Ternium S.A. Form 6-K October 05, 2010

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 10/04/2010

Ternium S.A.

(Translation of Registrant's name into English)

Ternium S.A.
46a, Avenue John F. Kennedy 2nd floor

As of 10/04/2010 1

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.

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.

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

Not applicable

Not applicable 2

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 informing Ternium and Nippon Steel Corporation sign definitive agreements to establish a joint venture in Mexico.

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: <u>/s/ Pablo Brizzio</u> Name: Pablo Brizzio

Title: Chief Financial Officer

By: /s/ Daniel Novegil
Name: Daniel Novegil

Title: Chief Executive Officer

Dated: October 5, 2010

Sebastián Martí

Ternium - Investor Relations

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Ternium and Nippon Steel Corporation Sign Definitive Agreement to Establish a Joint Venture in Mexico

Luxembourg, October 4, 2010 [] Ternium S.A. (NYSE: TX) and Nippon Steel Corporation announced today that they have signed a definitive agreement to form a joint venture in Mexico for the manufacturing and sale of hot-dip galvanized and galvannealed steel sheets to serve the Mexican automobile market. The joint venture will operate under the name of Tenigal SRL de CV (Tenigal). Ternium and Nippon Steel will hold 51% and 49% participations in Tenigal, respectively.

Tenigal plans to build a hot-dip galvanizing plant in the vicinity of Monterrey City (equivalent to the state-of-the-art equipment now in operation at Nippon Steel□s steelworks in Japan) with a production capacity of 400,000 metric tons per year. Construction of the facility would require a total investment of approximately US\$350 million. The plant is expected to commence production of high-grade and high-quality galvanized and galvannealed automotive steel sheets, including outer-panel and high-strength qualities, in 2013.

The Mexican automobile market is a growing and important market for both Nippon Steel and Ternium, and continued growth is anticipated in the future. Tenigal is expected to serve the demanding requirements of the automotive industry in Mexico, including those of the Japanese car makers.

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 Nippon Steel

Nippon Steel, with its consolidated annual crude steel production of 40 million metric tons, is one of the leading steelmakers in the world. By virtue of its technical expertise of the world\[\] s highest level, which keeps on advancing day by day, and deployment of global and domestic strategic alliances, the company holds an unchallenged position in the global market of high-end steel products. More information about Nippon Steel is available at http://www.nsc.co.ip/en/index.html.

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About Ternium

Ternium is a leading steel company in Latin America, manufacturing and processing a wide range of flat and long steel products for customers active in the construction, home appliances, capital goods, container, food, energy and automotive industries. With its principal operations in Mexico and Argentina, Ternium serves markets in the Americas through its integrated manufacturing system and extensive distribution network. The Company has an annual production capacity of approximately ten million tons of finished steel products. More information about Ternium is available at www.ternium.com.

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