



TERNIUM S.A.

FORM 6-K

(Report Of Foreign Issuer)

Filed 02/15/23 for the Period Ending 12/31/22

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Telephone (727) 384-2323
CIK 0001342874
Symbol TX
SIC Code 3312 - Steel Works, Blast Furnaces & Rolling Mills (
Fiscal Year 12/31

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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 02/14/2023

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

Ternium S.A.
26 Boulevard Royal - 4th floor
L-2249 Luxembourg
(352) 2668-3152
(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 ☒ 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 ☒

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 consolidated financial statements as of December 31, 2022.

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/Pablo Brizzio
Name: Pablo Brizzio
Title: Chief Financial Officer

By:/s/Máximo Vedoya
Name: Máximo Vedoya
Title: Chief Executive Officer

Dated: February 14, 2023



TERNIUM S.A.

Consolidated Financial Statements

as of December 31, 2022 and 2021 and

for the years ended on December 31, 2022, 2021 and 2020

26 Boulevard Royal, 4th floor
L - 2449 Luxembourg
R.C.S. Luxembourg: B 98 668

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TERNIUM S.A.

Consolidated Financial Statements as of December 31, 2022 and 2021
and for the years ended December 31, 2022, 2021 and 2020
(All amounts in \$ thousands)

Consolidated Income Statements

	Notes	Year ended December 31,		
		2022	2021	2020
Net sales	4	16,414,466	16,090,744	8,735,435
Cost of sales	5	(12,487,282)	(9,895,070)	(7,099,923)
Gross profit		3,927,184	6,195,674	1,635,512
Selling, general and administrative expenses	6	(1,143,646)	(950,124)	(762,882)
Other operating (expense) income, net	8	(84,019)	25,586	206,843
Operating income		2,699,519	5,271,136	1,079,473
Finance expense	9	(46,737)	(26,997)	(46,644)
Finance income	9	75,145	62,912	49,421
Other financial (expenses) income, net	9	(98,541)	56,547	19,554
Equity in earnings of non-consolidated companies	13	37,114	400,732	57,555
Profit before income tax expense		2,666,500	5,764,330	1,159,359
Income tax expense	10	(573,728)	(1,397,139)	(291,488)
Profit for the year		2,092,772	4,367,191	867,871
Attributable to:				
Owners of the parent		1,767,516	3,825,068	778,468
Non-controlling interest		325,256	542,123	89,403
Profit for the year		2,092,772	4,367,191	867,871
Weighted average number of shares outstanding		1,963,076,776	1,963,076,776	1,963,076,776
Basic and diluted earnings per share for profit attributable to the owners of the parent (expressed in \$ per share)		0.90	1.95	0.40

The accompanying notes are an integral part of these consolidated financial statements.

TERNIUM S.A.

Consolidated Financial Statements as of December 31, 2022 and 2021
and for the years ended December 31, 2022, 2021 and 2020
(All amounts in \$ thousands)

Consolidated Statements of Comprehensive Income

	Year ended December 31,		
	2022	2021	2020
Profit for the year	2,092,772	4,367,191	867,871
Items that may be reclassified subsequently to profit or loss:			
Currency translation adjustment	1,253	(484)	160
Currency translation adjustment from participation in non-consolidated companies	41,455	(39,997)	(109,079)
Changes in the fair value of financial instruments at fair value through other comprehensive income	29,121	960	(3,100)
Income tax related to financial instruments at fair value	(11,045)	(299)	1,230
Changes in the fair value of derivatives classified as cash flow hedges	60	278	(266)
Income tax relating to cash flow hedges	(20)	(83)	80
Other comprehensive income items	1,705	—	(966)
Other comprehensive income items from participation in non-consolidated companies	159	(106)	400
Items that will not be reclassified subsequently to profit or loss:			
Remeasurement of post employment benefit obligations	24,567	46,777	(36,907)
Income tax relating to remeasurement of post employment benefit obligations	(6,994)	(13,965)	10,790
Remeasurement of post employment benefit obligations from participation in non-consolidated companies	6,862	1,662	15,081
Other comprehensive income (loss) for the year, net of tax	87,123	(5,257)	(122,577)
Total comprehensive income for the year	2,179,895	4,361,934	745,294
Attributable to:			
Owners of the parent	1,841,194	3,818,185	666,667
Non-controlling interest	338,701	543,749	78,627
Total comprehensive income for the year	2,179,895	4,361,934	745,294

The accompanying notes are an integral part of these consolidated financial statements.

TERNIUM S.A.

Consolidated Financial Statements as of December 31, 2022 and 2021
and for the years ended December 31, 2022, 2021 and 2020
(All amounts in \$ thousands)

Consolidated Statements of Financial Position

		Balances as of			
	Notes	December 31, 2022		December 31, 2021	
ASSETS					
Non-current assets					
Property, plant and equipment, net	11	6,261,887		6,431,578	
Intangible assets, net	12	944,409		902,256	
Investments in non-consolidated companies	13	821,571		751,475	
Other investments	17	100,716		67,277	
Deferred tax assets	19	200,237		160,745	
Receivables, net	14	318,690		177,803	
Trade receivables, net	15	—	8,647,510	229	8,491,363
Current assets					
Receivables, net	14	662,762		357,705	
Derivative financial instruments	21	227		4,353	
Inventories, net	16	3,470,215		3,908,305	
Trade receivables, net	15	1,180,689		1,767,196	
Other investments	17	1,875,026		1,290,459	
Cash and cash equivalents	17	1,653,355	8,842,274	1,276,605	8,604,623
Assets classified as held for sale			1,764		1,921
			8,844,038		8,606,544
Total Assets			17,491,548		17,097,907
EQUITY					
Capital and reserves attributable to the owners of the parent			11,845,959		10,535,019
Non-controlling interest			1,922,434		1,700,019
Total Equity			13,768,393		12,235,038
LIABILITIES					
Non-current liabilities					
Provisions	18	81,422		83,299	
Deferred tax liabilities	19	162,742		186,216	
Other liabilities	20	538,214		506,886	
Trade payables		1,112		989	
Lease liabilities	22	190,134		215,250	
Borrowings	23	532,701	1,506,325	656,465	1,649,105
Current liabilities					
Current income tax liabilities		135,703		873,759	
Other liabilities	20	344,843		345,123	
Trade payables		1,187,600		1,126,049	
Derivative financial instruments	21	505		1,889	
Lease liabilities	22	49,015		44,371	
Borrowings	23	499,164	2,216,830	822,573	3,213,764
Total Liabilities			3,723,155		4,862,869
Total Equity and Liabilities			17,491,548		17,097,907

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Changes in Equity

	Attributable to the owners of the parent (1)							Non-controlling interest	Total Equity	
	Capital stock (2)	Treasury shares (2)	Initial public offering expenses	Reserves (3)	Capital stock issue discount (4)	Currency translation adjustment	Retained earnings			Total
Balance as of January 1, 2022	2,004,743	(150,000)	(23,295)	1,360,637	(2,324,866)	(2,898,593)	12,566,393	10,535,019	1,700,019	12,235,038
Profit for the year							1,767,516	1,767,516	325,256	2,092,772
Other comprehensive income (loss) for the period										
Currency translation adjustment						39,525		39,525	3,183	42,708
Remeasurement of post employment benefit obligations				21,864				21,864	2,571	24,435
Cash flow hedges and others, net of tax				20				20	20	40
Others (5)				12,269				12,269	7,671	19,940
Total comprehensive income (loss) for the year	—	—	—	34,153	—	39,525	1,767,516	1,841,194	338,701	2,179,895
Dividends paid in cash (6)							(530,031)	(530,031)	—	(530,031)
Dividends paid in kind to non-controlling interest								—	(112,293)	(112,293)
Acquisition of non-controlling interest (7)				(223)				(223)	(3,993)	(4,216)
Balance as of December 31, 2022	2,004,743	(150,000)	(23,295)	1,394,567	(2,324,866)	(2,859,068)	13,803,878	11,845,959	1,922,434	13,768,393

(1) Shareholders' equity is determined in accordance with accounting principles generally accepted in Luxembourg.

(2) The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of \$ 1.00 per share. As of December 31, 2022, there were 2,004,743,442 shares issued. All issued shares are fully paid. Also, as of December 31, 2022, the Company held 41,666,666 shares as treasury shares.

(3) Include mainly legal reserve under Luxembourg law for \$ 200.5 million, undistributable reserves under Luxembourg law for \$ 1.4 billion, and reserves related to the acquisition of non-controlling interest in subsidiaries for \$ (72.2) million.

(4) Represents the difference between book value of non-monetary contributions received from shareholders under Luxembourg GAAP and IFRS.

(5) Includes mainly the changes of the fair value of financial instruments at fair value through other comprehensive income, net of tax.

(6) Represents \$ 0.27 per share (\$ 2.70 per ADS). Related to the dividends distributed on May 3 and on November 2, 2022, and as 41,666,666 shares are held as treasury shares by Ternium, the dividends attributable to these treasury shares amounting to \$ 11.2 million were included in equity as deduction of dividend paid.

(7) Corresponds to the acquisition of non-controlling interest participation of Ternium Argentina S.A..

Dividends may be paid by Ternium to the extent distributable retained earnings calculated in accordance with Luxembourg law and regulations exist. Therefore, retained earnings included in these consolidated financial statements may not be wholly distributable. See Note 24 (iii). The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Financial Statements as of December 31, 2022 and 2021
and for the years ended December 31, 2022, 2021 and 2020
(All amounts in \$ thousands)

Consolidated Statements of Changes in Equity

	Attributable to the owners of the parent (1)							Non-controlling interest	Total Equity	
	Capital stock (2)	Treasury shares (2)	Initial public offering expenses	Reserves (3)	Capital stock issue discount (4)	Currency translation adjustment	Retained earnings			Total
Balance as of January 1, 2021	2,004,743	(150,000)	(23,295)	1,329,945	(2,324,866)	(2,861,029)	9,310,617	7,286,115	1,157,038	8,443,153
Profit for the year							3,825,068	3,825,068	542,123	4,367,191
Other comprehensive income (loss) for the period										
Currency translation adjustment						(37,564)		(37,564)	(2,917)	(40,481)
Remeasurement of post employment benefit obligations				30,447				30,447	4,027	34,474
Cash flow hedges and others, net of tax				100				100	95	195
Others				134				134	421	555
Total comprehensive income (loss) for the year	—	—	—	30,681	—	(37,564)	3,825,068	3,818,185	543,749	4,361,934
Dividends paid in cash (5)							(569,292)	(569,292)	—	(569,292)
Acquisition of non-controlling interest (6)				11				11	(768)	(757)
Balance as of December 31, 2021	2,004,743	(150,000)	(23,295)	1,360,637	(2,324,866)	(2,898,593)	12,566,393	10,535,019	1,700,019	12,235,038

(1) Shareholders' equity is determined in accordance with accounting principles generally accepted in Luxembourg.

(2) The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of \$ 1.00 per share. As of December 31, 2021, there were 2,004,743,442 shares issued. All issued shares are fully paid. Also, as of December 31, 2021, the Company held 41,666,666 shares as treasury shares.

(3) Include mainly legal reserve under Luxembourg law for \$ 200.5 million, undistributable reserves under Luxembourg law for \$ 1.4 billion, and reserves related to the acquisition of non-controlling interest in subsidiaries for \$ (72.2) million.

(4) Represents the difference between book value of non-monetary contributions received from shareholders under Luxembourg GAAP and IFRS.

(5) Represents \$ 0.29 per share (\$ 2.90 per ADS). Related to the dividends distributed on May 3 and on November 2, 2021, and as 41,666,666 shares are held as treasury shares by Ternium, the dividends attributable to these treasury shares amounting to \$ 12.1 million were included in equity as deduction of dividend paid.

(6) Corresponds to the acquisition of non-controlling interest participation of Ternium Argentina S.A..

Dividends may be paid by Ternium to the extent distributable retained earnings calculated in accordance with Luxembourg law and regulations exist. Therefore, retained earnings included in these consolidated financial statements may not be wholly distributable. See Note 24 (iii). The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Changes in Equity

	Attributable to the owners of the parent (1)							Non-controlling interest	Total Equity	
	Capital stock (2)	Treasury shares (2)	Initial public offering expenses	Reserves (3)	Capital stock issue discount (4)	Currency translation adjustment	Retained earnings			Total
Balance as of January 1, 2020	2,004,743	(150,000)	(23,295)	1,332,980	(2,324,866)	(2,760,046)	8,532,149	6,611,665	1,103,208	7,714,873
Profit for the year							778,468	778,468	89,403	867,871
Other comprehensive income (loss) for the period										
Currency translation adjustment						(100,983)		(100,983)	(7,936)	(108,919)
Remeasurement of post employment benefit obligations				(9,340)				(9,340)	(1,696)	(11,036)
Cash flow hedges and others, net of tax				(95)				(95)	(91)	(186)
Others				(1,383)				(1,383)	(1,053)	(2,436)
Total comprehensive income (loss) for the year	—	—	—	(10,818)	—	(100,983)	778,468	666,667	78,627	745,294
Acquisition of non-controlling interest (5)				7,783				7,783	(24,797)	(17,014)
Balance as of December 31, 2020	2,004,743	(150,000)	(23,295)	1,329,945	(2,324,866)	(2,861,029)	9,310,617	7,286,115	1,157,038	8,443,153

(1) Shareholders' equity is determined in accordance with accounting principles generally accepted in Luxembourg.

(2) The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of \$ 1.00 per share. As of December 31, 2020, there were 2,004,743,442 shares issued. All issued shares are fully paid. Also, as of December 31, 2020, the Company held 41,666,666 shares as treasury shares.

(3) Include mainly legal reserve under Luxembourg law for \$ 200.5 million, undistributable reserves under Luxembourg law for \$ 1.4 billion and reserves related to the acquisition of non-controlling interest in subsidiaries for \$ (72.2) million.

(4) Represents the difference between book value of non-monetary contributions received from shareholders under Luxembourg GAAP and IFRS.

(5) Corresponds to the acquisition of non-controlling interest participation of Ternium Argentina S.A..

Dividends may be paid by Ternium to the extent distributable retained earnings calculated in accordance with Luxembourg law and regulations exist. Therefore, retained earnings included in these consolidated financial statements may not be wholly distributable. See Note 24 (iii). The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Cash Flows

Notes	Year ended December 31,		
	2022	2021	2020
Cash flows from operating activities			
Profit for the year	2,092,772	4,367,191	867,871
Adjustments for:			
Depreciation and amortization	11 & 12 616,492	591,790	631,051
Impairment charge	3 (f), 8 & 11 99,000	—	—
Income tax accruals less payments	26 (b) (1,195,561)	578,285	66,561
Equity in earnings of non-consolidated companies	13 (37,114)	(400,732)	(57,555)
Interest accruals less payments/receipts, net	26 (b) (24,795)	5,901	6,991
ICMS provision recovery, net of reversal of related asset	8 & 24 (i)(g) —	—	(186,010)
Changes in provisions	18 (1,069)	11,761	623
Changes in working capital (1)	26 (b) 1,152,498	(2,617,789)	352,795
Net foreign exchange results and others	50,720	140,908	78,919
Net cash provided by operating activities	2,752,943	2,677,315	1,761,246
Cash flows from investing activities			
Capital expenditures	11 & 12 (580,553)	(523,610)	(560,013)
Increase in other investments	17 (770,638)	(579,010)	(600,884)
Proceeds from the sale of property, plant and equipment	1,912	1,752	1,044
Dividends received from non-consolidated companies	28,884	56,275	—
Acquisition of non-controlling interest	(4,216)	(757)	(17,014)
Net cash used in investing activities	(1,324,611)	(1,045,350)	(1,176,867)
Cash flows from financing activities			
Dividends paid in cash to company's shareholders	(530,031)	(569,292)	—
Finance lease payments	(49,410)	(45,604)	(42,144)
Proceeds from borrowings	285,908	246,046	245,668
Repayments of borrowings	(722,644)	(485,526)	(709,778)
Net cash used in financing activities	(1,016,177)	(854,376)	(506,254)
Increase in cash and cash equivalents	412,155	777,589	78,125
Movement in cash and cash equivalents			
At January 1,	1,276,605	537,882	519,965
Effect of exchange rate changes	(35,405)	(38,866)	(60,208)
Increase in cash and cash equivalents	412,155	777,589	78,125
Cash and cash equivalents at December 31, (2)	1,653,355	1,276,605	537,882
Non-cash transactions:			
Dividends paid in kind to non-controlling interest	(112,293)	—	—
Acquisition of PP&E under lease contract agreements	13,961	13,758	6,101

(1) The working capital is impacted by non-cash movement of \$ 24.9 million as of December 31, 2022 (\$ (12.5) million and \$ (18.0) million as of December 31, 2021 and 2020, respectively) due to the variations in the exchange rates used by subsidiaries with functional currencies different from the U.S. dollar.

(2) It includes restricted cash of \$ 30, \$ 58 and \$ 54 as of December 31, 2022, 2021 and 2020, respectively. In addition, the Company had other investments with a maturity of more than three months for \$ 1,975,490, \$ 1,357,484 and \$ 816,157 as of December 31, 2022, 2021 and 2020, respectively.

The accompanying notes are an integral part of these consolidated financial statements.

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Notes to the Consolidated Financial Statements

1. GENERAL INFORMATION

Ternium S.A. (the “Company” or “Ternium”), was incorporated on December 22, 2003 to hold investments in flat and long steel manufacturing and distributing companies. The Company has an authorized share capital of a single class of 3.5 billion shares having a nominal value of \$ 1.00 per share. As of December 31, 2022, there were 2,004,743,442 shares issued. All issued shares are fully paid.

Ternium’s American Depositary Shares (“ADSs”) trade on the New York Stock Exchange under the symbol “TX”.

The Company was initially established as a public limited liability company (société anonyme) under Luxembourg’s 1929 holding company regime. Until termination of such regime on December 31, 2010, holding companies incorporated under the 1929 regime (including the Company) were exempt from Luxembourg corporate and withholding tax over dividends distributed to shareholders.

On January 1, 2011, the Company became an ordinary public limited liability company (société anonyme) and, effective as from that date, the Company is subject to all applicable Luxembourg taxes (including, among others, corporate income tax on its worldwide income) and its dividend distributions will generally be subject to Luxembourg withholding tax. However, dividends received by the Company from subsidiaries in high income tax jurisdictions, as defined under Luxembourg law, will continue to be exempt from corporate income tax in Luxembourg under Luxembourg’s participation exemption.

As part of the Company’s corporate reorganization in connection with the termination of Luxembourg’s 1929 holding company regime, on December 6, 2010, the Company contributed its equity holdings in all its subsidiaries and all its financial assets to its Luxembourg wholly-owned subsidiary Ternium Investments S.à r.l., or Ternium Investments, in exchange for newly issued corporate units of Ternium Investments. As the assets contributed were recorded at their historical carrying amount in accordance with Luxembourg GAAP, the Company’s December 2010 contribution of such assets to Ternium Investments resulted in a non-taxable revaluation of the accounting value of the Company’s assets under Luxembourg GAAP. The amount of the December 2010 revaluation was equal to the difference between the historical carrying amounts of the assets contributed and the value at which such assets were contributed and amounted to \$ 4.0 billion. However, for the purpose of these consolidated financial statements, the assets contributed by Ternium to its wholly-owned subsidiary Ternium Investments were recorded based on their historical carrying amounts in accordance with IFRS, with no impact on the financial statements.

Following the completion of the corporate reorganization, and upon its conversion into an ordinary Luxembourg holding company, the Company voluntarily recorded a special reserve exclusively for tax-basis purposes. As of December 31, 2022 and 2021, this special tax reserve amounted to \$ 5.2 billion and \$ 5.8 billion, respectively. The Company expects that, as a result of its corporate reorganization, its current overall tax burden will not increase, as all or substantially all of its dividend income will come from high income tax jurisdictions.

2. BASIS OF PRESENTATION

a) Basis of presentation

These consolidated financial statements have been prepared in accordance with IFRS (International Financial Reporting Standards) issued and effective or issued and early adopted as at the time of preparing these statements (February 2023), as issued by the International Accounting Standards Board and in conformity with International Financial Reporting Standards as adopted by the European Union ("EU"). These consolidated financial statements are presented in thousands of United States dollars ("\$"), except otherwise indicated.

These Consolidated financial statements fairly present the consolidated equity and consolidated financial situation of Ternium as of December 31, 2022 and 2021, and the consolidated results of its operations, the Changes in the Consolidated Statement of Comprehensive Income, the Changes in Consolidated Net Equity and the Consolidated Cash Flows of Ternium for the years ended December 31, 2022, 2021 and 2020.

Elimination of all material intercompany transactions and balances between the Company and their respective subsidiaries has been made in consolidation.

These consolidated financial statements have been prepared under the historical cost convention and certain financial assets and financial liabilities (including derivative instruments) are at fair value through profit or loss.

These consolidated financial statements have been approved for issue by the Board of Directors on February 14, 2023. The Directors have the power to amend and reissue the consolidated financial statements.

Detailed below are the companies whose financial statements have been consolidated and accounted for interest in these consolidated financial statements.

2. BASIS OF PRESENTATION (continued)

Company	Country of Organization	Main activity	Percentage of ownership at December 31,		
			2022	2021	2020
Ternium S.A.	Luxembourg	Holding	100.00 %	100.00 %	100.00 %
Ternium Investments S.à.r.l.	Luxembourg	Holding	100.00 %	100.00 %	100.00 %
Ternium Internacional España S.L. (1)	Spain	Holding and marketing of steel products	100.00 %	100.00 %	100.00 %
Ternium Solutions S.A. (1)	Uruguay	Other services	100.00 %	100.00 %	100.00 %
Ternium Internationaal B.V. (1)	Netherlands	Marketing of steel products	100.00 %	100.00 %	100.00 %
Ternium USA Inc. (2)	USA	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium Argentina S.A. (3)	Argentina	Manufacturing and selling of flat steel products	62.57 %	62.49 %	62.46 %
Prosid Investments S.A. (4)	Uruguay	Holding	62.58 %	62.49 %	62.46 %
Ternium Mexico S.A. de C.V. (5)	Mexico	Manufacturing and selling of steel products	89.25 %	89.22 %	89.21 %
Las Encinas S.A. de C.V. (6)	Mexico	Exploration, exploitation and pelletizing of iron ore	89.25 %	89.22 %	89.21 %
Ferropak Comercial S.A. de C.V. (6)	Mexico	Scrap services company	89.25 %	89.22 %	89.21 %
Transamerica E. & I. Trading Corp. (6)	USA	Scrap services company	89.25 %	89.22 %	89.21 %
Galvacer Chile S.A. (6)	Chile	Distributing company	89.25 %	89.22 %	89.21 %
Ternium Gas México S.A. de C.V. (7)	Mexico	Energy services company	89.25 %	89.22 %	89.21 %
Consortio Minero Benito Juárez Peña Colorada S.A. de C.V. (8)	Mexico	Exploration, exploitation and pelletizing of iron ore	44.62 %	44.61 %	44.61 %
Exiros B.V. (8)	Netherlands	Procurement and trading services	50.00 %	50.00 %	50.00 %
Servicios Integrales Nova de Monterrey S.A. de C.V. (9)	Mexico	Medical and Social Services	66.49 %	66.47 %	66.47 %
Ternium Internacional Nicaragua S.A.	Nicaragua	Manufacturing and selling of steel products	99.38 %	99.38 %	99.38 %
Ternium Internacional Honduras S.A. de C.V.	Honduras	Manufacturing and selling of steel products	99.18 %	99.18 %	99.18 %
Ternium Internacional El Salvador S.A. de C.V.	El Salvador	Manufacturing and selling of steel products	99.92 %	99.92 %	99.92 %
Ternium Internacional Costa Rica S.A.	Costa Rica	Manufacturing and selling of steel products	99.98 %	99.98 %	99.98 %
Ternium Internacional Guatemala S.A. (10)	Guatemala	Manufacturing and selling of steel products	99.98 %	99.98 %	99.98 %
Ternium Colombia S.A.S. (11)	Colombia	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium del Cauca S.A.S. (11)	Colombia	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium del Atlántico S.A.S. (11)	Colombia	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Ternium Procurement S.A. (11)	Uruguay	Marketing of steel products and procurement services	100.00 %	100.00 %	100.00 %
Technology & Engineering Services S.A. (11)	Uruguay	Engineering and other services	100.00 %	100.00 %	100.00 %
Ternium Brasil Ltda. (12)	Brazil	Manufacturing and selling of steel products	100.00 %	100.00 %	100.00 %
Tenigal S. de R.L. de C.V. (13)	Mexico	Manufacturing and selling of steel products	51.00 %	51.00 %	51.00 %
Soluciones Integrales de Gestión S.A. (14)	Argentina	Other services	100.00 %	100.00 %	100.00 %
Ternium Participações S.A. em liquidação (14)	Brazil	Holding	100.00 %	100.00 %	100.00 %
Vientos de Olavarría S.A. (15)	Argentina	Renewable energy project	62.57 %	—	—
Ternium Siderúrgica de Caldas S.A.S. (16)	Colombia	Manufacturing and selling of steel products	—	100.00 %	100.00 %
Impeco S.A. (17)	Argentina	Manufacturing of pipe products	—	62.49 %	62.49 %
Hylsa S.A. de C.V. (18)	Mexico	Manufacturing and selling of steel products	—	—	89.21 %

2. BASIS OF PRESENTATION (continued)

Company	Country of Organization	Main activity	Percentage of ownership at December 31,		
			2022	2021	2020
Técnica Industrial S.A. de C.V. (18)	Mexico	Services	—	—	89.21 %
Peña Colorada Servicios S.A. de C.V. (19)	Mexico	Services	—	—	44.61 %
Ternium Treasury Services S.A. (20)	Uruguay	Financial Services	—	—	100.00 %

(1) Indirectly through Ternium Investments S.à.r.l. Total voting rights held: 100.00%.

(2) Since the second quarter of 2021, indirectly through Ternium Internacional España S.L. Total voting rights held 100.00%. Before that, indirectly through Ternium Investments S.à.r.l. total voting rights was 100.00% in 2020.

(3) Indirectly through Ternium Internacional España S.L. Total voting rights held 62.57%.

(4) Indirectly through Ternium Argentina S.A. and Ternium Procurement S.A. Total voting rights held 100.00%.

(5) Indirectly through Ternium Argentina S.A. and Ternium Internacional España S.L. Total voting rights held 100.00%.

(6) Indirectly through Ternium Mexico S.A. de C.V. Total voting rights held: 100.00%.

(7) Indirectly through Ternium Mexico S.A. de C.V. and Tenigal S. de R.L. de C.V. Total voting rights held: 100.00%.

(8) Total voting rights held: 50.00%. The Company recognizes the assets, liabilities, revenue and expenses in relation to its interest in the joint operation.

(9) Indirectly through Ternium Mexico S.A. de C.V. Total voting rights held: 74.50%.

(10) Indirectly through Ternium Internacional España S.L. and Ternium Mexico S.A. de C.V. Total voting rights held: 100.00%.

(11) Indirectly through Ternium Internacional España S.L. Total voting rights held: 100.00%.

(12) Since the second quarter of 2020, indirectly through Ternium Internacional España S.L. Total voting rights held: 100.00%. Before that, indirectly through Ternium Investments S.à.r.l.

(13) Indirectly through Ternium Internacional España S.L. Total voting rights held: 51.00%.

(14) Indirectly through Ternium Investments S.à.r.l. and Ternium Internacional España S.L. Total voting rights held 100.00%.

(15) Indirectly through Ternium Argentina S.A. Total voting rights held: 100.00%.

(16) This company was merged into Ternium Colombia S.A.S as of November 30, 2022.

(17) This company was dissolved as of February 16, 2022.

(18) This company was merged into Ternium Mexico S.A. de C.V. as of August 9, 2021.

(19) This company was merged into Consorcio Minero Benito Juarez Peña Colorada S.A.de C.V. as of July 6, 2021.

(20) This company was dissolved as of April 12, 2021.

The most important non-controlling interest is related to the investment in Ternium Argentina S.A., which is a company listed in the Buenos Aires Stock Exchange (see note 29). All the information related to this investment could be found in the Buenos Aires Stock Exchange webpage.

3. ACCOUNTING POLICIES

The following is a summary of the principal accounting policies followed in the preparation of these Consolidated Financial Statements:

(a) Group accounting

(1) Subsidiary companies and transactions with non-controlling interests

Subsidiaries are all entities over which the Company has control. The Company controls an entity when the Company is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Company. They are deconsolidated from the date that control ceases.

The Company uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair values of the assets transferred, the liabilities incurred and the equity interests issued by the Company. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at the fair values at the acquisition date. Indemnification assets are recognized at the same time that the Company recognizes the indemnified item and measures them on the same basis as the indemnified item, subject to the need for a valuation allowance for uncollectible amounts. The Company measures the value of a reacquired right recognized as an intangible asset on the basis of the remaining contractual term of the related contract regardless of whether market participants would consider potential contractual renewals in determining its fair value.

The Company recognizes any non-controlling interest in the acquiree at the non-controlling interest's proportionate share of the acquiree's net identifiable assets.

The excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the Company's share of the identifiable net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognized directly in the income statement.

The measurement period is the earlier of the date that the acquirer receives the information that it is looking for or cannot obtain the information and one year after the acquisition date. Where the accounting for a business combination is not complete by the end of the reporting period in which the business combination occurred provisional amounts are reported.

The Company treats transactions with non-controlling interests as transactions with equity owners of the Company. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

3. ACCOUNTING POLICIES (continued)

When the Company ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

Inter-company transactions, balances and unrealized gains on transactions between group companies are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the group. However, the fact that the functional currency of some subsidiaries is their respective local currency, generates some financial gains (losses) arising from intercompany transactions, that are included in the consolidated income statement under Other financial expenses, net.

(2) Investments in non-consolidated companies

Associated companies are those entities in which Ternium has significant influence, but which it does not control.

Joint arrangements are understood as combinations in which there are contractual agreements by virtue of which two or more companies hold an interest in companies that undertake operations or hold assets in such a way that any financial or operating decision is subject to the unanimous consent of the partners. A joint arrangement is classed as a joint operation if the parties hold rights to its assets and have obligations in respect of its liabilities or as a joint venture if the venturers hold rights only to the investee's net assets.

Investments in non-consolidated companies (associated companies and joint ventures) are accounted for using the equity method of accounting. Under this method, interests in joint ventures and associates are initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Company's share of the post-acquisition profits or losses in the income statement, and its share of post-acquisition changes in reserves recognized in reserves and in other comprehensive income in the income statement. Unrealized gains on transactions among the Company and its non-consolidated companies are eliminated to the extent of the Company's interest in such non-consolidated companies; unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. When the Company's share of losses in a non-consolidated company equals or exceeds its interest in such non-consolidated company, the Company does not recognize further losses unless it has incurred obligations or made payments on behalf of such non-consolidated company.

The Company's investment in associates and joint ventures includes notional goodwill identified on acquisition.

The Company determines at each reporting date whether there is any objective evidence that the investment is impaired. If this is the case, the group calculates the amount of impairment as the difference between the recoverable amount of the investment and its carrying value and recognizes the amount within "Equity on earnings (losses) of non-consolidated companies".

3. ACCOUNTING POLICIES (continued)

(b) Foreign currency translation

(1) *Functional and presentation currency*

Items included in the financial statements of each of the Company's subsidiaries and associated companies are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). Except for the non-consolidated companies whose functional currencies are their local currencies, Ternium determined that the functional currency of its subsidiaries is the U.S. dollar. Although Ternium is located in Luxembourg, it operates in several countries with different currencies. The \$ is the currency that best reflects the economic substance of the underlying events and circumstances relevant to Ternium as a whole.

(2) *Subsidiary companies*

The results and financial position of all the group entities (except for the ones which operated in a hyperinflationary economy, if any) that have a functional currency different from the presentation currency, are translated into the presentation currency as follows:

- (i) assets and liabilities are translated at the closing rate of each statement of financial position;
- (ii) income and expenses for each income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
- (iii) all resulting translation differences are recognized within other comprehensive income.

In the case of a sale or other disposition of any such subsidiary, any accumulated translation differences would be recognized in the income statement as part of the gain or loss on sale.

(3) *Transactions in currencies other than the functional currency*

Transactions in currencies other than the functional currency are translated into the functional currency using the exchange rates prevailing at the date of the transactions or valuation where items are re-measured.

At the end of each reporting period: (i) monetary items denominated in currencies other than the functional currency are translated using the closing rates, (ii) non-monetary items that are measured in terms of historical cost in a currency other than the functional currency are translated using the exchange rates prevailing at the date of the transactions; and (iii) non-monetary items that are measured at fair value in a currency other than the functional currency are translated using the exchange rates prevailing at the date when the fair value was determined.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in currencies other than the functional currency are recorded as gains and losses from foreign exchange and included in "Other financial income (expenses), net" in the consolidated income statement, except when deferred in equity as qualifying cash flow hedges and qualifying net investment hedges. Translation differences on non-monetary financial assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the "fair value gain or loss," while translation differences on non-monetary financial assets such as equities classified as fair value through other comprehensive income are included in other gains/(losses).

3. ACCOUNTING POLICIES (continued)

(c) Financial instruments

Non derivative financial instruments

Non derivative financial instruments comprise investments in equity and debt securities, trade and other receivables, cash and cash equivalents, loans and borrowings, and trade and other payables.

The Company classifies its financial instruments in the following measurement categories:

- Amortized cost: instruments that are held for collection or repayment of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. Interest income and expenses from these financial instruments are included in finance income or expense using the effective interest rate method. Any gain or loss arising on derecognition is recognized directly in profit or loss and presented in finance income or expense, together with foreign exchange gains and losses. Impairment losses are presented as separate line items in the statement of profit or loss.
- Fair value through other comprehensive income ("FVOCI"): financial instruments that are held for collection of contractual cash flows and for selling the financial instruments, where the instruments' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest revenue or expense, and foreign exchange gains and losses which are recognized in profit or loss. When the financial instrument is derecognized, the cumulative gain or loss previously recognized in OCI is reclassified from equity to profit or loss and recognized in other gains/(losses), except for equity instruments, for which there is no reclassification from OCI to profit or loss. Interest income or expense from these financial instruments is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in other gains/(losses) and impairment expenses are presented as separate line item in the statement of profit or loss.
- Fair value through profit or loss ("FVPL"): financial instruments that do not meet the criteria for amortized cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognized in profit or loss and presented net within other gains/(losses) in the period in which it arises.

The classification depends on the Company's business model for managing the financial instruments and the contractual terms of the cash flows.

For financial instruments measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the group has made an irrevocable election at the time of initial recognition to account for the equity investment at FVOCI.

At initial recognition, the Company measures a financial instrument at its fair value plus, in the case of a financial instrument not at FVPL, transaction costs that are directly attributable to the acquisition of the financial instrument. Transaction costs of financial instruments carried at FVPL are expensed in profit or loss. Subsequent measurement of debt instruments depends on the Company's business model for managing the asset and the cash flow characteristics of the asset.

3. ACCOUNTING POLICIES (continued)

The classification depended on the nature and purpose of the financial assets and was determined at the time of initial recognition.

Financial assets and liabilities were recognized and derecognized on the settlement date.

Financial assets were initially measured at fair value, net of transaction costs, except for those financial assets classified as financial assets at fair value through profit or loss.

Financial liabilities, including borrowings, were initially measured at fair value, net of transaction costs and subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis.

Impairment of financial assets

The Company assesses on a forward-looking basis the expected credit losses associated with its debt instruments carried at amortized cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Company applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognized from initial recognition of the receivables, see note 3 (i) for further details.

For loans and receivables category and for held-to-maturity investments, the amount of the loss was measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate. The carrying amount of the asset was reduced and the amount of the loss was recognized in the consolidated income statement.

If, in a subsequent period, the amount of the impairment loss decreased and the decrease could be related objectively to an event occurring after the impairment was recognized, the reversal of the previously recognized impairment loss was recognized in the consolidated income statement.

Derivative financial instruments

Information about accounting for derivative financial instruments and hedging activities is included in Note 28 "Financial Risk management" and Note 3 (y).

3. ACCOUNTING POLICIES (continued)**(d) Property, plant and equipment***(1) Property, plant and equipment*

Land and buildings comprise mainly factories and offices. All property, plant and equipment are recognized at historical acquisition or construction cost less accumulated depreciation and accumulated impairment (if applicable), except for land, which is carried at acquisition cost less accumulated impairment (if applicable). There are no material residual values for property, plant and equipment items.

Major overhaul and rebuilding expenditures are recognized as a separate asset when future economic benefits are expected from the item, and the cost can be measured reliably.

Ordinary maintenance expenses on manufacturing properties are recorded as cost of products sold in the period in which they are incurred.

Where a tangible fixed asset comprises major components having different useful lives, these components are accounted for as separate items. Spare parts are included in property, plant and equipment.

Depreciation method is reviewed at each year end. Depreciation is calculated using the straight-line method to amortize the cost of each asset to its residual value over its estimated useful life as follows:

Land	No depreciation
Buildings and improvements	10-50 years
Production equipment	5-40 years
Vehicles, furniture and fixtures and other equipment	3-20 years

Property, plant and equipment used in mining activities are depreciated over its useful life or over the remaining life of the mine if shorter and there is no alternative use possible.

The assets' useful lives are reviewed, and adjusted if appropriate, at each year end. The re-estimation of assets useful lives by the Company did not materially affect depreciation charges in 2022, 2021 and 2020.

Gains and losses on disposals are determined by comparing the proceeds with the corresponding carrying amounts and are included in the income statement.

If the carrying amount of an asset were greater than its estimated recoverable amount, it would be written down to its recoverable amount (see Note 3 (f) "Impairment").

Amortization charges are included in cost of sales, selling, general and administrative expenses.

3. ACCOUNTING POLICIES (continued)

(2) Right-of-use assets

The Company is a party to lease contracts for:

- Land
- Plants and equipment for the production of industrial gases and other production materials.
- Transportation and maintenance equipment.
- Warehouses and office spaces.

These leases are recognized, measured and presented in accordance to IFRS 16 "Leases", following the guidelines described below.

Accounting by the lessee

The Company recognizes a right-of-use asset and a lease liability at the commencement date of each lease contract that grants the right to control the use of an identified asset during a period of time. The commencement date is the date in which the lessor makes an underlying asset available for use by the lessee.

The Company applied exemptions for leases with a duration lower than 12 months, with a value lower than thirty thousand U.S. dollars and/or with clauses related to variable payments. These leases have been considered as short-term leases and, accordingly, no right-of-use asset or lease liability have been recognized.

At initial recognition, the right-of-use asset is measured considering:

- The value of the initial measurement of the lease liability;
- Any lease payments made at or before the commencement date, less any lease incentives; and
- Any initial direct costs incurred by the lessee.

After initial recognition, the right-of-use assets are measured at cost, less any accumulated depreciation and/or impairment losses, and adjusted for any re-measurement of the lease liability.

Depreciation of the right-of-use asset is calculated using the straight-line method over the estimated duration of the lease contract, as follows:

Land	1-32 years
Buildings and facilities	1-27 years
Machinery	1-15 years

If the lease transfers ownership of the underlying asset to the Company by the end of the lease term, or if the cost of the right-of-use asset reflects that the Company will exercise a purchase option, the Company depreciates the right-of-use asset from the commencement date to the end of the useful life of the underlying asset. Otherwise, the Company depreciates the right-of-use asset from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term.

Accounting by the lessor

When the Company is acting as a lessor, each of its leases is classified as either operating or finance lease:

- Leases where a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases.
- Leases where all substantial risks and rewards of ownership are transferred by the lessor to the lessee are classified as finance leases.

3. ACCOUNTING POLICIES (continued)

(e) Intangible assets

(1) Information system projects

Generally, costs associated with developing or maintaining computer software programs are recognized as an expense as incurred. However, costs directly related to the acquisition and implementation of information systems are recognized as intangible assets if they have a probable economic benefit exceeding the cost beyond one year and comply with the recognition criteria of IAS 38.

Information system projects recognized as assets are amortized using the straight-line method over their useful lives, not exceeding a period of 3 years. Amortization charges are included in cost of sales, selling, general and administrative expenses.

(2) Mining assets

Mining assets include:

- (a) Mining licenses acquired;
- (b) Capitalized exploration and evaluation costs, reclassified from exploration and evaluation costs (see note 3 (e) 3); and
- (c) Capitalized developmental stripping costs (see note 3 (u)).

Mining licenses were recognized as separate intangible assets upon the acquisition of the investment in Mexico and comprise the right to exploit the mines and are recognized at its fair value at acquisition date less accumulated amortization.

These mining concessions were granted for a 50-year period; following the expiration of the initial concession term, the concessions are renewable for an additional 50-year term in accordance with, and subject to the procedures set forth in, applicable Mexican mining law.

Amortization charge is calculated by using the unit-of-production method, on the basis of actual mineral extracted in each period compared to the estimated mineral reserves, and is included in cost of sales. Any change in the estimation of reserves is accounted for prospectively. The resulting amortization rate for the years ended December 31, 2022, 2021 and 2020, is approximately 12%, 7% and 4% per year, respectively.

3. ACCOUNTING POLICIES (continued)

(3) Exploration and evaluation costs

Exploration and evaluation activities involve the search for iron ore resources, the determination of technical feasibility and the assessment of commercial viability of an identified resource.

Exploration and evaluation costs are measured at cost. Costs directly associated with exploration and evaluation activities are capitalized as intangible assets until the determination of reserves is evaluated. The costs associated to the acquisition of machinery and equipment are recognized as property, plant and equipment. If it is determined that commercial discovery has been achieved, costs incurred are reclassified into Mining assets and amortization starts once production begins.

Exploration costs are tested for impairment whenever there are indicators that impairment exists. Indicators of impairment include, but are not limited to:

- Rights to explore in an area have expired or will expire in the near future without renewal;
- No further exploration and evaluation is planned or budgeted;
- A decision to discontinue exploration and evaluation in an area because of the absence of commercial reserves; and
- Sufficient data exists to indicate that the book value will not be fully recovered from future development and production.

When analyzing the existence of impairment indicators, the exploration and evaluation areas from the mining units will be evaluated.

(4) Goodwill

Goodwill represents the excess of the acquisition cost over the fair value of Ternium's participation in acquired companies' net assets at the acquisition date. Under IAS 36, goodwill is considered to have an indefinite life and not amortized, but is subject to annual impairment testing.

Goodwill is allocated to Cash-generating units ("CGU") for the purpose of impairment testing. The allocation is made to those cash-generating units expected to benefit from the business combination which generated the goodwill being tested. The impairment losses on goodwill cannot be reversed.

As of December 31, 2022 and 2021, the carrying amount of goodwill allocated to the Mexico CGUs was \$ 662.3 million, of which \$ 619.8 million corresponds to Steel Mexico CGU and \$ 42.5 million to Mining Mexico CGU.

(5) Research and development

Research expenditures are recognized as expenses as incurred. Development costs are recorded as cost of sales in the income statement as incurred because they do not fulfill the criteria for capitalization. Research and development expenditures for the years ended December 31, 2022, 2021 and 2020 totaled \$ 16.3 million, \$ 9.8 million and \$ 8.3 million, respectively.

3. ACCOUNTING POLICIES (continued)

(6) Customer relationships acquired in a business combination

In accordance with IFRS 3 and IAS 38, Ternium has recognized the value of customer relationships in connection with the acquisition of Ternium Staal B.V. as of September 7, 2017. The value of the slab commitment agreement by which Ternium Investments S.à r.l. was entitled to invoice, under certain conditions, the price difference between slabs and hot rolled coils has been amortized using the units of slabs sold method. As of December 31, 2021, the asset related to this slab commitment agreement was fully amortized.

(7) Trademarks acquired in a business combination

Trademarks are amortized using the straight-line method over a useful life of between 5 to 10 years.

(f) Impairment

Assets that have an indefinite useful life (including goodwill) are not subject to amortization and are tested annually for impairment or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Assets that are subject to amortization and investments in affiliates are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less cost to sell and the value in use.

To carry out these tests, assets are grouped at the lowest levels for which there are separately identifiable cash flows (each, a CGU). When evaluating long-lived assets for potential impairment, the Company estimates the recoverable amount based on the higher of the CGU's fair value less costs to sell and its value in use. The value in use of each CGU is determined on the basis of the present value of net future cash flows which will be generated by the assets tested.

Determining the present value of future cash flows involves highly sensitive estimates and assumptions specific to the nature of each CGU's activities, including estimates and assumptions relating to amount and timing of projected future cash flows. Application of the discounted cash flow (DCF) method to determine the value in use of a CGU begins with a forecast of all expected future net cash flows. Significant assumptions considered in forecasts include the gross domestic product (GDP) growth rates of the country under study and their correlation with steel demand, changes in the growth rate for the perpetuity rate, changes in steel prices, changes in certain significant raw material costs and changes in discount rates.

Ternium uses, for the steel segment impairment tests, cash flow projections over a five-year period based on past performance and expectations of market development; for the subsequent years beyond the five-year period, a terminal value was calculated based on perpetuity. The growth rate used for the perpetuity rate is of 2.18%. This rate does not exceed the average long-term growth rate for the relevant markets. In the case of Mining Mexico CGU, cash flow projections are prepared until the mines are fully depleted and are based on past performance and expectations of market development.

Cash flows are discounted at rates that reflect specific country and currency risks associated with the cash flow projections. The discount rates used are based on the weighted average cost of capital (WACC), which is considered to be a good indicator of cost of capital.

3. ACCOUNTING POLICIES (continued)

Considering the economic situation in Argentina, the increase in the inflation rates, the devaluation of the Argentine peso and a weaker industrial environment as of June 30, 2020, the Company decided to assess the recoverability of its investments in Argentina, resulting in no impairment charges to be recognized. As of June 30, 2020, the post-tax discount rate used to test the investment in Argentine subsidiaries for impairment was 14.3%. As of December 31, 2022 and 2021, no new impairment triggers were detected in this CGU and, consequently, no impairment test was prepared.

In the case of the Steel Mexico CGU, considering the volatility of macroeconomic indicators, the decrease in the sales margin per ton, the increase in raw material costs mainly iron ore and slabs, along with the expectations of higher costs in the upcoming years, partially offset by the increase in steel prices, and the increase in the discount rate, the Company decided to assess the recoverability of its investments in the Steel Mexico CGU, resulting in no impairment charges to be recognized. Also, in the case of the Mining Mexico CGU, considering the decrease in the sales margin per ton, the decrease in the operating income before depreciation and amortization margin and the increase in the interest rate, the Company decided to assess the recoverability of its investments in the Mining Mexico CGU, resulting in no impairment charges to be recognized. As of December 31, 2022, the post-tax discount rate used to test the recoverability of the investments in the Steel and Mining Mexico CGUs for impairment was 11.28% (as of December 31, 2021, 9.93%). Based on the information currently available, Ternium believes that it is not reasonably possible that the variation would cause the carrying amount to exceed the recoverable amount of the Mexico CGUs.

Considering the economic situation in Brazil as of June 30, 2020, the Company decided to assess the recoverability of its investments in the Brazil CGU, resulting in no impairment charges to be recognized. The Brazil CGU comprises the manufacturing operations and assets related to a production plant located in Rio de Janeiro, Brazil. As of June 30, 2020, the post-tax discount rate used to test the investment in the Brazil CGU for impairment was 10.3%. As of December 31, 2021, no new impairment triggers were detected in this CGU and, consequently, no impairment test was prepared. As of December 31, 2022, considering the volatility of macroeconomic indicators, the decrease in the sales margin per ton, the increase in raw material costs mainly iron ore and hard coking coal, along with the expectations of higher costs in the upcoming years, partially offset by the increase in steel prices, and the increase in the interest rate, the Company decided to assess the recoverability of its investment in the Brazil CGU, resulting in the recognition of an impairment charge. As the Brazil CGU does not have any recorded goodwill, this impairment charge needs to be allocated to the other assets of the CGU on the basis of the carrying amount of each asset in the CGU. Management decided to record this impairment charge of \$ 99.0 million over the property, plant and equipment. After recognizing this impairment charge, the recoverable value of the Brazil CGU was of \$ 1,841 million. This impairment charge impacted the Steel segment. The post-tax discount rate to test the recoverability of the investment in the Brazil CGU as of December 31, 2022, was 11.91%. The Company estimates that a decrease of 0.5% in the discount rate, an increase of 5.0% in steel sales volumes and an increase of 5.0% in the operating income before amortization and depreciation per ton would have resulted in an increase of 29.3% in the value-in-use, and an increase of 0.5% in the discount rate, a decrease of 5.0% in steel sales volumes and a decrease of 5.0% in the operating income before amortization and depreciation per ton would have resulted in a decrease of 28.8% in the value-in-use.

During the years 2022, 2021 and 2020, no impairment provisions were recorded in connection with assets that have an indefinite useful life (including goodwill) in the Company's CGUs.

3. ACCOUNTING POLICIES (continued)

In connection with investments in non-consolidated companies, as of September 30, 2022, the Company wrote down its investment in Usiminas by \$ 120.4 million. The impairment was mainly due to the lower production availability of Usiminas' coke facilities, which need further capital investment, along with a worsened global macroeconomic situation that derived in the increase of discount rates used for the calculation of value-in-use. As of September 30, 2022, the post-tax discount rate used to test the investment in Usiminas for impairment was 13.5%. The Company estimates that a decrease of 1.0% in the discount rate, an increase of 0.5% in gross domestic product and an increase of 5.0% in the steel, iron ore and hard coking coal prices would have resulted in an increase of 25.5% in the value-in-use, and an increase of 1.0% in the discount rate, a decrease of 0.5% in gross domestic product and a decrease of 5% in the steel, iron ore and hard coking coal prices would have resulted in a decrease of -17.1% in the value-in-use. As of December 31, 2022, no new impairment triggers were detected over this investment and, consequently, no impairment test was prepared.

(g) Other investments

Other investments consist primarily of investments in financial debt instruments and equity investments where the Company holds a minor equity interest and does not exert significant influence.

All purchases and sales of investments are recognized on the settlement date, which is not significantly different from the trade date, which is the date that Ternium commits to purchase or sell the investment.

Income from financial instruments at fair value through profit or loss is recognized in Other financial income (expenses), net in the consolidated income statement. The fair value of quoted investments is based on current bid prices. If the market for a financial investment is not active or the securities are not listed, the Company estimates the fair value by using standard valuation techniques. Dividends from investments in equity instruments are recognized in the income statement when the Company's right to receive payments is established.

Certain fixed income financial instruments purchased by the Company have been categorized as at fair value through other comprehensive income. The results of these financial investments are recognized in Finance Income in the Consolidated Income Statement using the effective interest method. Unrealized gains and losses other than impairment and foreign exchange results are recognized in Other comprehensive income. On maturity or disposal, net gain and losses previously deferred in Other comprehensive income are recognized in Finance Income in the Consolidated Income Statement.

(h) Inventories

Inventories are stated at the lower of cost (calculated using the first-in-first-out "FIFO" method) or net realizable value. The cost of finished goods and goods in process comprises raw materials, direct labor, depreciation, other direct costs and related production overhead costs. It excludes borrowing costs. Goods acquired in transit at year end are valued at supplier's invoice cost.

3. ACCOUNTING POLICIES (continued)

The cost of iron ore produced in our mines comprises all direct costs necessary to extract and convert stockpiled inventories into raw materials, including production stripping costs, depreciation of fixed assets related to the mining activity and amortization of mining assets for those mines under production.

The Company assesses the recoverability of its inventories considering their selling prices, if the inventories are damaged, or if they have become wholly or partially obsolete.

(i) Trade receivables and other receivables

Trade and other receivables are recognized initially at fair value, generally the original invoice amount. The Company applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, trade receivables are grouped based on shared credit risk characteristics and the days past due. The Company keeps an allowance for trade receivables, recorded in an asset account to offset the trade receivables in an amount estimated sufficient to cover the losses resulting from the impossibility for the debtors to cancel the amounts owed. This allowance for trade receivables is recorded with a charge to selling expenses.

(j) Cash and cash equivalents

Cash and cash equivalents and highly liquid short-term securities are carried at fair market value or at a historical cost which approximates fair market value.

For purposes of the cash flow statement, cash and cash equivalents comprise cash, bank current accounts and short-term highly liquid investments (original maturity of three months or less at date of acquisition) and overdrafts.

In the consolidated statement of financial position, bank overdrafts are included in borrowings within current liabilities.

(k) Assets (disposal groups) classified as held for sale

Assets (disposal groups) are classified as assets held for sale, complying with the recognition criteria of IFRS 5, and stated at the lower of carrying amount and fair value less cost to sell if their carrying amount is recovered principally through a sale transaction rather than through continuing use.

The carrying value of assets classified as held for sale, at December 31, 2022 and 2021 totals \$ 1.8 million and \$ 1.9 million, respectively, which corresponds principally to land and other real estate items. Sale is expected to be completed within a one-year period.

(l) Borrowings

Borrowings are recognized initially for an amount equal to the net proceeds received. In subsequent periods, borrowings are stated at amortized cost following the effective interest method.

3. ACCOUNTING POLICIES (continued)

(m) Lease liabilities

The lease liability is initially measured at the present value of the lease payments that are not paid at such date, including the following concepts:

- Fixed payments, less any lease incentives receivable;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate as of the commencement date;
- Amounts expected to be payable by the lessee under residual value guarantees;
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

Variable lease liabilities with payments dependent on external factors, such as minimum volumes sold or used, are not included in the initial measurement of the lease liabilities and such payments are recognized directly in profit and loss.

Lease payments are discounted using incremental borrowing rates for the location and currency of each lease contract or, if available, the rate implicit in the lease contract.

The finance cost is charged to profit or loss over the lease period to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

The lease term determined by the Company comprises:

- Non-cancelable period of lease contracts;
- Periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and
- Periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option.

After the commencement date, the Company measures the lease liability by:

- Increasing the carrying amount to reflect interest on the lease liability;
- Reducing the carrying amount to reflect lease payments made; and
- Re-measuring the carrying amount to reflect any reassessment or lease modifications.

(n) Income taxes - current and deferred

The current income tax charge is calculated on the basis of the tax laws in force in the countries in which Ternium and its subsidiaries operate. Management evaluates positions taken in tax returns with respect to situations in which applicable tax regulation could be subject to interpretation. A liability is recorded for tax benefits that were taken in the applicable tax return but have not been recognized for financial reporting.

3. ACCOUNTING POLICIES (continued)

Deferred income taxes are calculated using the liability method on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting, nor taxable profit or loss. The principal temporary differences arise on fixed assets, intangible assets, inventories valuation and provisions for pensions. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period when the asset is realized or the liability is settled, based on tax rates and tax laws that have been enacted or substantially enacted at year end. Under IFRS, deferred income tax assets (liabilities) are classified as non-current assets (liabilities).

Deferred tax assets are recognized to the extent it is probable that future taxable income will be available to offset temporary differences.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries and associated companies, except where the timing of the reversal of the temporary difference is controlled by the Company and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are re-estimated if tax rates change. These amounts are charged or credited to the consolidated income statement or to the item "Other comprehensive income for the year" in the consolidated statement of comprehensive income, depending on the account to which the original amount was charged or credited.

(o) Employee liabilities

(1) *Post-employment obligations*

The Company has defined benefit and defined contribution plans. A defined benefit plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually (at year end) by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation. In countries where there is no deep market in such bonds, the market rates on government bonds are used.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. Past-service costs are recognized immediately in income.

For defined benefit plans, net defined benefit liability/asset is calculated based on the surplus or deficit derived by the difference between the defined benefit obligations less plan assets.

3. ACCOUNTING POLICIES (continued)

For defined contribution plans, the Company pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Company has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expense when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

Mexico

Ternium Mexico has defined benefit and defined contribution plans.

The valuation of the liabilities for the defined benefit employee retirement plans (pensions and seniority premiums) covers all employees and is based primarily on their years of service, their present age and their remuneration at the date of retirement. The cost of the employee retirement plans (pension, health-care expenses and seniority premiums) is recognized as an expense in the year in which services are rendered in accordance with actuarial studies made by independent actuaries. The formal retirement plans are congruent with and complementary to the retirement benefits established by the Mexican Institute of Social Security. Additionally, the Company has established a plan to cover health-care expenses of retired employees. The Company has established a commitment for the payment of pensions and seniority premiums, as well as for health-care expenses.

The defined contribution plans provide a benefit equivalent to the capital accumulated with the company's contributions, which are provided as a match of employees' contributions to the plan. The plan provides vested rights according to the years of service and the cause of retirement.

Argentina

Ternium Argentina implemented an unfunded defined benefit employee retirement plan for certain senior officers. The plan is designed to provide certain benefits to those officers (additional to those contemplated under applicable Argentine labor laws) in case of termination of the employment relationship due to certain specified events, including retirement. This unfunded plan provides defined benefits based on years of service and final average salary.

(2) Termination benefits

Termination benefits are payable when employment is terminated before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Company recognizes termination benefits when it is demonstrably committed to either: (i) terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or (ii) providing termination benefits as a result of an offer made to encourage voluntary redundancy.

3. ACCOUNTING POLICIES (continued)

(3) *Other compensation obligations*

Employee entitlements to annual leave and long-service leave are accrued as earned.

During 2007, Ternium launched an incentive retention program (the "Program") applicable to certain senior officers and employees of the Company, who will be granted a number of Units throughout the duration of the Program. The value of each of these Units is based on Ternium's shareholders' equity (excluding non-controlling interest). Also, the beneficiaries of the Program are entitled to receive cash amounts based on (i) the amount of dividend payments made by Ternium to its shareholders, and (ii) the number of Units held by each beneficiary to the Program. Units vest ratably over a period of four years and will be redeemed by the Company ten years after grant date, with the option of an early redemption at seven years after grant date. From 2018 units were vest ratably over the same period and will be mandatorily redeemed by the Company seven years after grant date. As the cash payment of the benefit is tied to the book value of the shares, and not to their market value, Ternium valued this long-term incentive program as a long term benefit plan as classified in IAS 19.

As of December 31, 2022 and 2021, the outstanding liability corresponding to the Program amounts to \$ 79.8 million and \$ 67.7 million, respectively. The total value of the units granted to date under the program, considering the number of units and the book value per share as of December 31, 2022 and 2021, is \$ 88.6 million and \$ 72.1 million, respectively.

Under Mexican law, Ternium's subsidiaries are required to pay their employees an annual benefit which is determined as a percentage of taxable profit for the year.

(4) *Social security contributions*

Social security laws in force in the countries in which the Company operates provide for pension benefits to be paid to retired employees from government pension plans and/or private fund managed plans to which employees may elect to contribute. As stipulated by the respective laws, Ternium Argentina and Ternium Mexico make monthly contributions calculated based on each employee's salary to fund such plans. The related amounts are expensed as incurred. No additional liabilities exist once the contributions are paid.

(p) **Provisions**

Ternium has certain contingencies with respect to existing or potential claims, lawsuits and other proceedings. Unless otherwise specified, Ternium accrues a provision for a present legal or constructive obligation as a result of a past event, when it is probable that future cost could be incurred and that cost can be reasonably estimated. Generally, accruals are based on developments to date, Ternium's estimates of the outcomes of these matters and the advice of Ternium's legal advisors.

(q) **Trade payables**

Trade payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.

3. ACCOUNTING POLICIES (continued)

(r) Revenue recognition and other income

Revenue is recognized at a point of time from sales to direct customers upon the satisfaction of performance obligations, which occurs when control of the goods transfers to the customer and the customer obtains the benefits from the goods, the potential cash flows and the transaction price can be measured reliably, and it is probable that the Company will collect the consideration in connection with the exchange of the goods. The control over the goods is obtained by the customer depending on when the goods are made available to the shipper or the customer takes possession of the goods, depending on the delivery terms. The Company considers that it has completed its performance obligations when the goods are delivered to its customers or to a shipper who will transport the goods to its customers. The revenue recognized by the Company is measured at the transaction price of the consideration received or receivable to which the Company is entitled to, reduced by estimated returns and other customer credits, such as discounts and volume rebates, based on the expected value to be realized and after eliminating sales within the group.

Interest income is recognized on an effective yield basis.

(s) Borrowing Costs

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

Other borrowing costs are expensed in the period in which they are incurred.

The amount of borrowing costs that Ternium capitalized during a period will not exceed the amount of borrowing costs incurred during that period. At December 31, 2022, 2021 and 2020, the capitalized borrowing costs were of \$ 0.4 million, \$ 6.3 million and \$ 13.1 million, respectively.

(t) Cost of sales, selling, general and administrative expenses

Cost of sales and expenses are recognized in the income statement on the accrual basis of accounting.

Commissions, freight and other selling expenses, including shipping and handling costs, are recorded in Selling, general and administrative expenses in the Consolidated Income Statement.

(u) Stripping costs

Stripping costs are the costs associated with the removal of overburden and other waste materials and can be incurred before the mining production commences ("development stripping") or during the production stage ("production stripping").

3. ACCOUNTING POLICIES (continued)

Development stripping costs that contribute to the future economic benefits of mining operations are capitalized as intangible assets (Mining assets). Production stripping costs which are part of on-going activities are included in the cost of the inventory produced (that is extracted) at each mine during the period in which they are incurred.

Capitalization of development stripping costs finishes when the commercial production of the mine commences. At that time, all development stripping costs are presented within Mining assets and depreciated on a unit-of-production basis. It is considered that commercial production begins when the production stage of mining operations begins and continues throughout the life of a mine.

(v) Mining development costs

Mining development costs are the costs associated to the activities related to the establishment of access to the mineral reserve and other preparations for commercial production. These activities often continue during production.

Development expenditures are capitalized and classified as Work in progress. On completion of development, all assets included in Work in progress are individually reclassified to the appropriate category of property, plant and equipment and depreciated accordingly.

(w) Asset retirement obligations

Ternium records asset retirement obligations ("ARO") initially at the fair value of the legal or constructive obligation in the period in which it is incurred and capitalizes the ARO by increasing the carrying amount of property, plant and equipment. The fair value of the obligation is determined as the discounted value of the expected future cash flows and is included in Provisions. The liability is accreted to its present value through net financing cost and the capitalized cost is depreciated based in the unit of production method.

(x) Earnings per share

Earnings per share are calculated by dividing the net income attributable to shareholders by the daily weighted average number of ordinary shares issued during the year, excluding the average number of shares of the parent Company held by the Group. There are no dilutive securities for the periods presented.

(y) Derivative financial instruments and hedging activities

Ternium designates certain derivatives as hedges of a particular risk associated with a recognized asset or liability or a highly probable forecast transaction. These transactions are classified as cash flow hedges (mainly interest rate swaps, collars, currency forward contracts on highly probable forecast transactions and commodities contracts). The effective portion of the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in OCI. Amounts accumulated in OCI are recognized in the income statement in the same period as any offsetting losses and gains on the hedged item. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. The fair value of Ternium derivative financial instruments (asset or liability) continues to be reflected in the statement of financial position.

3. ACCOUNTING POLICIES (continued)

For transactions designated and qualifying for hedge accounting, Ternium documents the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedge transactions. At December 31, 2022 and 2021, the effective portion of designated cash flow hedges (net of taxes) amounted to nil and \$ (0.04) million, respectively, and were included under "changes in the fair value of derivatives classified as cash flow hedges" line item in the statement of comprehensive income (see Note 26 (a)).

More information about accounting for derivative financial instruments and hedging activities is included in Note 28 "Financial risk management".

(z) Treasury shares

Acquisitions of treasury shares are recorded at acquisition cost, deducted from equity until disposal. The gains and losses on disposal of treasury shares are recognized under "Reserves" in the consolidated statement of financial position.

(aa) Cash flow

The consolidated statements of cash flows have been prepared using the indirect method and contain the use of the following expressions and their respective meanings:

- a) Operating activities: activities that constitute ordinary Group revenues, as well as other activities that cannot be qualified as investing or financing.
- b) Investing activities: acquisition, sale or disposal by other means of assets in the long-term and other investments not included in cash and cash equivalents.
- c) Financing activities: activities that generate changes in the size and composition of net equity and liabilities that do not form part of operating activities.

(bb) Critical Accounting Estimates

The preparation of financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and the related disclosure of contingent assets and liabilities. Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Management makes estimates and assumptions concerning the future. Actual results may differ significantly from these estimates under different assumptions or conditions.

The principal estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(1) Goodwill impairment test

Assessment of the recoverability of the carrying value of goodwill requires significant judgment. Management evaluates goodwill allocated to the operating units for impairment on an annual basis or whenever there is an impairment indicator.

3. ACCOUNTING POLICIES (continued)

Goodwill is tested at the level of the CGUs. Impairment testing of the CGUs is carried out and the value in use determined in accordance with the accounting policy stated in Note 3(f). The discount rates used for these tests are based on Ternium's weighted average cost of capital adjusted for specific country and currency risks associated with the cash flow projections. The post-tax discount rate used at December 31, 2022 was 11.28% and no impairment charge resulted from the impairment test performed. See notes 3(f) and 3(e)(4).

(2) Income taxes

Management calculates current and deferred income taxes according to the tax laws applicable to each subsidiary in the countries in which such subsidiaries operate. However, due to uncertain tax positions, certain adjustments necessary to determine the income tax provision are finalized only after the balance sheet is issued. In cases in which the final tax outcome is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

Also, when assessing the recoverability of tax assets, management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies.

(3) Loss contingencies

Ternium is subject to various claims, lawsuits and other legal proceedings that arise in the ordinary course of business, including customer claims in which a third party is seeking reimbursement or indemnity. The Company's liability with respect to such claims, uncertain tax positions, lawsuits and other legal proceedings cannot be estimated with certainty. Periodically, management reviews the status of each significant matter and assesses potential financial exposure. If the potential loss from the claim or proceeding is considered probable and the amount can be reasonably estimated, a liability is recorded. Management estimates the amount of such liability based on the information available and the assumptions and methods it has concluded are appropriate, in accordance with the provisions of IFRS. Accruals for such contingencies reflect a reasonable estimate of the losses to be incurred based on information available, including the relevant litigation or settlement strategy, as of the date of preparation of these financial statements. As additional information becomes available, management will reassess its evaluation of the pending claims, lawsuits and other proceedings and revise its estimates. The loss contingencies provision amounts to \$ 81.4 million and \$ 83.3 million as of December 31, 2022 and 2021, respectively.

(4) Useful Lives and Impairment of Property, Plant and Equipment and Other Long-lived Assets

In determining useful lives, management considered, among others, the following factors: age, operating condition and level of usage and maintenance. Management conducted visual inspections for the purpose of (i) determining whether the current conditions of such assets are consistent with normal conditions of assets of similar age; (ii) confirming that the operating conditions and levels of usage of such assets are adequate and consistent with their design; (iii) establishing obsolescence levels and (iv) estimating life expectancy, all of which were used in determining useful lives. Management believes, however, that it is possible that the periods of economic utilization of property, plant and equipment may be different than the useful lives so determined. Furthermore, management believes that this accounting policy involves a critical accounting estimate because it is subject to change from period to period as a result of variations in economic conditions and business performance.

3. ACCOUNTING POLICIES (continued)

When assessing whether an impairment indicator may exist, the Company evaluates both internal and external sources of information, such as the following:

- whether significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated;
- whether market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset's value in use and decrease the asset's recoverable amount materially;
- whether the carrying amount of the net assets of the entity is more than its market capitalization;
- whether evidence is available of obsolescence or physical damage of an asset.
- whether significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used. These changes include the asset becoming idle, plans to discontinue or restructure the operation to which an asset belongs, plans to dispose of an asset before the previously expected date, and reassessing the useful life of an asset as finite rather than indefinite; and
- whether evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected.

(5) Post-employment obligation estimates

The Company estimates at each year-end the provision necessary to meet its post-employment obligations in accordance with the advice from independent actuaries. The calculation of post-employment and other employee obligations requires the application of various assumptions. The main assumptions for post-employment and other employee obligations include discount rates, compensation growth rates, pension growth rates and life expectancy. Changes in the assumptions could give rise to adjustments in the results and liabilities recorded and might have an impact on the post-employment and other employee obligations recognized in the future.

(cc) Climate Change

Ternium is committed to the UN Global Compact Initiative, its sustainable development goals, and the world's efforts to address Climate Change.

The Company is determined to find ways to reduce the carbon footprint of its operations and the steel value chain. In February 2021, Ternium announced a medium-term target to reduce its carbon dioxide emissions intensity rate by 20% in 2030, compared to its 2018 base rate of 1.7 tons of carbon dioxide per ton of steel. The Company's strategy to achieve this 2030 reduction target consists of a multi-faceted approach that includes increasing the use of renewable energy and the development of energy efficiency strategies, increasing the participation of scrap in the metallic mix, improving the carbon capture capacity at its Direct Reduction Iron ("DRI") facilities, replacing coking coal with charcoal and prioritizing lower specific-emission steelmaking technologies.

3. ACCOUNTING POLICIES (continued)

The Company intends to continue analyzing and developing measures to decarbonize its operations over the longer term. This endeavor will require significant long-term investments, conditioned by technology innovation, cooperation within the value chain, government regulations, and capital availability for decarbonization projects. Factors like access to abundant and affordable clean energy, appropriate energy infrastructure, local and global regulation that guarantee fair trade and carbon capture storage, access to sustainable finance for low emissions steel-making technologies, and changes in consumer behavior will be key in the development of solutions and the outcomes in the next decades.

Given that Ternium's climate-change-related decarbonization plans span over many years and are subject to significant uncertainty as described above, they have not been included as part of the assumptions used to calculate future cash flows of the recoverable amount of the company's CGUs, except for those plans that are already approved or in process. Estimates and assumptions related to the impairment test over long-lived assets and goodwill, useful lives of assets, capital and research and development expenditures, inventory valuation, recovery of deferred tax assets and provisions, and contingent liabilities are based on available information and government regulations in place as of December 31, 2022, as well as on the company's already approved or in process investment plans.

4. SEGMENT INFORMATION

The Company is organized in two operating segments: Steel and Mining.

The Steel segment includes the sales of steel products, which comprises mainly slabs, hot and cold rolled products, coated products, roll-formed and tubular products, billets, bars and other products.

The Mining segment includes the sales of mining products, mainly iron ore and pellets, and comprises the mining activities of Las Encinas, an iron ore mining company in which Ternium holds a 100% equity interest and the 50% of the operations and results performed by Peña Colorada, another iron ore mining company in which Ternium maintains that same percentage over its equity interest.

Ternium's Chief Executive Officer ("CEO") functions as the Company's Chief Operating Decision Maker ("CODM"). The various geographic regions operate as an integrated steel producer. The CEO allocates resources and assesses performance of the Steel Segment as an integrated business and of the Mining Segment. The CEO uses "Operating income - Management view" as per the below table as the key performance measure which differs from operating income determined in accordance with IFRS principally as follows:

- The use of direct cost methodology to calculate the inventories, while under IFRS is at full cost, including absorption of production overheads and depreciation.
- The use of costs based on previously internally defined cost estimates, while, under IFRS, costs are calculated at historical cost (with the FIFO method).
- Other non-significant differences.

Year ended December 31, 2022				
	Steel	Mining	Inter-segment eliminations	Total
Operating income - Management view	2,556,949	3,716	10,500	2,571,165
Reconciliation:				
Differences in Cost of sales				128,354
Operating income - Under IFRS				2,699,519
Financial income (expense), net				(70,133)
Equity in earnings (losses) of non-consolidated companies				37,114
Income before income tax expense - IFRS				2,666,500
Net sales from external customers	16,414,334	132	—	16,414,466
Net sales from transactions with other operating segments of the same entity		410,636	(410,636)	—
Depreciation and amortization	(523,818)	(92,674)	—	(616,492)
Year ended December 31, 2021				
	Steel	Mining	Inter-segment eliminations	Total
Operating income - Management view	4,210,135	204,070	1,586	4,415,791
Reconciliation:				
Differences in Cost of sales				855,345
Operating income - Under IFRS				5,271,136
Financial income (expense), net				92,462
Equity in earnings (losses) of non-consolidated companies				400,732
Income before income tax expense - IFRS				5,764,330
Net sales from external customers	16,043,033	47,711	—	16,090,744
Net sales from transactions with other operating segments of the same entity		478,559	(478,559)	—
Depreciation and amortization	(528,144)	(63,646)	—	(591,790)

4. SEGMENT INFORMATION (continued)

	Year ended December 31, 2020			Total
	Steel	Mining	Inter-segment eliminations	
Operating income - Management view	1,046,623	101,937	689	1,149,249
Reconciliation:				
Differences in Cost of sales				(69,776)
Operating income - Under IFRS				1,079,473
Financial income (expense), net				22,331
Equity in earnings (losses) of non-consolidated companies				57,555
Income before income tax expense - IFRS				1,159,359
Net sales from external customers	8,679,513	55,922	—	8,735,435
Net sales from transactions with other operating segments of the same entity		334,619	(334,619)	—
Depreciation and amortization	(580,807)	(50,244)	—	(631,051)

Information on segment assets is not disclosed as it is not reviewed by the CEO .

GEOGRAPHICAL INFORMATION

The Company has no revenues attributable to the Company's country of incorporation (Luxembourg) in 2022. In 2021 and 2020 the Company had revenues attributable to Luxembourg related to a contract acquired as part of the acquisition of the participation in Ternium Brasil Ltda.

For purposes of reporting geographical information, net sales are allocated based on the customer's location. Allocation of depreciation and amortization is based on the geographical location of the underlying assets.

	Year ended December 31, 2022			Total
	Mexico	Southern region	Brazil and Other markets (1)	
Net sales	8,949,104	3,853,390	3,611,972	16,414,466
Non-current assets (2)	4,769,161	859,351	1,577,784	7,206,296
	Year ended December 31, 2021			Total
	Mexico	Southern region	Brazil and Other markets	
Net sales	8,990,868	3,377,596	3,722,280	16,090,744
Non-current assets (2)	4,789,273	861,149	1,683,412	7,333,834
	Year ended December 31, 2020			Total
	Mexico	Southern region	Brazil and Other markets	
Net sales	4,660,278	1,762,785	2,312,372	8,735,435
Non-current assets (2)	4,726,342	919,490	1,767,432	7,413,264

(1)The non-current assets value includes the impact of the impairment charge of \$ 99.0 million recognized in the Brazil CGU.

(2) Includes Property, plant and equipment and Intangible assets.

4. SEGMENT INFORMATION (continued)

REVENUES BY PRODUCT

	Year ended December 31,		
	2022	2021	2020
Slabs	640,231	1,304,437	1,047,311
Hot rolled (1)	6,991,466	6,356,576	2,880,055
Cold rolled	1,951,702	1,990,143	1,101,963
Coated (2)	5,704,765	5,303,394	3,015,132
Roll-formed and tubular (3)	660,829	659,609	413,337
Billets, round bars and others	142,512	167,138	3,632
Other products (4)	322,961	309,447	274,005
TOTAL SALES	16,414,466	16,090,744	8,735,435

(1) Hot rolled includes hot rolled flat products, merchant bars, reinforcing bars, stirrups and rods.

(2) Coated includes tin plate and galvanized products.

(3) Roll-formed and tubular includes pre-engineered metal building systems, tubes, beams, insulated panels, roofing and cladding, roof tiles, and steel decks.

(4) Other products include mainly sales of energy and pig iron.

5. COST OF SALES

	Year ended December 31,		
	2022	2021	2020
Inventories at the beginning of the year	3,908,305	2,001,781	2,158,298
Plus: Charges for the year			
Raw materials and consumables used and other movements	9,773,523	9,835,504	5,359,938
Services and fees	183,003	151,251	112,924
Labor cost	862,593	689,614	546,045
Depreciation of property, plant and equipment	532,160	514,746	527,283
Amortization of intangible assets	43,947	23,519	14,624
Maintenance expenses	612,928	582,633	371,368
Office expenses	10,295	7,741	6,131
Insurance	15,184	12,309	10,641
Change of obsolescence allowance	20,804	3,965	(1,279)
Valuation allowance	15,333	—	—
Recovery from sales of scrap and by-products	(42,000)	(37,597)	(20,892)
Others	21,421	17,909	16,623
Less: Inventories at the end of the year	(3,470,214)	(3,908,305)	(2,001,781)
Cost of Sales	12,487,282	9,895,070	7,099,923

6. SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

	Year ended December 31,		
	2022	2021	2020
Services and fees (1)	73,401	60,216	53,220
Labor cost	299,139	250,697	192,854
Depreciation of property, plant and equipment	13,990	14,153	15,920
Amortization of intangible assets	26,395	39,372	73,224
Maintenance and expenses	8,311	6,977	4,275
Taxes	170,216	160,254	97,075
Office expenses	41,921	34,968	27,314
Freight and transportation	499,127	365,455	283,808
Increase (decrease) of allowance for doubtful accounts	114	350	336
Others	11,032	17,682	14,856
Selling, general and administrative expenses	1,143,646	950,124	762,882

(1) For the year ended December 31, 2022, it includes fees accrued for professional services rendered by PwC to Ternium S.A. and its subsidiaries that amounted to \$ 3,991, including \$ 3,681 for audit services, \$ 272 for audit-related services and \$ 38 for all other services.

For the year ended December 31, 2021, it includes fees accrued for professional services rendered by PwC to Ternium S.A. and its subsidiaries that amounted to \$ 3,241, including \$ 3,157 for audit services, \$ 78 for audit-related services and \$ 6 for all other services.

For the year ended December 31, 2020, it includes fees accrued for professional services rendered by PwC to Ternium S.A. and its subsidiaries that amounted to \$ 3,289, including \$ 3,132 for audit services, \$ 41 for audit-related services, \$ 95 for tax services and \$ 21 for all other services.

7. LABOR COSTS (Included Cost of sales and Selling, General and Administrative expenses)

	Year ended December 31,		
	2022	2021	2020
Wages, salaries and social security costs	1,093,105	878,347	677,541
Termination benefits	22,246	18,677	25,265
Post-employment benefits (Note 20 (i))	46,381	43,287	36,093
Labor costs	1,161,732	940,311	738,899

As of December 31, 2022, 2021 and 2020, the number of employees was 20,510, 20,142 and 20,173, respectively.

8. OTHER OPERATING INCOME (EXPENSES), NET

	Year ended December 31,		
	2022	2021	2020
Results of sundry assets	8,177	8,558	1,363
Provision for legal claims and other matters (Note 18 and 24 (i) and (ii))	1,069	—	—
Recovery of provision related to the ICMS action of unconstitutionality (Note 24 (i) (f)) (1)	—	—	380,075
Other operating income (2)	5,735	40,587	20,093
Other operating income	14,981	49,145	401,531
Provision for legal claims and other matters (Note 18 and 24 (i) and (ii))	—	(11,761)	(623)
Impairment charge (Note 3 (f))	(99,000)	—	—
Reversal of the asset in connection with the slab commitment agreement (Note 3 (e) (6))	—	(11,798)	—
Reversal of the asset in connection with the ICMS provision (Note 24 (i) (f)) (1)	—	—	(194,065)
Other operating expense	(99,000)	(23,559)	(194,688)
Other operating income (expenses), net	(84,019)	25,586	206,843

(1) For the year ended December 31, 2020, it includes the gain generated by the recovery of the provision for contingencies related to the ICMS action of unconstitutionality (\$ 380,075), partially compensated by the reversal of the related credit (\$ 194,065). For more information about this case, see note 24 (i)(f).

(2) For the year ended December 31, 2021, it includes the recovery of certain tax credits in Brazil of \$ 27,200.

9. OTHER FINANCIAL INCOME (EXPENSES), NET

	Year ended December 31,		
	2022	2021	2020
Interest expense	(46,737)	(26,997)	(46,644)
Finance expense	(46,737)	(26,997)	(46,644)
Interest income	75,145	62,912	49,421
Finance income	75,145	62,912	49,421
Net foreign exchange gain (loss) (1)	(163,740)	(36,761)	3,379
Change in fair value of financial assets	78,309	75,801	6,104
Derivative contract results	(2,132)	1,485	11,933
Others	(10,978)	16,022	(1,862)
Other financial income (expenses), net	(98,541)	56,547	19,554

(1) Mainly related to the devaluation of the Argentine peso.

10. INCOME TAX EXPENSE

Income tax expense for each of the years presented is as follows:

	Year ended December 31,		
	2022	2021	2020
Current tax			
Current tax	(671,016)	(1,650,281)	(338,408)
Deferred tax (Note 19)			
Deferred tax	80,692	185,655	39,895
Effect of changes in tax law (1)	—	(9,117)	—
Recovery of income tax (2)	16,596	76,604	7,025
Income tax expense	(573,728)	(1,397,139)	(291,488)

(1) For 2021, it includes the modification of the tax rate in Argentina enacted in 2017 and modified in 2019 and 2021, setting the corporate income tax rate to 35% for the year 2021 going forward.

(2) It includes the recovery of tax credits in Ternium Brasil Ltda.

Income tax expense for the years ended December 31, 2022, 2021 and 2020 differed from the amount computed by applying the statutory income tax rate in force in each country in which the company operates to pre-tax income as a result of the following:

	Year ended December 31,		
	2022	2021	2020
Income before income tax	2,666,500	5,764,330	1,159,359
Income tax expense at statutory tax rate	(785,888)	(1,633,556)	(350,896)
Non taxable income	—	37,815	118,540
Non deductible expenses	(45,862)	—	—
Effect of currency translation on tax base (1)	241,426	131,115	(66,157)
Recovery of income tax	16,596	76,604	7,025
Effect of changes in tax law	—	(9,117)	—
Income tax expense	(573,728)	(1,397,139)	(291,488)

(1) Ternium applies the liability method to recognize deferred income tax on temporary differences between the tax bases of assets and their carrying amounts in the financial statements. By application of this method, Ternium recognizes gains and losses on deferred income tax due to the effect of the change in the value on the tax basis in subsidiaries, which have a functional currency different to their local currency, mainly Mexico and Argentina.

Tax rates used to perform the reconciliation between tax expense (income) and accounting profit are those in effect at each relevant date or period in each applicable jurisdiction.

11. PROPERTY, PLANT AND EQUIPMENT, NET

(1) Property, plant and equipment, net

Year ended December 31, 2022

	Land	Buildings and improvements	Production equipment	Vehicles, furniture and fixtures	Work in progress	Spare parts	Right-of-use assets	Total
Values at the beginning of the year								
Cost	594,744	4,023,271	7,707,052	294,356	563,082	166,959	364,971	13,714,435
Accumulated depreciation	—	(1,890,186)	(4,986,161)	(240,250)	—	(29,792)	(136,468)	(7,282,857)
Net book value at January 1, 2022	594,744	2,133,085	2,720,891	54,106	563,082	137,167	228,503	6,431,578
Opening net book value	594,744	2,133,085	2,720,891	54,106	563,082	137,167	228,503	6,431,578
Translation differences	139	325	123	23	9	—	—	619
Impairment charge (note 3 (f))	—	(53,635)	(45,365)	—	—	—	—	(99,000)
Additions	5,342	2,423	913	2,337	433,269	28,983	13,961	487,228
Capitalized borrowing costs	—	—	—	—	403	—	—	403
Disposals / Consumptions	(953)	(1,133)	(1,056)	(842)	(1,162)	(22,210)	(1,039)	(28,395)
Indexation	—	—	—	—	—	—	17,945	17,945
Transfers	8,699	144,914	273,885	18,660	(448,499)	—	—	(2,341)
Depreciation charge	—	(147,863)	(328,574)	(19,414)	—	(1,073)	(49,226)	(546,150)
Closing net book value	607,971	2,078,116	2,620,817	54,870	547,102	142,867	210,144	6,261,887
Values at the end of the year								
Cost	607,971	4,091,108	7,744,607	309,469	547,102	173,731	395,620	13,869,608
Accumulated depreciation	—	(2,012,992)	(5,123,790)	(254,599)	—	(30,864)	(185,476)	(7,607,721)
Net book value at December 31, 2022	607,971	2,078,116	2,620,817	54,870	547,102	142,867	210,144	6,261,887

Year ended December 31, 2021

	Land	Buildings and improvements	Production equipment	Vehicles, furniture and fixtures	Work in progress	Spare parts	Right-of-use assets	Total
Values at the beginning of the year								
Cost	592,761	3,567,732	7,179,626	289,877	1,203,362	143,309	349,003	13,325,670
Accumulated depreciation	—	(1,754,476)	(4,714,976)	(231,719)	—	(27,185)	(92,633)	(6,820,989)
Net book value at January 1, 2021	592,761	1,813,256	2,464,650	58,158	1,203,362	116,124	256,370	6,504,681
Opening net book value	592,761	1,813,256	2,464,650	58,158	1,203,362	116,124	256,370	6,504,681
Translation differences	(70)	(161)	(43)	(11)	(18)	—	—	(303)
Additions	—	1,874	282	1,285	418,736	38,800	13,758	474,735
Capitalized borrowing costs	—	—	—	—	6,294	—	—	6,294
Disposals / Consumptions	—	(7,439)	(801)	(1,276)	(1,915)	(15,150)	(1,995)	(28,576)
Indexation	—	—	—	—	—	—	4,523	4,523
Transfers	2,053	461,377	585,186	13,884	(1,063,377)	—	—	(877)
Depreciation charge	—	(135,822)	(328,383)	(17,934)	—	(2,607)	(44,153)	(528,899)
Closing net book value	594,744	2,133,085	2,720,891	54,106	563,082	137,167	228,503	6,431,578
Values at the end of the year								
Cost	594,744	4,023,271	7,707,052	294,356	563,082	166,959	364,971	13,714,435
Accumulated depreciation	—	(1,890,186)	(4,986,161)	(240,250)	—	(29,792)	(136,468)	(7,282,857)
Net book value at December 31, 2021	594,744	2,133,085	2,720,891	54,106	563,082	137,167	228,503	6,431,578

11. PROPERTY, PLANT AND EQUIPMENT, NET (continued)

(2) Right-of-use assets

	Right-of-use assets			
	Land	Buildings and improvements	Production equipment	Vehicles, furniture and fixtures
Values at the beginning of the year				
Cost	—	245,300	119,497	174
Accumulated depreciation	—	(87,103)	(49,321)	(44)
Net book value at January 1, 2022	—	158,197	70,176	130
Opening net book value	—	158,197	70,176	130
Additions	1,339	6,445	6,163	14
Disposal/Derecognition	—	—	(1,039)	—
Indexation	—	14,585	3,360	—
Depreciation charge	(4)	(31,606)	(17,534)	(82)
Closing net book value	1,335	147,621	61,126	62
Values at the end of the year				
Cost	1,339	266,330	127,765	187
Accumulated depreciation	(4)	(118,709)	(66,639)	(125)
Net book value at December 31, 2022	1,335	147,621	61,126	62
	Right-of-use assets			
	Land	Buildings and improvements	Production equipment	Vehicles, furniture and fixtures
Values at the beginning of the year				
Cost	—	239,211	109,792	—
Accumulated depreciation	—	(58,052)	(34,581)	—
Net book value at January 1, 2021	—	181,159	75,211	—
Opening net book value	—	181,159	75,211	—
Additions	—	2,732	10,852	174
Disposal/Derecognition	—	(353)	(1,642)	—
Indexation	—	4,027	496	—
Depreciation charge	—	(29,368)	(14,741)	(44)
Closing net book value	—	158,197	70,176	130
Values at the end of the year				
Cost	—	245,300	119,497	174
Accumulated depreciation	—	(87,103)	(49,321)	(44)
Net book value at December 31, 2021	—	158,197	70,176	130

The cost related to variable-lease payments that do not depend on an index or rate amounted to \$ 14.5 million for the year ended December 31, 2022 (\$ 20.0 million for the year ended December 31, 2021).

The expenses related to leases for which the Company applied the practical expedient described in paragraph 5 (a) of IFRS 16 (leases with contract term of less than 12 months) amounted to \$ 1.9 million for the year ended December 31, 2022 (\$ 2.0 million and \$ 0.8 million for the year ended December 31, 2021 and 2020, respectively).

12. INTANGIBLE ASSETS, NET

Year ended December 31, 2022

	Information system projects	Mining assets	Exploration and evaluation costs	Customer relationships and other contractual rights	Trademarks	Goodwill	Total
Values at the beginning of the year							
Cost	402,387	326,269	11,231	295,597	73,935	662,307	1,771,726
Accumulated depreciation	(322,595)	(184,766)	—	(288,174)	(73,935)	—	(869,470)
Net book value at January 1, 2022	79,792	141,503	11,231	7,423	—	662,307	902,256
Opening net book value	79,792	141,503	11,231	7,423	—	662,307	902,256
Additions	57,689	—	50,627	1,831	—	—	110,147
Transfers	2,348	32,498	(32,498)	—	—	—	2,348
Depreciation charge	(27,655)	(42,332)	—	(355)	—	—	(70,342)
Closing net book value	112,174	131,669	29,360	8,899	—	662,307	944,409
Values at the end of the year							
Cost	460,434	358,767	29,360	297,427	73,935	662,307	1,882,230
Accumulated depreciation	(348,260)	(227,098)	—	(288,528)	(73,935)	—	(937,821)
Net book value at December 31, 2022	112,174	131,669	29,360	8,899	—	662,307	944,409

Year ended December 31, 2021

	Information system projects	Mining assets	Exploration and evaluation costs	Customer relationships and other contractual rights	Trademarks	Goodwill	Total
Values at the beginning of the year							
Cost	369,468	275,912	26,221	604,929	73,935	662,307	2,012,772
Accumulated depreciation	(293,627)	(163,298)	—	(573,329)	(73,935)	—	(1,104,189)
Net book value at January 1, 2021	75,841	112,614	26,221	31,600	—	662,307	908,583
Opening net book value	75,841	112,614	26,221	31,600	—	662,307	908,583
Additions	29,066	2,864	32,520	—	—	—	64,450
Disposals / Consumptions	—	—	—	(11,798)	—	—	(11,798)
Transfers	3,929	47,493	(47,510)	—	—	—	3,912
Depreciation charge	(29,044)	(21,468)	—	(12,379)	—	—	(62,891)
Closing net book value	79,792	141,503	11,231	7,423	—	662,307	902,256
Values at the end of the year							
Cost	402,387	326,269	11,231	295,597	73,935	662,307	1,771,726
Accumulated depreciation	(322,595)	(184,766)	—	(288,174)	(73,935)	—	(869,470)
Net book value at December 31, 2021	79,792	141,503	11,231	7,423	—	662,307	902,256

The Company has not registered any impairment charges in connection with Goodwill (see notes 3 (f) and (bb)(1) and (4)).

13. INVESTMENTS IN NON-CONSOLIDATED COMPANIES

	As of December 31,	
	2022	2021
At the beginning of the year	751,475	471,306
Equity in earnings of non-consolidated companies	37,114	400,732
Other comprehensive income	48,475	(38,441)
Dividends from non-consolidated companies	(15,493)	(82,122)
At the end of the year	821,571	751,475

The principal investments in non-consolidated companies, all of which are unlisted, except for Usiminas, are:

	Country of incorporation	Main activity	Voting rights at		Value at	
			December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Usinas Siderurgicas de Minas Gerais S.A. - USIMINAS	Brazil	Manufacturing and selling of steel products	34.39 %	34.39 %	725,705	681,711
Techgen S.A. de C.V.	Mexico	Provision of electric power	48.00 %	48.00 %	90,559	64,140
Other non-consolidated companies (1)					5,307	5,624
					821,571	751,475

(1) It includes the investment held in Finma S.A.I.F., Recrotek S.R.L. de C.V. and Gas Industrial de Monterrey S.A. de C.V.

(a) Usinas Siderurgicas de Minas Gerais S.A. - USIMINAS

As of December 31, 2022, Ternium, through its subsidiaries, owns a total of 242.6 million ordinary shares and 8.5 million preferred shares, representing 20.40% of the issued and outstanding share capital of Usinas Siderurgicas de Minas Gerais S.A. - USIMINAS ("Usiminas"), the largest flat steel producer in Brazil for the energy, automotive and other industries.

Ternium, through its subsidiaries, together with Tenaris S.A.'s Brazilian subsidiary Confab Industrial S.A. ("TenarisConfab"), are part of Usiminas' control group, comprising the so-called T/T Group. As at December 31, 2022, the Usiminas control group holds, in the aggregate, 483.6 million ordinary shares bound to the Usiminas shareholders' agreement, representing approximately 68.6% of Usiminas' voting capital. The Usiminas control group, which is bound by a long-term shareholders' agreement that governs the rights and obligations of Usiminas' control group members, is currently composed of three sub-groups: the T/T Group; the NSC Group, comprising Nippon Steel Corporation ("NSC"), Metal One Corporation and Mitsubishi Corporation; and Usiminas' pension fund Previdência Usiminas. The T/T Group holds approximately 47.1% of the total shares held by the control group (39.5% corresponding to the Ternium entities and the other 7.6% corresponding to TenarisConfab); the NSC Group holds approximately 45.9% of the total shares held by the control group; and Previdência Usiminas holds the remaining 7%.

13. INVESTMENTS IN NON-CONSOLIDATED COMPANIES (continued)

The corporate governance rules reflected in the Usiminas shareholders agreement provide, among other things, that Usiminas' executive board will be composed of six members, including the chief executive officer and five vice-presidents, with Ternium and NSC nominating three members each. The right to nominate Usiminas' chief executive officer alternates between Ternium and NSC at every 4-year interval, with the party that does not nominate the chief executive officer having the right to nominate the chairman of Usiminas' board of directors for the same 4-year period. The Usiminas shareholders agreement also provides for an exit mechanism consisting of a buy-and-sell procedure—exercisable at any time after November 16, 2022 and applicable with respect to shares held by NSC and the T/T Group —, which would allow either Ternium or NSC to purchase all or a majority of the Usiminas shares held by the other shareholder.

As of December 31, 2022, the closing price of the Usiminas ordinary and preferred shares, as quoted on the BM&F Bovespa Stock Exchange, was BRL 7.41 (approximately \$ 1.42; December 31, 2021: BRL 14.51 – \$ 2.60) per ordinary share and BRL 7.16 (approximately \$ 1.37; December 31, 2021: BRL 15.16 – \$ 2.72) per preferred share, respectively. Accordingly, as of December 31, 2022, Ternium's ownership stake had a market value of approximately \$ 356.2 million (\$ 653.9 million as of December 31, 2021) and a carrying value of \$ 725.7 million (\$ 681.7 million as of December 31, 2021).

As of December 31, 2022 and 2021, the value of the investment in Usiminas is comprised as follows:

	USIMINAS	
	As of December 31, 2022	As of December 31, 2021
Value of investment		
At the beginning of the year	681,711	422,948
Share of results (1)	130,696	379,067
Other comprehensive income	48,145	(38,680)
Dividends	(14,487)	(81,624)
Impairment charge (note 3 (f))	(120,360)	—
At the end of the year	725,705	681,711

(1) It includes the adjustment of the values associated to the purchase price allocation.

13. INVESTMENTS IN NON-CONSOLIDATED COMPANIES (continued)

The investment in Usiminas is based in the following calculation:

Usiminas' shareholders' equity	4,437,784
Percentage of interest of the Company over shareholders' equity	20.40 %
Interest of the Company over shareholders' equity	905,444
Purchase price allocation	56,255
Goodwill	199,213
Impairment	(435,207)
Total Investment in Usiminas	725,705

On February 10, 2023, Usiminas issued its annual accounts as of and for the year ended December 31, 2022.

Summarized balance sheet (in million \$)	As of December 31, 2022	As of December 31, 2021
Assets		
Non-current	3,764	3,491
Current	2,930	2,325
Other current investments	413	75
Cash and cash equivalents	559	1,184
Total Assets	7,666	7,075
Liabilities		
Non-current	508	477
Non-current borrowings	1,163	1,098
Current	1,009	1,104
Current borrowings	25	31
Total Liabilities	2,705	2,710
Non-controlling interest	524	468
Shareholders' equity	4,437	3,897
Summarized income statement (in million \$)	Year ended December 31, 2022	Year ended December 31, 2021
Net sales	6,297	6,270
Cost of sales	(5,187)	(4,168)
Gross Profit	1,110	2,102
Selling, general and administrative expenses	(237)	(199)
Other operating income (loss), net	(386)	197
Operating income	487	2,100
Financial expenses, net	114	158
Equity in earnings of associated companies	43	41
Profit (Loss) before income tax	644	2,299
Income tax benefit	(231)	(426)
Net profit (loss) before non-controlling interest	413	1,873
Non-controlling interest in other subsidiaries	(93)	(185)
Net profit (loss) for the year	320	1,688

13. INVESTMENTS IN NON-CONSOLIDATED COMPANIES (continued)

b) Techgen S.A. de C.V.

Techgen is a Mexican natural gas-fired combined cycle electric power plant in the Pesquería area of the State of Nuevo León, Mexico. The company started producing energy on December 1, 2016 and is fully operational. As of February 2017, Ternium, Tenaris, and Tecpetrol International S.A. (a wholly-owned subsidiary of San Faustin S.A., the controlling shareholder of both Ternium and Tenaris) completed their investments in Techgen. Techgen is currently owned 48% by Ternium, 30% by Tecpetrol and 22% by Tenaris. Ternium and Tenaris also agreed to enter into power supply and transportation agreements with Techgen, pursuant to which Ternium and Tenaris will contract 78% and 22%, respectively, of Techgen's power capacity of 900 megawatts.

Techgen stated in its unaudited annual accounts as of and for the year ended December 31, 2022, that revenues amounted to \$ 580 million (\$ 419 million as of December 31, 2021), net profit from continuing operations to \$ 55 million (\$45 million as of December 31, 2021), non-current assets to \$ 766 million (\$ 791 million as of December 31, 2021), current assets to \$ 131 million (\$ 91 million as of December 31, 2021), non-current liabilities to \$ 527 million (\$ 614 million as of December 31, 2021), current liabilities to \$ 181 million (\$ 134 million as of December 31, 2021) and shareholders' equity to \$ 189 million (\$ 134 million as of December 31, 2021).

During 2017 and 2016, Techgen's shareholders made additional investments in Techgen, in the form of subordinated loans, which in the case of Ternium amounted to \$ 126.8 million as of December 31, 2022, and which are due in June 2026.

On February 2019, Techgen S.A. de C.V. entered into syndicated loan agreement with HSBC Mexico, Natixis, Credit Agricole, BNP, Santander, Intesa SP and Norinchukin (the "Syndicated Loan"), according to the following terms: (i) Libor + 170 bps; (ii) maturity on February 13, 2026; (iii) average life 4,30 years; and (iv) guaranteed by: assets, shares, a debt service reserve account - which represents 10% of the outstanding amount- and the fix capacity charge cash-flow.

On August 5, 2021, Ternium Investments completed the purchase of a participation in this Syndicated Loan for an amount of \$ 68 million. As of December 31, 2022, the outstanding syndicated loan amount was of \$ 344 million and Ternium Investments' participation was of \$ 51 million.

For commitments from Ternium in connection with Techgen, see note 24.

14. RECEIVABLES, NET - NON CURRENT AND CURRENT

	As of December 31,	
	2022	2021
Receivables with related parties (Notes 25 and 13 (b))	127,008	126,860
Employee advances and loans	21,729	23,147
Advances to suppliers for the purchase of property, plant and equipment	44,067	14,435
Advances to suppliers for the purchase of property, plant and equipment with related parties (Note 25)	2,444	2,075
Other tax credits	117,111	9,803
Others	6,331	1,483
Receivables, net - Non-current	318,690	177,803
	As of December 31,	
	2022	2021
Value added tax	133,860	195,070
Income tax credits	400,949	44,544
Other tax credits	37,461	24,402
Employee advances and loans	6,782	5,703
Advances to suppliers	22,257	16,700
Advances to suppliers with related parties (Note 25)	6,089	7,160
Expenses paid in advance	17,850	11,785
Government tax refunds on exports	1,677	7,639
Receivables with related parties (Note 25)	17,154	26,743
Others	18,683	17,959
Receivables, net - Current	662,762	357,705

15. TRADE RECEIVABLES, NET - NON CURRENT AND CURRENT

	As of December 31,	
	2022	2021
Trade receivables	—	229
Trade receivables, net - Non-current	—	229
Current accounts	1,110,481	1,699,252
Trade receivables with related parties (Note 25)	80,078	77,416
Allowance for doubtful accounts (Note 18)	(9,870)	(9,472)
Trade receivables, net - Current	1,180,689	1,767,196

	Trade receivables, net as of December 31, 2022		
	Total	Fully performing	Past due
Guaranteed	527,700	498,962	28,738
Not guaranteed	662,859	590,093	72,766
Trade receivables	1,190,559	1,089,055	101,504
Allowance for doubtful accounts (Note 18)	(9,870)	—	(9,870)
Trade receivables, net	1,180,689	1,089,055	91,634

	Trade receivables, net as of December 31, 2021		
	Total	Fully performing	Past due
Guaranteed	838,798	795,466	43,332
Not guaranteed	938,099	886,079	52,020
Trade receivables	1,776,897	1,681,545	95,352
Allowance for doubtful accounts (Note 18)	(9,472)	—	(9,472)
Trade receivables, net	1,767,425	1,681,545	85,880

16. INVENTORIES, NET

	As of December 31,	
	2022	2021
materials, materials and spare parts	963,732	990,360
s in process	1,681,239	1,848,181
red goods	553,965	737,650
s in transit	365,675	393,590
lescence allowance (Note 18)	(79,063)	(61,476)
tion allowance	(15,333)	—
ntories, net	3,470,215	3,908,305

17. CASH, CASH EQUIVALENTS AND OTHER INVESTMENTS, NON-CURRENT AND CURRENT

	As of December 31,	
	2022	2021
Investments in debt instruments and other	100,464	67,025
Other investments	252	252
Other investments, net - Non-current	100,716	67,277

	As of December 31,	
	2022	2021
(i) Other investments		
Other deposits with maturity of more than three months	1,875,026	1,290,459
Other investments - Current	1,875,026	1,290,459
(ii) Cash and cash equivalents		
Cash and banks	371,797	305,136
Restricted cash	30	58
Short-term bank deposits	772,953	692,529
Other deposits with maturity of less than three months	508,575	278,882
Cash and cash equivalents	1,653,355	1,276,605

18. ALLOWANCES AND PROVISIONS - NON CURRENT AND CURRENT

Provisions and allowances - Non current

	Liabilities	Liabilities
	Legal claims and other matters	Asset retirement obligation
ended December 31, 2022		
Provisions at the beginning of the year	83,299	32,098
Provision differences	2,999	2,735
Provisions	5,889	3,271
Reversals	(6,959)	—
	(3,806)	—
December 31, 2022	81,422	38,104
ended December 31, 2021		
Provisions at the beginning of the year	80,570	41,673
Provision differences	(5,898)	(1,084)
Provisions	15,802	(8,491)
Reversals	(4,041)	—
	(3,134)	—
December 31, 2021	83,299	32,098

18. ALLOWANCES AND PROVISIONS - NON CURRENT AND CURRENT (continued)**Provisions and allowances - Current**

	Deducted from assets		Liabilities
	Allowance for doubtful accounts	Obsolescence allowance	Asset retirement obligation
Year ended December 31, 2022			
Values at the beginning of the year	9,472	61,476	3,610
Translation differences	544	—	(465)
Additions	1,786	36,666	3,558
Reversals	(1,672)	(15,862)	—
Uses	(260)	(3,217)	(3,399)
At December 31, 2022	9,870	79,063	3,304
Year ended December 31, 2021			
Values at the beginning of the year	10,500	58,610	4,515
Translation differences	(721)	(5)	(323)
Additions	775	15,968	5,909
Reversals	(425)	(12,003)	—
Uses	(657)	(1,094)	(6,491)
At December 31, 2021	9,472	61,476	3,610

19. DEFERRED INCOME TAX

Deferred income taxes are calculated in full on temporary differences under the liability method using the tax rate of the applicable country.

Changes in deferred income tax are as follows:

	As of December 31,	
	2022	2021
At the beginning of the year	(25,471)	(187,782)
Translation differences	330	(69)
Effect of changes in tax law (note 10)	—	(9,117)
Credits directly to other comprehensive income	(18,056)	(14,158)
Deferred tax credit (note 10)	80,692	185,655
At the end of the year	37,495	(25,471)

19. DEFERRED INCOME TAX (continued)

The changes in deferred tax assets and liabilities (prior to offsetting the balances within the same tax jurisdiction) during the year are as follows:

Deferred tax liabilities	PP&E	Inventories	Intangible assets	Other	Total at December 31, 2022
At the beginning of the year	(353,420)	49,437	(26,323)	(10,959)	(341,265)
Income statement credit (charge)	152,864	(119,031)	3,400	13,270	50,503
At the end of the year	(200,556)	(69,594)	(22,923)	2,311	(290,762)

Deferred tax assets	Provisions	Trade receivables	Tax losses (1)	Other (2)	Total at December 31, 2022
At the beginning of the year	82,139	35,144	3,578	194,934	315,795
Translation differences	—	—	—	330	330
Credits directly to other comprehensive income	—	—	—	(18,056)	(18,056)
Income statement credit (charge)	16,860	(19,629)	13,822	19,136	30,189
At the end of the year	98,999	15,515	17,400	196,343	328,257

(1) As of December 31, 2022, the recognized deferred tax assets on tax losses amount to \$ 17.4 million and there are net unrecognized deferred tax assets of \$ 202.0 million and unrecognized tax losses amounting to \$ 879.0 million. These two last effects are connected to the acquisition of Ternium Brasil Ltda.

(2) It corresponds mainly to the deferred tax assets related to post-employment benefits and asset retirement obligations.

Deferred tax liabilities	PP&E	Inventories	Intangible assets	Other	Total at December 31, 2021
At the beginning of the year	(426,140)	(30,187)	(20,710)	(2,021)	(479,058)
Income statement credit (charge)	72,720	79,624	(5,613)	(8,938)	137,793
At the end of the year	(353,420)	49,437	(26,323)	(10,959)	(341,265)

Deferred tax assets	Provisions	Trade receivables	Tax losses (3)	Other (4)	Total at December 31, 2021
At the beginning of the year	52,342	9,186	31,084	198,664	291,276
Translation differences	—	—	—	(69)	(69)
Credits directly to other comprehensive income	—	—	—	(14,158)	(14,158)
Effect of changes in tax law	—	—	—	(9,117)	(9,117)
Income statement credit (charge)	29,797	25,958	(27,506)	19,613	47,862
At the end of the year	82,139	35,144	3,578	194,934	315,794

(3) As of December 31, 2021, the recognized deferred tax assets on tax losses amount to \$ 3.6 million and there are net unrecognized deferred tax assets of \$ 0.1 billion and unrecognized tax losses amounting to \$ 0.8 billion. These two last effects are connected to the acquisition of Ternium Brasil Ltda.

(4) It corresponds mainly to the deferred tax assets related to post-employment benefits and asset retirement obligations.

Deferred tax assets and liabilities are offset when the entity a) has a legally enforceable right to set off the recognized amounts; and b) intends to settle the tax on a net basis or to realize the asset and settle the liability simultaneously.

20. OTHER LIABILITIES- NON-CURRENT AND CURRENT

	As of December 31,	
	2022	2021
(i) Other liabilities - Non current		
Post-employment benefits	405,018	390,942
Other employee benefits	84,028	74,787
Asset retirement obligation (note 18) (1)	38,104	32,098
Other	11,064	9,059
Other liabilities - Non-current	538,214	506,886

(1) The asset in connection with this liability is included in Property, plant and equipment.

Post-employment benefits

The amounts recognized in the consolidated statement of financial position are determined as follows:

	Post-employment benefits	
	As of December 31,	
	2022	2021
Present value of unfunded obligations	405,018	390,942
Liability in the statement of financial position	405,018	390,942

The amounts recognized in the consolidated income statement are as follows:

	Post-employment benefits	
	Year ended December 31,	
	2022	2021
Current service cost	13,721	13,624
Interest cost	32,660	29,663
Total included in labor costs	46,381	43,287

Changes in the liability recognized in the consolidated statement of financial position are as follows:

	Post-employment benefits	
	As of December 31,	
	2022	2021
At the beginning of the year	390,942	432,648
Transfers, new participants and funding of the plan	(508)	1,255
Total expense	46,381	43,287
Remeasurements	(24,567)	(46,777)
Effect of changes in demographic assumptions	3,990	710
Effect of changes in financial assumptions	(36,927)	(82,243)
Effect of experience adjustments	8,370	34,756
Translation differences	21,088	(11,720)
Contributions paid	(28,318)	(27,751)
At the end of the year	405,018	390,942

20. OTHER LIABILITIES- NON-CURRENT AND CURRENT (continued)

The principal actuarial assumptions used were as follows:

	Year ended December 31,	
	2022	2021
Mexico		
Discount rate	9.00%	8.00%
Compensation growth rate	6.00% - 7.00%	6.00% - 7.00%
	Year ended December 31,	
	2022	2021
Argentina		
Discount rate	6.00% - 7.00%	6.00% - 7.00%
Compensation growth rate	2.00% - 3.00%	2.00% - 3.00%

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is as follows:

	Impact on defined benefit obligation		
	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	1.00%	-8.1%	9.5%
Compensation growth rate	1.00%	3.3%	-2.8%
Pension growth rate	1.00%	-1.0%	1.1%
Life expectancy	1 year	-2.3%	2.4%

The estimated future payments for the next five years will be between \$ 31.4 million and \$ 39.9 million per year.

	As of December 31,	
	2022	2021
(ii) Other liabilities - Current		
Payroll and social security payable	150,378	161,303
VAT liabilities	113,842	107,453
Other tax liabilities	55,622	53,378
Termination benefits	761	787
Related Parties (Note 25)	515	28
Asset retirement obligation (Note 18)	3,303	3,610
Others	20,422	18,564
Other liabilities - Current	344,843	345,123

21. DERIVATIVE FINANCIAL INSTRUMENTS

Net fair values of derivative financial instruments

The net fair values of derivative financial instruments at December 31, 2022 and 2021 were as follows:

	As of December 31,	
	2022	2021
Contracts with positive fair value		
Foreign exchange contracts	227	4,353
	227	4,353
Contracts with negative fair value		
Interest rate swap contracts	(1)	(163)
Commodity contracts	(504)	—
Foreign exchange contracts	—	(1,726)
	(505)	(1,889)

Derivative financial instruments breakdown is as follows:

(a) Interest rate contracts

Fluctuations in market interest rates create a degree of risk by affecting the amount of the Company's interest payments and the value of its floating-rate debt. As of December 31, 2022, most of the Company's long-term borrowings were at variable rates.

During 2012 and 2013, Tenigal entered into several forward starting interest rate swap agreements in order to fix the interest rate to be paid over an aggregate amount of \$ 100 million, at an average rate of 1.92%. As of December 31, 2022 there are no outstanding balances. These agreements became effective during July 2014, were due in July 2022 and were accounted for as cash flow hedges. As of December 31, 2022, there is no cash flow hedge reserve outstanding related to these agreements.

Changes in fair value of derivative instruments designated as cash flow hedges for each of the years presented are included below:

	Cash flow hedges		
	Gross amount	Income tax	Total
December 31, 2020	(338)	103	(235)
Decrease / Increase	—	—	—
Classification to income statement	278	(83)	195
December 31, 2021	(60)	20	(40)
Decrease / Increase	1	(1)	—
Classification to income statement	59	(19)	40
December 31, 2022	—	—	—

21. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

(b) Foreign exchange contracts

From time to time, Ternium's subsidiaries enter into derivative agreements to manage their exposure to currencies other than the \$, in accordance with the Company's policy for derivative instruments.

During 2022, 2021 and 2020, Ternium Argentina entered into several non-deliverable forward agreements in order to manage the exchange rate exposure generated by Argentine peso-denominated financial assets and liabilities. As of December 31, 2022, there is no outstanding notional amount in Argentine pesos.

Furthermore, during 2022, 2021 and 2020, Ternium Colombia S.A.S. has entered into non-deliverable forward agreements to manage the exposure of certain actual and future trade receivables denominated in its local currency. As of December 31, 2022, the notional amount on these agreements amounted to \$ 90.6 million.

During 2022, 2021 and 2020, Ternium Mexico entered into several forward agreements mainly to manage the exchange rate exposure generated by future payables in EUR related to the investment plan in Pesquería and other standard liabilities in EUR. Furthermore, a minor part of the forward agreements were carried out in order to manage the exchange rate exposure arising from sales in EUR. As of December 31, 2022, the aggregate notional amount on these agreements amounted to \$ 28.5 million.

Furthermore, during 2022, Ternium Mexico has entered into non-deliverable forward agreements to manage the exposure of certain tax credits denominated in its local currency. As of December 31, 2022, the notional amount on these agreements amounted to \$ 120.0 million.

During 2021 and 2020, Ternium Investments S.à r.l., entered into several forward agreements in order to manage the exchange rate exposure generated by the consolidated financial position in EUR. As of December 31, 2022, there is no outstanding notional amount in EUR. In addition, during 2021 and 2020, Ternium Investments S.à r.l. entered into non-deliverable forward agreements to manage the exchange rate exposure generated by actual and future trade receivables denominated in Colombian pesos related to the commissioning of the plant and the business of its subsidiary, Ternium del Atlántico. As of December 31, 2022, there is no outstanding notional amount in Colombian pesos.

The net fair values of the exchange rate derivative contracts as of December 31, 2022 and 2021 were as follows:

Currencies	Contract	Notional amount	Fair value at December 31,	
			2022	2021
EUR/\$	Forward - Buy EUR	26.8 million EUR	258	245
COP/\$	ND Forward - Sell COP	441.8 billion COP	227	4,038
MXN/\$	ND Forward - Sell MXN	2.4 billion MXN	(258)	—
EUR/\$	Forward - Sell EUR	3.0 million EUR	—	70
ARS/\$	ND Forward - Buy ARS	10.9 billion ARS	—	(1,726)
			227	2,627

COP: Colombian pesos; EUR: Euros; \$: US dollars; ARS: Argentine pesos; MXN: Mexican pesos.

c) Commodities contracts

During 2022, Ternium Mexico entered into swap agreements to manage the impact of the fluctuation of zinc price when manufacturing galvanized products. As of December 31, 2022, Ternium Mexico several agreements outstanding with an aggregate notional amount of \$ 5.8 million.

22. LEASE LIABILITIES

	Lease liabilities		
	Current	Non Current	Total
Year ended December 31, 2022			
Values at the beginning of the year	44,371	215,250	259,621
Translation differences	(1,506)	(4,180)	(5,686)
Net proceeds	3,903	9,763	13,666
Indexation	3,107	14,988	18,095
Repayments	(49,404)	(6)	(49,410)
Interest accrued	14,468	—	14,468
Interest paid	(11,605)	—	(11,605)
Reclassifications	45,681	(45,681)	—
As of December 31, 2022	49,015	190,134	239,149
Year ended December 31, 2021			
Values at the beginning of the year	42,486	251,617	294,103
Translation differences	(2,187)	(5,878)	(8,065)
Net proceeds	3,334	8,319	11,653
Indexation	1,810	3,009	4,819
Repayments	(45,604)	—	(45,604)
Interest accrued	14,967	—	14,967
Interest paid	(12,252)	—	(12,252)
Reclassifications	41,817	(41,817)	—
As of December 31, 2021	44,371	215,250	259,621

	As of December 31, 2022	As of December 31, 2021
Commitments in relation to finance leases are payable as follows:		
Within one year	60,233	52,803
Later than one year but not later than five years	151,255	156,538
Later than five years	108,191	128,435
Minimum lease payments	319,679	337,776
Future finance charges	(80,530)	(78,155)
Total Financial lease liabilities	239,149	259,621
The present value of finance lease liabilities is as follows:		
Within one year	49,015	44,371
Later than one year but not later than five years	117,654	122,966
Later than five years	72,480	92,284
Total minimum lease payments	239,149	259,621

23. BORROWINGS

	As of December 31,	
	2022	2021
Non-current		
borrowings	534,352	659,999
debt issue costs	(1,651)	(3,534)
	532,701	656,465
Current		
borrowings	500,091	825,139
debt issue costs	(927)	(2,566)
	499,164	822,573
Total Borrowings	1,031,865	1,479,038

The maturity of borrowings is as follows:

	Expected Maturity Date			At December 31, (1)	
	2023	2024	2025 and thereafter	2022	2021
Fixed Rate	295,033	—	—	295,033	174,965
Floating Rate	204,108	523,366	9,358	736,832	1,304,073
Total	499,141	523,366	9,358	1,031,865	1,479,038

(1) As most borrowings incorporate floating rates that approximate market rates and the contractual repricing occurs mostly every 1 month, the fair value of the borrowings approximates their carrying amount and it is not disclosed separately. Fixed rate borrowings are uncommitted short-term revolving loans and their fair value approximates to their carrying amount.

The weighted average interest rates - which incorporate instruments denominated mainly in U.S. dollars and which do not include the effect of derivative financial instruments nor the devaluation of these local currencies - at year-end were as follows:

	As of December 31,	
	2022	2021
Bank borrowings	6.21 %	1.45 %

The nominal average interest rates shown above were calculated using the rates set for each instrument in its corresponding currency and weighted using the dollar-equivalent outstanding principal amount of said instruments at December 31, 2022 and 2021, respectively.

23. BORROWINGS (continued)

Breakdown of borrowings by currency is as follows:

Currencies	Contract	As of December 31,	
		2022	2021
\$	Floating	684,554	1,252,543
\$	Fixed	197,259	129,000
ARS	Floating	5	—
MXN	Floating	13,339	16,310
COP	Floating	38,934	35,220
COP	Fixed	92,680	40,783
GTQ	Fixed	5,094	5,182
		1,031,865	1,479,038

\$: U.S. dollars; ARS: Argentine pesos; COP: Colombian pesos; GTQ: Guatemalan quetzales; MXN: Mexican pesos.

Ternium's most significant borrowings as of December 31, 2022, were those incurred under Ternium México's syndicated loan facilities, in order to finance the construction of its hot rolling mill, hot-dip galvanizing and painting lines in Pesquería, and under Ternium Brasil's syndicated loan facility, in order to finance solely activities related to its exports of goods:

Date	Borrower	Type	In \$ million		Maturity
			Original principal amount	Outstanding principal amount as of December 31, 2022	
June 2018	Ternium Mexico	Syndicated loan	1,000	125	June 2023
August 2019	Ternium Brasil	Syndicated loan	500	500	August 2024

The main covenants on these loan agreements are limitations on liens and encumbrances, limitations on the sale of certain assets and compliance with financial ratios (i.e. leverage ratio). As of December 31, 2022, Ternium was in compliance with all of its covenants.

24. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS

Ternium is from time to time subject to various claims, lawsuits and other legal proceedings, including customer, employee, tax and environmental-related claims, in which third parties are seeking payment for alleged damages, reimbursement for losses, or indemnity. Management with the assistance of legal counsel periodically reviews the status of each significant matter and assesses potential financial exposure.

Some of these claims, lawsuits and other legal proceedings involve highly complex issues, and often these issues are subject to substantial uncertainties and, therefore, the probability of loss and an estimation of damages are difficult to ascertain. Accordingly, with respect to a large portion of such claims, lawsuits and other legal proceedings, Ternium is unable to make a reliable estimate of the expected financial effect that will result from ultimate resolution of the proceeding. In those cases, Ternium has not accrued a provision for the potential outcome of these cases.

If a potential loss from a claim, lawsuit or other proceeding is considered probable and the amount can be reasonably estimated, a provision is recorded. Accruals for loss contingencies reflect a reasonable estimate of the losses to be incurred based on information available to management as of the date of preparation of the financial statements and take into consideration litigation and settlement strategies. In a limited number of ongoing cases, Ternium was able to make a reliable estimate of the expected loss or range of probable loss and has accrued a provision for such loss but believes that publication of this information on a case-by-case basis would seriously prejudice Ternium's position in the ongoing legal proceedings or in any related settlement discussions. Accordingly, in these cases, the Company has disclosed information with respect to the nature of the contingency but has not disclosed its estimate of the range of potential loss.

The Company believes that the aggregate provisions recorded for potential losses in its consolidated financial statements are adequate based upon currently available information. However, if management's estimates prove incorrect, current reserves could be inadequate and Ternium could incur a charge to earnings which could have a material adverse effect on Ternium's results of operations, financial condition, net worth and cash flows.

(i) Tax claims and other contingencies

(a) Companhia Siderúrgica Nacional (CSN) - Tender offer litigation

In 2013, the Company was notified of a lawsuit filed in Brazil by Companhia Siderúrgica Nacional, or CSN, and various entities affiliated with CSN against Ternium Investments, its subsidiary Ternium Argentina, and TenarisConfab. The entities named in the CSN lawsuit had acquired a participation in Usiminas in January 2012. The CSN lawsuit alleges that, under applicable Brazilian laws and rules, the acquirers were required to launch a tag-along tender offer to all non-controlling holders of Usiminas ordinary shares for a price per share equal to 80% of the price per share paid in such acquisition, or BRL 28.8, and seeks an order to compel the acquirers to launch an offer at that price plus interest. If so ordered, the offer would need to be made to 182,609,851 ordinary shares of Usiminas not belonging to Usiminas' control group; Ternium Investments and Ternium Argentina's respective shares in the offer would be 60.6% and 21.5%.

24. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS (continued)

On September 23, 2013, the first instance court dismissed the CSN lawsuit, and on February 8, 2017, the court of appeals of São Paulo maintained the understanding of the first instance court. On March 6, 2017, CSN filed a motion for clarification against the decision of the court of appeals, which was rejected on July 19, 2017. On August 18, 2017, CSN filed with the court of appeals an appeal seeking the review and reversal of the decision issued by the court of appeals by the Superior Court of Justice. On March 5, 2018, the court of appeals ruled that CSN's appeal did not meet the requirements for review by the Superior Court of Justice and rejected such appeal. On May 8, 2018, CSN appealed against such ruling and on January 22, 2019, the court of appeals rejected such appeal and ordered that the case be submitted to the Superior Court of Justice. On September 10, 2019, the Superior Court of Justice declared CSN's appeal admissible. Decisions at the Superior Court of Justice are taken by simple majority. A 5-judge panel of the Superior Court of Justice began its process for rendering a decision on the merits of the case. At the panel's session held on October 4, 2022, the reporting judge of the panel voted in favor of granting CSN's appeal and ordering the defendants to pay damages to CSN; and on a subsequent session held on December 13, 2022, the president of the panel voted against CSN's appeal. The voting on the case was adjourned for a future session to be determined by the panel. It is not yet known when the new session will take place or whether all the remaining three judges in the panel will express their votes at that session or seek further adjournments. At this time, the Company cannot predict how each of those three judges will vote on the matter.

Ternium continues to believe that all of CSN's claims and allegations are groundless and without merit, as confirmed by several opinions of Brazilian legal counsel, two decisions issued by the Brazilian securities regulator (CVM) in February 2012 and December 2016, and the first and second instance court decisions referred to above. Accordingly, no provision has been recorded in these Consolidated Financial Statements.

(b) Shareholder claims relating to the October 2014 acquisition of Usiminas shares

On April 14, 2015, the staff of the CVM determined that an acquisition of additional ordinary shares of Usiminas by Ternium Investments made in October 2014, triggered a requirement under applicable Brazilian laws and regulations for Usiminas' controlling shareholders to launch a tender offer to all non-controlling holders of Usiminas ordinary shares. The CVM staff's determination was made further to a request by NSSMC and its affiliates, who alleged that Ternium's 2014 acquisition had exceeded a threshold that triggers the tender offer requirement. On April 29, 2015, Ternium filed an appeal to be submitted to the CVM's Board of Commissioners. On May 5, 2015, the CVM staff confirmed that the appeal would be submitted to the Board of Commissioners and that the effects of the staff's decision would be stayed until such Board rules on the matter.

On June 15, 2015, upon an appeal filed by NSSMC, the CVM staff changed its earlier decision and stated that the obligation to launch a tender offer would fall exclusively on Ternium. Ternium's appeal was submitted to the CVM's Board of Commissioners. On April 18, 2018, Ternium filed a petition with the CVM's reporting Commissioner requesting that the applicable threshold for the tender offer requirement be recalculated taking into account the new ordinary shares issued by Usiminas in connection with its 2016 BRL 1 billion capital increase and that, in light of the replenishment of the threshold that would result from such recalculation, the CVM staff's 2015 determination be set aside. On August 16, 2022, CVM's Board of Commissioners determined, by unanimous decision, the extinction of the procedure, recognizing that Ternium is not obligated to launch a tender offer as a result of the 2016 capital increase. The CVM decision is final.

24. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS (continued)

(c) Potential Mexican income tax adjustment

In March 2015, as part of a tax audit with respect to fiscal year 2008, the Mexican tax authority ("SAT") challenged the deduction by Ternium Mexico of a tax loss arising from an intercompany sale of shares in December 2008. In addition, in September 2018, as part of a tax audit for fiscal year 2011, the SAT objected to the deduction by Ternium Mexico of the remainder of the 2008 tax loss. Ternium Mexico requested an injunction from the Mexican courts against the SAT claims and filed its defense and supporting documents with the SAT. After Ternium Mexico obtained an injunction in August 2020, in November 2020 the SAT issued a new preliminary audit report in which it reiterated its objections to the deduction of the 2008 tax loss. In June 2021, the SAT determined income tax adjustments with respect to 2008 and 2011 for amounts currently estimated at approximately \$ 64.7 million and \$ 31.7 million, respectively. Ternium Mexico appealed the SAT determinations.

More recently, however, Ternium Mexico withdrew its appeals and agreed to provide further information and documentation to the SAT. With all of the above-mentioned information and documentation, the SAT should reduce the 2008 and 2011 tax adjustments downwards to approximately \$ 15.5 million and \$ 31.7 million, respectively. As a result, the Company recognized a tax provision of \$47.2 million in its Consolidated Financial Statements as of December 31, 2022. Should the audits be not ultimately closed by the SAT on the above terms, Ternium Mexico could initiate litigation to challenge the tax adjustments.

(d) Fishermen associations' claims

Civil contingencies include lawsuits brought by a number of fishermen associations on behalf of their associates, alleging that the dredge of Ternium Brasil's deep-water port has had a negative impact on fish farming and exploitation activities in the Sepetiba Bay area in Rio de Janeiro and that, as a result, fishermen in that area had suffered damages. A provision in the amount of \$ 24.5 million was recorded at the acquisition date in connection with this matter (\$ 4.5 million and \$ 8.8 million as of December 31, 2022 and 2021, respectively; the decrease in the provision was mainly due to the favorable outcome for a part of the lawsuits).

(e) Tax assessments relating to the use of certain ICMS tax credits

The Imposto Sobre Operações Relativas à Circulação de Mercadorias e Serviços, or ICMS, is a Brazilian value-added tax on the services (inter-states) and the transfer of goods in Brazil. Payment of ICMS generates tax credits that, subject to applicable law, rules and regulations, may be either used to offset ICMS payment obligations generated in connection with domestic sales of products and services, or sold and transferred to third parties.

The Rio de Janeiro State Treasury Office is challenging the use by Ternium Brasil of ICMS tax credits generated in connection with purchases of refractory materials in the period from December 2010 through December 2016, and intends to assess taxes and impose fines on Ternium Brasil on the argument that such materials may not be qualified as "raw materials" or "intermediary products" but as "goods for consumption" and, accordingly, ICMS tax credits generated in connection with their purchase are not available and may not be used to offset ICMS payment obligations generated in connection with Ternium Brasil's domestic sales of carbon steel slabs. Ternium Brasil has appealed against the Rio de Janeiro State Treasury Office tax assessments and fines. A provision in the amount of \$ 57.7 million was recorded as of the acquisition date in connection with this matter (\$ 34.8 million and \$ 32.5 million as of December 31, 2022 and 2021, respectively).

24. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS (continued)

(f) ICMS deferral tax benefit – Action of Unconstitutionality

On March 31, 2005, through State Law No. 4,529 (Law RJ 4529), the State of Rio de Janeiro granted Ternium Brasil a tax incentive consisting of a deferral of ICMS payable by Ternium Brasil in connection with the construction and operation of the company's Rio de Janeiro steelmaking complex. The incentive applies in respect of the acquisition of fixed assets and certain raw materials (i.e. iron ore, pellets, alloys, coke, coal and scrap) and significantly reduces input ICMS credit accumulation by Ternium Brasil. The tax incentive was granted for a period of 20 years from the commencement of the construction works for Ternium Brasil's Rio de Janeiro steel complex.

In 2012, a Brazilian political party filed a direct action of unconstitutionality against Law RJ 4529 before the Brazilian Federal Supreme Court, claiming that the State Law should be declared unconstitutional because the tax incentive granted pursuant to Law RJ 4529 had not been approved by Brazil's National Council of Fiscal Policy (Conselho Nacional de Política Fazendária, or CONFAZ).

In August 2017, the Brazilian Congress enacted Supplementary Law No. 160/2017, instituting a mechanism through which the States may confirm any ICMS incentives they had granted in prior years without CONFAZ approval. In furtherance of such Supplementary Law, in December 2017 the Brazilian States adopted ICMS Convention 190/2017, establishing the applicable rules and deadlines for confirming such ICMS incentives. In accordance with the ICMS Convention 190/2017, the State of Rio de Janeiro published its list of ICMS incentives, including, among others, the ICMS benefit granted to Ternium Brasil, and filed with CONFAZ all relevant documents concerning such incentives. On July 27, 2018, the Governor of Rio de Janeiro issued Decree No. 46,378, pursuant to which the State of Rio de Janeiro reconfirmed, in accordance with ICMS Convention 190/2017, the ICMS tax benefits listed in its official gazette publication made pursuant to the Convention, including, among others, Ternium Brasil's ICMS tax benefits.

In October 2018, the State of Rio de Janeiro and the Federation of Industries of the State of Rio de Janeiro filed petitions arguing that the action of unconstitutionality against Law RJ 4529 could not be judged by the Brazilian Federal Supreme Court since, following the revalidation of such law under Supplementary Law No.160/17 and the ICMS Convention 190/2017, such action of unconstitutionality had lost its purpose. On October 20, 2020, the Reporting Justice Minister of the Brazilian Federal Supreme Court in charge of the case ruled that the action of unconstitutionality against Law RJ 4529 was impaired by the supervening loss of its object, and on November 17, 2020, the Reporting Justice Minister's ruling became final and not subject to any further recourses or appeals.

The tax benefits accumulated under Ternium Brasil's ICMS incentive amounted to approximately \$ 1,089 million as of the acquisition date of Ternium Brasil on September 7, 2017. In accordance with the guidance in IFRS 3, the Company recorded as of the acquisition date a provision of \$ 651.8 million (including estimated penalties and interest) in connection with this matter, together with an asset of \$ 325.9 million arising from its right to recover 50% of the contingency amount from Thyssenkrupp.

As at December 31, 2020, both the asset, which expired on September 7, 2020, of \$ 194.1 million recorded in the Company's financial statements arising from its right to recover 50% of the contingency amount from Thyssenkrupp and the contingent liability of \$ 380.1 million recorded in its financial statements in connection with this matter have been derecognized. Accordingly, the Company recognized in the year ended December 31, 2020, a net gain in the amount of \$ 186.0 million.

24. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS (continued)

(ii) Commitments

The following are Ternium's main off-balance sheet commitments:

(a) Ternium Argentina signed agreements, mainly with Vale S.A. and Mineração Corumbaense Reunida S.A., to cover 80% of its required iron ore, pellets and iron ore fines volumes until December 31, 2024, for an estimated total amount of \$ 688.8 million. Although they do not set a minimum amount or a minimum commitment to purchase a fixed volume, under certain circumstances a penalty is established for the party that fails of:

- 7% in case the annual operated volume is between 70% and 75% of the total volume of purchases of the Company; such percentage is applied over the difference between the actual purchased volume and the 80% of the total volume of purchases.
- 15% in case the annual operated volume is lower than 70% of the total volume of purchases of the Company; such percentage is applied over the difference between the actual purchased volume and the 80% of the total volume of purchases.

(b) Ternium Argentina also signed various contracts for the provision of natural gas, including Tecpetrol and Energy Consulting Services S.A., both related companies of Ternium, assuming firm commitments for a total of \$ 62.5 million payable until April 2025. Additionally, Ternium Argentina signed contracts for gas transportation with Transportadora de Gas del Norte S.A., a related company of Ternium, assuming firm commitments for a total of \$ 13.4 million payable until April 2028.

(c) Ternium Argentina signed an agreement with Air Liquide Argentina S.A. for the supply of oxygen, nitrogen and argon until 2021, for an aggregate amount of \$ 72.5 million, which is due to terminate in 2037.

(d) On April 24, 2017, Ternium Mexico entered into a 25-year contract (effective as of December 1, 2016, through December 1, 2041) with Techgen, S.A. de C.V. for the supply of 699 MW (which represents 78% of Techgen's capacity) and covers most of Ternium Mexico's facilities electricity needs. Monthly payments are determined on the basis of capacity charges, operation costs, back-up power charges, and transmission charges. As of the seventh contract year (as long as Techgen's existing or replacing bank facility has been repaid in full), Ternium Mexico has the right to suspend or early terminate the contract if the rate payable under the agreement is higher than the rate charged by Comisión Federal de Electricidad ("CFE") or its successors. Ternium Mexico may instruct Techgen to sell to any affiliate of Ternium Mexico, to CFE, or to any other third party all or any part of unused contracted energy under the agreement and Ternium Mexico will benefit from the proceeds of such sale.

(e) Ternium México issued a guarantee letter covering up to approximately \$ 16.6 million of the obligations of Gas Industrial de Monterrey, S.A. de C.V. ("GIMSA"), under the natural gas trading agreement between GIMSA and NEG Natural S.A. de C.V. ("NEG"). The credit line granted by NEG in connection with this natural gas trading agreement amounted to approximately \$ 17.0 million. As of December 31, 2022, the outstanding amount under the natural gas trading agreement was \$ 17.0 million, which is below the amount included in the guarantee letter issued by Ternium México. Due to recent volatility in natural gas prices, the contract with NEG was renewed in June 28, 2022, and a guarantee letter covering up to approximately \$ 28.8 million was requested and would be issued in January 2023.

24. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS (continued)

(f) In June, 2018, Ternium Mexico entered into a loan agreement with a syndicate of banks for a \$ 1,000 million syndicated loan facility for the purpose of financing capital expenditures, the repayment or prepayment of existing debt, and other general corporate purposes. The Company entered the Facility on June 12, 2018, and the final maturity date is on June 12, 2023, being payable in eight consecutive and equal semi-annual installments commencing on December 13, 2019. The main financial covenant that the Facility requires to meet is the consolidated net senior leverage ratio to be not greater than 3.5 to 1.00. During 2019, the facility was fully disbursed (\$ 400 million was disbursed during 2018 and \$ 600 million by the end of June 2019). As of December 31, 2022, the outstanding value of this loan agreement was \$ 125 million and the Company was in compliance with all of its covenants. On January 12, 2023, Ternium Mexico made a pre-payment of the remaining balance, leaving the loan fully amortized.

(g) Ternium Mexico issued a guarantee letter covering up to approximately \$ 62.0 million of the obligations of Techgen, S.A. de C.V. ("Techgen"), under the Clean Energy Certificates trading agreement between Techgen and Enel Green Power ("ENEL"). The amount equals the remnant balance if Techgen decides to terminate the agreement prior to the expiration date (and decreases as time of the contract passes). The contract was signed on May 25, 2018 and terminates on June 30, 2041.

(h) In June 2008, Ternium Mexico entered into an industrial gas supply agreement with Praxair Mexico for the Guerrero and Juventud facilities until December 2024, for a total amount of \$ 421 million. In 2011, an amendment agreement added the purchase of hydrogen for the Juventud and Universidad facilities valid until April 2025. As of December 31, 2022, the agreement considers a minimum annual oxygen consumption of 96 million cubic meters, valued at approximately \$ 4.5 million per year. The Company is in compliance with the minimum annual quotas established, which represent less than half of the average annual consumption.

(i) On May 9, 2018, Ternium Mexico entered into a 10-year contract (effective as of July 1, 2018) with Kinder Morgan Texas Pipeline L.L.C., Kinder Morgan Tejas Pipeline L.L.C. and Kinder Morgan Border Pipeline L.L.C. for the transportation of natural gas in the United States of America (Texas). The contracted capacity is 60,000 MMBTU/day and the annual cost is approximately \$ 3.7 million.

(j) On December 30, 2019, Ternium Mexico entered into a 15-year contract (effective as of July 1, 2021) with Kinder Morgan Texas Pipeline L.L.C., Kinder Morgan Tejas Pipeline L.L.C. and Kinder Morgan Gas Natural de México S. de R.L. de C.V. for the transportation of natural gas in the United States of America (Texas) and in Mexico. The contracted capacity is 31,000 MMBTU/day and the annual cost is approximately \$ 4.8 million.

(k) Techgen is a party to gas transportation capacity agreements with Kinder Morgan Gas Natural de Mexico, S. de R.L. de C.V., Kinder Morgan Texas Pipeline LLC and Kinder Morgan Tejas Pipeline LLC for the whole transportation capacity starting on August 1, 2016 and ending during the second half of 2036. As of December 31, 2022, the outstanding value of this commitment was approximately \$ 193.2 million. Ternium's exposure under the guarantee in connection with these agreements amounts to \$ 92.8 million, corresponding to the 48% of the agreements' outstanding value as of December 31, 2022.

24. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS (continued)

(l) Ternium issued two stand-by letters of credit covering 48% of the funding of a debt service reserve account under a syndicated loan agreement between Techgen and several banks led by Citigroup Global Markets Inc., Credit Agricole Corporate and Investment Bank, and Natixis, New York Branch acting as joint bookrunners. The loan agreement dated as of February 13, 2019, amounted to \$ 640 million and the proceeds were used by Techgen to refinance in full all amounts owed under a previous syndicated loan between Techgen and several banks, which funds were used in the construction of the facility. As of December 31, 2022, the outstanding aggregated amount under the stand-by letters of credit was \$ 46.8 million, as a result the amount guaranteed by Ternium was approximately \$ 22.4 million.

(m) During 2006, CSA, the predecessor of Ternium Brasil, has entered into a 15-year contract denominated “Contrato de comercialização de energia elétrica no ambiente regulado – CCEAR por disponibilidade” to provide electric energy to 24 distributors starting on 2011. Under this contract, Ternium Brasil has to provide 200 MW average per year and the price is adjusted by the Brazilian inflation index. The penalty for not delivering the volume of energy of the contract is the difference between the spot price and the unit variable cost (calculated and published by the Agência Nacional de Energia Elétrica), calculated per hour.

(n) Ternium Brasil signed an exclusivity agreement with Vale S.A. for the purchase of iron ore (pellets, sinter feed and lump ore), which is due to terminate in 2029. The total purchased volume, in accordance with the actual production capacity, is of approximately 8.0 million tons per year. Ternium Brasil has not the obligation to take or pay the mentioned volume and only should pay logistic costs in case of not purchasing the contracted volume.

(o) Ternium Brasil, for its activity of energy generation through gas and steam turbines, signed on March 2017 a contract with GE Global Parts and Products GMBH, General Electric International Inc. and Alstom Energia Térmica e Indústria Ltda. for the maintenance services of such turbines (including the supply of spare parts) for a period of 20 years. This agreement was extended for an additional period of 4 years. As of December 31, 2022, the outstanding amount of this commitment was \$ 192.1 million.

(p) Ternium Brasil also signed on November 2007 a contract with Primetals Technologies Brazil Ltda. for the provision of maintenance services at a central workshop for the entire steel mill complex, including caster maintenance for the steel plant. As of December 31, 2022, the outstanding amount of the mentioned services was approximately \$ 38.9 million and is due to terminate on November 2024. Ternium Brasil is currently using more hours than the minimum quantity of contracted hours.

(q) Ternium Brasil is a party to a long-term contract with the Consortium formed by Air Liquide Brasil Ltda., AirSteel Ltda., White Martins Gases Industriais Ltda., White Martins Steel Ltda. and ThyssenKrupp MinEnergy GmbH for the supply of air, oxygen, nitrogen and argon to satisfy the requirements up to January 2029. The outstanding amount was approximately \$ 190.0 million as of December 31, 2022. The contract has minimum daily-required volumes.

24. CONTINGENCIES, COMMITMENTS AND RESTRICTIONS ON THE DISTRIBUTION OF PROFITS (continued)

(r) Ternium Brasil signed on January 2015 a contract with Naturgy (formerly Companhia Distribuidora de Gás do Rio de Janeiro) for the supply of natural gas, which was due to terminate on December 2019. This agreement was automatically renewed for another two years, is due to terminate on December 2023 and can be interrupted by common agreement due to free market conditions' changes. The outstanding amount was of \$ 39.4 million (or 61.3 million m3) as of December 31, 2022. Ternium Brasil is currently purchasing more than the minimum volume required by the contract, which is 85% of the volume mentioned before.

(s) Ternium Brasil signed on May 2019 a contract with LSI Logística S.A. for mobile equipment rental. This agreement is due to terminate on May 2024 and the outstanding amount was \$ 4.5 million as of December 31, 2022. The contract only has a penalty in case of anticipated termination.

(t) In March 2022, Ternium Brasil S.A. entered into a contract with Unicarbo Ltda. for the supply of petcoke. This agreement is due to terminate on March 2023 and the outstanding amount was \$ 40.9 million as of December 31, 2022. The contract has minimum monthly-required volumes.

(u) The acquisition of Ternium Brasil Ltda. was mainly financed through an unsecured 5-year syndicated facility in the principal amount of \$ 1.5 billion granted to the Company's subsidiary, Ternium Investments S.à.r.l., by a syndicate of banks. The facility is to be repaid in eight consecutive and equal semi-annual installments, commencing on March 5, 2019, and has been guaranteed by the Company's subsidiary, Ternium México, S.A. de C.V. The borrower and the guarantor are subject to certain covenants customary for transactions of this type, including limitations on liens and encumbrances, transactions with affiliates, consolidations and mergers and restrictions on investments. The guarantor is additionally subject to limitations on the sale of certain assets and compliance with a leverage ratio. There are no limitations to the payment of dividends applicable to the borrower or the guarantor, except, with respect to the borrower, upon an event of default under the facility. During 2018 and 2019, the Company made prepayments of principal for \$ 375 million and \$ 725 million, respectively. As of December 31, 2022, this syndicated facility was fully repaid.

(iii) Restrictions on the distribution of profits

In accordance with Luxembourg Law, the Company is required to transfer a minimum of 5% of its net profit for each financial year to a legal reserve until such reserve equals 10% of the issued share capital.

As of December 31, 2022, this reserve is fully allocated and additional allocations to the reserve are not required under Luxembourg law. Dividends may not be paid out of the legal reserve.

The Company may pay dividends to the extent, among other conditions, that it has distributable retained earnings calculated in accordance with Luxembourg law and regulations.

25. RELATED PARTY TRANSACTIONS

As of December 31, 2022, Techint Holdings S.à r.l. ("Techint") owned 62.02% of the Company's share capital and Tenaris Investments S.à r.l. ("Tenaris") held 11.46% of the Company's share capital. Each of Techint and Tenaris were controlled by San Faustin S.A., a Luxembourg company ("San Faustin"). Rocca & Partners Stichting Administratiekantoor Aandelen San Faustin ("RP STAK"), a private foundation (Stichting) located in the Netherlands, held voting shares in San Faustin sufficient in number to control San Faustin. No person or group of persons controls RP STAK.

For commitments with Related parties, see note 24.

The following transactions were carried out with related parties:

	Year ended December 31,		
	2022	2021	2020
(i) Transactions			
(a) Sales of goods and services			
Sales of goods to non-consolidated parties	720,137	950,792	432,511
Sales of goods to other related parties	224,698	195,636	15,972
Sales of services and others to non-consolidated parties	177	178	173
Sales of services and others to other related parties	4,213	1,496	1,009
	949,225	1,148,102	449,665
(b) Purchases of goods and services			
Purchases of goods from non-consolidated parties	643,494	508,784	347,638
Purchases of goods from other related parties	70,951	65,964	83,738
Purchases of services and others from non-consolidated parties	13,735	10,279	9,421
Purchases of services and others from other related parties	78,899	98,065	75,483
Purchases of goods and services in connection with lease contracts from other related parties	—	—	201
	807,079	683,092	516,481
(c) Financial results			
Income with non-consolidated parties	8,298	6,256	7,182
Expenses in connection with lease contracts from other related parties	(976)	(1,013)	(1,484)
	7,322	5,243	5,698
(d) Dividends received			
Dividends from non-consolidated parties	15,493	82,122	6,299
	15,493	82,122	6,299
(e) Other income and expenses			
Income (expenses), net with non-consolidated parties	3,300	1,029	765
Income (expenses), net with other related parties	682	879	1,042
	3,982	1,908	1,807

25. RELATED PARTY TRANSACTIONS (continued)

	As of December 31,	
	2022	2021
(ii) Year-end balances		
(a) Arising from sales/purchases of goods/services and other transactions		
Receivables from non-consolidated parties	180,476	204,329
Receivables from other related parties	43,765	26,690
Advances from non-consolidated parties	4,851	5,383
Advances to suppliers with other related parties	3,683	3,852
Payables to non-consolidated parties	(91,172)	(72,373)
Payables to other related parties	(20,163)	(16,617)
Lease liabilities with other related parties	(2,287)	(2,635)
	119,153	148,629

(iii) Officers and Directors' compensation

During the year ended December 31, 2022, the cash compensation of Officers and Directors amounted to \$ 22,899 (2021: \$ 18,137). In addition, Officers received 1,221,909 Units for a total amount of \$ 7,220 (2021: \$ 6,276) in connection with the incentive retention program mentioned in note 3 (o)(3).

26. OTHER REQUIRED DISCLOSURES

(a) Statement of comprehensive income

	Cash flow hedges			Currency translation adjustment
	Gross amount	Income tax	Total	
At December 31, 2020	(338)	103	(235)	(3,877,863)
(Decrease) / Increase	—	—	—	(40,481)
Reclassification to income statement	278	(83)	195	—
At December 31, 2021	(60)	20	(40)	(3,918,344)
(Decrease) / Increase	1	(1)	—	42,708
Reclassification to income statement	59	(19)	40	—
At December 31, 2022	—	—	—	(3,875,636)

26. OTHER REQUIRED DISCLOSURES (continued)*(b) Statement of cash flows*

	Year ended December 31,		
	2022	2021	2020
(i) Changes in working capital (1)			
Inventories	438,090	(1,906,524)	156,517
Receivables and others	10,888	(41,535)	(29,539)
Trade receivables	573,811	(885,200)	(12,110)
Other liabilities	46,403	106,223	37,517
Trade payables	83,306	109,247	200,410
	1,152,498	(2,617,789)	352,795
(ii) Income tax accrual less payments			
Tax accrued (Note 10)	573,728	1,397,139	291,488
Taxes paid	(1,769,289)	(818,854)	(224,927)
	(1,195,561)	578,285	66,561
(iii) Interest accruals less payments			
Interest accrued (Note 9 and 22)	(13,940)	(20,948)	13,339
Interest received	31,880	62,912	49,421
Interest paid	(42,735)	(36,063)	(55,769)
	(24,795)	5,901	6,991

(1) Changes in working capital are shown net of the effect of exchange rate changes.

(c) Financial debt reconciliation

	Financial debt			
	Finance lease liabilities	Short term borrowings	Long term borrowings	Total
At December 31, 2020	(294,103)	(395,604)	(1,327,289)	(2,016,996)
Cash flows	57,856	253,824	9,210	320,890
Reclassifications	—	(662,708)	662,708	—
Acquisitions - finance leases	(11,653)	—	—	(11,653)
Foreign exchange adjustments	8,059	7,643	—	15,702
Other non cash movements	(19,780)	(25,728)	(1,094)	(46,602)
At December 31, 2021	(259,621)	(822,573)	(656,465)	(1,738,659)
Cash flows	61,015	467,014	625	528,654
Reclassifications	—	(124,140)	124,140	—
Acquisitions - finance leases	(13,666)	—	—	(13,666)
Foreign exchange adjustments	5,686	26,093	58	31,837
Other non cash movements	(32,563)	(45,558)	(1,059)	(79,180)
At December 31, 2022	(239,149)	(499,164)	(532,701)	(1,271,014)

27. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

The following amendments, standards and interpretations have been applied on the year starting January 1, 2022:

International Financial Reporting Standard 7, "Financial Instruments: Disclosures", International Financial Accounting Standard 9, "Financial Instruments" and International Accounting Standard 39, "Financial Instruments: Recognition and Measurement" - Interest Rate Benchmark Reform

The IASB has issued amendments to IFRS 7 "Financial Instruments: Disclosures", IFRS 9 "Financial Instruments" and IAS 39 "Financial Instruments: Recognition and Measurement" which provide certain reliefs in relation to interest rate benchmark reforms. The reliefs relate to hedge accounting and have the effect that the reforms should not generally cause hedge accounting to terminate. However, any hedge ineffectiveness should continue to be recorded in the income statement.

As of December 31, 2021, the Company's management had already assessed the effects of applying these amendments on the Company's financial statements and had not identified any material impact in the application of these amendments.

International Financial Reporting Standard 16, "Leases" - Amendments on Covid-19-related Rent Concessions

In May 2020, the IASB made an amendment to IFRS 16 "Leases" in the context of the COVID-19 pandemic and its impact on rent concessions granted to lessees. Such concessions might take a variety of forms, including payment holidays and deferral of lease payments, which provides lessees with an option to treat qualifying rent concessions in the same way as they would if they were not lease modifications. In many cases, this will result in accounting for the concessions as variable lease payments in the period in which they are granted. Entities applying the practical expedients must disclose this fact, whether the expedient has been applied to all qualifying rent concessions or, if not, information about the nature of the contracts to which it has been applied, as well as the amount recognized in profit or loss arising from the rent concessions.

As of December 31, 2021 the Company's management had already assessed the effects of applying this amendment on the Company's financial statements and had not identified any lease agreements which may be impacted by the application of this amendment.

The following standards, amendments to standards and interpretations are not mandatory for the financial year beginning January 1, 2022, and have not been early adopted:

International Accounting Standard 12, "Income taxes" - Amendments

The IASB has issued amendments to IAS 12 "Income taxes", which introduce a further exception from the initial recognition exemption. Under the amendments, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences. Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and liability in a transaction that is not a business combination and affects neither accounting nor taxable profit.

The Company's management has assessed the effects of applying these amendments on the Company's financial statements and has not identified any material impact in the application of these amendments.

27. RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS (continued)

Other standards and interpretations non-significant for the Company's financial statements:

- Amendments to IFRS 10 and IAS 28 - Sale or contribution of assets between an investor and its associate or joint venture
- Amendments to IAS 1 - Classification of Liabilities as Current or Non-current
- Amendments to IFRS 3 - Reference to the Conceptual Framework
- Amendments to IAS 16 - Property, Plant and Equipment: Proceeds before intended use
- Amendments to IAS 37 - Onerous Contracts - Cost of Fulfilling a Contract
- Annual Improvements to IFRS Standards 2018-2020 cycle
- Amendments to IAS 1 and IFRS Practice Statement 2 - Disclosure of Accounting policies
- Amendments to IAS 8 - Definition of accounting estimates

28. FINANCIAL RISK MANAGEMENT

1) Financial risk factors

Ternium's activities expose the Company to a variety of risks: market risk (including the effects of changes in foreign currency exchange rates, interest rates and commodities prices), credit risk and liquidity risk.

Ternium's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the financial performance. Ternium's subsidiaries may use derivative financial instruments to hedge certain risk exposures.

1.1) Market Risk

(i) Foreign exchange rate risk

Ternium operates and sells its products in different countries, and as a result is exposed to foreign exchange rate volatility. Ternium's subsidiaries may use derivative contracts in order to hedge their exposure to exchange rate risk derived from their trade and financial operations.

Ternium's foreign exchange policy is to minimize the negative impact of fluctuations in the value of other currencies with respect to the U.S. dollar. Ternium's subsidiaries monitor their short-term net cash flows in currencies other than the U.S. dollar and analyze potential hedging according to market conditions. This hedging can be carried out by netting positions or by financial derivatives. However, regulatory or legal restrictions in the countries in which Ternium's subsidiaries operate, could limit the possibility of the Company carrying out its hedging policy.

Ternium has foreign operations, whose net assets are exposed to foreign currency translation risk, some of which may impact net income.

The following table shows a breakdown of Ternium's assessed financial position exposure to currency risk as of December 31, 2022:

Exposure to functional currency	\$ million
EU euro (EUR)	(29)
Argentine peso (ARS)	(22)
Mexican peso (MXN)	(260)
Brazilian real (BRL)	39
Colombian peso (COP)	(94)
Other currencies	(2)

The main relevant exposures correspond to:

(a) Argentine peso vs. U.S. dollar

If the Argentine peso had weakened by 1% against the U.S. dollar, it would have generated a pre-tax gain of \$ 0.2 million and a pre-tax loss of \$ 3.2 million as of December 31, 2022, and 2021, respectively.

(b) Mexican peso vs. U.S. dollar

If the Mexican peso had weakened by 1% against the U.S. dollar, it would have generated a pre-tax gain of \$ 2.6 million and \$ 12.5 million as of December 31, 2022 and 2021, respectively.

(c) Colombian peso vs. U.S. dollar

If the Colombian peso had weakened by 1% against the U.S. dollar, it would have generated a pre-tax gain of \$ 0.9 million and \$ 0.5 million as of December 31, 2022 and 2021, respectively.

28. FINANCIAL RISK MANAGEMENT (continued)**(d) Brazilian real vs. U.S. dollar**

If the Brazilian real had weakened by 1% against the U.S. dollar, it would have generated a pre-tax loss of \$ 0.4 million and \$ 0.5 million as of December 31, 2022 and 2021, respectively.

We estimate that if the Argentine peso, Mexican peso, Colombian peso and Brazilian real had weakened simultaneously by 1% against the U.S. dollar with all other variables held constant, total pre-tax income for the year would have been \$ 3.3 million higher (\$ 9.4 million higher as of December 31, 2021), as a result of foreign exchange gains/losses on translation of U.S. dollar-denominated financial position, mainly local currency cash, trade receivables, trade payables, tax credits and liabilities, lease liabilities, borrowings and other liabilities.

Considering the same variation of the currencies against the U.S. dollar of all net investments in foreign operations amounting to \$ 725.7 million, the currency translation adjustment included in total equity would have been \$ 7.2 million lower, arising mainly from the adjustment on translation of the equity related to the Brazilian real during the year 2022.

(ii) Interest rate risk

Ternium manages its exposure to interest rate volatility through its financing alternatives and hedging instruments. Borrowings issued at variable rates expose the Company to the risk of increased interest expense in the event of a raise in market interest rates, while borrowings issued at fixed rates expose the Company to a variation in its fair value. The Company's interest-rate risk mainly arises from long-term borrowings that bear variable-rate interest that could be partially fixed through different derivative transactions, such as interest rate swaps.

Ternium's nominal weighted average interest rate for its debt instruments, which do not include neither the effect of derivative financial instruments, nor the devaluation of the local currencies, was 6.21% and 1.45% as of December 31, 2022 and 2021, respectively. These rates were calculated using the rates set for each instrument in its corresponding currency and weighted using the dollar-equivalent outstanding principal amount of each instrument.

Ternium's total variable interest rate debt amounted to \$ 737 million (71.4% of total borrowings) at December 31, 2022 and \$ 1,304 million (88.2% of total borrowings) at December 31, 2021.

If interest rates on the aggregate average notional of U.S. dollar denominated borrowings held during 2022, excluding borrowings with derivatives contracts mentioned in Note 21 (a), had been 100 basis points higher with all other variables held constant, total pre-tax income for the year ended December 31, 2022 would have been \$ 12.1 million lower (\$ 17.3 million lower as of December 31, 2021).

Effect of IBOR reform

Reform and replacement of various inter-bank offered rates ('IBORs') has become a priority for regulators. Most IBOR rates stopped being published by December 31, 2021, while certain U.S. dollar LIBOR rates would stop being published by June 30, 2023.

Ternium started the transition to alternative interest rate benchmarks in some of its outstanding loans during 2022. During the first half of 2023, Ternium will continue with the transition to the alternative interest rates benchmark (mostly SOFR for the remaining outstanding loans that continued to be based in U.S. dollar LIBOR rates as of December 31, 2022. All newly transacted floating rate financial liabilities will be linked to an alternative benchmark rate (e.g. SOFR + spread adjustments).

28. FINANCIAL RISK MANAGEMENT (continued)

Under any specific requests of any of its counterparties in these outstanding borrowings, Ternium will negotiate to perform a transition of legacy IBOR-based financial instruments to alternative benchmark interest rates. The Company has prepared a sensitivity analysis considering this situation and concluded that no material impacts could derive from this change. The Company is also enhancing its IT systems and internal processes to ensure smooth transition from IBOR to alternative benchmark interest rates.

1.2) Credit risk

Credit risk arises from cash and cash equivalents, deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions. Ternium's subsidiaries have credit guidelines in place to ensure that derivative and treasury counterparties are limited to high credit quality financial institutions.

Ternium invests in financial assets with a minimum credit rating of investment grade established by an international qualification agency renowned in the financial market, in line with corporate investment portfolio policies. Approximately 59.9% of the Company's liquid financial assets correspond to investment grade rated instruments as of December 31, 2022, in comparison with approximately 57.3% as of December 31, 2021. The investments in financial assets are as follows:

	At December 31, 2022	At December 31, 2021
Cash and cash equivalents	1,653,355	1,276,605
Other Investments - Current and Non-Current	1,975,490	1,357,485
Fixed Income (time-deposit, zero-coupon bonds, commercial papers)	576,784	863,416
Deposit certificates	204,802	710,996
Commercial papers	323,386	92,729
Other	48,596	59,691
Bonds and other fixed income	1,395,853	490,806
Non - U.S. government securities	651,633	367,333
Corporate securities	744,220	123,473
Other notes	2,853	3,263

Ternium has no significant concentrations of credit risk from customers. No single customer accounts for more than ten percent of Ternium's sales. Ternium's subsidiaries have policies in place to ensure that sales are made to customers with an appropriate credit history, and that credit insurances, letters of credit or other instruments are requested to reduce credit risk whenever deemed necessary. The subsidiaries maintain allowances for potential credit losses. The utilization of credit limits is regularly monitored.

Trade and other receivables are carried at face value less allowance for doubtful accounts, if applicable. This amount does not differ significantly from fair value. The other receivables do not contain significant impaired assets.

As of December 31, 2022, trade receivables total \$ 1,180.7 million (\$1,767.4 million as of December 31, 2021). These trade receivables are collateralized by guarantees under letter of credit and other bank guarantees of \$ 0.1 million (\$ 30.3 million as of December 31, 2021), credit insurance of \$ 520.6 million (\$ 800.1 million as of December 31, 2021) and other guarantees of \$ 7.0 million (\$ 8.4 million as of December 31, 2021).

28. FINANCIAL RISK MANAGEMENT (continued)

As of December 31, 2022, trade receivables of \$ 1,089.1 million (\$ 1,681.5 million as of December 31, 2021) were fully performing.

As of December 31, 2022, trade receivables of \$ 101.5 million (\$ 95.4 million as of December 31, 2021) were past due (mainly up to 180 days).

The amount of the allowance for doubtful accounts was \$ 9.9 million as of December 31, 2022 (\$ 9.5 million as of December 31, 2021).

The carrying amounts of the Company's trade and other receivables as of December 31, 2022, are denominated in the following currencies:

Currency	\$ million
US dollar (\$)	1,102
EU euro (EUR)	25
Argentine peso (ARS)	26
Mexican peso (MXN)	594
Brazilian real (BRL)	338
Colombian peso (COP)	76
Other currencies	1
	2,162

1.3) Liquidity risk

Management maintains sufficient cash and marketable securities and credit facilities to finance normal operations. Management monitors rolling forecasts of the group's liquidity reserve on the basis of expected cash flow.

The table below analyses financial liabilities into relevant maturity groups based on the remaining period at the date of the statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

\$ million	2023	2024	2025	2026	Thereafter
Borrowings	499	524	9	—	—
Interests to be accrued (1)	38	14	1	—	—
Trade payables and other liabilities	1,117	8	6	3	33
Lease liabilities	49	34	28	28	100
Total	1,703	580	44	31	133

(1) These amounts do not include the effect of derivative financial instruments.

As of December 31, 2022, total cash and cash equivalents and other current and non-current investments less borrowings amounted to \$ 2,594.3 million.

1.4) Capital risk

Ternium seeks to maintain an adequate debt/equity ratio considering the industry and the markets where it operates. The year-end ratio debt over debt plus equity is 0.07 and 0.11 as of December 31, 2022 and 2021, respectively. The Company does not have to comply with regulatory capital adequacy requirements as known in the financial services industry.

28. FINANCIAL RISK MANAGEMENT (continued)

2) Financial instruments by category and fair value hierarchy level

The accounting policies for financial instruments have been applied to the line items below. According to the scope and definitions set out in IFRS 7 and IAS 32, employers' rights and obligations under employee benefit plans, and non-financial assets and liabilities such as advanced payments and income tax payables, are not included.

As of December 31, 2022 (in \$ thousands)	Amortized cost	Assets at fair value through profit or loss	Assets at fair value through OCI	Total
(i) Assets as per statement of financial position				
Receivables	197,686	—	—	197,686
Derivative financial instruments	—	227	—	227
Trade receivables	1,180,689	—	—	1,180,689
Other investments	483,209	96,428	1,395,853	1,975,490
Cash and cash equivalents	880,402	772,953	—	1,653,355
Total	2,741,986	869,608	1,395,853	5,007,447

As of December 31, 2022 (in \$ thousands)	Liabilities at fair value through profit or loss	Amortized cost	Total
(ii) Liabilities as per statement of financial position			
Other liabilities	—	64,968	64,968
Trade payables	—	1,102,264	1,102,264
Derivative financial instruments	505	—	505
Finance lease liabilities	—	239,149	239,149
Borrowings	—	1,031,865	1,031,865
Total	505	2,438,246	2,438,751

As of December 31, 2021 (in \$ thousands)	Amortized cost	Assets at fair value through profit or loss	Assets at fair value through OCI	Total
(i) Assets as per statement of financial position				
Receivables	202,123	—	—	202,123
Derivative financial instruments	—	4,353	—	4,353
Trade receivables	1,767,425	—	—	1,767,425
Other investments	621,831	244,848	490,806	1,357,485
Cash and cash equivalents	584,076	692,529	—	1,276,605
Total	3,175,455	941,730	490,806	4,607,991

As of December 31, 2021 (in \$ thousands)	Liabilities at fair value through profit or loss	Amortized cost	Total
(ii) Liabilities as per statement of financial position			
Other liabilities	—	56,595	56,595
Trade payables	—	1,078,448	1,078,448
Derivative financial instruments	1,889	—	1,889
Finance lease liabilities	—	259,621	259,621
Borrowings	—	1,479,038	1,479,038
Total	1,889	2,873,702	2,875,591

28. FINANCIAL RISK MANAGEMENT (continued)

Fair Value by Hierarchy

Following the requirements contained in IFRS 13, Ternium categorizes each class of financial instrument measured at fair value in the statement of financial position into three levels, depending on the significance of the judgment associated with the inputs used in making the fair value measurements:

- Level 1 comprises financial assets and financial liabilities whose fair values have been determined on the basis of quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 includes financial assets and financial liabilities for which fair values have been estimated using inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 comprises financial instruments for which inputs to estimate fair value of the assets or liabilities are not based on observable market data (unobservable inputs).

The following table presents the assets and liabilities that are measured at fair value as of December 31, 2022 and 2021:

Fair value measurement as of December 31, 2022 (in \$ thousands):				
Description	Total	Level 1	Level 2	Level 3 (*)
Financial assets at fair value through profit or loss / OCI				
Cash and cash equivalents	772,953	772,953	—	—
Other investments	1,492,281	1,283,284	164,980	44,017
Derivative financial instruments	227	—	227	—
Total assets	2,265,461	2,056,237	165,207	44,017
Financial liabilities at fair value through profit or loss / OCI				
Derivative financial instruments	505	—	505	—
Total liabilities	505	—	505	—
Fair value measurement as of December 31, 2021 (in \$ thousands):				
Description	Total	Level 1	Level 2	Level 3 (*)
Financial assets at fair value through profit or loss / OCI				
Cash and cash equivalents	692,529	692,529	—	—
Other investments	735,654	668,056	39,777	27,821
Derivative financial instruments	4,353	—	4,353	—
Total assets	1,432,536	1,360,585	44,130	27,821
Financial liabilities at fair value through profit or loss / OCI				
Derivative financial instruments	1,889	—	1,889	—
Total liabilities	1,889	—	1,889	—

(*) The fair value of financial instruments classified as level 3 is not obtained from observable market information, but from measurements of the asset portfolio at market value provided by the fund manager. The evolution of such instruments during the years ended December 31, 2022 and 2021, corresponds to the initial investment and to the changes in its fair value, as follows:

	Guarantee fund companies	Non - U.S. government securities	Corporate securities
At December 31, 2021	3,263	7,863	16,695
Disinvestment	(74)	(2,237)	(12,502)
Interest accrued	—	(1,578)	—
Changes in fair value	2,158	875	(339)
Reclassifications	—	36,240	—
Net foreign exchange gain	(2,493)	—	(3,854)
At December 31, 2022	2,854	41,163	—

28. FINANCIAL RISK MANAGEMENT (continued)

There were no significant transfers between Level 1 and Level 2 of the fair value hierarchy there were no transfers from Level 1 to Level 3 and there were transfers of Non-U.S. Government securities from Level 2 to Level 3.

The fair value of financial instruments traded in active markets is based on quoted market prices at the reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by Ternium is the current mid-price. These instruments are included in Level 1 and comprise primarily corporate and sovereign debt securities.

The fair value of financial instruments that are not traded in an active market (such as certain debt securities, certificates of deposits with original maturity of more than three months, forward and interest rate derivative instruments) is determined by using valuation techniques which maximize the use of observable market data when available and rely as little as possible on entity specific estimates. If all significant inputs required to value an instrument are observable, the instrument is included in Level 2. Ternium values its assets and liabilities included in this level using mid prices, interest rate curves, broker quotations, current exchange rates and forward rates volatilities obtained from market contributors as of the valuation date.

If one or more of the significant inputs are not based on observable market data, the instruments are included in Level 3. Ternium values its assets and liabilities in this level using observable market inputs, information provided by fund managers and management assumptions which reflect the Company's best estimate on how market participants would price the asset or liability at measurement date.

3) Accounting for derivative financial instruments and hedging activities

Derivative financial instruments are initially recognized in the statement of financial position at cost and subsequently measured at fair value. Changes in fair value are disclosed under "Other financial income (expenses), net" line item in the income statement. Ternium does not hedge its net investments in foreign entities.

Ternium designates certain derivatives as hedges of a particular risk associated with a recognized asset or liability or a highly probable forecast transaction. These transactions are classified as cash flow hedges (mainly interest rate swaps). The effective portion of the fair value of derivatives that are designated and qualify as cash flow hedges is recognized within other comprehensive income. Amounts accumulated in other comprehensive income are recognized in the income statement in the same period than any offsetting losses and gains on the hedged item. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. The fair value of Ternium derivative financial instruments (asset or liability) continues to be reflected on the statement of financial position.

For transactions designated and qualifying for hedge accounting, Ternium documents at inception the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedge transactions. The Company also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. At December 31, 2022, there is no outstanding effective portion of designated cash flow hedges .

28. FINANCIAL RISK MANAGEMENT (continued)

The fair values of various derivative instruments used for hedging purposes are disclosed in Note 21. The full fair value of a hedging derivative is classified as a non-current asset or liability when the remaining maturity of the hedged item is more than 12 months and as a current asset or liability when the remaining maturity of the hedged item is less than 12 months.

Changes in the fair value of any derivative instruments that do not qualify for hedge accounting under IAS 39 are recognized immediately in the income statement.

4) Fair value estimation

The estimated fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

For the purpose of estimating the fair value of financial assets and liabilities with maturities of less than one year, the Company uses the market value less any estimated credit adjustments. For other investments, the Company uses quoted market prices.

As most borrowings incorporate floating rates that approximate market rates and the contractual repricing occurs mostly every one month, the fair value of the borrowings approximates their carrying amount and it is not disclosed separately.

In assessing the fair value of derivatives and other financial instruments, Ternium uses a variety of methods, including, but not limited to, estimated discounted value of future cash flows using assumptions based on market conditions existing at each year-end.

29. FOREIGN EXCHANGE RESTRICTIONS IN ARGENTINA

Ternium's Argentine subsidiary, Ternium Argentina S.A., is currently operating in a complex and volatile economic environment. Beginning in September 2019, the Argentine government has imposed and continues to impose significant restrictions on foreign exchange transactions. Restrictions have tightened significantly over time.

Effective November 1, 2022, the Argentine Central Bank put in place a new regulation on import of services rendered by non-related parties, pursuant to which the Argentine Central Bank may clear or not the payment of import of services and, if cleared, may determine a payment term equal or different to that being requested. There are no rules on the conditions upon which the Argentine Central Bank may clear or determine alternative payment terms.

Also effective November 1, 2022, the Argentine government implemented a new system, known as the SIRA system, pursuant to which the Argentine government may clear or not the payment of imports and, if cleared, may determine a payment term equal or different to that being requested. There are no objective conditions upon which the Argentine government may clear the payment of imports or determine alternative payment terms under the SIRA system.

This context of volatility and uncertainty remains in place as of the issue date of these Consolidated Financial Statements. Although as of the date of these financial statements these measures did not have a significant effect on Ternium Argentina's ability to purchase U.S. dollars at the prevailing official exchange rate for most of its imports of goods and for the acquisition of services from unrelated parties, if such restrictions continue to be maintained, or are further tightened, Ternium Argentina could be restricted from making payment of imports for key steelmaking inputs (which would adversely affect its operations), or would need to resort to alternative, more expensive arrangements (which would adversely affect its results of operations). In addition, access to the Argentine foreign exchange market to distribute dividends or to pay royalties to related parties at the prevailing official exchange rate generally requires prior Argentine Central Bank approval, which is rarely, if ever, granted, thus limiting Ternium's ability to collect dividends from Ternium Argentina at the prevailing official exchange rate.

Under Ternium Argentina's annual accounts as of December 31, 2022, and for the year then ended, revenues amounted to \$ 3,830 million (2021: \$3,425 million), net profit from continuing operations to \$ 756 million (2021: \$ 930 million), total assets to \$ 5,258 million (2021: \$ 4,798 million), total liabilities to \$ 511 million (2021: \$ 541 million) and shareholders' equity to \$ 4,747 million (2021: \$ 4,257 million). Ternium Argentina's cash and cash equivalents and other investments amounted to \$ 1,363 million as of December 31, 2022, broken down as follows:

- \$ 1,152 million in U.S. dollars-denominated instruments, mainly sovereign bonds issued by the Argentine Government and payable in U.S. dollars, Argentine Treasury bonds related to the official exchange rate and negotiable obligations and promissory notes issued by Argentine export driven companies in U.S. dollars and payable in Argentine pesos.
- \$ 145 million in Argentine pesos-denominated instruments, mainly inflation-adjusted bonds and mutual funds.
- \$ 66 million in Argentine pesos-denominated instruments with underlying assets linked to the U.S. dollar.

Ternium Argentina's financial position in ARS as of December 31, 2022, amounted to \$ 261 million in monetary assets and \$ 254 million in monetary liabilities. All of Ternium Argentina's ARS-denominated assets and liabilities are valued at the prevailing official exchange rate.

30. THE RUSSIA-UKRAINE ARMED CONFLICT

On February 24, 2022, Russia launched a military attack on Ukraine. In response, the United States, the United Kingdom, and the European Union, among other countries, have imposed a wave of sanctions against certain Russian institutions, companies and citizens. As a result of the armed conflict and related sanctions, foreign trade transactions involving Russian and Ukrainian counterparties have been severely affected.

Russia has a significant participation in the international trade of steel slabs, iron ore pellets, metallurgical coal, pulverized coal for injection, which are relevant inputs for Ternium's operations. In addition, Ukraine traditionally had a relevant participation in the international trade of steel slabs and iron ore pellets. As a result of the armed conflict and the economic sanctions imposed on Russia, Ternium or its contractors (including shipping companies) may not be able to continue purchasing or transporting products from, or making payments to, Ukrainian or Russian suppliers or counterparties; and the Company may be required to purchase raw materials from other sources at increased prices, resulting in limitations to Ternium's production levels and higher costs, affecting the Company's profitability and results of operations.

Pablo Brizzio
Chief Financial Officer