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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 11, 2017

HORIZON TECHNOLOGY FINANCE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

814-00802 (Commission File Number) 27-2114934 (I.R.S. Employer Identification No.)

312 Farmington Avenue Farmington, CT 06032

(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: (860) 676-8654

Check the appropriate box below if the Form 8-K is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

| Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) |
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| Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) |
| Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) |
| Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)) |
| |

Section 2 Financial Information

Item 2.02 Results of Operations and Financial Condition

On January 11, 2017, Horizon Technology Finance Corporation (the "Company") issued a press release announcing its investment portfolio update for the three months and year ended December 31, 2016. A copy of this press release is attached hereto as Exhibit 99.1.

The information in Item 2.02 of this Current Report on Form 8-K, including Exhibit 99.1 furnished herewith, is being furnished and shall not be deemed "filed" for any purpose of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to liabilities of such Section. The information in this Current Report on Form 8-K shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Section 9 Financial Statements and Exhibits Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

99.1 Press release of the Company dated January 11, 2017.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

By:

Date: January 11, 2017 HORIZON TECHNOLOGY FINANCE CORPORATION

/s/ Robert D. Pomeroy, Jr. Robert D. Pomeroy, Jr. Chief Executive Officer

Exhibit Index

Exhibit No. Description

Press release of the Company dated January 11, 2017



Horizon Technology Finance Provides Investment Portfolio Update

Expanded Investment Platform Combined with Enhanced Liquidity Positions Horizon to Grow its Portfolio in 2017

FARMINGTON, Conn., January 11, 2017 – Horizon Technology Finance Corporation (NASDAQ: HRZN) ("Horizon"), a leading specialty finance company that provides capital in the form of secured loans to venture capital backed companies in the technology, life science, healthcare information and services, and cleantech industries, today provided a portfolio update for the fourth quarter and year ended December 31, 2016.

"Our fourth quarter activity included new loans to two public life sciences companies and positive liquidity events from three portfolio companies which has enhanced our liquidity position," said Gerald A. Michaud, President of Horizon. "During this time, we also took important steps to strengthen our investment platform by adding two senior-level hires to our life sciences team. Our expanded capabilities, combined with our strong liquidity, put us in an excellent position to grow our portfolio in 2017."

New Loans Funded

Horizon funded two new loans in the fourth quarter of 2016 totaling \$13.8 million, and 13 new loans totaling \$57.8 million for the year. Horizon funded the following loans in the fourth quarter:

- \$6.3 million to a new portfolio company, vTv Therapeutics, Inc. (NASDAQ: VTVT), a clinical-stage biopharmaceutical company committed to the discovery and development of treatments for a range of human diseases including Alzheimer's disease and diabetes.
- \$7.5 million to a new portfolio company, Strongbridge Biopharma plc (NASDAQ: SBBP), a global commercial-stage biopharmaceutical company focused on the development and commercialization of therapies for rare diseases with significant unmet needs.

Liquidity Events

During the quarter ended December 31, 2016, Horizon experienced liquidity events from three portfolio companies, increasing the total number of portfolio companies with liquidity events to 13 for the year. Liquidity events for Horizon may consist of the sale of warrants or equity in portfolio companies, loan prepayments, sale of owned assets or receipt of success fees.

In November, Additech, Inc. ("Additech") prepaid the outstanding principal balance of \$3.8 million on its venture loan, plus interest and end-of-term payment. Horizon continues to hold warrants in Additech.

In November, Crowdstar, Inc. ("Crowdstar") prepaid the outstanding principal balance of \$1.3 million on its venture loan, plus interest, end-of-term payment and prepayment fee. Horizon also received proceeds from the exercise and sale of warrants in Crowdstar.

In December, Medsphere Systems Corporation ("Medsphere") prepaid the outstanding principal balance of \$7.5 million on its venture loan, plus interest, end-of-term payment and prepayment fee. Horizon continues to hold warrants in Medsphere.

Refinanced Principal Balances, Early Principal Payoffs, and Principal Payments Received

As noted above, Horizon experienced early pay-offs during the fourth quarter of 2016 totaling \$12.7 million, compared to early pay-offs totaling \$17.0 million during the third quarter of 2016. During the fourth quarter of 2016, Horizon received regularly scheduled principal payments on investments totaling \$12.9 million, which included InVisage Technologies, Inc.'s ("InVisage") repayment at maturity of the outstanding principal balance of \$2.8 million on its venture loan, plus interest and end-of-term payment, compared to regularly scheduled principal payments totaling \$10.3 million during the third quarter of 2016. Horizon continues to hold warrants in InVisage.

Commitments

During the quarter ended December 31, 2016, Horizon closed new loan commitments totaling \$27.5 million to two companies, compared to the quarter ended September 30, 2016, wherein Horizon closed new loan commitments totaling \$17.0 million to two companies.

Pipeline

As of December 31, 2016, Horizon's unfunded loan approvals and commitments ("Committed Backlog"), all priced at floating interest rates, were \$20.8 million to four companies. This compares to a Committed Backlog of \$19.5 million to three companies as of September 30, 2016. While Horizon's portfolio companies have discretion whether to draw down such commitments, the right of a portfolio company to draw down its commitment is often subject to achievement of specific milestones and other conditions to borrowing.

Warrant and Equity Portfolio

As of December 31, 2016, Horizon held a portfolio of warrant and equity positions in 85 portfolio companies, including 71 private companies, which provides the potential for future additional returns to Horizon's shareholders.

About Horizon Technology Finance

Horizon Technology Finance Corporation is a leading specialty finance company that provides capital in the form of secured loans to venture capital backed companies in the technology, life science, healthcare information and services, and cleantech industries. The investment objective of Horizon is to maximize its investment portfolio's return by generating current income from the debt investments it makes and capital appreciation from the warrants it receives when making such debt investments. Headquartered in Farmington, Connecticut, Horizon has regional offices in Pleasanton, California and Reston, Virginia. Horizon's common stock trades on the NASDAQ Global Select Market under the ticker symbol "HRZN". To learn more, please visit www.horizontechfinance.com.

Forward-Looking Statements

Statements included herein may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Statements other than statements of historical facts included in this press release may constitute forward-looking statements and are not guarantees of future performance, condition or results and involve a number of risks and uncertainties. Actual results may differ materially from those in the forward-looking statements as a result of a number of factors, including those described from time to time in our filings with the Securities and Exchange Commission. Horizon undertakes no duty to update any forward-looking statement made herein. All forward-looking statements speak only as of the date of this press release.

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