of the Series B warrants is $0.90 per share, subject to certain adjustments. The warrants provide a right of cashless exercise if, at the time of exercise, there is no effective registration statement registering the resale of the shares underlying the warrants.

The conversion rate of each convertible debenture and the exercise price of the Series B warrants are subject to adjustment for certain events, including dividends, stock splits, combinations and the sale of our common stock or securities convertible into or exercisable for our common stock at a price less than the then applicable conversion or exercise price.

An investor cannot convert the convertible debentures, exercise the warrants or receive interest shares, to the extent that, after giving effect to such conversion, exercise or receipt, such investor would beneficially own in excess of 4.99% of our outstanding shares of common stock unless it provides us with at least 65-days prior written notice; provided, however, that this provision does not apply to the exercise of a warrant within 60 days of its expiration. We are permitted to force an investor to convert its convertible debenture into common stock, or receive interest shares, up to an amount not to exceed 9.99% of the number of shares of common stock outstanding immediately after giving effect to such conversion or receipt of interest shares.

Each investor has a right of first refusal on any future funding that involves the issuance of our capital stock for so long as a portion of the convertible debentures is outstanding.

Under the Registration Rights Agreements, we have agreed to file an initial registration statement with the SEC to register the resale of common stock issuable to the first investor (including interest shares), referred to herein as registrable shares, within 30 days of the first signing date. Also, we have agreed to respond to all SEC comment letters as promptly as reasonably possible and to use our best efforts to have the registration statement declared effective within 120 days of the first signing date. The initial registration statement covering the first investor s shares shall include up to 33% of the public float. If registrable shares remain outstanding after all shares under the initial registration statement have been sold, we may be required to file additional registration statements for those registrable shares. These registration rights will cease once the registrable shares are eligible for sale by the first investor without restriction under Rule 144(K). Upon certain events, we have agreed to pay

as partial liquidated damages an amount equal to 1.0% of the aggregate purchase price paid by an investor for any convertible debentures then held by such investor, but such payments may not exceed 12% per investor of the aggregate purchase price paid by such investor.

Each purchaser of the convertible debentures represented that such purchaser is an accredited investor and agreed that the securities issued in the private placement bear a restrictive legend against resale without registration under the Securities Act. The convertible debentures and warrants were sold pursuant to the exemption from registration afforded by Section 4(2) of the Securities Act and Regulation D thereunder.

The gross proceeds of the sale will be $10,000,000 before payment of 3.25% of the purchase price in commissions to the placement agent. The net proceeds of this private placement will be used for research and development and working capital purposes. We have issued, and agreed to issue, to the placement agent warrants to purchase 7% of the purchase price, or 777,777 shares, of our common stock with similar terms to the warrants that have been issued to the first investor. We paid each investor a non-refundable structuring/ due diligence fee of $30,000. We have also agreed to pay the first investor and the second investor a commitment fee of 5% and 7%, respectively, of such investor s purchase price, which is paid proportionately at each closing.

Common Stock

Our authorized capital stock includes 60 million shares of common stock, [17,473,694] of which were issued and outstanding as of the record date. The following briefly summarizes the material terms of our common stock. You should read the more detailed provisions of our certificate of incorporation and by-laws for provisions that may be important to you.

Each holder of common stock is entitled to one vote per share for the election of directors and for all other matters to be voted on by stockholders. Except as otherwise provided by law, the holders of common stock vote as one class together with holders of our preferred stock (if they have voting rights), none of which was outstanding as of the record date. Holders of common stock may not cumulate their votes in the election of directors, and are entitled to share equally in the dividends that may be declared by the board of directors, but only after payment of dividends required to be paid on outstanding shares of preferred stock. Our voluntary or involuntary liquidation, dissolution or winding up, holders of common stock share ratably in the assets remaining after payments to creditors and provision for the preference of any preferred stock. There are no preemptive or other subscription rights, conversion rights or redemption or scheduled installment payment provisions relating to shares of our common stock. All of the outstanding shares of our common stock are fully paid and nonassessable. The transfer agent and registrar for the common stock is American Stock Transfer & Trust Company. The common stock is listed on AMEX under the symbol SNT.

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

prior to the business combination, the corporation s board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; or

upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the outstanding voting stock of the corporation at the time the transaction commenced, excluding for the purpose of determining the number of shares outstanding those shares owned by the corporation s officers and directors and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

at or subsequent to the time the business combination is approved by the corporation s board of directors, it is authorized at an annual or special meeting of its stockholders, and not by written consent, by the

affirmative vote of at least 66 2/3% of its outstanding voting stock which is not owned by the interested stockholder.

A business combination includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An interested stockholder is a person who, together with affiliates and associates, owns (or within three years did own) 15% or more of the corporation s voting stock.

The following table summarizes (1) the number of shares of common stock that will be issued and outstanding upon full conversion of the convertible debentures at the fixed conversion price and full exercise of the warrants at the current applicable exercise price, (2) the number of shares each investor will be issued pursuant to the financing, and (3) the percentage of outstanding shares the investors shares represent after all securities anticipated by the financing are issued.

Investor	Total Number of Shares Outstanding Upon Conversion and Exercise (1)	Total Number of Shares Underlying Warrants and Convertible Debentures Issued to Investors(2)	Underlying Shares as a Percent of Outstanding Shares(3)
YA Global Investments, L.P.	42,468,137	11,105,555	26.2%
Stanford Venture Capital Holdings	42,468,137	13,888,888	32.7%

(1) This amount represents the sum of (a) the number of outstanding shares of common stock as of September 30, 2007 and (b) the total number of shares underlying the convertible debentures and warrants issued, and to be issued, as part of the financing, assuming full conversion at the fixed conversion price and full exercise at the current applicable exercise price held by the investors (does not include outstanding convertible securities not held by the investors), and excluding interest shares and other additional shares that may be issued pursuant to potential adjustments to the exercise and conversion prices.

(2) This amount represents the number of shares underlying the convertible debentures and warrants issued, and to be issued, in the financing, assuming full conversion at the fixed conversion price and full exercise at the current applicable exercise price. Pursuant to the terms of the convertible debentures, if the conversion is after the second anniversary of the signing date, or if we do not achieve certain milestones by January 31, 2008, the convertible debentures may convert into shares of our common stock at the market conversion price. This amount does not include interest shares or any shares that are issuable pursuant to potential adjustments to the conversion price and exercise price of these instruments. The convertible debentures accrue interest on their outstanding principal balances at an annual rate of 8%. If we were to pay such interest in interest shares, we would issue approximately [2,000,000] shares. The maximum number of shares which can be issued to YA Global Investments, L.P. is 30,500,000 and the maximum number of shares which can be issued to Stanford Venture Capital Holdings is 31,888,888.

(3) This represents the percentage of outstanding shares that the investors could potentially own after all securities anticipated by the financing are issued, excluding interest shares and other additional shares that may be issued pursuant to adjustments to the exercise and conversion prices.

The following table sets forth the beneficial ownership of the investors prior to the financing and after the financing.

Investor	Beneficial Ownership of Investor Prior to Financing(1)		Beneficial Ownership of Shares After Financing(2)	
	Number	Percent	Number	Percent
YA Global Investments, L.P.	0	0%	11,105,555	26.2%
Stanford Venture Capital Holdings	2,470,535	14.1%	16,359,423	38.5%

(1) Ownership is based upon the number of outstanding shares of common stock as of September 30, 2007.

(2) Ownership is based upon the sum of (a) the number of outstanding shares of common stock as of September 30, 2007 and (b) the total number of shares underlying the convertible debentures and warrants issued, and to be issued, in the financing, assuming full conversion at the fixed conversion price and full exercise at the current applicable exercise price, and excluding interest shares and other additional shares issuable pursuant to potential adjustments to the exercise and conversion prices.

Senesco plans on using the proceeds from the financing to advance a certain cancer target with the goal of ultimately initiating a Phase I clinical trial, as well as other human health and agricultural research and general corporate purposes. In connection with the potential clinical trial, Senesco has engaged a clinical research organization to assist Senesco through the process, and will be working towards completing a pre-clinical animal model of the disease and evaluating potential delivery systems for Senesco s technology in the animal model, contracting for the supply of pharmaceutical grade materials to be used in toxicology and human studies and ultimately filing an investigational new drug application with the U.S. Food and Drug Administration for its review and consideration in order to initiate a clinical trial. We believe that the proceeds of the financing may be used as follows:

- an estimated $3.0 million to $3.5 million to advance the cancer target to the IND stage;
- an estimated $1.0 million to $1.5 million to fund additional pre-clinical human health research and development;
- an estimated $0.5 million to $1.0 million to fund agricultural research and development;
- an estimated $3.5 million to $3.0 million to pay general corporate and administrative costs; and
- an estimated $1.0 to $1.5 million to obtain and maintain patents.

However, as these projects entail certain biologic and immunologic research studies yet to be performed; actual spending may differ from these projections in response to the data derived from each research study.

OUR BOARD OF DIRECTORS RECOMMENDS THAT THE STOCKHOLDERS VOTE **FOR** THE PROPOSAL TO APPROVE THE THIRD CLOSING OF THE FIRST FINANCING AND THE SECOND FINANCING OF THE PRIVATE PLACEMENT TRANSACTION AND ALL TRANSACTIONS CONTEMPLATED THEREBY, INCLUDING THE ISSUANCE OF MORE THAN 62,388,888 SHARES OF COMMON STOCK UPON CONVERSION AND EXERCISE OF THE CONVERTIBLE DEBENTURES AND WARRANTS.

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PROPOSAL TWO

APPROVAL OF THE POTENTIAL ISSUANCE OF 62,388,888 SHARES OF OUR COMMON STOCK: (1) RESULTING FROM CERTAIN ADJUSTMENTS TO THE EXERCISE PRICE OF THE SERIES B WARRANTS AND TO THE CONVERSION PRICE OF THE CONVERTIBLE DEBENTURES PURSUANT TO THE ANTIDILUTION ADJUSTMENT PROVISIONS OF THE RESPECTIVE SECURITIES AND THE MILESTONE ADJUSTMENT PROVISION OF THE CONVERTIBLE DEBENTURES; AND (2) PURSUANT TO THE INTEREST SHARES PROVISION OF THE CONVERTIBLE DEBENTURES

In August 2007, we entered into a private placement transaction (described in Proposal 1) pursuant to which we agreed to issue and sell $10,000,000 of convertible debentures and warrants. Under the terms of the private placement transaction, the convertible debentures will convert into shares of our common stock at the market conversion price if we do not achieve certain milestones by January 31, 2008, or if two years have passed since the applicable signing date, referred to herein as the milestone adjustment provision. In addition, the conversion price of the convertible debentures and the exercise price of the Series B warrants will be subject to the antidilution adjustment provisions set forth in the respective securities, referred to herein as the antidilution adjustment provisions. Furthermore, the convertible debentures provide that we can pay interest, upon certain conditions, in shares of our common stock, referred to herein as the interest shares provision.

If the convertible debentures are converted into shares of our common stock pursuant to the milestone adjustment provision, they will convert at the lower of (A) the fixed conversion price or (B) 80% of the lowest daily VWAP of the common stock during the five trading days prior to the conversion date. As a result, the conversion price of the convertible debentures, in the future, may be less than the closing sales price of a share of common stock on AMEX, referred to herein as the market price of our common stock. In addition, if the conversion price is lowered, a greater number of shares of our common stock may be issued upon conversion of the convertible debentures.

The antidilution adjustment provisions provide that if we sell common stock (or the right to acquire common stock) for a consideration per share that is less than the conversion price or exercise price in effect immediately prior to such sale, referred to herein as a dilutive issuance, then immediately after such dilutive issuance, the conversion price of the convertible debentures and the exercise price of the Series B warrants will be reduced, pursuant to a formula. These antidilution adjustment provisions do not apply to certain excluded securities, including securities issued in connection with employee benefit plans, upon conversion of the convertible debentures or the exercise of the Series B warrants, upon the conversion, exchange or exercise of any right, option, obligation or security outstanding prior to the date of the Securities Purchase Agreements, and issuances in connection with strategic business arrangements. These antidilution adjustment provisions could, in the future, result in the adjusted applicable conversion price or exercise price being less than the market price of our common stock. In addition, if the exercise price of the Series B warrants or the conversion price of the convertible debentures is lowered, a greater number of shares of our common stock may be issued upon exercise of the Series B warrants or conversion of the convertible debentures.

The convertible debentures accrue interest on their outstanding principal balances at an annual rate of 8%. Pursuant to the interest shares provision, we have the option to pay interest in cash or, upon certain conditions, shares of common stock. If we pay interest in shares of common stock, the stock will be valued at a 10% discount to the average daily VWAP for the five day trading period prior to the interest payment date.

In order to comply with the 20% Rule, the number of shares of our common stock that can be issued as part of the private placement transaction is restricted to 19.99% of our issued and outstanding common stock until we receive stockholder approval for larger issuances, referred to herein as the 19.99% cap. As a result, issuances of common stock pursuant to the antidilution adjustment provisions, the milestone adjustment provision, and the interest shares provision are currently subject to the 19.99% cap.

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We are seeking stockholder approval so that we can proceed with the private placement transaction in the event that greater than 20% of the issued and outstanding shares of our common stock are to be issued at a price that is lower than the market price due to the antidilution adjustment provisions, the milestone adjustment provision or the interest shares provision. Absent such stockholder approval, we may be precluded from completing the private placement transaction.

If our stockholders approve this Proposal, then the number of shares issuable pursuant to the antidilution provisions, the milestone adjustment provision and the interest shares provision will no longer be subject to the 19.99% cap. Accordingly, we would be permitted to issue a larger number of shares upon the conversion of the convertible debenture and upon the exercise of the Series B warrants than if the 19.99% cap remained. The issuance of a larger number of shares will be dilutive to our existing stockholders because it will reduce the existing stockholders equity per share as well as the percentage ownership of common stock by existing stockholders. In addition, if we were to issue all 62,388,888 shares of our common stock, it may be deemed a change of control under AMEX rules and under the Delaware General Corporation Law, which would also require stockholder approval.

For your reference, the financial statements contained in our Annual Report on Form 10-K for the year ended June 30, 2007 are incorporated by reference into this Proposal 2.

Investor	Total Number of Shares Underlying Convertible Debentures(1)	Total Number of Shares Underlying Warrants(2)	Estimated Number of Interest Shares(3)	Maximum Number of Shares that may be Issued Pursuant to the Financing(4)
YA Global Investments, L.P.	5,555,555	5,550,000	1,000,000	30,500,000
Stanford Venture Capital Holdings	5,555,555	8,333,333	1,000,000	31,888,888

(1) This represents the number of shares issuable upon conversion of the convertible debentures at the fixed conversion price. Pursuant to the terms of the convertible debentures, if the conversion is after the second anniversary of the signing date, or if we do not achieve certain milestones by January 31, 2008, the convertible debentures may convert into shares of our common stock at the market conversion price. This amount does not include interest shares and other additional shares that may be issued pursuant to potential adjustments to the conversion price.

(2) This represents the number of shares issuable upon exercise of the warrants at the current applicable exercise price. This amount does not include additional shares that may be issued pursuant to potential adjustments to the exercise price.

(3) This represents the estimated amount of interest shares that may be issued upon conversion of the convertible debentures. The convertible debentures accrue interest on their outstanding principal balances at an annual rate of 8%. We have the option to pay interest in cash or, upon certain conditions, common stock. If we pay interest in common stock, the stock will be valued at a 10% discount to the average daily VWAP for the five day trading period prior to the interest payment date.

(4) This represents the maximum number of shares that may be issued to the investor if we fail to meet our milestones and/ or other adverse adjustments are made under the financing documents.

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OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE **FOR** THE PROPOSAL TO APPROVE THE POTENTIAL ISSUANCE OF 62,388,888 SHARES OF OUR COMMON STOCK: (1) RESULTING FROM CERTAIN ADJUSTMENTS TO THE EXERCISE PRICE OF THE SERIES B WARRANTS AND TO THE CONVERSION PRICE OF THE CONVERTIBLE DEBENTURES PURSUANT TO THE ANTIDILUTION ADJUSTMENT PROVISIONS OF THE RESPECTIVE SECURITIES AND THE MILESTONE ADJUSTMENT PROVISION OF THE CONVERTIBLE DEBENTURES; AND (2) PURSUANT TO THE INTEREST SHARES PROVISION OF THE CONVERTIBLE DEBENTURES.

PROPOSAL THREE

APPROVAL OF AMENDMENT TO SENESCO S CERTIFICATE OF INCORPORATION TO INCREASE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK

Stockholders are being asked to approve an amendment to our Amended and Restated Certificate of Incorporation, as amended to date, referred to herein as our Certificate of Incorporation, to increase the number of authorized shares of our common stock from 60,000,000 to 100,000,000. On [October ,] 2007, in connection with the private placement, our board of directors, referred to herein as the board, adopted resolutions approving and authorizing the amendment and directing that the amendment be submitted to a vote of the stockholders at the meeting.

The board determined that the amendment is in the best interests of Senesco and its stockholders and unanimously recommends approval by the stockholders. If the proposed amendment is approved by the stockholders, the board currently intends to file, with the Secretary of State of the State of Delaware, a Certificate of Amendment to the Certificate of Incorporation, referred to herein as the Certificate of Amendment, reflecting such amendment as soon as practicable following stockholder approval. The following summary is qualified in its entirety by reference to the Certificate of Incorporation. Attached hereto as *Appendix A* to this proxy statement is the proposed Certificate of Amendment.

Our Certificate of Incorporation currently authorizes the issuance of up to 60,000,000 shares of common stock and 5,000,000 shares of preferred stock, par value $0.01 per share, referred to herein as the preferred stock. No shares of preferred stock are currently issued and outstanding. The proposed amendment will not, if adopted, result in an increase in the number of authorized shares of preferred stock.

Of the 60,000,000 shares of common stock currently authorized, as of the close of business on the record date, there were [17,473,694] shares of common stock issued and outstanding. Furthermore, we have reserved for future issuance:

a. 6,000,000 shares of common stock upon the exercise of outstanding options granted under the 1998 Stock Plan;

b. 10,000 shares of common stock upon exercise of options granted outside the 1998 Stock Plan;

c. 5,134,815 shares of common stock upon the exercise of warrants issued outside of the private placement transaction described in Proposal 1 above;

d. 14,661,110 shares of common stock upon the exercise of warrants issued, and to be issued, pursuant to the private placement transaction described in Proposal 1;

e. 11,111,111 shares of common stock upon conversion of the convertible debentures issued, and to be issued, pursuant to the private placement transaction described in Proposal 1; and

f. an estimated 2,000,000 shares of common stock, which may be issued as interest shares pursuant to the private placement transaction described in Proposal 1.

If the proposed amendment is approved, then after the meeting, there will still be [17,473,694] shares of common stock issued and outstanding.

Our board has proposed this increase in authorized shares of common stock to ensure that we have sufficient shares of common stock available for general corporate purposes including, without limitation, sufficient shares available underlying the securities issued in the financings, equity financings, acquisitions, establishing strategic relationships with corporate and other partners, providing equity incentives to employees, and payments of stock dividends, stock splits or other recapitalizations. As of the date of this proxy statement, we expect to issue additional equity pursuant to the private placement transaction described in Proposal 1 and potentially pursuant to the antidilution adjustment provisions and the milestone adjustment provision described in Proposal 2.

As is the case with the current authorized but unissued shares of common stock, the additional shares of common stock authorized by this proposed amendment could be issued upon approval by our board without further vote of our stockholders except as may be required in particular cases by our Certificate of Incorporation, applicable law, regulatory agencies or the AMEX rules. Under our Certificate of Incorporation, stockholders do not have preemptive rights to subscribe to additional securities that may be issued by Senesco, which means that current stockholders do not have a prior right to purchase any new issue of common stock in order to maintain their proportionate ownership interest in Senesco. In addition, if we issue additional shares of common stock or securities convertible into or exercisable for common stock, such issuance would have a dilutive effect on the voting power and could have a dilutive effect on the earnings per share of Senesco s currently outstanding shares of common stock.

Anti-takeover Effects

The proposed amendment to the Certificate of Incorporation could also, under certain circumstances, have an anti-takeover effect. The proposed increase in the number of authorized shares of common stock may discourage or make it more difficult to effect a change in control of Senesco. For example, we could issue additional shares to dilute the voting power of, create voting impediments for, or otherwise frustrate the efforts of persons seeking to take over or gain control of Senesco, whether or not the change in control is favored by a majority of our unaffiliated stockholders. We could also privately place shares of common stock with purchasers who would side with our board in opposing a hostile takeover bid. The board is not aware of any plans for or attempt to take control of Senesco.

If approved, the amendment would amend and restate the first section of the fourth paragraph of the Certificate of Incorporation, as follows:

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is One Hundred and Five Million (105,000,000) shares. The Corporation is authorized to issue two classes of stock designated Common Stock and Preferred Stock, respectively. The total number of shares of Common Stock authorized to be issued by the Corporation is One Hundred Million (100,000,000), each such share of Common Stock having a $0.01 par value. The total number of shares of Preferred Stock authorized to be issued by the Corporation is Five Million (5,000,000), each such share of Preferred Stock having $0.01 par value.

The Certificate of Amendment, which contains the above amendment, is attached to this proxy statement as *Appendix A*. The affirmative vote of a majority of the outstanding shares of common stock is required for approval of the proposed amendment. Therefore, abstentions and broker non-votes will have the same effect as votes against this proposal.

The following table sets forth the total number of: (1) authorized shares of our common stock, (2) outstanding shares of our common stock, (3) reserved shares of our common stock, (4) shares of our common stock available for issuance, (5) authorized shares of our common stock if Proposal 3 is approved, and (6) shares of our common stock that would be available for issuance if Proposal 3 is approved.

Authorized Shares (1)	Outstanding Shares (1)	Shares Reserved for Issuance (1)	Shares Available for Issuance (1)	Proposed Authorized Shares (2)	Shares Potentially Available for Issuance(3)
60,000,000	17,473,694	38,917,036	3,609,270	100,000,000	43,609,270

(1) As of September 30, 2007.

(2) The number of authorized shares of our common stock, if this Proposal 3 is approved by the stockholders.

(3) The number of shares of our common stock available for issuance, if this Proposal 3 is approved by the stockholders.

Senesco has no plans to issue the common stock authorized pursuant to Proposal 3 other than in connection with the financing.

THE BOARD RECOMMENDS THAT STOCKHOLDERS VOTE **FOR** THE PROPOSAL TO AMEND SENESCO S CERTIFICATE OF INCORPORATION.

STOCKHOLDERS PROPOSALS

Stockholders who wish to submit proposals for inclusion in our proxy statement and form of proxy relating to our 2008 annual meeting of stockholders must advise our Secretary of such proposals in writing by July 7, 2008

Stockholders who wish to present a proposal at our 2008 annual meeting of stockholders without inclusion of such proposal in our proxy materials must advise our Secretary of such proposals in writing by September 19, 2008.

If we do not receive notice of a stockholder proposal within this timeframe, our management will use its discretionary authority to vote the shares they represent, as our board of directors may recommend. We reserve the right to reject, rule out of order, or take other appropriate action with respect to any proposal that does not comply with these requirements.

OTHER MATTERS

Our board of directors is not aware of any matter to be presented for action at the meeting other than the matters referred to above and does not intend to bring any other matters before the meeting. However, if other matters should come before the meeting, it is intended that holders of the proxies will vote thereon in their discretion.

MULTIPLE STOCKHOLDERS SHARING ONE ADDRESS

In accordance with Rule 14a-3(e)(1) under the Exchange Act, one proxy statement will be delivered to two or more stockholders who share an address, unless we have received contrary instructions from one or more of the stockholders. We will deliver promptly upon written or oral request a separate copy of the proxy statement to a stockholder at a shared address to which a single copy of the proxy statement was delivered. Requests for additional copies of the proxy statement, and requests that in the future separate proxy statements be sent to stockholders who share an address, should be directed to Senesco Technologies, Inc., 303 George Street, Suite 420, New Brunswick, New Jersey 08901, telephone: 732.296.8400. In addition, stockholders who share a single address but receive multiple copies of the proxy statement may request that in the future they receive a single copy by contacting us at the address and phone number set forth in the prior sentence.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any reports, proxy statements or other information that we file with the SEC at its Public Reference Room, 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. You may also obtain copies of this information by mail from the Public Reference Section of the SEC, 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. Our public filings are also available to the public from document retrieval services and the Internet website maintained by the SEC at www.sec.gov.

The SEC allows us to incorporate by reference into this proxy statement documents we file with the SEC. This means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this proxy statement, and later information that we file with the SEC will update and supersede that information. We incorporate by reference any documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this proxy statement and prior to the date of the special meeting, including:

- our Annual Report on Form 10-K, for the fiscal year ended June 30, 2007, filed on September 28, 2007.

Any person, including any beneficial owner, to whom this proxy statement is delivered may request copies of proxy statements, reports and any of the documents incorporated by reference in this document or other information concerning us, without charge, by written or telephonic request directed to us at Senesco Technologies, Inc., 303 George Street, Suite 420, New Brunswick, New Jersey 08901, telephone: 732.296.8400 or from the SEC through the SEC s website at the address provided above. Documents incorporated by reference are available without charge, excluding any exhibits to those documents unless the exhibit is specifically incorporated by reference into those documents.

No persons have been authorized to give any information or to make any representations other than those contained in this proxy statement and, if given or made, such information or representations must not be relied upon as having been authorized by us or any other person. This proxy statement is dated [November 2,] 2007. You should not assume that the information contained in this proxy statement is accurate as of any date other than that date, and the mailing of this proxy statement to stockholders shall not create any implication to the contrary.

GENERAL

The accompanying proxy is solicited by and on behalf of our board of directors, whose notice of meeting is attached to this proxy statement, and the entire cost of such solicitation will be borne by us.

In addition to the use of the mails, proxies may be solicited by personal interview, telephone and telegram by our directors, officers and other employees who will not be specially compensated for these services. We will also request that brokers, nominees, custodians and other fiduciaries forward soliciting materials to the beneficial owners of shares held of record by such brokers, nominees, custodians and other fiduciaries. We will reimburse such persons for their reasonable expenses in connection therewith.

Certain information contained in this proxy statement relating to the security holdings of our directors and officers is based upon information received from the individual directors and officers.

WE WILL FURNISH, WITHOUT CHARGE, A COPY OF OUR REPORT ON FORM 10-K FOR THE YEAR ENDED JUNE 30, 2007, INCLUDING FINANCIAL STATEMENTS AND SCHEDULES THERETO, BUT NOT INCLUDING EXHIBITS, TO EACH OF OUR STOCKHOLDERS OF RECORD ON OCTOBER 19, 2007 AND TO EACH BENEFICIAL STOCKHOLDER ON THAT DATE UPON WRITTEN REQUEST MADE TO OUR SECRETARY. A REASONABLE FEE WILL BE CHARGED FOR COPIES OF REQUESTED EXHIBITS.

PLEASE DATE, SIGN AND RETURN THE PROXY CARD AT YOUR EARLIEST CONVENIENCE IN THE ENCLOSED RETURN ENVELOPE. A PROMPT RETURN OF YOUR PROXY CARD WILL BE APPRECIATED AS IT WILL SAVE THE EXPENSE OF FURTHER MAILINGS.

By Order of the Board of Directors

/s/ Sascha P. Fedyszyn

Sascha P. Fedyszyn
Secretary

New Brunswick, New Jersey
November 2, 2007

Appendix A

Certificate of Amendment

CERTIFICATE OF AMENDMENT

OF THE

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

SENESCO TECHNOLOGIES, INC.

Pursuant to Sections 228 and 242

of the

Delaware General Corporation Law

Senesco Technologies, Inc. (the Corporation), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the DGCL);

DOES HEREBY CERTIFY THAT:

FIRST: The name of the corporation (hereinafter, the Corporation) is:

Senesco Technologies, Inc.

SECOND: The Amended and Restated Certificate of Incorporation of the Corporation was filed with the office of the Secretary of State of Delaware on January 22, 2007 (as amended, the Charter).

THIRD: The Charter is hereby amended as follows:

(a) The first section of Article FOURTH of the Charter is hereby deleted in its entirety and replaced by the following new paragraph:

The total number of shares of all classes of stock which the Corporation shall have authority to issue is One Hundred and Five Million (105,000,000) shares. The Corporation is authorized to issue two classes of stock designated Common Stock and Preferred Stock, respectively. The total number of shares of Common Stock authorized to be issued by the Corporation is One Hundred Million (100,000,000), each such share of Common Stock having a $0.01 par value. The total number of shares of Preferred Stock authorized to be issued by the Corporation is Five Million (5,000,000), each such share of Preferred Stock having a $0.01 par value.

FOURTH: That the foregoing amendments have been duly adopted in accordance with the provisions of Sections 228 and 242 of the DGCL.

FIFTH: This Certificate of Amendment shall be deemed effective upon its filing with the Secretary of State of the State of Delaware.

IN WITNESS WHEREOF, this Certificate of Amendment of Certificate of Incorporation has been duly executed by the undersigned officer of the Corporation this day of , 2007.

SENESCO TECHNOLOGIES, INC.

By: /s/Bruce C. Galton
Name: Bruce C. Galton
Title: President and Chief Executive Officer