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): March 15, 2011

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.)

76 Batterson Park Road

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)
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 March 15, 2011, Horizon Technology Finance Corporation (the "Company") issued a press release announcing its financial results for the year ended December 31, 2010. 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 March 15, 2011.

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.

Date: March 15, 2011 HORIZON TECHNOLOGY FINANCE CORPORATION

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

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Horizon Technology Finance Corporation Announces Full Year 2010 Financial Results

FARMINGTON, Conn., March 15, 2011 — Horizon Technology Finance Corporation (Nasdaq: HRZN) ("HRZN" or the "Company"), a leading specialty finance company that provides secured loans to sponsor-backed development-stage companies in the technology, life science, healthcare information and services, and clean-tech industries, announced today its financial results for the year ended December 31, 2010.

The consolidated results for the year ended December 31, 2010 included in this press release reflect the performance of the Company's predecessor, Compass Horizon Funding Company LLC, prior to the Company's initial public offering (IPO), which was effective on October 28, 2010. Based on the Company's qualification to be treated as a Business Development Company (BDC) and related changes in accounting principles immediately following the completion of the IPO, the Company's consolidated results for the year ended December 31, 2010 may not be indicative of the results reported in future periods. In accordance with applicable accounting standards, the Company has included in this press release consolidated results subsequent to its IPO from October 29, 2010 through December 31, 2010 (the "stub period").

Highlights

- Net increase in net assets from operations was \$3.4 million, or \$0.45 per common share for the stub period and \$14.7 million for the full year 2010
- Net investment income was \$1.4 million, or \$0.18 per common share, for the stub period and \$10.4 million for the full year 2010
- Net realized gain on investments was \$0.6 million, or \$0.08 per common share, for the stub period and \$0.7 million for the full year 2010
- Net asset value was \$127.2 million, or \$16.75 per share, as of December 31, 2010
- Funded \$98.3 million in loan investments during 2010
- Committed backlog totaled \$26.5 million at December 31, 2010
- Completed IPO, raising \$73.1 million in gross proceeds to the Company
- Paid a stub period dividend of \$0.22 per share, which equated to a 8.25% yield using the IPO price of \$16.00 per share

Robert D. Pomeroy, Jr., Chairman and Chief Executive Officer, commented, "We are pleased by our strong results for the stub period and full year 2010 as our existing portfolio of assets continues to perform well. During the fourth quarter, we completed our \$100 million IPO, a major milestone for Horizon that significantly enhances our short-term and long-term growth prospects. We also advanced our strategy to obtain an SBIC license from the Small Business Administration by the filing of our formal application. This will provide us the ability to increase our leverage under favorable terms to fund new investments. Management remains committed to taking advantage of the positive industry fundamentals in venture lending and expanding our diverse, high-quality portfolio. With a strong balance sheet and a growing investment pipeline, we are already experiencing a rapid increase in deal originations that meet management's strict criteria as we seek to expand future earnings and dividends for the benefit of our shareholders."

Operating Results

Total investment income, consisting of interest income and fees, increased 18.8% for the year ended December 31, 2010 to \$18.2 million, as compared to \$15.3 million for the year ended December 31, 2009. The year-over-year increase in investment income is primarily due to the increased average size of the Company's loan portfolio. For the year ended December 31, 2010, total investment income consisted of \$16.0 million in interest income from investments, \$1.4 million in income from the amortization of discounts and origination fees on investment, and \$0.8 million in other income primarily related to loan prepayment fees. Total investment income for the stub period was \$3.3 million.

The Company's weighted average portfolio yield, excluding warrant gains, was 14.6% for the year ended December 31, 2010, and 13.9% for the year ended December 31, 2009.

Total expenses were \$7.8 million for the year ended December 31, 2010, as compared to \$6.8 million for the year ended December 31, 2009. Total expenses consisted principally of interest expense and management and incentive fees. Interest expense increased in 2010 from 2009 primarily from higher average outstanding debt balances on the Company's credit facility.

Net investment income for the year ended December 31, 2010 and 2009 was \$10.4 million and \$8.6 million, respectively. Net investment income for the stub period was \$1.4 million, or \$0.18 per common share.

For the year ended December 31, 2010, the net realized gain on investments increased to \$0.7 million, as compared to \$0.1 million for the year ended December 31, 2009, from the exercise of warrants in portfolio companies. Net realized gain on investments for the stub period was \$0.6 million, or \$0.08 per common share.

For the year ended December 31, 2010 and 2009, net unrealized appreciation on investments was \$2.9 million and \$0.9 million, respectively. The year-over-year increase is primarily due to an increase in the enterprise value of portfolio companies in which we held warrants. The net unrealized appreciation on investments during the stub period was \$1.4 million, or \$0.19 per common share.

For the year ended December 31, 2010, the net increase in net assets resulting from operations was \$14.7 million, as compared to a net increase in net assets resulting from operations of \$9.3 million for the year-earlier period. The increase in net assets from operations is attributable to the growth in net investment income as a result of an expanding portfolio. The net increase in net assets resulting from operations for the stub period was \$3.4 million.

Portfolio Summary and Investment Activity

As of December 31, 2010, the Company's debt portfolio consisted of 32 secured loans with an aggregate fair value of \$130.2 million. In addition, the Company's warrant portfolio of 43 investments had an aggregate fair value of \$6.2 million as of December 31, 2010.

Total portfolio investment activity as of and for each of the years ended December 31, 2010 and 2009 was as follows:

	Decem	ber 31,
(\$ in thousands)	2010	2009
Beginning portfolio	\$113,878	\$ 93,824
New loan funding	98,267	49,934
Less refinanced balances	(13,593)	
Net new loan funding	84,674	49,934
Principal and stock payments received on investments	(33,149)	(16,805)
Early pay-offs	(31,709)	(14,582)
Accretion of loan fees	1,399	1,068
New loan fees	(836)	(449)
New equity	350	_
Net appreciation on investments	2,203	888
Ending Portfolio	\$136,810	\$113,878

Portfolio Asset Quality

As of December 31, 2010 and 2009 the weighted average credit rating on the fair value of the Company's loan portfolio was 3.2 and 2.9, respectively, with 4 being the highest credit quality rating and 3 being the rating for a standard level of risk. A rating of 2 or 1 represents a deteriorating credit quality and increased risk. The Company did not have any investments on non-accrual status as of these dates.

Liquidity and Capital Resources

As of December 31, 2010, HRZN had cash and cash equivalents of approximately \$76.8 million.

On October 28, 2010, the Company completed its IPO of 6,250,000 shares of its common stock at a public offering price of \$16.00 per share, representing the primary offering of 4,910,000 shares by the Company and a secondary offering of 1,340,000 shares by a selling stockholder. The Company raised approximately \$73.1 million of proceeds from its portion of the offering and did not receive any proceeds from the secondary offering. Net proceeds will be used to make new investments in portfolio companies.

Dividend

On December 15, 2010, the Company's Board of Directors declared a fourth quarter dividend of \$0.22 per share, paid on December 31, 2010 to stockholders of record on December 28, 2010. The dividend was paid on a pro-rated basis from taxable earnings since the completion of the Company's IPO on October 28, 2010.

Conference Call

Management will host a conference call on Wednesday, March 16, 2011 at 9:00 a.m. ET to discuss the latest corporate developments and financial results. The dial-in number for callers in the U.S. is (877) 677-9112 and the dial-in number for international callers is (708) 290-1396. The access code for all callers is 44735421. A live webcast will also be available on the Company's website at www.horizontechnologyfinancecorp.com.

A replay of the call will be available through March 23, 2011. To access the replay, please dial (800) 642-1687 in the U.S. and (706) 645-9291 outside the U.S., and then enter the access code 44735421.

About Horizon Technology Finance Corporation

Horizon Technology Finance Corporation is a closed-end investment company that has elected to be treated as a business development company under the Investment Company Act of 1940. The Company provides secured loans to development-stage companies backed by established venture capital and private equity firms within the technology, life science, healthcare information and

services, and clean-tech industries. The investment objective of HRZN is to maximize total risk-adjusted returns by generating current income from a portfolio of directly originated secured loans as well as capital appreciation from warrants to purchase the equity of portfolio companies. Headquartered in Farmington, CT, with a regional office in Walnut Creek, CA, the Company is externally managed by its investment advisor, Horizon Technology Finance Management LLC. To learn more, please visit www.horizontechnologyfinancecorp.com.

Forward-Looking Statements

Statements included herein may constitute "forward-looking statements," which relate to future events or our future performance or financial condition. These statements 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. The Company 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.

Horizon Technology Finance Corporation and Subsidiaries Consolidated Statements of Assets and Liabilities (In thousands, except share data)

Standard	December 31,		
Standard	2009	2010	
of \$1,924 at December \$1,2009 \$136,810 ash and cash equivalents 76,793 cetter strectivable 1,938 ebt issuance costs (net of accumulated amortization of: 194 December \$1,2010 \$3,292 and December \$1,2009 \$2,130) 194 their assets 470 otal assets \$216,205 isibilities 360 centive fee payable 360 centive fee payable 414 therest acts swap liability 258 their accrued expenses 553 otal liabilities \$9,010 et assets/members' capital \$ - cerumulated other comprehensive loss - - Unrealized loss on interest rate swaps - common Stock, par value \$0.001 per share, 100,000,000 shares authorized, 7,593 shares outstanding as of 8 December 31, 2010 8 id-in capital in excess of par 123,836 istributions in excess of net investment income 123,836 et realized gains on investments 3,043 et realized gains on investments 451 otal net assets/members' capital <t< td=""><td></td><td></td><td>Assets</td></t<>			Assets
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tet unrealized appreciation on investments at trealized gains on investments at 51 bital net assets/members' capital at 127,195 bital liabilities and net assets/members' capital at 216,205	6 —	123,836	Paid-in capital in excess of par
et realized gains on investments otal net assets/members' capital otal liabilities and net assets/members' capital \$216,205	3) —	(143)	Distributions in excess of net investment income
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otal liabilities and net assets/members' capital \$216,205	<u> </u>	451	Net realized gains on investments
•	59,493	127,195	Total net assets/members' capital
•	5 \$124,868	\$216,205	Total liabilities and net assets/members' capital
et asset value per share \$ 16.75	= 		•
<u>. </u>	5 N/A	\$ 16.75	Net asset value per share
		<u></u>	

Horizon Technology Finance Corporation and Subsidiaries Consolidated Statements of Operations

(In thousands, except share data)

	Post-IPO Busines Developn Compai	s ent	Pre-IPO prior to becoming a Business Development Company						
	October 2010 to	October 29, 2010 to December 31,		October 29, January 2010 to 2010 to December 31, October 2		Year E Decemb	Year Ended December 31, 2009		ch 4, 2008 aception) hrough ember 31, 2008
Investment income									
Interest income on non-affiliate investments	\$ 2,	993	\$ 14,373		4,987	\$	6,530		
Interest income on cash and cash equivalents		10	60		67		359		
Fee income on non-affiliate investments		248	523		272		132		
Total investment income	3,	<u> 251</u>	14,956	1:	5,326		7,021		
Expenses									
Interest expense		508	3,622	?	4,246		2,748		
Base management fee		668	2,019)	2,202		1,073		
Performance based incentive fee		114	_	-	_		_		
Administrative fee		88		-	_				
Professional fees		92	112		131		60		
General and administrative		122	178		190		150		
Total expenses	1,	392	5,931	<u> </u>	6,769		4,031		
Net investment income	1,	359	9,025		8,557	_	2,990		
Credit (provision) for loan losses		_	739		(274)		(1,650)		
Net realized gain on investments		511	69)	138		22		
Net unrealized appreciation (depreciation) on investments	1,	149	1,481		892		(73)		
Net realized and unrealized gain (loss) on investments	2,	060	1,550		1,030		(51)		
Net increase in net assets resulting from operations	\$ 3,	119	\$ 11,314	\$!	9,313	\$	1,289		
Net investment income per common share	\$ (.18							
Change in net assets per common share	\$ (.45							
Weighted average shares outstanding	7,555,	722							

Horizon Technology Finance Corporation Christopher M. Mathieu Chief Financial Officer (860) 676-8653 chris@horizontechfinance.com Investor Relations and Media Contacts: The IGB Group Leon Berman / Michael Cimini (212) 477-8438 / (212) 477-8261 lberman@igbir.com / mcimini@igbir.com