FORM 6 - K

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Report of Foreign Private Issuer Pursuant to Rule 13a - 16 or 15d - 16 of the Securities Exchange Act of 1934

As of 5/5/2008

Ternium S.A. (Translation of Registrant's name into English)

Ternium S.A.

46a, Avenue John F. Kennedy – 2nd floor
L-1855 Luxembourg
(352) 4661-11-3815
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or 40-F.

Form 20-F R Form 40- F£

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12G3-2(b) under the Securities Exchange Act of 1934.

Yes £ No R

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):

Not applicable

The attached material is being furnished to the Securities and Exchange Commission pursuant to Rule 13a-16 and Form 6-K under the Securities Exchange Act of 1934, as amended.

This report contains Ternium S.A.'s press release announcing first quarter 2008 results.

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, thereunto duly authorized.

TERNIUM S.A.

By: /s/ Roberto Philipps Name: Roberto Philipps

Title: Chief Financial Officer

By: /s/ Daniel Novegil Name: Daniel Novegil

Title: Chief Executive Officer

Dated: May 5, 2008

Sebastián Martí Ternium - Investor Relations +1 (866) 890 0443 +52 (81) 8865 2111 +54 (11) 4018 2389 www.ternium.com

Ternium Announces First Quarter 2008 Results

Luxembourg, May 5, 2008 – Ternium S.A. (NYSE: TX) today announced its results for the first quarter ended March 31, 2008.

The financial and operational information contained in this press release is based on consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS) and presented in U.S. dollars and metric tons.

Summary of First Quarter 2008 Results

	1Q 2008	4Q 2007	1Q	2007	
Shipments (million tons)	2.7	2.8	-3%	2.5	9%
Net Sales (US\$ million)	2,427.7	2,267.2	7%	1,798.3	35%
Operating Income (US\$ million)	434.9	297.2	46%	415.4	5%
EBITDA (US\$ million)	592.5	469.0	26%	530.7	12%
EBITDA Margin (% of net sales)	24%	21%		30%	
Net Income (US\$ million)	483.6	220.6	119%	251.6	92%
Equity Holders' Net Income (US\$ million)	422.1	165.6	155%	222.1	90%
Earnings per ADS* (US\$)	2.11	0.83	155%	1.11	90%

Operating income was US\$434.9 million in the first quarter 2008, an increase of 46% when compared to the fourth quarter 2007, mainly as a result of higher steel prices partially offset by higher costs and lower volume. Shipments decreased 3% in the first quarter 2008 when compared to the fourth quarter 2007, as lower shipments in the South & Central America Region that resulted from the work stoppages at Sidor were partially offset by higher shipments in the North America Region. Ternium's operating income increased 5% in the first quarter 2008 when compared to the first quarter 2007. Excluding the effect of the consolidation of Grupo Imsa, operating income decreased slightly year-over-year, as higher costs and lower volumes were partially offset by higher steel prices.

Net income during the first quarter 2008 was US\$483.6 million, an increase of 119% when compared to the fourth quarter 2007. The sequential increase in net income was due mainly to higher operating income and two non-recurring items: an income tax gain of US\$96.3 million related to Hylsa's lower deferred tax liability and an after-tax gain of US\$101.4 million related to the sale of non-strategic interests to BlueScope Steel. Ternium's net income during the first quarter 2008 increased 92% when compared to the first quarter 2007. Excluding the effect of the consolidation of Grupo Imsa, the year-over-year increase was mainly due to the above mentioned non-recurring items.

Ternium's net sales were US\$2.4 billion in the first quarter 2008, an increase of 7% when compared to the fourth quarter 2007. Net sales increased sequentially mainly as a result of higher revenue per ton partially offset by lower shipments. Excluding the effect of the consolidation of Grupo Imsa, net sales increased slightly year-over-year in the first quarter 2008 mainly due to higher revenue per ton partially offset by lower shipment levels as a result of the work stoppages at Sidor.

Sidor Nationalization Process

On March 31, 2008, Ternium controlled approximately 59.7% of Sidor, while CVG Corporación Venezolana de Guayana (a company owned by the Venezuelan government) held approximately 20.4% of Sidor and certain Sidor employees and former employees held the remaining 19.9% interest.

On April 8, 2008, the Venezuelan government announced its intention to take control over Sidor. Following the confirmation of the Venezuelan government's decision to nationalize Sidor on April 16, 2008, Ternium, Sidor and the Venezuelan government entered into an agreement providing for the creation of a transition committee, composed of representatives of the government, the labor union and class B employee shareholders. This committee is charged with overseeing Sidor's operations during the transition period until the nationalization is completed, acting in coordination with Sidor's board of directors.

On April 29, 2008, the National Assembly of the Republic of Venezuela passed a resolution declaring that the shares of Sidor, together with all of its assets, are of public and social interest. This resolution authorizes the Venezuelan government to take any action it may deem appropriate in connection with any such assets, which may include expropriation.

The discussions among representatives of Ternium and the Venezuelan government regarding adequate and fair terms and conditions upon which all or a significant part of Ternium's interest in Sidor would be transferred to the government began with the formation of a negotiating committee and are presently under way. The date on which control over Sidor would be transferred to the government is uncertain at this time.

The impact of the potential government actions with respect to Sidor on Ternium's financial position is not determinable at this time.

Ternium continues to preserve all of its rights under contracts, investment treaties and Venezuelan and international law and will continue to evaluate its options in realizing the fair value of its interest in Sidor.

From an accounting perspective (book value), total assets and total liabilities of Sidor were \$3.1 billion and \$855.5 million, respectively, at March 31, 2008. None of such book values represents the fair market value of Sidor as a going concern. Sidor's revenue and EBITDA for the first quarter 2008 were \$513.9 million and US\$114.21 million, respectively. Ternium's equity holders' net income for the first quarter 2008 includes a gain of US\$50.3 million related to its interest in Sidor.

¹ Sidor's EBITDA in the first quarter 2008 equals operating income of US\$63.4 million plus depreciation and amortization of US\$50.8 million.

Outlook

Global steel prices are increasing as a result of sustained demand coupled with certain supply limitations that have resulted mainly from continued tightness in the raw materials markets. In the North America Region, a restocking process is supporting today's strong pricing environment, while demand for steel products is expected to remain at current levels, reflecting continued weakness in the construction and automobile industries. Demand and prices in the South & Central America Region are expected to remain at their current, healthy levels.

Ternium expects its operating margin will improve in the second quarter 2008 compared to the operating margin it achieved in the first quarter 2008. Higher steel prices should be only partially offset by higher raw material costs since such costs are expected to be gradually reflected in the cost of sales, as Ternium consumes raw materials from its inventories over time.

As discussed above, the impact of the Sidor nationalization process on Ternium's financial position is not determinable at this time.

Analysis of First Quarter 2008 Results

Net income attributable to the Company's equity holders in the first quarter 2008 was US\$422.1 million, compared with US\$222.1 million in the first quarter 2007. Including minority interest, net income for the first quarter 2008 was US\$483.6 million, compared with US\$251.6 million in the first quarter 2007. Earnings per ADS for the first quarter 2008 were US\$2.11, compared with US\$1.11 in the first quarter 2007.

Net sales for the first quarter 2008 increased 35% to US\$2.4 billion compared with the same period in 2007. Net sales increased mainly due to the consolidation of Grupo Imsa. Shipments of flat and long products were 2.7 million tons during the first quarter 2008, an increase of 9% compared to shipment levels in the first quarter 2007, mainly due to the consolidation of Grupo Imsa partially offset by lower shipment levels as a result of the work stoppages at Sidor. Revenue per ton shipped increased 24% to US\$869 in the first quarter 2008 versus the same quarter in 2007, mainly as a result of higher steel prices and the consolidation of Grupo Imsa's higher value added product mix.

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	Net Sales (million US\$)		Shipments (thousand tons)			Revenue / ton (US\$/ton)			
	1Q 2008	1Q 2007	Dif.	1Q 2008	1Q 2007	Dif.	1Q 2008	1Q 2007	Dif.
South & Central									
America	960.1	821.8	17%	1,088.4	1,111.8	-2%	882	739	19%
North America	1,021.0	522.5	95%	1,080.0	698.4	55%	945	748	26%
Europe & other	9.5	48.7	-81%	9.7	82.7	-88%	978	589	66%
Total flat products	1,990.6	1,392.9	43%	2,178.1	1,892.9	15%	914	736	24%
C41- 0									
South & Central									
America	179.5	164.9	9%	265.2	292.8	-9%	677	563	20%
North	177.5	101.9	770	203.2	2,2.0	7 /0	077	303	2070
America	186.4	192.9	-3%	265.3	313.3	-15%	703	616	14%
Europe &									
other	5.2	0.0		8.8	0.0		587		
Total long									
products	371.1	357.7	4%	539.3	606.1	-11%	688	590	17%
Total flat and long									
products	2,361.6	1,750.7	35%	2,717.4	2,498.9	9%	869	701	24%
Other products	66.1	47.6	39%						
(1)	00.1	47.0	39%						
Total Net Sales	2,427.7	1,798.3	35%						
(1) D : 1		1							

⁽¹⁾ Primarily includes iron ore and pig iron.

Net sales of flat products during the first quarter 2008 totaled US\$2.0 billion, an increase of 43% compared with the same quarter in 2007. Excluding the effect of the consolidation of Grupo Imsa, net sales of flat products increased as a result of higher revenue per ton, partially offset by lower shipment levels. Shipments of flat products totaled 2.2 million tons in the first quarter 2008, an increase of 15% compared with the same period in 2007, mainly due to the consolidation of Grupo Imsa partially offset by lower shipment levels as a result of the work stoppages at Sidor. Revenue per ton shipped increased 24% to US\$914 in the first quarter 2008 compared with the same period in 2007, mainly due to higher steel prices and the consolidation of Grupo Imsa's higher value added product mix.

Net sales of long products were US\$371.1 million during the first quarter 2008, an increase of 4% compared with the same period in 2007 due to higher steel prices, partially offset by lower shipment levels in all regions. Shipments of long products totaled 539,000 tons in the first quarter 2008, representing an 11% decrease versus the same quarter in 2007. Revenue per ton shipped increased 17% to US\$688 in the first quarter 2008 over the first quarter 2007.

Net sales of other products totaled US\$66.1 million during the first quarter 2008, compared to US\$47.6 million during the first quarter 2007.

Net sales of flat and long products in the North America Region were US\$1.2 billion in the first quarter 2008, an increase of 69% versus the same period in 2007. Shipments in the region totaled 1.3 million tons during the first quarter 2008, or 33% higher than in the same period in 2007, mainly due to the consolidation of Grupo Imsa. Revenue per ton shipped in the region increased 27% to US\$897 in the first quarter 2008 over the same quarter in 2007 mainly as a result of higher prices and the consolidation of Grupo Imsa's higher value added product mix.

Flat and long product net sales in the South & Central America Region were US\$1.1 billion during the first quarter 2008, an increase of 16% versus the same period in 2007. This increase was due to higher revenue per ton, partially offset by lower volumes. Shipments in the region totaled 1.4 million tons during the first quarter 2008, or 4% lower than in the first quarter 2007. Despite the increase in demand for steel products in the region, Ternium's shipments decreased due to the work stoppages at Sidor. Revenue per ton shipped in the region increased 20% to US\$842 in the first quarter 2008 over the same quarter in 2007, mainly due to higher prices.

Cost of sales totaled US\$1.8 billion in the first quarter 2008 compared to US\$1.2 billion in the first quarter 2007. Cost of sales increased as a result, in part, of the consolidation of Grupo Imsa, which increased Ternium's cost per ton due to Grupo Imsa's higher production cost structure and higher value added product sales mix. Excluding this effect, the higher year-over-year cost of sales was related to an increase in shipment volume; higher costs for raw materials and other supplies, as well as for freight, services and labor; and lower efficiencies associated with the work stoppages at Sidor.

The consolidation of Grupo Imsa resulted in an increased volume of purchased slabs with a cost per ton significantly higher than Ternium's average cost of slab production. Prices for iron ore supplies to Ternium's Argentine and Venezuelan operations were higher during the first quarter 2008 than they were in the same period in 2007. Scrap prices increased in Mexico while the price of zinc decreased in the first quarter 2008 compared to the prior year period. Labor costs in Argentina and Venezuela increased in the first quarter 2008 when compared to the first quarter 2007.

Selling, General and Administrative (SG&A) expenses in the first quarter 2008 were US\$237.0 million, or 10% of net sales, compared with US\$164.5 million, or 9% of net sales, in the first quarter 2007. The increase in SG&A, excluding the effect of the consolidation of Grupo Imsa, was due mainly to a year-over-year tax increase in Venezuela related to a tax enacted in the second half of 2007 on debits in checking accounts.

Operating income in the first quarter 2008 was US\$434.9 million, or 18% of net sales, compared with US\$415.4 million, or 23% of net sales, in the first quarter 2007.

EBITDA2 in the first quarter 2008 was US\$592.5 million, or 24% of net sales, compared with US\$530.7 million, or 30% of net sales, in the first quarter 2007. Ternium's EBITDA margin in the first quarter 2008 was affected by the consolidation of Grupo Imsa. Equity holders' EBITDA in the first quarter 2008 was 86% of EBITDA.

Net financial expenses totaled US\$83.5 million in the first quarter 2008, compared with US\$82.3 million in the same period in 2007. A US\$51.8 million decrease in the excess cash distribution related to Sidor's participation accounts and a US\$38.2 million better result related to foreign exchange valuations were mainly offset by a year-over-year negative variance of US\$40.8 million related to changes in the fair value of some derivative instruments entered into by Ternium to mitigate energy prices and interest rate fluctuations and a US\$21.5 million increase in net interest expenses primarily associated with an increase in net debt. The foreign exchange results in the first quarter 2008 (an effect that is offset to a large extent by changes in Ternium's net equity position) resulted primarily from the impact of the Mexican Peso fluctuation on the company's Mexican subsidiaries' US dollar denominated debt (Ternium's subsidiaries prepare their financial statements in currencies other than the US dollar in accordance with IFRS).

Sidor's excess cash distribution related to the participation accounts was US\$96.5 million in the first quarter 2008 compared with US\$225.2 million in the first quarter 2007. The recognition of payments to minority shareholders of Sidor resulted in expenses for Ternium of US\$38.9 million in the first quarter 2008, compared with expenses of US\$90.7 million in the same period in 2007.

2EBITDA in the first quarter 2008 equals operating income of US\$434.9 million plus depreciation and amortization of US\$157.7 million.

Income tax for the first quarter 2008 was a gain of US\$30.5 million, compared with a first quarter 2007 income tax expense of US\$80.5 million, or 24% of income before income tax and minority interest. The first quarter 2008 result included a non-recurring gain of US\$96.3 million on account of Hylsa's lower deferred tax liability. Mexican laws require local companies to pay their employees a profit sharing bonus calculated on a basis similar to that used for local income tax purposes. Ternium accounts for temporary differences arising between the statutory calculation and the reported expense determined under IFRS in a manner similar to the calculation of deferred income tax. The Company recorded a reversal of its deferred profit sharing obligations as a result of the corporate restructuring being carried out among its Mexican subsidiaries. Additionally, there was a US\$33.7 million higher gain as a result of Sidor's lower deferred tax liability, which resulted mainly from the application of an adjustment for inflation concerning the value of Sidor's fixed assets for tax purposes in accordance with Venezuelan tax law, that was partially offset by a US\$26.2 million higher income tax expense at Siderar.

Income attributable to minority interest for the first quarter 2008 was US\$61.4 million, compared with US\$29.5 million in the first quarter 2007. The year-over-year increase was due mainly to higher income attributable to minority interest in Siderar.

Cash Flow and Liquidity

Net cash provided by operating activities in the first quarter 2008 was US\$120.1 million compared to US\$530.3 million in the first quarter 2007. Working capital increased US\$227.5 million in the first quarter 2008, mainly as a result of higher inventory levels of goods in process and raw materials, compared to a decrease of US\$110.3 million in the first quarter 2007. Net interest payments over accruals increased by US\$87.6 million in the first quarter 2008 mainly as a result of the semi-annual payment of interest on debt related to the acquisition of Grupo Imsa.

Capital expenditures in the first quarter 2008 were US\$156.6 million, compared to US\$102.4 million in the first quarter 2007. Capital expenditures during the first quarter 2008 were made principally for the expansion of one steel shop, the upgrading of one hot strip mill and the upgrading of one cold rolled mill in Mexico; the relining of one blast furnace and the revamping and expansion of the coking facilities in Argentina; and the revamping of one DRI production unit and the upgrading of the loading system in one steel shop in Venezuela. Ternium's negative free cash flow3 in the first quarter 2008 of US\$36.5 million, compared to free cash flow3 of US\$427.9 million in the first quarter 2007. Net cash provided by discontinued operations in the first quarter 2008 in connection with the sale of non-strategic interests to BlueScope Steel was US\$722.5 million.

Ternium's net repayment of borrowings in the first quarter 2008 was US\$816.4 million, mostly related to the pre-payment of some of the Company's Mexican subsidiaries' outstanding debt. Ternium's net debt position (borrowings less cash and cash equivalents and other current investments) decreased by US\$780.7 million in the first quarter 2008 to US\$2.1 billion as of March 31, 2008, compared to net debt of US\$2.9 billion as of December 31, 2007. Total financial debt was US\$3.2 billion as of March 31, 2008, compared to US\$4.1 billion as of December 31, 2007.

³ Free cash flow equals net cash provided by operating activities of US\$120.1 million and US\$530.3 million less capital expenditures of US\$156.6 million and US\$102.4 million for the first quarter 2008 and 2007, respectively.

Forward Looking Statements

Some of the statements contained in this press release are "forward-looking statements". Forward-looking statements are based on management's current views and assumptions and involve known and unknown risks that could cause actual results, performance or events to differ materially from those expressed or implied by those statements. These risks include but are not limited to risks arising from uncertainties as to gross domestic product, related market demand, global production capacity, tariffs, cyclicality in the industries that purchase steel products and other factors beyond Ternium's control.

About Ternium

Ternium is one of the leading steel companies in the Americas, offering a wide range of flat and long steel products. With its main operations in Mexico, Venezuela and Argentina and 21,000 employees, Ternium had sales of approximately US\$8 billion and shipments of approximately 10 million tons of finished steel products in 2007. More information about Ternium is available at www.ternium.com.

Consolidated income statement

US\$ million	1Q 2008	1Q 2007	Dif.
Net sales	2,427.7	1,798.3	629.4
Cost of sales	(1,766.9)	(1,223.9)	(543.0)
Gross profit	660.8	574.4	86.4
Selling, general and administrative expenses	(237.0)	(164.5)	(72.4)
Other operating income, net	11.0	5.6	5.5
Operating income	434.9	415.4	19.4
Interest expense	(45.1)	(16.9)	(28.2)
Interest income	17.5	10.8	6.7
Other financial expenses, net	(55.8)	(76.1)	20.3
Equity in earnings (losses) of associated companies	0.3	(1.0)	1.3
Income before income tax expense	351.7	332.2	19.5
Current and deferred income tax expense	(65.8)	(80.5)	14.7
Reversal of deferred statutory profit sharing	96.3	0.0	96.3
Discontinued operations	101.4	0.0	101.4
Net income for the period	483.6	251.6	231.9
Attributable to:			
Equity holders of the Company	422.1	222.1	200.0
Minority interest	61.4	29.5	31.9
	483.6	251.6	231.9

Consolidated balance sheet

US\$ million	March 31, 2008	December 31, 2007
Property, plant and equipment, net	6,913.0	6,858.8
Intangible assets, net	1,463.8	1,452.2
Investment in associated companies	44.7	44.0
Other investments, net	15.3	14.8
Deferred tax assets	24.1	31.8
Receivables, net	77.5	217.6
Total non-current assets	8,538.3	8,619.3
Receivables	561.3	426.0
Derivative financial instruments	0.0	0.6
Inventories, net	2,128.4	1,913.1
Trade receivables, net	923.2	847.8
Other investments	66.1	65.3
Cash and cash equivalents	996.6	1,126.0
Total current assets	4,675.6	4,378.9
Non-current assets classified as held for sale	7.1	769.1
Total assets	13,221.1	13,767.3
Shareholders' equity	4,902.7	4,452.7
Minority interest in subsidiaries	1,978.3	1,914.2
Minority interest & shareholders' equity	6,881.0	6,366.9
Provisions	59.6	57.3
Deferred income tax	1,157.9	1,337.0
Tax liabilities	1.5	0.0
Other liabilities	364.5	336.5
Trade payables	6.6	6.7
Borrowings	2,631.8	3,677.5
Total non-current liabilities	4,221.7	5,415.1
Current tax liabilities	280.4	184.8
Other liabilities	179.7	182.2
Trade payables	1,085.1	983.9
Derivative financial instruments	29.5	13.3
Borrowings	543.9	407.4
Total current liabilities	2,118.5	1,771.6
Liabilities related to discontinued operations	0.0	213.8
Total liabilities	6,340.1	7,400.4
Total liabilities, minority interest & shareholders' equity	13,221.1	13,767.3

Consolidated cash flow statement			
US\$ million	1Q 2008	1Q 2007	Dif.
Net income for the period	483.6	251.6	231.9
Adjustments for:	103.0	251.0	231.9
Depreciation and amortization	157.7	115.3	42.4
Income tax accruals less payments	(108.0)	58.0	(166.0)
Equity in (earnings) losses of associated companies	(0.3)	1.0	(1.3)
Interest accruals less payments	(87.6)	(4.7)	(82.8)
Changes in provisions	5.4	(3.3)	8.8
Changes in working capital	(227.5)	110.3	(337.9)
Discontinued operations	(101.4)	-	(101.4)
Others	(1.8)	2.1	(4.0)
Net cash provided by operating activities	120.1	530.3	(410.2)
Capital expenditures	(156.6)	(102.4)	(54.3)
Increase in Other Investments	(0.8)	-	(0.8)
Proceeds from sale of property, plant & equipment	0.9	5.2	(4.3)
Discontinued operations	722.5	-	722.5
Net cash provided by (used in) investing activities	565.9	(97.2)	663.1
Proceeds from borrowings	105.0	120.1	(15.2)
Repayment of borrowings	(921.4)	(212.5)	(708.9)
Net cash used in financing activities	(816.4)	(92.4)	(724.0)

(130.4)

340.7

(Decrease) increase in cash and cash equivalents

(471.1)

		Shipments			
	Thousand tons		1Q 2008	1Q 2007	4Q 2007
South & Central America			1,088.4	1,111.8	1,173.2
North America			1,080.0	698.4	993.6
Europe & other			9.7	82.7	22.5
Total flat products			2,178.1	1,892.9	2,189.4
South & Central America			265.2	292.8	329.1
North America			265.3	313.3	268.9
Europe & other			8.8	0.0	15.0
Total long products			539.3	606.1	613.0
Total flat and long products			2,717.4	2,498.9	2,802.4
		Revenue / ton			
	US\$/ton		1Q 2008	1Q 2007	4Q 2007
South & Central America			882	739	822
North America			945	748	882
Europe & other			978	589	607
Total flat products			914	736	847
•					
South & Central America			677	563	609
North America			703	616	611
Europe & other			587		457
Total long products			688	590	606
Total flat and long products			869	701	794
	US\$ million	Net Sales	1Q 2008	1Q 2007	4Q 2007
South & Central America			960.1	821.8	964.3
North America			1,021.0	522.5	876.2
Europe & other			9.5	48.7	13.7
Total flat products			1,990.6	1,392.9	1,854.2
South & Central America			179.5	164.9	200.3
North America			186.4	192.9	164.4
Europe & other			5.2	0.0	6.9
Total long products			371.1	357.7	371.6
Total flat and long products			2,361.6	1,750.7	2,225.8
Other products (1)			66.1	47.6	41.5

Total net sales	2,427.7	1,798.3	2,267.2
(1) Includes iron ore and pig iron			