SCHEDULE 14A

(RULE 14a-101)
Information Required in Proxy Statement
Schedule 14A Information
Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934

Filed by the Registrant ☑
Filed by a Party other than the Registrant ☐

Check the appropriate box:

☐ Preliminary Proxy Statement
☐ Definitive Proxy Statement
☑ Definitive Additional Material
☐ Soliciting Material Pursuant to Rule 14a-12

☐ **Confidential, for Use of the Commission Only**
(as permitted by Rule 14a-6(e)(2))

Horizon Technology Finance Corporation

(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):
☑ **No fee required.**

☐ 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:

☐ Fee paid previously with preliminary materials

☐ 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:

PLEASE SUBMIT YOUR PROXY TODAY

June 1, 2012

Dear Horizon Technology Finance Corporation Stockholder:

We have previously mailed to you proxy materials, including a Proxy Statement dated May 4, 2012, and a reminder letter dated May 25, 2012, in connection with the Special Meeting of Stockholders of Horizon Technology Finance Corporation (the "Company") to be held on June 11, 2012 at 10:00 a.m. at the offices of the Company at 312 Farmington Avenue, Farmington, Connecticut (the "Special Meeting"). <u>The Special Meeting is rapidly approaching and, as of the date of this letter, you have **not** yet voted your shares</u>. Your vote is important and your participation is requested at this important Special Meeting.

At the Special Meeting, you will be asked to approve a proposal (the "Proposal") to authorize flexibility for the Company, with the approval of its Board of Directors, to sell shares of its common stock during the next 12 months at a price below the then current net asset value per share in one or more offerings, subject to certain conditions. As set forth in more detail in the Proxy Statement, the proposal provides limitations on the number of shares available for issuance to no more than 25% of the Company's then outstanding common stock, at a price below, but no more than 15% below, its then current net asset value.

THE BOARD OF DIRECTORS, INCLUDING THE INDEPENDENT DIRECTORS, UNANIMOUSLY RECOMMENDS THAT YOU VOTE "FOR" THE PROPOSAL.

The Board of Directors believes that providing flexibility for the Company to sell its common stock below net asset value under certain pre-approved conditions is in the best interests of both the Company and its Stockholders. Approval of this Proposal may enhance the Company's ability to realize the following important benefits:

1. Capitalize on high-quality investment opportunities identified by the Company that would lead to an expected increase in the Company's net asset value over the long term;

2. Strengthen the Company's long-term competitive position by leveraging its expanded capital resources in order to generate additional deal flow;

3. Reduce the Company's fixed expenses on a per share basis by increasing total assets; and

4. Increase liquidity in the Company's publicly traded common stock, positioning Horizon as a more attractive investment to both current and prospective shareholders.

If the Company is unable to access the capital markets when attractive investment opportunities arise, its ability to grow over time and to continue to pay dividends to Stockholders could be adversely affected.

Your vote is very important. Approval of the Proposal requires the affirmative vote of the stockholders of the Company holding (1) a majority of the outstanding shares of the common stock of the Company entitled to vote at the Special Meeting and (2) a majority of the outstanding shares of the common stock of the Company entitled to vote at the Special Meeting that are not held by affiliated persons of the Company. Therefore, the vote of every stockholder is very important.

Please vote your proxy promptly without delay. Please submit your proxy in this important matter as promptly as possible (1) through the internet, (2) by marking, signing, and dating the enclosed proxy card or voting instruction form and returning it in the postage-paid return envelope provided, or (3) if you received a voting instruction form with telephonic instructions, by telephone.

If you have any questions or need assistance voting your shares, please call Georgeson Inc., which is assisting us, toll-free at 1-888-607-9252.

Thank you for your cooperation and continued support.

Sincerely,

[signature: Robert Pomeroy, Jr.]

Robert D. Pomeroy, Jr.

Chief Executive Officer

Easy Ways To Vote

Please help the Company avoid the expense of further solicitation by voting today. You may use one of the following simple methods to vote your shares:

1. **Vote by Internet.** Go to the website listed on your proxy card or voting instruction form. Have your control number listed on the form ready and follow the simple instructions.

2. **Vote by Mail.** Mark, sign, and date your proxy card or voting instruction form and return it in the postage-paid return envelope provided.

3. **Vote by Telephone.** If you received a voting instruction form with telephonic instructions, call the toll-free number listed for this purpose on your voting instruction form. Have your control number listed on the form ready and follow the simple instructions.