MANAGEMENT REPORT

FCA-PSA Merger

On December 17, 2019, FCA and PSA entered into a combination agreement providing for the combination of FCA and PSA through a cross-border merger, with FCA as the surviving legal entity in the merger ("Stellantis N.V.").

On September 14, 2020, FCA and PSA agreed to amend the combination agreement. According to the combination agreement amendment, the FCA Extraordinary Dividend, to be paid to former FCA shareholders was reduced to €2.9 billion, with PSA's 46 percent stake in Faurecia S.E. ("Faurecia") planned to be distributed to all Stellantis shareholders promptly after closing following approval of the Stellantis board and shareholders.

On January 4, 2021, PSA and FCA held their respective extraordinary general shareholder meetings in order to, among other matters, approve the merger transaction. The respective shareholder meetings approved the merger. Following the respective shareholder approvals and receipt of the final regulatory clearances, FCA and PSA completed the legal merger.

The conditions agreed to as part of the regulatory clearance did not have a material impact on the cash flows or financial positions for the Company.

On January 17, 2021, the board of directors was appointed, the Stellantis articles of association became effective and the combined company was renamed Stellantis. On this date, the Stellantis management and board of directors collectively obtained the power and the ability to control the assets, liabilities and operations of both FCA and PSA. As such, under IFRS 3 - Business Combinations ("IFRS 3"), January 17, 2021 is the acquisition date for the business combination.

On January 29, 2021, the approximately €2.9 billion extraordinary distribution was paid to holders of FCA common shares of record as of the close of business on Friday, January 15, 2021. Refer to Note 3, *Scope of consolidation*, within the Consolidated Financial Statements included elsewhere in this report for additional information.

Identification of the accounting acquirer

The merger was accounted for by Stellantis using the acquisition method of accounting in accordance with IFRS 3, which requires the identification of the acquirer and the acquiree for accounting purposes. Based on the assessment of the indicators under IFRS 3 and consideration of all pertinent facts and circumstances, management determined that PSA is the acquirer for accounting purposes and as such, the merger has been accounted for as a reverse acquisition. In identifying PSA as the acquiring entity, notwithstanding that the merger was effected through an issuance of FCA shares, the most significant indicators were (i) the composition of the combined group's board, composed of eleven directors, six of whom were to be nominated by PSA, PSA shareholders or PSA employees, or were current PSA executives, (ii) the combined group's first CEO, who is vested with the full authority to individually represent the combined group, and was the president of the PSA Managing Board prior to the merger, and (iii) the payment of a premium by pre-merger shareholders of PSA. Refer to Note 3, *Scope of consolidation*, within the Consolidated Financial Statements included elsewhere in this report for additional information.

Faurecia Distribution

On January 25, 2021, an extraordinary general meeting of the shareholders was convened in order to approve the distribution by Stellantis to the holders of its common shares of up to 54,297,006 ordinary shares of Faurecia (an automotive equipment supplier) and up to €308 million, which are the proceeds received by Peugeot S.A. in November 2020 from the sale of certain ordinary shares of Faurecia. The distribution represented the legacy PSA ownership in Faurecia and approximately 39 percent of the share capital of Faurecia and became unconditional on March 10, 2021, with (i) ex-date on Monday, March 15, 2021; and (ii) record date on Tuesday, March 16, 2021. Holders of Stellantis common shares have been entitled to: (i) 0.017029 ordinary shares of Faurecia; and (ii) €0.096677 for each common share of Stellantis they hold on the record date for the Distribution. The distribution occurred on March 22, 2021, resulting in 53,130,574 ordinary shares of Faurecia and €302 million in cash distributed. The Company lost control of Faurecia on January 11, 2021. Refer to Note 3, *Scope of consolidation*, and to Note 27, *Equity*, within the Consolidated Financial Statements included elsewhere in this report for additional information on Faurecia deconsolidation and distribution.

UNAUDITED PRO FORMA CONSOLIDATED FINANCIAL INFORMATION

This Unaudited Pro Forma Consolidated Financial Information has been prepared to give effect to completion of the merger of PSA and FCA to create Stellantis, which was completed on January 17, 2021, as if it had been completed on January 1, 2020. The Unaudited Pro Forma Consolidated Financial Information includes the unaudited pro forma consolidated income statement for years ended December 31, 2021 and 2020 and the related explanatory notes (the "Unaudited Pro Forma Consolidated Financial Information"). The Unaudited Pro Forma Consolidated Financial Information has been prepared for illustrative purposes only with the aim to provide comparative period income statement information, and does not necessarily represent what the actual results of operations would have been had the merger been completed on January 1, 2020. Additionally, the Unaudited Pro Forma Consolidated Financial Information does not attempt to represent, or be an indication of, the future results of operations or cash flows of Stellantis. No pro forma statement of financial position has been presented as the effects of the merger have been reflected in the Consolidated Statement of Financial Position of Stellantis as of December 31, 2021. Please refer to the Consolidated Statement of Financial Position as of December 31, 2021 included elsewhere within this report for additional information.

Refer to the section *FCA-PSA Merger* included above for information on the reverse acquisition presentation of the financial statements and to Note 3, *Scope of consolidation* in the Consolidated Financial Statements included elsewhere within this report for additional information on the merger.

The Unaudited Pro Forma Consolidated Financial Information presented herein is derived from (i) the Consolidated Income Statement of Stellantis for the years ended December 31, 2021 and 2020 included elsewhere in this report, (ii) FCA's Consolidated Income Statement for the year ended December 31, 2020, contained in FCA's Annual Report on Form 20-F filed with the SEC on March 4, 2020, (iii) the consolidated statement of income included in the audited consolidated financial statements of PSA for the year ended December 31, 2020 in the Consolidated Financial Statements and Management's Discussion and Analysis of Groupe PSA on Form 6-K, furnished to the SEC on March 4, 2021, and (iv) FCA's accounting records for the period from January 1, 2021 to January 16, 2021. The Unaudited Pro Forma Consolidated Financial Information should be read in conjunction with the historical consolidated financial statements referenced above and the accompanying notes thereto, as well as the other information contained in this report.

The consolidated financial statements of Stellantis, PSA and FCA are prepared in accordance with IFRS as issued by the IASB and in accordance with IFRS as adopted by the European Union. There is no effect on the consolidated financial statements resulting from differences between IFRS as issued by the IASB and IFRS as adopted by the European Union. The Unaudited Pro Forma Consolidated Financial Information is prepared on a basis that is consistent with the accounting policies used in the preparation of the Consolidated Financial Statements of Stellantis as of and for year ended December 31, 2021 and 2020 included elsewhere in this report.

The historical consolidated financial information has been adjusted in the accompanying Unaudited Pro Forma Consolidated Financial Information to give effect to unaudited pro forma events that are directly attributable to the merger and factually supportable. Specifically, the pro forma adjustments relate to the following:

- The purchase price allocation, primarily to reflect adjustments to depreciation and amortization associated with the acquired property, plant and equipment and intangible assets with a finite useful life, as well as a reduction in the interest expense related to the fair value adjustment to financial liabilities.

- The alignment of accounting policies of FCA to those applied by Stellantis.

- The elimination of intercompany transactions between FCA and PSA.

The pro forma adjustments relate to the two periods from January 1, 2020 to December 31, 2020 and from January 1, 2021 to January 16, 2021.

The Unaudited Pro Forma Consolidated Financial Information does not reflect any anticipated synergies, operating efficiencies or cost savings that may be achieved, or any integration costs that may be incurred, following the completion of the merger.

UNAUDITED PRO FORMA CONSOLIDATED INCOME STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

(€ million, except per share amounts)	For the year ended December 31, 2021									
			Pro Forma adjustments							
		Stellantis		January 1 - 16, 2021 results of FCA		Purchase Price Allocation		Other adjustments		Stellantis Pro Forma Consolidated Income Statement
		Note 1		Note 2		Note 3		Note 4		
Net revenues	€	149,419	€	2,704	€	2	€	(6)	€	152,119
Cost of revenues		119,943		2,322		(52)		(6)		122,207
Selling, general and other costs		9,130		192		(2)		—		9,320
Research and development costs		4,487		113		(40)		—		4,560
Gains/(Losses) on disposal of investments		(35)		—		—		—		(35)
Restructuring costs		698		—		—		—		698
Operating income/(loss)		**15,126**		**77**		**96**		**—**		**15,299**
Net financial expenses		734		29		(17)		—		746
Profit/(loss) before taxes		**14,392**		**48**		**113**		**—**		**14,553**
Tax expense		1,911		21		7		—		1,939
Share of the profit of equity method investees		737		3		—		—		740
Net profit/(loss) from continuing operations		**13,218**		**30**		**106**		**—**		**13,354**
Profit/(loss) from discontinued operations, net of tax		990		—		—		—		990
Net profit/(loss)	**€**	**14,208**	**€**	**30**	**€**	**106**	**€**	**—**	**€**	**14,344**
Net profit/(loss) attributable to:										
Owners of the parent	€	14,200	€	30	€	106	€	—	€	14,336
Non-controlling interests	€	8	€	—	€	—	€	—	€	8
Net profit/(loss) from continuing operations										
Owners of the parent	€	13,210	€	30	€	106	€	—	€	13,346
Non-controlling interests	€	8	€	—	€	—	€	—	€	8
Earnings per share:										
Basic earnings per share	€	4.64							€	4.69
Diluted earnings per share	€	4.51							€	4.55
Earnings per share from continuing operations:										
Basic earnings per share	€	4.32							€	4.36
Diluted earnings per share	€	4.19							€	4.23

The accompanying notes are an integral part of the Unaudited Pro Forma Consolidated Financial Information.

(€ million, except per share amounts)	For the year ended December 31, 2020				
		Pro Forma adjustments			
	PSA Historical Consolidated (as adjusted) [1]	FCA Historical Consolidated	Purchase Price Allocation	Other adjustments	Stellantis Pro Forma Financial Information
	Note 1	Note 2	Note 3	Note 4	
Net revenues	€ 47,656	€ 86,676	€ 110	€ (560)	€ 133,882
Cost of revenues	38,250	75,962	(1,266)	(759)	112,187
Selling, general and other costs	3,923	5,501	(52)	25	9,397
Research and development costs	2,231	2,979	(960)	301	4,551
Gains/(Losses) on disposal of investments	174	4	—	—	178
Restructuring costs	416	73	—	—	489
Operating income/(loss)	**3,010**	**2,165**	**2,388**	**(127)**	**7,436**
Net financial expenses	94	993	(380)	(35)	672
Profit before taxes	**2,916**	**1,172**	**2,768**	**(92)**	**6,764**
Tax expense	504	1,332	240	8	2,084
Share of the profit of equity method investees	(74)	184	—	—	110
Net profit from continuing operations	**2,338**	**24**	**2,528**	**(100)**	**4,790**
Profit/(loss) from discontinued operations, net of tax	(315)	—	—	—	(315)
Net profit/(loss)	**€ 2,023**	**€ 24**	**€ 2,528**	**€ (100)**	**€ 4,475**
Net profit/(loss) attributable to:					
Owners of the parent	€ 2,173	€ 29	€ 2,512	€ (100)	€ 4,614
Non-controlling interests	€ (150)	€ (5)	€ 16	€ —	€ (139)
Net profit/(loss) from continuing operations attributable to:					
Owners of the parent	€ 2,353	€ 29	€ 2,512	€ (100)	€ 4,794
Non-controlling interests	€ (15)	€ (5)	€ 16	€ —	€ (4)
Earnings per share:					
Basic earnings per share	€ 1.41				€ 1.48
Diluted earnings per share	€ 1.34				€ 1.43
Earnings per share from continuing operations:					
Basic earnings per share	€ 1.52				€ 1.54
Diluted earnings per share	€ 1.45				€ 1.49

(1) Refer to Note 3, Scope of consolidation in the Consolidated Financial Statements included elsewhere in this Report

The accompanying notes are an integral part of the Unaudited Pro Forma Consolidated Financial Information.

NOTES TO UNAUDITED PRO FORMA CONSOLIDATED FINANCIAL INFORMATION

Note 1 – Stellantis / PSA Historical Consolidated (as adjusted)

This column represents the Consolidated Income Statement of Stellantis for the year ended December 31, 2021 and the PSA Historical Consolidated Income Statement (as adjusted) for the year ended December 31, 2020, which is derived from the historical consolidated statement of income of PSA for the year ended December 31, 2020.

In accordance with IFRS 3, PSA was determined to be the acquirer for accounting purposes, therefore, the year ended December 31, 2020 represents the continuing operations of PSA adjusted for the discontinuation of Faurecia. Refer to Note 3, *Scope of consolidation*, within the Consolidated Financial Statements included elsewhere within this report for additional information.

Note 2 – FCA Historical

This column represents FCA's results for the period from January 1, 2021 to January 16, 2021, as derived from FCA's accounting records as well as the FCA consolidated income statement included in FCA's audited consolidated financial statements for the year ended December 31, 2020. In order to conform to the presentation of Stellantis in its Consolidated Income Statement for the years ended December 31, 2021 and 2020 included elsewhere within this report, Results from investments related to equity method investments are reclassified to Share of the profit of equity method investees, and Results from Investments other than equity method investments are reclassified to Net financial expenses.

Note 3 – Purchase Price Allocation

As noted in the introduction to this Unaudited Pro Forma Consolidated Financial Information, the merger has been accounted for using the acquisition method of accounting in accordance with IFRS 3, with PSA identified as the accounting acquirer (reverse acquisition accounting). The acquisition method of accounting under IFRS 3 applies the fair value concepts defined in IFRS 13 and requires, among other things, that the assets acquired and the liabilities assumed in a business combination be recognized by the acquirer at their fair values as of the merger date, which for accounting purposes was January 17, 2021. As a result, the acquisition method of accounting has been applied and the assets and liabilities of FCA have been recognized at the merger acquisition date at their respective fair values, with limited exceptions as permitted by IFRS 3. The excess of the consideration transferred over the fair value of FCA's assets acquired and liabilities assumed has been recorded as goodwill. Refer to Note 3, *Scope of consolidation*, within the Consolidated Financial Statements included elsewhere within this report for additional information.

The Unaudited Pro Forma Consolidated Financial Information reflects the effects of the purchase accounting adjustments, where applicable, on the unaudited pro forma consolidated income statement for the years ended December 31, 2021 and 2020 as if the merger had occurred on January 1, 2020.

The following tables provide a summary of the pro forma effects of the purchase price allocation adjustments in the unaudited pro forma consolidated income statement for the years ended December 31, 2021 and 2020.

For the period January 1 - 16, 2021

(€ million)	January 1-16, 2021 Intangible assets (A)	Property, plant and equipment (B)	Financial liabilities (C)	Other (D)	Total
Net revenues	€ —	€ —	€ —	€ 2	€ 2
Cost of revenues	—	45	—	7	52
Selling, general and other costs	—	2	—	—	2
Research and development costs	40	—	—	—	40
Net financial expenses/(income)	—	—	21	(4)	17
Tax expenses	(4)	—	(3)	—	(7)
Net profit	**€ 36**	**€ 47**	**€ 18**	**€ 5**	**€ 106**

For the year ended December 31, 2020

(€ million)	For the year ended December 31, 2020 Intangible assets (A)	Property, plant and equipment (B)	Financial liabilities (C)	Other (D)	Total
Net revenues	€ —	€ —	€ —	€ 110	€ 110
Cost of revenues	(4)	1,092	—	178	1,266
Selling, general and other costs	8	44	—	—	52
Research and development costs	960	—	—	—	960
Net financial expenses/(income)	—	—	462	(82)	380
Tax expenses	(90)	(28)	(74)	(48)	(240)
Net profit	**€ 874**	**€ 1,108**	**€ 388**	**€ 158**	**€ 2,528**

The pro forma adjustments are described in further detail below.

A. Intangible assets

The fair value of brands (Jeep, Ram, Dodge, Fiat, Maserati, Alfa Romeo and Mopar) was determined through an income approach based on the relief from royalty method, which requires an estimate of future expected cash flows. The useful life associated with the brands is determined to be indefinite. For capitalized development expenditures, the fair value has been assessed according to a multi-criteria approach based on relief from royalty method and an excess-earning method. The fair value for the Dealer network has been assessed using the replacement cost method. The fair value of reacquired rights has been valued based on the discounted cash flows expected from the related agreement.

Amortization of intangible assets has been calculated on the fair value taking into account the estimated remaining useful life of the acquired assets. The related change in amortization as a result of the fair value adjustment to intangible assets was a net decrease in amortization expense of €40 million and €964 million for the period January 1 to January 16, 2021 and for the year ended December 31, 2020, respectively, of which €40 million and €960 million has been recorded within Research and development costs in relation to capitalized research and development costs and other intangible assets, respectively, and €8 million has been recorded within Selling, general and other costs in relation to the dealer network and (4) million has been recorded within Cost of revenues in relation to reacquired rights for the year ended December 31, 2020.

B. Property, plant and equipment

The fair value of property, plant and equipment was determined primarily through the replacement cost method, which requires an estimation of the physical, functional and economic obsolescence of the related assets. A market approach, which requires the comparison of the subject assets to transactions involving comparable assets, was applied to determine the fair value of land. The fair value of certain assets was determined through an income approach.

Depreciation has been calculated on the fair value taking into account the estimated remaining useful life of the acquired assets. The related change in depreciation as a result of the fair value adjustment to property, plant and equipment was a decrease in depreciation expense of €47 million and €1,136 million for the period January 1 to January 16, 2021 and for the year ended December 31, 2020, respectively, of which €45 million and €1,092 million has been recorded within Cost of revenues and €2 million and €44 million has been recorded within Selling, general and other costs in the Unaudited Pro Forma Consolidated Financial Information.

C. Financial liabilities

Purchase price adjustments were recognized to step up to fair value the financial liabilities based on quoted market prices for listed debt and based on discounted cash flow models for debt that is not listed. The fair value adjustments to financial liabilities resulted in a decrease in interest expense due to the decrease of the effective interest rate based on current market conditions, of €21 million and €462 million for the period January 1 to January 16, 2021 and for the year ended December 31, 2020, respectively, and has been recorded within Net financial income (expense) in the Unaudited Pro Forma Consolidated Financial Information.

D. *Other*

Primarily reflects:

- the recognition of additional revenue of €2 million and €54 million for the period January 1 to January 16, 2021 and for the year ended December 31, 2020, respectively, as a result of a step up to fair value of deferred revenue relating to extended warranty service contracts, as well as additional finance costs of €4 million and €93 million for the period January 1 to January 16, 2021 and for the year ended December 31, 2020, respectively, due to the recognition of the fair value adjustments of the related liabilities.

- the reversal of the impact on cost of revenues of €7 million and €232 million for the period January 1 to January 16, 2021 and for the year ended December 31, 2020, respectively, of certain prepaid assets that were written off as part of the purchase price allocation.

The step up in the value of inventories has not been recognized as a pro forma adjustment as this impact has been recognized in Stellantis results for the year ended December 31, 2021.

E. Tax expense

Represents the tax effects on the pro forma adjustments reflected in the unaudited pro forma consolidated income statement, calculated based on statutory tax rates applicable in the relevant jurisdictions.

Note 4 – Other Adjustments

Other adjustments mainly include the following:

- the elimination of the intercompany transactions with Sevel in the Stellantis Consolidated Income Statement for the year ended December 31, 2020 of €534 million. Sevel is a joint operation that was previously owned 50 percent each by both PSA and FCA. Upon completion of the merger, Stellantis holds 100 percent of Sevel, which is fully consolidated from that date;

- the alignment of FCA's accounting policies to Stellantis accounting policies resulting in a net decrease in Net profit of €100 million for the year ended December 31, 2020, primarily relating to an increase in Research and development expenditures expensed;

- the alignment of the classification of certain items to align to Stellantis' income statement presentation.

Note 5 - Pro Forma Earnings per Share

Refer to Note 28, *Earnings per share*, included within the Consolidated Financial Statements for the year ended December 31, 2021 for additional detail on the calculation of earnings per share.

Regarding the pro forma basic and diluted earnings per share from continuing operations for the year ended December 31, 2020:

(i) Pro forma weighted average number of outstanding Stellantis common shares for the year ended December 31, 2020 includes PSA weighted average number of outstanding common shares for the year ended December 31, 2020 converted with the merger exchange ratio of 1.742 and Stellantis common shares issued at the merger date;

(ii) The number of the equity warrants on PSA ordinary shares delivered to General Motors ("GM"), amounting to 39,727,324, have been included in the diluted number of shares and converted with the merger exchange ratio of 1.742;

(iii) Pro forma weighted average number of outstanding Stellantis common shares resulting from dilutive equity instruments performance share plans issued by PSA and converted with the merger exchange ratio of 1.742; and

(iv) Pro forma weighted average number of outstanding Stellantis common shares resulting from the equity instruments issued under FCA's equity incentive plan.

Pro Forma Basic earnings per share

	Year ended December 31, 2021		
(€ million except otherwise noted)	Stellantis	Continuing operations	Discontinued operations
Net profit attributable to owners of the parent, as adjusted	**€ 14,200**	**€ 13,210**	**€ 990**
Add: FCA Net profit attributable to owners of the parent, January 1 - 16, 2021	30	30	—
Add: Pro forma adjustments	106	106	—
Pro Forma Net profit attributable to owners of the parent (A)	**€ 14,336**	**€ 13,346**	**€ 990**
Weighted average number of shares outstanding for basic earnings per share (thousand), January 17 - December 31, 2021 (B)	3,059,284	3,059,284	3,059,284
Pro Forma Basic earnings per share (€ per share) (A/B)	**€ 4.69**	**€ 4.36**	**€ 0.32**

(€ million except otherwise noted)	Year ended December 31, 2020 Stellantis	Continuing operations	Discontinued operations
Net profit/(loss) attributable to owners of the parent, as adjusted	**€ 2,173**	**€ 2,353**	**€ (180)**
Add: FCA Net profit attributable to owners of the parent, January 1 - December 31, 2020	29	29	—
Add: Pro forma adjustments	2,412	2,412	—
Pro Forma Net profit/(loss) attributable to owners of the parent (A)	**€ 4,614**	**€ 4,794**	**€ (180)**
Pro Forma Weighted average number of shares outstanding for diluted earnings per share (thousand) (B)	3,119,935	3,119,935	3,119,935
Pro Forma Basic earnings/(loss) per share (€ per share) (A/B)	**€ 1.48**	**€ 1.54**	**€ (0.06)**

Pro Forma Diluted earnings per share

(€ million except otherwise noted)	Year ended December 31, 2021 Stellantis	Continuing operations	Discontinued operations
Net profit attributable to owners of the parent, as adjusted	**€ 14,200**	**€ 13,210**	**€ 990**
Add: FCA Net profit attributable to owners of the parent, January 1 - 16, 2021	30	30	—
Add: Pro forma adjustments	106	106	—
Pro Forma Net profit attributable to owners of the parent (A)	**€ 14,336**	**€ 13,346**	**€ 990**
Weighted average number of shares outstanding (thousand), January 17 - December 31, 2021	*3,059,284*	*3,059,284*	*3,059,284*
Number of shares deployable for share-based compensation, January 17 - December 31, 2021 (thousand)	*23,651*	*23,651*	*23,651*
Equity warrants delivered to GM (thousand)	*68,497*	*68,497*	*68,497*
Pro Forma Weighted average number of shares outstanding for diluted earnings per share (thousand) (B)	3,151,432	3,151,432	3,151,432
Pro Forma Diluted earnings per share (€ per share) (A/B)	**€ 4.55**	**€ 4.23**	**€ 0.31**

(€ million except otherwise noted)	Year ended December 31, 2020 Stellantis	Continuing operations	Discontinued operations(1)
Net profit/(loss) attributable to owners of the parent, as adjusted	**€ 2,173**	**€ 2,353**	**€ (180)**
Add: FCA Net profit attributable to owners of the parent, January 1 - December 31, 2020	29	29	—
Add: Pro forma adjustments	2,412	2,412	—
Pro Forma Net profit/(loss) attributable to owners of the parent (A)	**€ 4,614**	**€ 4,794**	**€ (180)**
Weighted average number of shares outstanding (thousand)	*3,119,935*	*3,119,935*	*3,119,935*
Number of shares deployable for share-based compensation (thousand)	*39,137*	*39,137*	*39,137*
Equity warrants delivered to GM (thousand)	*68,497*	*68,497*	*68,497*
Weighted average number of shares outstanding for diluted earnings per share (thousand) (B)	3,227,569	3,227,569	3,227,569
Pro Forma Diluted earnings/(loss) per share (€ per share) (A/B)	**€ 1.43**	**€ 1.49**	**€ (0.06)**

(1) Number of shares deployable for share-based compensation and equity warrants delivered to GM have not been taken into consideration in the calculation of diluted loss per share for the year ended December 31, 2020 as this would have had an anti-dilutive effect

STELLANTIS OVERVIEW

Stellantis is a global automaker and mobility provider which is engaged in designing, engineering, manufacturing, distributing and selling vehicles, components and production systems worldwide. Stellantis designs, engineers, manufactures, distributes and sells vehicles across five portfolios: (i) luxury vehicles under the Maserati brand; (ii) premium vehicles covered by Alfa Romeo, DS and Lancia brands; (iii) global sport utility vehicles under the Jeep brand; (iv) American brands covering Dodge, Ram and Chrysler vehicles and (v) European brands covering Abarth, Citroën, Fiat, Opel, Peugeot and Vauxhall vehicles. Stellantis centralizes design, engineering, development and manufacturing operations, to allow it to efficiently operate on a global scale. Stellantis supports its vehicle shipments with the sale of related service parts and accessories, as well as service contracts, worldwide for mass-market vehicles. Stellantis makes retail and dealer financing, leasing and rental services available through its subsidiaries, joint ventures and commercial arrangements with third party financial institutions. In addition, Stellantis operates in the components and production systems sectors under the Teksid and Comau brands. Refer to Note 3, *Scope of consolidation* in the Consolidated Financial Statements included elsewhere in this report for detail on the sale of Teksid's cast iron automotive components business.

In connection with our Dare Forward 2030 strategic plan, we have also increased our focus on generating growth in several of our other areas, such as the two mobility brands, Free2move and Share Now, as well as independent aftermarket parts and services and software with a particular focus on data services. The focus on software also includes the deployment of technology across our vehicle platforms and leveraging over-the-air features and services. We have created Stellantis Ventures which funds investments in early and later-stage start up companies that develop innovative, customer-centric technologies that targets the automotive and mobility sectors.

Stellantis aims to reach carbon net zero by 2038. This is supported through our circular economy business, whose main objectives are to extend the life of vehicles and parts, returning material and end-of-life vehicles back to the manufacturing process for new vehicles and products.

In 2022, Stellantis shipped 6,003 thousand vehicles (including the Company's unconsolidated joint ventures), with Net revenues of €180 billion and Net profit of €16.8 billion, and generated €10.8 billion of Industrial free cash flows (See *Non-GAAP Financial Measures*). At December 31, 2022, the Company’s available liquidity was €62.7 billion (including €12.7 billion available under undrawn committed credit lines).

History of Stellantis

Stellantis N.V. (“Stellantis”) was incorporated as a public limited liability company (*naamloze vennootschap*) under the laws of the Netherlands on April 1, 2014 under the name Fiat Chrysler Automobiles N.V (“FCA”).

In its current configuration, Stellantis is the result of the merger of FCA and PSA, each of which were leading independent global automotive groups prior to the merger.

Fiat S.p.A., the predecessor to FCA, was founded as Fabbrica Italiana Automobili Torino on July 11, 1899 in Turin, Italy as an automobile manufacturer. Fiat grew in Italy and internationally in the following decades both organically and through the acquisition of several prominent brands and manufacturers including Lancia, Alfa Romeo, Maserati and Ferrari. In 2009, FCA US LLC, then known as Chrysler Group LLC (“FCA US”), acquired the principal operating assets of the former Chrysler LLC as part of a government-sponsored restructuring of the North American automotive industry. Between 2009 and 2014, Fiat S.p.A. expanded its initial 20 percent ownership interest to 100 percent of the ownership of FCA US and on October 12, 2014, Fiat S.p.A. completed a corporate reorganization resulting in the establishment of FCA as the parent company of the FCA Group, with its principal executive offices in the United Kingdom. In January 2011, the separation of Fiat S.p.A.’s non-automotive capital goods business was completed with the creation of Fiat Industrial, now known as CNH Industrial N.V. In October 2015, the initial public offering of Ferrari N.V. was completed, followed by the spin-off of FCA’s remaining interest in Ferrari to its shareholders in January 2016.

Peugeot S.A. began manufacturing and selling vehicles to consumers in 1896 and also expanded its automotive business, particularly in the second half of the twentieth century. In 1974, PSA acquired all of the outstanding shares of Citroën S.A. and then merged the two companies in 1976. In 1978, PSA acquired Chrysler Corporation's stake in its industrial and commercial subsidiaries in Europe, as well as Chrysler Financial Corporation's European commercial financing subsidiaries. In 1995, PSA Finance Holding, which provided financing for Peugeot and Citroën vehicle sales, was transformed into a bank and subsequently renamed "Banque PSA Finance". PSA acquired the Opel and Vauxhall subsidiaries of GM on August 1, 2017. As contemplated by the business combination agreement for the merger of FCA and PSA, on March 22, 2021, Stellantis distributed to shareholders its entire interest (approximately 39 percent) in Faurecia, an automotive equipment supplier and formerly the automotive equipment division of PSA, to holders of Stellantis common shares.

On December 17, 2019, FCA and PSA entered into a combination agreement (as amended, the "combination agreement") agreeing to merge the two groups. On January 16, 2021, PSA merged with and into FCA, with FCA as the surviving legal entity in the merger. On January 17, 2021, the combined company was renamed Stellantis, the board of directors was appointed and the Stellantis articles of association became effective. On this date, the Stellantis management and board of directors collectively obtained the power and the ability to control the assets, liabilities and operations of both FCA and PSA. As such, under IFRS 3 - Business Combinations ("IFRS 3"), January 17, 2021 is the acquisition date for the business combination.

On January 18, 2021, Stellantis common shares began trading on Euronext Milan and Euronext Paris, and on January 19, 2021, began trading on the NYSE. Stellantis common shares trade under the following symbols: Euronext Milan: "STLAM"; Euronext Paris: "STLAP"; NYSE: "STLA". From October 13, 2014, the common shares of FCA were traded on the NYSE under the symbol "FCAU" and on Euronext Milan under the symbol "FCA".

The principal office of Stellantis is located at Taurusavenue 1, 2132LS, Hoofddorp, the Netherlands (telephone number: +31 23 700 1511). Its agent for U.S. federal securities law purposes is Christopher J. Pardi, c/o FCA US LLC, 1000 Chrysler Drive, Auburn Hills, Michigan 48326.

Major Shareholders

As of February 21, 2023, the largest shareholders of Stellantis were Exor N.V. (“Exor”) (holding 13.99 percent of the outstanding common shares), Établissements Peugeot Frères (“EPF”) (holding 6.98 percent of the outstanding common shares) and Bpifrance Participations S.A. via Lion Participations SAS (“BPI”) (holding 6 percent of the outstanding common shares). As of February 21, 2023, none of these shareholders held any special voting shares of Stellantis.

Upon the effectiveness of the merger, on January 16, 2021, PSA shareholders received 1.742 FCA common shares for each PSA ordinary share held immediately prior to the merger as consideration in connection with the merger, which represented 1,545,220,196 shares. In addition, all special voting shares of FCA held by Exor were repurchased by FCA for no consideration. Therefore, none of our major shareholders held any special voting shares immediately following the merger.

In accordance with the resolution adopted by the General Meeting of Shareholders held on April 15, 2021, all the 449,410,092 Class B special voting shares held by Stellantis were cancelled as of October 8, 2021.

On December 21, 2022, all the outstanding special voting shares B were exchanged with newly issued special voting shares A in accordance with article 7.5 of the terms and conditions of the special voting shares (the "SVS Terms and Conditions"). As a result, all the 208,622 issued special voting shares B were held in the Company’s treasury. At December 31, 2022 there were 178,790 issued special voting shares A and 208,622 issued special voting shares B (208,622 at December 31, 2021), all with a par value of €0.01 each.

As of February 21, 2023 the share capital of the Company consists of the following: 3,213,372,229 common shares (of which 69,125,544 shares are owned by the Company), 178,790 Class A special voting shares and 208,622 Class B special voting shares.

Based on the information in Stellantis’ shareholder register, regulatory filings with the AFM and the SEC and other sources available to Stellantis, the following persons owned, directly or indirectly, in excess of three percent of Stellantis’ capital and/or voting interest as of February 21, 2023:

Stellantis Shareholders	Number of Issued Common Shares[(1)]	Percentage of Issued Common Shares
Exor	449,410,092	13.99
EPF[(2)]	224,228,121	6.98
BPI[(3)]	192,703,907	6
Dongfeng[(4)]	99,223,907	3.09
BlackRock Inc.[(5)]	95,379,376	2.97

(1) Issued shares includes common shares as well as 178,790 Class A special voting shares and 208,622 Class B special voting shares. Refer also to Corporate Governance - Articles of Association and Information on Stellantis Shares - Share Capital for additional information

(2) EPF, through Peugeot Invest and its subsidiary Peugeot 1810, owns 224,228,121 common shares (6.98 percent of the issued shares)

(3) BPI owns 192,703,907 common shares (6 percent of the issued shares). BPI is a joint venture of EPIC Bpifrance (Bpi Groupe) and Caisse des Dépots et Consignations (both holding a 49.3 percent interest in Bpifrance SA). Caisse des Dépots et Consignations also (directly and indirectly) holds an additional 9.338.752 Stellantis Common Shares, representing an additional 0.29 percent of the common shares and 0.29 percent of the issued share capital and voting rights of Stellantis

(4) Dongfeng owns 99,223,907 common shares (3.09 percent of the issued shares). Refer to “Risk Factors - Resales of Stellantis common shares following the merger may cause the market value of Stellantis common shares to decline.” included elsewhere in this report for additional information on the requirement for Dongfeng to sell part of its shareholding

(5) BlackRock Inc. owns 95,379,376 common shares (2.97 percent of the issued shares) and 127,563,832 voting rights (3.97 percent of outstanding common shares and of the issued shares)

Based on the information in Stellantis’ shareholder register and other sources available to us, as of February 21, 2023, approximately 566 million Stellantis common shares, or approximately 18 percent of the Stellantis common shares, were held in the United States. As of the same date, approximately 370 record holders of Stellantis common shares had registered addresses in the United States.

Until the date that is three years after closing of the merger, Exor, BPI and EPF are subject to a lock-up in respect of their shareholdings in Stellantis, except that BPI is permitted to reduce its shareholdings by a stake no greater than 2.5 percent of Stellantis common shares. We have agreed to release each such shareholder from its respective lock-up obligation in the event the Board of Directors recommends a transaction in which a person or group would acquire 50 percent or more of the Stellantis common shares (including a merger of Stellantis with or into another entity unless the shareholders of Stellantis immediately prior to the merger are entitled to receive more than the majority of the share capital and voting rights in the surviving entity of the merger).

Dare Forward 2030 Strategic Plan

On March 1, 2022, Stellantis' Chief Executive Officer Carlos Tavares presented the Company's Dare Forward 2030 strategic plan, which included the following four core targets to be achieved by 2030:

1. Reducing our carbon emissions footprint by half versus 2021 metrics on the path to achieving carbon net zero emissions by 2038;

2. Reaching 100 percent of passenger car battery electric vehicles ("BEV") sales mix in EU and 50 percent passenger car and light-duty truck BEV sales mix in the United States;

3. Achieving the number one position in customer satisfaction for our products and services in every market; and

4. Achieving €300 billion of Net revenues (doubling versus Pro Forma 2021) while transforming our business model and sustaining double-digit Adjusted operating income ("AOI") margins throughout the plan period.

The following are the key elements of Dare Forward 2030:

Foundation

Diversity, operational excellence, house of iconic brands, and a differentiated product portfolio are Stellantis' 'second to none' differentiators propelling the Company forward.

- Achieve 100 percent of the €5 billion annual cash merger synergies target by the end of 2024;

- Maintain break-even point at less than 50 percent of 2021 consolidated shipments;

- Global BEV sales of five million units in 2030;

- Lead industry with more than 75 BEVs, including the Jeep brand's first-ever 100 percent battery-electric SUV launching in early 2023, followed by the Ram Promaster BEV later in 2023 and the all-new-all-electric Ram 1500 REV pickup truck in 2024;

- Specific U.S. product offensive of more than 25 all-new BEVs; and

- New car revenues from premium and luxury vehicle segments to increase fourfold from 2021.

Tech

Stellantis' ambition is to embrace breakthrough ideas to offer innovative, clean, safe and affordable mobility.

- Confirmation of more than €30 billion of R&D, capex and joint venture investments in electrification and software for 2021-2025 and software revenue of approximately €20 billion by 2030;

- To increase planned battery capacity to approximately 400 GWh;

- Expand hydrogen fuel cell technology to large vans in 2024; first U.S. offering in 2025; further expands to heavy-duty trucks; and

- With Waymo, pave the way for sustainable "Delivery as a Service".

Care

Ethical responsibility is at the core of Stellantis to ensure a sustainable future of mobility for our customers, our employees, and our planet.

- 50 percent carbon emissions reduction by 2030, compared with 2021 metrics, on the way to carbon net zero by 2038;
- Target top rankings for customer satisfaction across products and services;
- Women to hold at least 35 percent of leadership roles. For year ended December 31, 2022, we have more than 27% of leadership positions held by women, targeting to achieve 30% by 2025;
- Double the number of leaders with profit and loss responsibility; and
- Roll out Software and Data and Electric academies to support transformation.

Value

Stellantis' ambition is to be 'second to none' in value creation for all stakeholders while unleashing an entrepreneurial mindset.

- Reach one-third of global sales online in 2030; launch a global digital marketplace offering customers a seamless journey through the entire Stellantis galaxy of products and services;
- More autonomy to seven accretive businesses: mobility, financial services, pre-owned cars, aftermarket, data as-a-service, circular economy, commercial vehicles;
- Leadership in commercial vehicle market powered by 26 new vehicle launches and electric offerings in all segments, including the all-new-all-electric Ram 1500 REV pickup truck to be launched in 2024;
- More than 25 percent of global Net revenues coming from regions outside Enlarged Europe and North America; and
- China: Plan for asset-light business model to reduce fixed costs and limit exposure to geopolitical risk.

Financials

Stellantis will manage the transition period toward electrification while delivering double-digit AOI margins and maximizing shareholder value.

- Net revenues to double to €300 billion by 2030 while sustaining double-digit AOI margins through the plan period;
- Generate more than €20 billion in Industrial free cash flows in 2030; and
- Target a 25-30 percent dividend payout ratio through 2025 and the repurchase of up to 5 percent of outstanding common shares.

Expected Merger Synergies

As a result of the merger, we expect that we will achieve significant synergies from the integration of the legacy businesses, in particular in the following four areas:

- *Technology, Platforms and Products*. The sharing and convergence of platforms, modules and systems, along with the optimization of R&D investments, manufacturing processes and tooling, are expected to create significant efficiencies;

- *Purchasing*. Procurement savings are expected to result from leveraging the Company's enlarged scale and combined product development processes, leading to lower product costs, improved price alignment and broader access to suppliers;

- *Selling, General and Administrative Expenses ("SG&A")*. Savings are expected from the integration of functions such as sales and marketing, and the optimization of costs in regions where both businesses had a well-established presence (*i.e.*, Enlarged Europe and South America); and

- *All Other Functions*. Synergies are expected from the optimization of other functions, including logistics, where savings are expected from the optimization of logistics for new cars and the effect of the procurement volume increase on the Company's combined expenditures, as well as supply chain, quality and after-market operations.

For the year ended December 31, 2022, the Company has achieved €7.1 billion of net cash synergies compared to €3.2 billion for the year ended December 31, 2021 exceeding the €5 billion annual steady state target more than two years earlier than planned at the time of the merger.

Overview of Our Business

Stellantis' activities during the year ended December 31, 2022, were carried out through the following six reportable segments:

(i) North America: Stellantis' operations to manufacture, distribute and sell vehicles in the United States, Canada and Mexico, primarily under the Jeep, Ram, Dodge, Chrysler, Fiat and Alfa Romeo brands. Manufacturing plants are located in: US, Canada and Mexico;

(ii) Enlarged Europe: Stellantis' operations to manufacture, distribute and sell vehicles in Europe (which includes the 27 members of the European Union, the United Kingdom and the members of the European Free Trade Association). Primarily under Peugeot, Citroën, Opel/Vauxhall, DS and Fiat brands. Manufacturing plants are located in: France, Italy, Spain, Germany, United Kingdom ("UK"), Poland, Portugal, Serbia and Slovakia;

(iii) Middle East & Africa: Stellantis' operations to manufacture, distribute and sell vehicles primarily in Turkey, Egypt and Morocco under the Peugeot, Citroën, Opel, Fiat and Jeep brands. Manufacturing plants are located in Morocco and in Turkey, through our joint venture with Tofas-Turk Otomobil Fabrikasi A.S. ("Tofas");

(iv) South America: Stellantis' operations to manufacture, distribute and sell vehicles in South and Central America, primarily under the Fiat, Jeep, Peugeot and Citroën brands, with the largest focus of its business in Brazil and Argentina. Manufacturing plants are located in the main markets of: Brazil and Argentina;

(v) China, India & Asia Pacific: Stellantis' operations to manufacture, distribute and sell vehicles in the Asia Pacific region (mostly in China, Japan, India, Australia and South Korea) carried out in the region through both subsidiaries and joint ventures, primarily under the Jeep, Peugeot, Citroën, Fiat, DS and Alfa Romeo brands. Manufacturing plants are located in China, India and Malaysia, through our joint ventures with GAC Fiat Chrysler Automobiles Co ("GAC-Stellantis JV") until January 2022, Dongfeng Peugeot Citroën Automobiles ("DPCA JV"), India Fiat India Automobiles Private Limited ("FIAPL JV") and our wholly owned subsidiary Stellantis Gurun (Malaysia); and

(vi) Maserati: Stellantis' operations to design, engineer, develop, manufacture, distribute worldwide and sell luxury vehicles under the Maserati brand.

Stellantis also owns or holds interests in companies operating in other activities and businesses. These activities are grouped under "Other Activities", which primarily consists of the Company's industrial automation systems design and production business, under the Comau brand name, and its cast iron and aluminum business, which produce cast iron components for engines, gearboxes, transmissions and suspension systems, and aluminum cylinder heads and engine blocks, under the Teksid brand name, mobility businesses through the brands Free2move and Share Now, circular economy whose business objectives are extending the life of vehicles and parts through return to the manufacturing process for new vehicles and parts, the Company's software and data businesses as well as the financial services activities of dealer and customer financing primarily in North America, Enlarged Europe, South America and China. Refer to "*Sales Overview*" included elsewhere in this report for additional information. Also included are our companies that provide services, including accounting, payroll, tax, insurance, purchasing, information technology, facility management and security for the Company and management of central treasury activities. Refer to Note 3, *Scope of consolidation* in the Consolidated Financial Statements included elsewhere in this report for details on the sale of Teksid's cast iron automotive components business in Mexico and U.S. and the GAC-Stellantis JV bankruptcy filing.

Definitions and abbreviations

Passenger cars include sedans, station wagons and three- and five-door hatchbacks, that may range in size from "micro" or "A-segment" vehicles of less than 3.7 meters in length to "large" or "F-segment" cars that are greater than 5.1 meters in length.

Utility vehicles ("UVs") include sport utility vehicles ("SUVs"), which are available with four-wheel drive systems that provide true off-road capabilities, and crossover utility vehicles, ("CUVs"), which are not designed for heavy off-road use. UVs can be divided among six main groups, ranging from "micro" or "A-segment", defined as UVs that are less than 3.9 meters in length, to "large" or "F-segment", defined as UVs that are greater than 5.2 meters in length.

Light trucks may be divided between vans (also known as light commercial vehicles, or "LCVs"), which typically are used for the transportation of goods or groups of people, and pickup trucks, which are light motor vehicles with an open-top rear cargo area. Minivans, also known as multi-purpose vehicles ("MPVs") typically have seating for up to eight passengers.

A vehicle is characterized as "all-new" if it is a new product with no prior model year, or if its vehicle platform is significantly different from the platform used in the prior model year and/or it has had a full exterior renewal.

A vehicle is characterized as "significantly refreshed" if it continues its previous vehicle platform but has extensive changes or upgrades from the prior model year.

Design and Manufacturing

We sell vehicles in the SUV, passenger car, truck and LCV markets. Our SUV and CUV portfolio includes vehicles such as the Grand Wagoneer, Wagoneer, Jeep Grand Cherokee, all-new Jeep Meridian, all-new Alfa Romeo Tonale, Citroën C5 Aircross, Dodge Durango, DS 3 Crossback, all-new Maserati Grecale and Peugeot 3008. Our passenger car product portfolio includes vehicles such as the Opel and Vauxhall Mokka, Fiat New 500, Alfa Romeo Giulia, Chrysler 300, Dodge Charger, DS 9, Lancia Ypsilon, Maserati Quattroporte, Peugeot 308 and minivans such as the Chrysler Pacifica. We sell light duty and heavy duty pickup trucks such as the Ram 1500, Ram 2500/3500, the Fiat Strada, the significantly refreshed Fiat Toro, and chassis cabs such as the Ram 3500/4500/5500. Our LCVs include vans such as the Fiat Professional Doblò, Peugeot Partner, Citroën Berlingo, Opel/Vauxhall Combo and Ram ProMaster.

In 2022, Stellantis deployed the Stellantis Production Way ("SPW") principles in its manufacturing operations. SPW is intended to achieve best in class performance as measured by health and safety, quality, throughput, cost and environmental metrics, through empowerment of employees, enhancement of employee skill-sets, the sharing of best practices and the improved and economical use of production assets.

Research and Development

Stellantis is continuing a commitment to research and development activities building on the legacy of both FCA and PSA. Stellantis is engaged in research and development activities aimed at improving the design, performance, safety, energy efficiency, reliability, consumer perception and sustainability of its products and services and to address the challenges faced by the automotive industry, including environmental and safety regulations, emerging mobility trends, connectivity, software and autonomous driving.

With respect to product development, Stellantis' recent research initiatives have been mainly concentrated in the areas of mobility electrification and clean energy, autonomous driving, and connectivity technologies. In 2022, Stellantis announced its Dare Forward 2030 strategic plan and confirmed its target for 100 percent of its passenger car sales mix in Europe and 50 percent of its passenger car and light duty truck sales mix in North America will be BEVs in 2030. As a result, its research and development activities have shifted to focus on electrification and related technologies, as well as autonomous technology and vehicle connectivity. Significant activity has also continued with a focus to reduce overall vehicle energy demand, fuel consumption and emissions based on traditional technologies. Recent fuel consumption and emissions reduction activities have primarily focused on propulsion system technologies, including engines, transmissions, axles and drivelines, hybrid and electric propulsion and alternative fuels.

Strategic Initiatives

Modular Vehicle Platforms

In 2022, Stellantis continued development of its BEV platform strategy comprised of four platforms intended to meet BEV customer and market needs in the different vehicle segments. The four platforms are:

- STLA Small, with an estimated BEV range of up to 500 kilometers/300 miles, designed for ultra-compact cars;
- STLA Medium, with an estimated BEV range of up to 700 kilometers/440 miles, designed for compact to mid-size cars;

- STLA Large, with an estimated BEV range of up to 800 kilometers/500 miles, designed for mid-size to full-size vehicles; and

- STLA Frame, with an estimated BEV range of up to 800 kilometers/500 miles, designed for full-size SUV and pickup trucks.

Each platform is designed to have a high level of flexibility (length and width). The platforms will also share electrified components and be capable of adapting over time to evolutions in technology.

Full-Electric Propulsion Systems

Stellantis is developing new electric propulsion systems centered on flexibility, modularity and efficiency to be utilized on all four of the vehicle platforms. The strategy includes three families of electric drive modules ("EDM") that combine the motor, gearbox and inverter, each designed to meet different performance needs.

The EDMs can be configured for front-wheel drive, rear-wheel drive and all-wheel drive. A program of hardware upgrades and over-the-air ("OTA") software updates is expected to extend the life cycle of the propulsion systems and, therefore, the vehicles. Stellantis intends to internally develop software and controls in order to maintain characteristics unique to each brand.

Battery Cell Chemistry and Design

Development and research on battery technology is ongoing and it is planned that, by 2024, Stellantis vehicles will be supported by two main battery chemistries:

- Nickel-based ("NMC") module configuration with an energy density of 300-700Wh/L; and

- Nickel cobalt-free alternative cell to pack configuration with an energy density of 400-500 Wh/L.

By design, the two chemistries are intended to be upgradeable, with the ability for potential future developments, such as cost reduction, range extensions and charging speed increases.

In 2022, Stellantis made a minority equity investment in Factorial Inc., a U.S.-based battery development company focused on the development, commercial production and deployment of solid-state battery technology that could offer up to 50 percent greater driving range than current lithium-ion technology.

Autonomous Driving Technology

In December 2022, Stellantis acquired aiMotive, a developer of advanced artificial intelligence and autonomous driving software. The aiMotive technology product portfolio is focused on four key areas within artificial intelligence and autonomous driving: embedded software stack for autonomous driving; artificial intelligence operations and data tooling; expertise and intellectual property for silicon microchips; and software simulation for development of autonomous driving.

In July 2020, a second phase of the collaboration with Waymo (formerly the Google self-driving car project) was announced. The first phase integrated Waymo's self-driving technology into the Chrysler Pacifica Hybrid as a development platform for the autonomous fleets that Waymo is operating in several cities around the U.S. The second phase is expected to focus on LCVs and to explore the potential of Level 4 automation for goods distribution.

A collaboration with Aptiv on the development of a Level 2+ (hands-off the wheel, eyes-on road) autonomous driving system began in 2018. Testing on a fleet of vehicles with this capability has been completed and a launch is planned for 2023.

A team of Stellantis and BMW engineers are working to develop an SAE Level 3 (hands-off the wheel, eyes-off the road) capable autonomous driving platform which is intended to have the ability to be updated through OTA upgrades. Prototype vehicles running early versions of the SAE Level 3 system have been running on public roads in Italy and the U.S., since 2020. A new generation of prototype vehicles having STLA AutoDrive, an updated SAE Level 3 system, will start testing in 2023.

Connectivity and Software

Stellantis' development of the "STLA Brain" is underway, which will reduce the number of electronic control units per vehicle and enable technology enhancements and improvements. STLA Brain is a new electronic and software architecture targeted to launch across its four battery electric vehicle platforms. This service-oriented architecture is intended to be fully integrated with the cloud and connects electronic control units within the vehicle to the vehicle's high-performance computers. The STLA Brain enables software developers to create and update features more quickly without having to update hardware. In addition, STLA Brain is intended to be OTA capable, which will reduce costs and simplify maintenance.

In 2021, Stellantis entered into the "Mobile Drive" joint venture with Hon Hai Technology Group ("Foxconn") and began developing the "STLA SmartCockpit" solutions. The STLA SmartCockpit is intended to be layered on top of the STLA Brain to deliver AI-based applications such as navigation, voice assistance, e-commerce, and payment services. Stellantis entered into a partnership with Amazon in early 2022 to integrate software technology into the STLA SmartCockpit. The launch of STLA SmartCockpit technology is planned for end of 2024.

Hydrogen

Stellantis' Hydrogen and Fuel Cells Center of Competence in Russelsheim, Germany is developing fuel cell electric vehicle technology. In the fuel cells, hydrogen is combined with air to produce electricity to drive an electric motor where the only exhaust emission is pure water vapor. As a result, the hydrogen fuel cell electric vehicles offer a combination of zero emissions, fast refueling and long driving range. In May 2021, Stellantis introduced its first hydrogen fuel cell-powered LCV, the Opel Vivaro-e HYDROGEN. In addition, Stellantis has entered into partnerships with two suppliers, Faurecia and Symbio, for development of the hydrogen storage system and the fuel cell system, respectively.

BEV Propulsion System Technologies

Jeep introduced its first-ever BEV, the all-new Jeep Avenger, at the 2022 Paris Motor Show. The Ram 1500 Revolution BEV Concept and Peugeot Inception Concept were unveiled at the CES 2023 in Las Vegas (Nevada) in January 2023. The Peugeot Inception Concept is based on the STLA Large platform and is powered by a 100kWh battery and two electronic motors, which provides a range of approximately 497 miles and almost 680hp. The Ram Revolution Concept incorporates an efficient battery pack configuration and is powered by two EDMs, enabling the cabin to be moved forward, increasing the cabin space and configuration flexibility. Using 800-volt DC fast charging at up to 350kW, the Revolution Concept is able to add up to 100 miles of range in approximately 10 minutes.

Beginning in 2020, Stellantis launched seven full battery electric LCV's in Europe, including the Peugeot e-Partner, e-Boxer and e-Expert. As of December 31, 2021, the full LCV portfolio under the Peugeot and Opel brands were offered in BEV versions.

In early 2020, as an alternative to public transport (bus, tramway, metro) and individual, two-wheeler means of transport such as bikes and scooters, Citroën launched the fully electric AMI, an ultra-compact two-seat vehicle, which has a battery that can recharge in three hours from a standard European electrical socket. A BEV variant of the Fiat 500, the Fiat New 500, launched in October 2020 and is manufactured for the European market at the Mirafiori plant in Turin, Italy. The Fiat New 500 is offered in electric ranges of 320 km and 180 km. The Fiat Ducato Electric was also unveiled in 2019 and launched in Europe in 2021.

Beginning in 2019, the full battery electric DS 3 Crossback E-Tense, Peugeot e-208 and e-2008, Opel Corsa-e and Mokka-e and Citroën Ë-C4 were sold in Europe. These models offer ranges of between 320 and 350 km based on Worldwide Harmonized Light Vehicle Testing Procedures ("WLTP").

Hybrid Propulsion Technologies

In 2022, Stellantis broadened its hybrid Jeep offering with the launch of the Jeep Grand Cherokee 4xe in the North American market. Offering up to 48 km of all-electric range and up to 51 km of all-electric city range, the 2023 Grand Cherokee 4xe features a PHEV system that combines a 2.0 liter four-cylinder turbocharged engine with two electric motors, a high-voltage battery pack and a TorqueFlite eight-speed automatic transmission.

The Jeep hybrid lineup expanded for Model Year 2021 with the launch of the Jeep Wrangler 4xe for North America, Europe and China markets. In 2021, the DS9 E-Tense, Peugeot 508 PSE, Peugeot 308 Hybrid, DS4 E-Tense, Opel Vauxhall Astra Hybrid and Citroën C5 X Hybrid were also launched.

In 2020, the Jeep Renegade and Compass 4xe launched in the European market with a range of up to 50 km on full electric propulsion at zero emission. The electric units are integrated with the 1.3L turbo gasoline engine to increase efficiency and overall power with the simultaneous action of the internal combustion engine and the electric motor delivering up to 240 hp. Also in 2020, Maserati took its first step on its electrification path with the new Maserati Ghibli mild hybrid equipped with a 2.0L turbo with e-booster and 48-volt BSG.

Beginning in 2019, the DS7 Crossback E-Tense, Peugeot 3008 Hybrid, Peugeot 508 Hybrid and 508 SW Hybrid, Opel Vauxhall Grandland X Hybrid and Citroën C5 Aircross SUV Hybrid were also launched. These vehicles are available with two- and four-wheel drive, and have total power of 300hp in the four-wheel drive version and 225hp in the two-wheel drive version. These vehicles offer ranges of up to 59km (4x4) and 56km (4x2) in full electric mode (WLTP).

Battery Technology

In 2022, Stellantis finalized a joint venture with Samsung SDI for the production of battery cells and modules for North America, targeted to begin production in Kokomo, Indiana (U.S.) in 2025 with initial annual production capacity of 23 GWh. In 2022, Stellantis and LG Energy Solution also announced a plan to invest $5 billion CAD in a joint venture for Canada's first large scale lithium-ion battery production plant, which will be built in Windsor, Canada. The agreement between Stellantis and LG Energy Solution is subject to customary closing conditions.

In 2022, Stellantis also announced the expansion of its Automotive Research and Development Centre in Canada to, among other things, establish a battery lab intended to be a center for the development and validation of BEV and PHEV vehicle cells, modules and battery packs.

In 2020, Automotive Cell Company ("ACC"), a joint venture was formed with Total/Saft, for the development and manufacture of high-performance batteries for the automotive industry. A research and development center in Bordeaux and a pilot site in Nersac (France) were established by Automotive Cell Company to develop high-performance lithium-ion technologies for electric car batteries. Production by the joint venture is planned to be launched in Douvrin (France) in 2023. In May 2022, Mercedes-Benz AG joined ACC as its third partner.

ACC has also committed to gigafactories located in Kaiserslautern (Germany) and Termoli (Italy), in addition to the ACC facility in Dourvin (France). These three facilities are expected to combine for aggregate battery production capacity of 120 gigawatt hours (GWh) by 2030.

Vehicle Energy Demand

Stellantis research and development efforts regarding vehicle energy demand have been focused on reducing energy loss, enhancing integration and improving overall vehicle efficiency.

Reductions in energy losses have been concentrated on weight reduction with the adoption of lightweight materials for closures and structural components; aerodynamic drag improvements through static shape, aero shields, adjustable height suspension and active front air dams; and lower rolling resistance tires. Additional development has also included reductions in driveline energy loss, and the optimization of several electrical loads through the implementation of technologies.

Stellantis continues to undertake development activities on systems integration to find technical solutions for vehicle energy demand. Internal combustion engines with 12v batteries are designed to be recharged by high efficiency alternators. The climate control systems on PHEV and BEVs are designed to integrate both the cabin and battery cooling systems with the adoption of fully electric air conditioning and advanced thermal management systems to control cabin temperatures.

Intellectual Property

Stellantis owns a significant number of patents, trade secrets, licenses, trademarks and service marks, including, in particular, the marks of its vehicle and component and production systems brands, which relate to its products and services. We expect the number to grow as we continue to pursue technological innovations. We file patent applications in Europe, the U.S. and around the world to protect technology and improvements considered important to our business. No single patent is material to our business as a whole.

Property, Plant and Equipment

As of December 31, 2022, Stellantis manufacturing facilities (including passenger vehicle and light commercial vehicle assembly, propulsion systems and components plants, and excluding joint ventures), are primarily located in Enlarged Europe (mainly in France, Germany, Italy, Spain and UK), North America (U.S., Canada and Mexico) and South America (Brazil and Argentina). Stellantis companies have also historically owned other significant properties including parts distribution centers, research laboratories, test tracks, warehouses and office buildings. The total carrying value of Stellantis' property, plant and equipment as of December 31, 2022 was €36.2 billion.

A number of Stellantis manufacturing facilities and equipment, including land and industrial buildings, plant and machinery and other assets, were and are subject to mortgages and other security interests granted to secure indebtedness to certain financial institutions. As of December 31, 2022, property, plant and equipment reported as pledged as collateral for loans amounted to approximately €1.4 billion, excluding Right-of-use assets (refer to Note 11, *Property, plant and equipment).*

Stellantis was not aware of any environmental issues that would materially affect the utilization of fixed assets. See *Industrial Environmental Control*.

Supply of Raw Materials, Parts and Components

Stellantis purchases a variety of components (including but not exclusively, mechanical, steel, electrical, electronic and plastic components as well as castings and tires), raw materials, supplies, utilities, logistics and other services from numerous suppliers. The purchase of raw materials, parts and components has historically accounted for 70-80 percent of total Cost of revenues. Of these purchases, approximately 15-20 percent relates to the cost of raw materials, including but not exclusively steel, rubber, aluminum, resin, copper, lead, precious metals (including platinum, palladium and rhodium) and battery materials (including lithium, manganese, nickel and cobalt).

Stellantis' focus on quality improvement, cost reduction, product innovation and production flexibility requires the Company to rely upon suppliers with a focus on quality and the ability to provide cost reductions. Stellantis has valued relationships with suppliers, and works to establish closer ties with a significantly reduced number of suppliers by selecting those with a leading position in the relevant markets. In addition, Stellantis formed various partnerships this year in an effort to secure specific critical raw materials, including but not limited to, nickel, cobalt, lithium, manganese. Some supply agreements include take or pay conditions or investments in the supplier's equity. Refer to Note 26, *Guarantees granted, commitments and contingent liabilities* for additional information.

Stellantis continued to experience production losses in 2022 as a result of unfilled semiconductor orders and shortages of certain key components. Stellantis also experienced a significant increase in the cost of raw materials which has partially been mitigated with merger synergies. Stellantis regularly sources some of its systems, components, parts, equipment and tooling from a single provider or limited number of providers. As with unfilled semiconductor orders in 2022, we are at risk of production delays and lost production should any supplier fail to deliver goods and services on time. In addition, although we have recently entered into several significant agreements with battery and raw material suppliers, as we implement our vehicle electrification strategy, our dependence on a significant supply of battery components and related raw materials will also increase. See also "*Risk Factors - We face risks associated with increases in costs, disruptions of supply or shortages of raw materials, parts, components and systems used in our vehicles."* and "*Risk Factors - The coronavirus (COVID-19) pandemic could continue to disrupt the manufacture and sale of our products and the provision of our services and adversely impact our business.*"

Supply of raw materials, parts and components can also be disrupted or interrupted by natural disasters. In such circumstances, Stellantis works proactively with suppliers to identify material and part shortages and take steps to mitigate their impact by deploying additional personnel, accessing alternative sources of supply and managing its production schedules. Stellantis also continues to refine processes to identify emerging capacity constraints in the supplier tiers given the ramp up in manufacturing volumes to meet volume targets. Furthermore, Stellantis continuously monitors supplier performance according to key metrics such as part quality, delivery, performance, financial solvency and sustainability.

Employees

At December 31, 2022, Stellantis had a total of 272,367 employees (excluding employees of joint arrangements, associates and unconsolidated subsidiaries) and a 3.3 percent decrease from December 31, 2021, and a 8.9 percent decrease from December 31, 2020 on a Pro Forma basis. The following table provides a breakdown of employees as of December 31, 2022, 2021 and 2020 on a Pro Forma basis by geographical area. Figures at December 31, 2020 are the aggregation of former FCA and former PSA excluding Faurecia.

	At December 31,		
	2022	2021	2020 Pro forma
North America	88,835	91,289	95,151
Enlarged Europe	142,681	150,807	158,277
Middle East & Africa	5,311	5,983	4,617
South America	28,968	29,352	35,851
China, India & Asia Pacific	6,572	4,164	4,983
Total	**272,367**	**281,595**	**298,879**

Stellantis employees are free to join any trade union, provided they do so in accordance with local laws and the rules of the related trade union. Local collective agreements are led by the regions and/or countries which take the global Company polices into account and reflect local particularities. As of December 31, 2022, approximately 88 percent of our employees were covered by collective bargaining agreements.

An active dialogue has been maintained in 2022 with various employee representation bodies existing at the national or transnational level. This is represented in Europe through the European Works Councils of PSA, Fiat and Opel and Vauxhall, in North America through the union, UAW and in Canada through the union, Unifor.

Trade Unions and Collective Bargaining

Stellantis' social relations strategy is based on six commitments:

- Stellantis supports the principles of the United Nations Universal Declaration of Human Rights and the provision of a decent equitable work environment. We work towards providing competitive and living wages and have contracted with the Fair Wage network, an independent, recognized authority on fair and living wages;
- Stellantis is committed to comply with all applicable labor laws and regulations and aims to apply best practices in human resources management;
- Stellantis bases social dialogue on relationships with independent labor unions and employee representatives and seeks workplace cooperation;
- Stellantis' objective is to negotiate collective bargaining agreements that are pragmatic, inclusive and protective of its employees;
- Stellantis fosters social dialogue with the workforce on a daily basis; and
- Stellantis monitors social indicators in its subsidiaries and globally discloses in a transparent manner to its stakeholders.

The Company endorses the International Labor Organization's ("ILO") declaration on fundamental principles and rights at work.

In 2022, approximately 582 collective agreements were in place worldwide.

Stellantis is committed to enacting a high-quality collective agreements strategy, based on a sound understanding of the Company, seeking out innovative solutions and demonstrating a capacity to reconcile the Company’s economic and social challenges. During 2022, these included:

- Official launch of a negotiation body to install a common unique European Works Council;
- In Germany, an agreement to merge the commercial operations into one Stellantis National Sales Company and to align the working conditions of its employees;
- In Poland, a new collective framework agreement for the new LCV plant; and
- Various agreements in Morocco, Argentina and Brazil.

Sales Overview

New vehicle sales represent sales of vehicles primarily by dealers and distributors, or, directly by us in some cases, to retail customers and fleet customers. Sales include mass-market and luxury vehicles manufactured at our plants, as well as vehicles manufactured by joint ventures and third party contract manufacturers and distributed under our brands. Sales figures exclude sales of vehicles that we contract manufacture for other OEMs. While vehicle sales are illustrative of our competitive position and the demand for our vehicles, sales are not directly correlated to Net revenues, Cost of revenues or other measures of financial performance in any given period, as such results were primarily driven by vehicle shipments to dealers and distributors or to retail and fleet customers. For a discussion of our shipments, see *FINANCIAL OVERVIEW—Shipment Information*. Sales and market shares for 2020 reported in the tables below are the aggregation of FCA and PSA while 2021 also includes FCA for the period from January 1 to January 16, prior to the merger. Figures in all tables represented in this section may not add due to rounding. Additionally, prior period figures have been updated to reflect current information provided by third party industry sources.

The following table shows new vehicle sales by geographic market for the periods presented:

	Years ended December 31,		
	2022	**2021**	**2020**
		(millions of units)	
North America	1.8	2.0	2.1
Enlarged Europe	2.6	3.1	3.1
Middle East & Africa	0.4	0.4	0.4
South America	0.8	0.8	0.6
China and India & Asia Pacific	0.2	0.2	0.2
Total Regions	**5.8**	**6.6**	**6.3**
Maserati	0.02	0.02	0.02
Total Worldwide	**5.8**	**6.6**	**6.3**

North America

North America Sales and Competition

The following table presents vehicle sales and estimated market share in the North America segment for the periods presented:

	Years ended December 31,					
	2022[(1)]		**2021**[(1)]		**2020**[(1)]	
North America	**Sales**	**Market Share**	**Sales**	**Market Share**	**Sales**	**Market Share**
	Thousands of units (except percentages)					
U.S.	1,547	11.0%	1,777	11.5%	1,821	12.2%
Canada	169	11.4%	161	9.9%	179	11.6%
Mexico	74	6.6%	66	6.3%	59	6.0%
Total	**1,791**	**10.7%**	**2,005**	**11.1%**	**2,058**	**11.8%**

(1) Estimated market share data presented are based on management's estimates of industry sales data, which use certain data provided by third-party sources: Canada - DesRosiers Automotive consultants, Mexico - INEGI (Government National Institute), U.S. - Ward's Automotive
Maserati excluded from volumes and market share

The following table presents estimated new vehicle market share information for Stellantis and our principal competitors in the U.S., our largest market in the North America segment:

	Years ended December 31,		
U.S.	**2022**	**2021**	**2020**
Automaker	**Percentage of industry**		
GM	16.1%	14.4%	17.1%
Toyota	15.0%	15.2%	14.3%
Ford	13.2%	12.4%	13.7%
Stellantis[(1)]	**11.0%**	**11.5%**	**12.2%**
Hyundai/Kia	10.4%	9.7%	8.2%
Honda	7.0%	9.5%	9.1%
Nissan	5.2%	6.4%	6.0%
Other	22.2%	21.0%	19.3%
Total	**100%**	**100%**	**100%**

(1) Excluding Maserati
Estimated market share data presented are based on management's estimates of industry sales data, which use certain data provided by third-party sources: Canada - DesRosiers Automotive consultants, Mexico - INEGI (Government National Institute), U.S. - Ward's Automotive

U.S. industry sales, including medium and heavy-duty vehicles, in addition to commercial vehicles, were down 1.3 million units in 2022 from 15.4 million units in 2021. Despite an increasing supply of semiconductor chips that affected 2021 sales growth, the industry sales decline in 2022 was due to headwinds driven by inflation, low consumer confidence, pricing actions and continuing supply chain and production challenges.

Our vehicle line-up in the North America segment primarily leveraged the brand recognition of the Jeep, Ram, Dodge and Chrysler brands to offer utility vehicles, pickup trucks, cars and minivans under those brands. Vehicle sales and profitability in the North America segment were generally weighted towards larger vehicles such as utility vehicles, trucks and vans, consistent with overall industry sales trends in the North America segment, which have become increasingly weighted towards utility vehicles and trucks in recent years.

The decrease in our 2022 sales compared to 2021 resulted primarily from continuing production headwinds due to supply chain issues, pricing actions and headwinds driven by inflation. The Company did see pent-up demand for Jeep and Ram brand vehicles. Product highlights in 2022 include the Jeep Grand Cherokee 4xe and Jeep Wrangler 4xe electric plug-in models, in addition to strong demand for the Jeep Compass, Ram commercial vehicles, Dodge Charger, Chrysler Pacifica, and the Grand Wagoneer/Wagoneer.

North America Distribution

In the North America segment, our vehicles are sold primarily to dealers in our dealer network for sale to retail consumers and to fleet customers. Fleet sales in the commercial channel are typically more profitable than sales in the government and daily rental channels since they more often involve customized vehicles with more optional features and accessories; however, vehicle orders in the commercial channel are usually smaller in size than the orders made in the daily rental channel. Fleet sales in the government channel are generally more profitable than fleet sales in the daily rental channel primarily due to the mix of products included in each respective channel.

North America Dealer and Customer Financing

In the North America segment, on November 1, 2021, Stellantis acquired First Investors Financial Services Group, which has been renamed Stellantis Financial Services US Corp ("Stellantis Financial Services U.S."). Stellantis Financial Services U.S. will provide U.S. customers and dealers with a complete range of financing options in the near-to-medium term, including retail loans, leases, and floorplan financing. However, while Stellantis Financial Services U.S. grows, Stellantis also utilizes independent financial service providers, including Santander Consumer USA Inc. ("SCUSA") to provide financing for dealers and retail customers in the U.S. In February 2013, FCA entered into a private label financing agreement with SCUSA (the "SCUSA Agreement"), under which SCUSA will continue to provide a wide range of wholesale and retail financial services to dealers and retail customers in the U.S., under the Chrysler Capital brand name. In April 2022, the SCUSA Agreement was amended and extended through 2025, allowing SCUSA to serve a complementary role to Stellantis Financial Services U.S. Under the SCUSA Agreement, SCUSA has certain rights, including limited exclusivity to participate in specified minimum percentages of certain retail financing subvention programs.

As of December 31, 2022, of the current approximately 2,600 Stellantis dealers in the U.S., SCUSA provided wholesale lines of credit to approximately 9 percent of the dealers while Ally provided 29 percent. For the 2022 sales year, approximately 80.4 percent of the retail vehicles sold to U.S. retail customers were financed or leased. Of those financed or leased retail sales, SCUSA, Ally, and Stellantis Financial Services U.S. (still in start-up phase) market share represented 30.5 percent, 13.4 percent, and 1.2 percent respectively.

In Mexico, we have a private label agreement with Banco Inbursa Group in order to provide dealer and retail customer financing programs.

Following the decision of Stellantis to regroup all financing activities in Mexico for all brands under the partnership with Inbursa, a share purchase agreement was signed in November 2021, by Banque PSA Finance ("BPF") with Grupo Financiero Inbursa for the acquisition by the latter of the entire share capital of BPF Finance México S.A. de C.V., SOFOM. The sale was completed on December 14, 2022, following the obtaining of necessary authorization by the Mexican competent authorities.

Enlarged Europe

Enlarged Europe Sales and Competition

The following table presents Stellantis vehicle sales and market share in the Enlarged Europe segment for the periods presented:

	Years ended December 31,					
	2022		2021		2020	
Enlarged Europe	**Sales**	**Market Share**	**Sales**	**Market Share**	**Sales**	**Market Share**
	Thousands of units (except percentages)					
France	620	33.1%	749	35.8%	755	36.8%
Italy	535	36.3%	637	39.0%	609	39.7%
Germany	371	12.9%	417	14.4%	415	13.0%
UK	268	14.1%	315	15.7%	302	15.6%
Spain	213	22.9%	257	25.4%	259	25.6%
Other	539	14.0%	677	16.3%	696	17.1%
Europe(1)	**2,547**	**19.7%**	**3,051**	**22.1%**	**3,036**	**22.0%**
Other Europe(2)	22	2.0%	47	2.1%	35	1.6%
Total	**2,570**	**18.3%**	**3,098**	**19.3%**	**3,071**	**19.2%**

(1) EU30 = EU27 (excluding Malta), Iceland, Norway, Switzerland and UK. Industry and market share information is derived from third-party industry sources (e.g. Agence Nationale des Titres Sécurisés ("ANTS"), Ministry of Infrastructure and Sustainable Mobility ("MIMS") and ANFAC Spain) and internal information

(2) Other Europe = Eurasia (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Moldova, Russia, Ukraine, Uzbekistan) and other Europe (Albania, Bosnia, Kosovo, Malta, Montenegro, North Macedonia and Serbia)

Maserati excluded from volumes and market share of the region

The following table summarizes new passenger vehicle market share information and our principal competitors in Europe, our largest market in the Enlarged Europe segment:

	Years ended December 31,		
Europe[(1)] Passenger Cars	**2022**	**2021**	**2020**
Automaker	**Percentage of industry**		
Volkswagen	23.0%	22.9%	23.7%
Stellantis[(2)]	**19.7%**	**22.1%**	**22.0%**
Renault	10.1%	10.2%	10.9%
Hyundai/Kia	8.2%	7.4%	6.1%
Toyota	6.8%	6.1%	5.4%
Daimler	6.5%	6.3%	7.1%
Ford	6.5%	6.5%	7.1%
BMW	6.3%	6.2%	6.2%
Other	12.9%	12.2%	11.4%
Total	**100%**	**100%**	**100%**

(1) 27 members of the European Union excluding Malta and including Iceland, Norway, Switzerland and UK
(2) Excluding Maserati
Estimated market share information is derived from third-party industry sources (e.g., Agence Nationale des Titres Sécurisés ("ANTS"), Ministry of Infrastructure and Sustainable Mobility ("MIMS") and ANFAC Spain) and internal information

In 2022, the automotive industry in the Europe 30 decreased by 6.2 percent as compared to 2021 due to supply constraints and the impact of the war in Ukraine.

The decrease of the Company's overall market share in 2022 in Europe 30 to 19.7 percent is primarily due to a 16.5 percent volume decrease. This is mainly due to a decrease of 17.6 percent in Peugeot, 20.9 percent in Fiat and 18.1 percent in Citroën. This is offset by marked increases in DS and Alfa Romeo.

Showing the unique strength of our product portfolio, the Company has 4 of the top 10 models based on sales in the Europe 30: Peugeot 208 at number 1, Fiat 500 at number 6, Opel/Vauxhall Corsa at number 7 and Citroën C3 at number 8.

In 2022, Stellantis reinforced its sales leadership in Passenger Cars ("PC") and LCV being number 1 in France, Italy, Spain, Portugal, Belgium and Greece. We also consolidated our leadership in the LCV segment in Europe 30 with a market share of 30.6 percent.

Stellantis continues to accelerate towards electrification: we are the leader in LEV (PC and LCV) in France, Italy, Spain and Portugal.

In Enlarged Europe, our sales are largely weighted to passenger cars, with an estimated 65.0 percent of total vehicle sales in the small car segment (A and B segments) for 2022. This reflects the demand for smaller vehicles due to driving conditions prevalent in many European cities and stringent environmental regulations.

Enlarged Europe Distribution

In Europe, our relationship with individual dealer entities may be represented by a number of contracts (typically, we enter into one agreement per brand of vehicles to be sold), and the dealer can sell those vehicles through one or more points of sale.

We sell our vehicles directly to independent and our owned dealer entities located in most European markets, as well as to fleet customers (including government and rental). In other markets and in segments in which we do not have a substantial presence, we have agreements with general distributors.

During 2021, Stellantis engaged in a transformation process by terminating its distribution contracts and at the same time consulting its networks on the future distribution model. This process was undertaken in anticipation of implementing new distribution schemes starting July 2023.

Enlarged Europe Dealer and Customer Financing

In the Enlarged Europe segment, dealer and retail customer financing is managed by FCA Bank, a 50 percent joint venture with Crédit Agricole Consumer Finance S.A. (“CACF”) as for the former FCA brands (Abarth, Alfa Romeo, Dodge, Fiat, Jeep, Lancia, Chrysler, Maserati and Ram), and by BPF as for the former PSA brands (through two partnerships described below). FCA Bank operates in Europe, including the five major markets of Italy, France, Germany, Spain and the UK, and provides dealer and retail financing and, within selected countries, also rentals to support the former FCA vehicle brands. FCA Bank provides its services to the Maserati luxury brand, as well as certain other OEMs, including Ferrari. The joint venture with CACF was initially entered into in 2006 and was thereafter renewed with a term extended through December 31, 2024. BPF operates through two 50 percent joint ventures under the umbrella of two major partnerships in Europe, one with Group Santander Consumer Finance (“SCF”) for the Peugeot, Citroën and DS brands, and one with BNP Paribas Personal Finance (“BNPP PF”) for the Opel and Vauxhall brands. The partnership with SCF began in 2015 with an initial duration of 10 years and with BNPP PF in 2017 with an initial duration of 12 years.

On December 17, 2021, Stellantis announced the intention to reorganize its leasing activities in Europe with the intention to create a European multi-brand operational leasing company with CACF, (with each of Stellantis and CACF holding a 50 percent interest) that would result from the combination of the leasing activities of Leasys, a subsidiary transferred at December 31, 2022, from FCA Bank to LeaseCo, a joint venture held 50 percent by both Stellantis and CACF, and the activities of Free2Move Lease (“F2ML”), a business unit created within the former Groupe PSA and which aims to develop the business to business (“B2B”) long-term leasing activity. In addition, the joint ventures with BNPP PF and SCF are planned to be reorganized so the joint ventures with BNPP PF will operate financing activities in Germany, Austria and in the UK and joint ventures with SCF will operate financing activities in France, Italy, Spain, Belgium, Poland, the Netherlands and through a commercial agreement with SCF in Portugal. The joint ventures’ financing activities will cover all Stellantis brands. The binding agreements governing this reorganization were signed on March 31, 2022, between Stellantis and each of BNP Paribas Personal Finance, Crédit Agricole Consumer Finance and Santander Consumer Finance and the proposed transactions are targeted to be completed during the first half of 2023, subject to regulatory approvals including from relevant authorities and market regulators.

Sales activities within certain Eastern European countries are supported by private label agreements with local banks covering both the wholesale and retail financing needs.

Middle East & Africa

Middle East & Africa Sales and Competition

The following table presents Stellantis vehicle sales and market share in the Middle East & Africa segment for the periods presented:

	Years ended December 31,					
	2022		2021		2020	
Middle East & Africa	**Sales**	**Market Share**	**Sales**	**Market Share**	**Sales**	**Market Share**
	Thousands of units (except percentages)					
Turkey	250	31.9%	219	29.7%	248	32.1%
Morocco	34	20.8%	37	21.1%	27	20.3%
Gulf(1)	26	2.4%	33	3.2%	24	2.9%
Overseas France(2)	24	33.8%	23	31.6%	20	30.5%
Israel Zone(3)	22	8.1%	24	7.9%	18	8.0%
Egypt	18	16.5%	42	22.9%	33	25.2%
Other(4)	41	4.4%	33	3.3%	26	3.5%
Total	**415**	**12.0%**	**411**	**11.8%**	**396**	**13.6%**

(1) Includes: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE and Yemen
(2) Includes: French Guiana, Mayotte, Reunion, Martinique and Guadeloupe
(3) Includes: Israel and Palestine
(4) Without banned countries: Iran, Sudan and Syria
Estimated market share information is derived from third-party industry sources of MEA countries (e.g., AMIC (Egypt), ODD (Turkey), AMBG (Saudia Arabia, Qatar, United Arab Emirates, Yemen) AIVAM (Morocco)) and internal information
Maserati excluded from volumes and market share of the region

In 2022, the total industry volume of Middle East & Africa slightly decreased by 0.8 percent, despite growth in the Middle East and South Africa markets. Both the Egyptian and Algerian markets decreased by 42.0 percent and 23.9 percent, respectively, as a result of supply constraints and the sensitivity around the geopolitical environments. Despite these headwinds, the Company increased its sales volumes by 1.1 percent with 4.4 thousand more deliveries and market share gains in most of the major countries.

Overall market share of the region reached 12.0 percent, up by 20 basis points compared to 2021. The increase was primarily due to positive performance in Turkey, Overseas France, South Africa, Israel, Algeria and Tunisia. Despite being one of the main market brands in Egypt and Algeria, we were limited by supply availability during the year.

Commercial vehicle sales increased by 3.0 percent, up to 108 thousand units, or 15.1 percent market share. Stellantis secured its number two commercial vehicles position in the region.

The following table summarizes new passenger vehicle market share information and our principal competitors in the Middle East & Africa:

G5[1] Middle East & Africa Passenger Cars	Years ended December 31,		
	2022	**2021**	**2020**
Automaker	**Percentage of industry**		
Toyota	20.3%	18.9%	18.2%
Stellantis[2]	**14.9%**	**15.2%**	**17.1%**
Hyundai/Kia	13.9%	14.1%	12.8%
Renault	9.2%	9.2%	11.1%
Volkswagen	6.7%	8.1%	8.6%
Ford	4.7%	4.5%	6.0%
BMW	1.1%	1.1%	1.0%
Daimler	1.4%	1.2%	1.3%
Other	27.8%	27.6%	23.9%
Total	**100%**	**100%**	**100.0%**

(1) G5: Turkey, Morocco, Israel zone, Gulf and Overseas France
Israel Zone: Israel and Palestine
Gulf: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE and Yemen
Overseas France: French Guiana, Mayotte, Reunion, Martinica and Guadeloupe
(2) Excluding Maserati
Estimated market share information is derived from third-party industry sources of MEA countries (e.g. AMIC (Egypt), ODD (Turkey), AMBG (Saudia Arabia, Qatar, United Arab Emirates, Yemen) AIVAM (Morocco)) and internal information

Middle East & Africa Distribution

In Turkey, Peugeot, Citroën, DS and Opel brands are distributed through a national sales company, consolidating operations for these four brands, whereas Fiat, Alfa Romeo and Jeep brands are distributed by a joint venture with Koc Automotiv Group, Tofas.

In Morocco, a national sales company is in charge of distributing Fiat, Alfa Romeo, and Jeep, while Peugeot, Citroën, DS and Opel Brands are managed by local importers.

In South Africa we also operate through a national sales company that distributes Peugeot, Citroën, Opel, Fiat, Jeep and Alfa Romeo.

In all other markets of the region, we distribute through agreements with local general distributors, with the regional offices of Stellantis located in Cairo and Dubai coordinating operations in Egypt and Middle East.

Middle East & Africa Dealer and Customer Financing

We operate in Turkey, where the activities related to the FCA brands, are carried out through a 100 percent owned subsidiary of our joint venture, Tofas that provides financial services mainly to retail customers, while the activities related to the PSA brands are carried out by a subsidiary of BPF, which markets a range of retail financing and insurance products in cooperation with a TEB Finansman AS, a subsidiary BNPP PF, and from November 2022, with Garanti Bank, a subsidiary of BBVA.

Finally, we operate vendor programs with bank partners in other markets to provide access to dealer and retail customer financing in those markets:

- In South Africa the Stellantis brands sales are supported by Wesbank (South Africa market) covering both wholesale and retail financing under the FCA Finance South Africa brand; and
- In Morocco by FCA Bank for the dealer financing activity (limited to the FCA brands) while sales to retail customers are supported by private label agreements with Wafasalaf.

South America

South America Sales and Competition

The following table presents our vehicle sales and market share in the South America segment for the periods presented:

	Years ended December 31,					
	2022[1]		2021[1]		2020[1]	
South America	**Sales**	**Market Share**	**Sales**	**Market Share**	**Sales**	**Market Share**
	Thousands of units (except percentages)					
Brazil	647	32.9%	636	32.0%	461	23.5%
Argentina	117	30.7%	103	29.1%	83	25.6%
Other South America	81	6.2%	73	6.1%	49	5.9%
Total	**844**	**23.2%**	**812**	**22.9%**	**592**	**19.0%**

(1) Estimated market share data presented are based on management's estimates of industry sales data, which use certain data provided by third-party sources, National Organization of Automotive Vehicles Distribution and Association of Automotive Producers
Maserati excluded from volumes and market share

The following table presents Stellantis vehicle market share information and our principal competitors in Brazil, our largest market in the South America segment:

Brazil	Years ended December 31,		
	2022[1]	**2021[1]**	**2020[1]**
Automaker	Percentage of industry		
Stellantis[2]	**32.9%**	**32.0%**	**23.5%**
GM	14.8%	12.2%	17.3%
Volkswagen	14.3%	15.9%	17.4%
Ford	1.1%	2.0%	7.2%
Other	36.9%	37.9%	34.6%
Total	**100%**	**100%**	**100%**

(1) Estimated market share data presented are based on management's estimates of industry sales data, which use data provided by ANFAVEA (Associação Nacional dos Fabricantes de Veículos Automotores)
(2) Excluding Maserati

Automotive industry volumes within the countries in which the South America segment operates increased by 2.7 percent to 3.6 million vehicles (PC and LCV) in 2022 as compared to 2021, which was primarily driven by the unfilled semiconductor orders which limited vehicle production in 2021. Overall, there was a 0.8 percent decrease in the industry in Brazil, reflecting the unfilled semiconductor orders, which has affected the production capacity, and a 7.0 percent increase in the industry in Argentina, reflecting the gradual recovery of sales.

Stellantis' market share in South America increased 30 basis points from 22.9 percent in 2021 to 23.2 percent in 2022, primarily reflecting market share growth in Brazil, with Fiat as the brand leader. In Brazil, overall market share increased 90 basis point to 32.9 percent in 2022 from 32.0 percent in 2021 while, in Argentina, overall market share increased 160 basis point to 30.7 percent in 2022 from 29.1 percent in 2021.

Our vehicle line-up in South America leverages the brand recognition of Fiat, as well as the relatively urban population of countries like Brazil, and offers vehicles in smaller segments, such as the Fiat Argo as well as the Fiat Mobi. Fiat also led the pickup truck market in Brazil, with the Fiat Strada and the Fiat Toro (both represent a total of 49.9 percent market share in the segment). Jeep achieved 7.0 percent of the total sales in Brazil and led the SUV segment with 20.0 percent of market share primarily based on the performance of the Jeep Renegade, the Jeep Compass and the Jeep Commander. Peugeot and Citroën are conquering new consumers and sales grew 41.5 percent and 37.6 percent, respectively compared to 2021.

South America Distribution

In South America, law in each country regulates retail vehicle distribution. In Brazil and Argentina, distribution is through dealers of each brand, although it is common for the same distributor to have several stores in order to offer different brands. In other countries, distribution is through multi-brands importers or dealers.

South America Dealer and Customer Financing

In the South America segment, we provide access to dealer and retail customer financing as well as rental products through 100 percent owned captive finance companies and also through strategic relationships with financial institutions.

We have three 100 percent owned captive finance companies in the South America segment that offer dealer and retail customer financing as well as rental services: Banco Fidis S.A. ("Banco Fidis") and FCA Rental Locadora de Automoveis Ltda (commercially known as Flua) in Brazil and FCA Compañia Financiera S.A. in Argentina. We also have two 50 percent owned joint ventures that offer dealer and retail customer financing, PSA Finance Argentina Compañia Financiera S.A., with Banco Bilbao Vizcaya Argentaria S.A. owning the other 50 percent, and Banco PSA Finance Brasil S.A., with Banco Santander Brasil S.A. owning the other 50 percent.

In November 2022, two contracts were signed with Banco Santander Brasil S.A. to purchase its 50 percent shares of both Banco PSA Finance Brasil S.A., a finance company, and PSA Corretora de Seguros e Services Ltd., a company providing insurance services. Both of these contracts are 50/50 joint ventures with Banco Santander Brasil S.A. The closings of those two deals are expected to happen before the end of 2023. In addition, in Brazil we have two significant commercial partnerships with Banco Itaú and Bradesco to provide financing to retail customers purchasing our branded vehicles. Banco Itaú is a leading vehicle retail financing company in Brazil and our partnership was renewed in August 2013 for a ten-year term ending in 2023. Under this agreement, which applied only to our retail customers purchasing Fiat branded vehicles, Banco Itaú has exclusivity on our promotional campaigns and preferential rights on non-promotional financing. We receive commissions in connection with each vehicle financing above a certain threshold. In July 2015, Fiat Chrysler Automoveis Brasil ("FCA Brasil") and Banco Fidis signed a ten-year partnership contract with Bradesco, one of the leading Brazilian banks, through its affiliate Bradesco Financiamentos, whereby Bradesco Financiamentos finances retail sales of Jeep, Chrysler, Dodge and Ram vehicles in Brazil. Under this agreement, Bradesco has exclusivity on promotional campaigns and FCA Brasil promotes Bradesco as FCA Brasil's official financial partner. Banco Fidis is in charge of the commercial management of this partnership and receives commissions for this partnership agreement and for acting as banking agent, based on profitability and penetration.

China and India & Asia Pacific

China and India & Asia Pacific Sales and Competition

The following table presents our vehicle sales and market share in the China and India & Asia Pacific segment:

China and India & Asia Pacific	Years ended December 31, 2022[(1)(5)]		2021[(1)(5)]		2020[(1)(5)]	
	Sales	**Market Share**	**Sales**	**Market Share**	**Sales**	**Market Share**
	Thousands of units (except percentages)					
China[(2)*]	94	0.4%	124	0.6%	108	0.5%
Japan	34	1.0%	45	1.2%	41	1.1%
India[(3)]	20	0.5%	13	0.4%	5	0.2%
Australia	18	1.7%	18	1.8%	14	1.6%
Asean & General Distributors[(4)]	17	0.5%	13	0.5%	10	0.4%
South Korea	9	0.6%	13	0.9%	12	0.7%
New Zealand	4	2.5%	4	2.8%	3	2.6%
China and India & Asia Pacific major Markets	197	0.6%	230	0.7%	193	0.6%
Total	**197**	**0.5%**	**230**	**0.6%**	**193**	**0.5%**

** Includes Hong Kong and Taiwan*
(1) Estimated market share information is derived from third-party industry sources of China & Asia Pacific countries (e.g. CADA and CPCA (China PC Domestic), CATARC (China PC Import), FCAI (Australia), SIAM (India PC), JADA and JAIA (Japan), MIA (New Zeeland), IHS (Thailand), MAA (Malaysia)) and internal information
(2) Data include vehicles sold by our joint ventures in China for Stellantis brands
(3) India market share is based on wholesale volumes
(4) Asean & General Distributors ("AGD") includes Bangladesh, Brunei, Cambodia, French Polynesia, Indonesia, Malaysia, Myanmar, Nepal, New Caledonia, Philippines, Singapore, Sri Lanka, Thailand and Vietnam
(5) Sales reflect retail deliveries. China and India & Asia Pacific industry reflects aggregate for major markets where the Company competes (China (PC), Japan (PC), India (PC), South Korea (PC and Pickups), Australia, New Zealand and AGD). Market share is based on retail/registrations except, as noted above, in India where market share is based on wholesale volumes
Maserati excluded from volumes and market share

The automotive industry in the India & Asia Pacific segment has shown a year-over-year growth, with industry sales increased by 7.4 percent to 13.6 million units in 2022 compared to 2021. The increase in demand was primarily driven by key markets: India with an increase of 23.0 percent due to new model launches from local OEMs lifting the market, AGD with an increase of 14.9 percent and in Australia an increase of 1.8 percent, as both markets started to recover from the semiconductor shortage. However, South Korea experienced a decrease of 2.9 percent and Japan a decrease of 6.2 percent, with both markets impacted negatively by unfilled semiconductor orders during the year. In 2022, 26.9 million vehicles (passengers cars and commercial vehicles) were sold in China, which represents a 2.1 percent year-over-year increase.

We sell a range of vehicles in the China and India & Asia Pacific segment, including small and compact cars, premium mid-size cars, utility vehicles and light commercial vehicles. Although our smallest segment by vehicle sales, China and India & Asia Pacific segment represents a significant growth opportunity and we are invested in building relationships with key partners in India to increase our manufacturing footprint and presence in the region. In the China and India & Asia Pacific segment we also distribute vehicles that are manufactured in the U.S. and Europe through our dealers and distributors.

China and India & Asia Pacific Distribution

In the key markets in the China and India & Asia Pacific segment (China, Australia, India, Japan, South Korea and AGD), we sell our vehicles through 100 percent owned subsidiaries or through our joint venture, DPCA JV to local independent dealers. On October 31, 2022, the two shareholders of the GAC-Stellantis JV have approved a resolution authorizing the JV to file for bankruptcy. Stellantis will focus on distributing imported vehicles for the Jeep brand in China through an asset-light approach. The Dongfeng Peugeot Citroën Automobile Sales Co ("DPCS") markets the vehicles produced by DPCA in China. We operate through national sales companies in Australia, Japan, India and South Korea. In AGD and smaller markets, we have agreements with general distributors.

China and India & Asia Pacific Dealer and Customer Financing

In China, we operate a 100 percent owned captive finance company, FCA Automotive Finance Co., Ltd, which supports our sales activities in China through dealer and retail customer financing. Cooperation agreements are also in place with third-party financial institutions to provide dealer network and retail customer financing in India, South Korea, Australia and Japan.

In 2022, Stellantis and Dongfeng Motor Group ("Dongfeng") agreed to reshape the relationships initially established through two joint finance companies, namely Dongfeng Peugeot Citroën Auto Finance Company Ltd ("DPCAFC") and Dongfeng Peugeot Citroën Financial Leasing Co ("DPCFLC"), which provide the financing of the Dongfeng Peugeot and Dongfeng Citroën brands in China as well as leasing solutions. This resulted in the signature of two equity transfer agreements, one relating to the acquisition by Dongfeng of all of the equity shares held in DPCAFC by Stellantis and by DPCA JV, and one relating to the acquisition by Stellantis of all of the equity shares held in DPCFLC by Dongfeng. Following the signature of these two agreements, the acquisition by Dongfeng of the entire equity shares in DPCAFC occurred on December 15, 2022. The acquisition by Stellantis of Dongfeng's equity shares held in DPCFLC is expected to close in the first half of 2023 after the necessary regulatory approvals.

Maserati

In 2022, Maserati launched the all-new Grecale SUV which is available in three versions (GT, Modena and Trofeo) and with a wide choice of propulsion systems, from conventional combustion to hybrid engines. In addition, Maserati revealed the spyder version of its MC20: Maserati MC20 Cielo, with a retractable hard top.

The following table shows the distribution of Maserati sales by geographic regions and as a percentage of total sales for each of the years ended December 31, 2022, 2021 and 2020:

	2022 Sales	As a percentage of 2022 sales	2021 Sales	As a percentage of 2021 sales	2020 Sales	As a percentage of 2020 sales
U.S./Mexico	6,945	29.7 %	7,765	32.0 %	5,258	30.6 %
Europe top 4[1]	5,442	23.3 %	3,434	14.1 %	2,649	15.4 %
China	4,680	20.0 %	7,357	30.3 %	4,602	26.8 %
Japan	1,238	5.3 %	1,080	4.5 %	893	5.2 %
Other countries	5,099	21.8 %	4,633	19.1 %	3,764	21.9 %
Total	**23,404**	**100 %**	**24,269**	**100 %**	**17,166**	**100 %**

(1) Italy, United Kingdom, Germany and Switzerland
China includes Hong Kong
U.S. includes Mexico and Puerto Rico

In 2022, a total of 23.4 thousand Maserati vehicles were sold, slightly lower compared to 2021 as a result of sales performance in China mainly due to pandemic restrictions partially offset by significant increase in Europe and other key markets as a result of the Grecale launch.

FCA Bank provides access to dealer and retail customer financing for Maserati brand vehicles in Europe and our 100 percent owned captive finance company, FCA Automotive Finance Co. Ltd, provides dealer and retail financing in China. In the U.S., JPM Chase provides retail financing. In other regions, we rely on local agreements with financial services providers for the financing of Maserati brand vehicles to dealers and end customers.

Cyclical Nature of the Business

As is typical in the automotive industry, Stellantis' vehicle sales are highly sensitive to general economic conditions, availability of low interest rate vehicle financing for dealers and retail customers and other external factors, including fuel prices, and as a result could vary substantially from quarter to quarter and year to year. Retail consumers tend to delay the purchase of a new vehicle when disposable income and consumer confidence is low. Moreover, increases in inflation may lead to subsequent increases in the cost of borrowing and availability of affordable credit for vehicle financing, which may further influence retail consumers to delay the purchase of a new vehicle. In addition, Stellantis' vehicle production volumes and related revenues could vary from month to month, sometimes due to plant shutdowns, which could occur for several reasons including raw material or component unavailability, production changes from one model year to the next and actions to balance vehicle supply and demand fluctuations and also to adjust dealer stock levels appropriately. Plant shutdowns, whether associated with model year changeovers or other factors such as temporary supplier interruptions, could have a negative impact on Stellantis' revenues and working capital as Stellantis continues to pay suppliers under established terms while Stellantis would not receive proceeds from vehicle sales. Refer to *Liquidity and Capital Resources—Liquidity Overview* for additional information.

Legal Proceedings

Takata airbag inflators

Putative class action lawsuits were filed in March 2018 against FCA US LLC ("FCA US"), a wholly owned subsidiary of Stellantis, in the U.S. District Courts for the Southern District of Florida and the Eastern District of Michigan, asserting claims under federal and state laws alleging economic loss due to Takata airbag inflators installed in certain of our vehicles. The cases were subsequently consolidated in the Southern District of Florida. On November 8, 2022, the Court granted summary judgement in FCA US's favor against all claimants except those in Georgia and North Carolina. FCA US has moved to dismiss all remaining claims and decisions on those motions are pending.

Emissions Matters

On January 10, 2019, FCA US announced it had reached final settlements on civil environmental and consumer claims with the U.S. Environmental Protection Agency ("EPA"), the Civil Division of the U.S. Department of Justice ("DoJ"), the California Air Resources Board ("CARB"), the State of California, 49 other States and U.S. Customs and Border Protection, for which we accrued €748 million during the year ended December 31, 2018. Approximately €350 million of the amount accrued by FCA US, which was prior to the merger, was related to civil penalties to resolve differences over diesel emissions requirements. A portion of the amount accrued, prior to the merger, was attributable to settlement of a putative class action on behalf of consumers in connection with which FCA US agreed to pay an average of $2,800 per vehicle to eligible customers affected by the recall. That settlement received final court approval on May 3, 2019. On April 9, 2021, FCA US reached an agreement with substantially all of the approximately 3,200 consumers that exercised their right to opt out of the class action settlement to settle their claims for an amount that is not material to the Company.

In September 2019, the DoJ filed criminal charges against an employee of FCA US for, among other things, fraud, conspiracy, false statements and violations of the Clean Air Act primarily in connection with efforts to obtain regulatory approval of the vehicles that were the subject of the civil settlements described above. In April 2021, two additional employees of a Stellantis subsidiary were indicted by the DoJ on similar charges. The three employees were placed on administrative leave following their indictments. On June 3, 2022, FCA US announced that it had agreed to a settlement to resolve the DoJ, Criminal Division's investigation as it relates to FCA US. The settlement, which received court approval, includes a guilty plea, a fine of approximately $96 million, and the forfeiture of approximately $204 million in gains. Prior to the merger, we accrued approximately €200 million during the three months ended September 30, 2020 as our best estimate of probable loss with regard to matters under discussion. In light of subsequent progress in our discussions with the DoJ, Criminal Division, we increased our accrual for this matter to approximately €266 million as of December 31, 2021, which is sufficient to cover the forfeiture and penalty imposed by the plea agreement. We remain subject to a number of related private lawsuits (the "Non Opt-Out Litigation").

We have also received inquiries from other regulatory authorities in a number of jurisdictions as they examine the on-road tailpipe emissions of several automakers' vehicles and, when jurisdictionally appropriate, we continue to cooperate with these governmental agencies and authorities.

In Europe, we have continued to work with the Italian Ministry of Transport ("MIT") and the Dutch Vehicle Regulator ("RDW"), the authorities that certified FCA diesel vehicles for sale in the European Union, and the UK Driver and Vehicle Standards Agency in connection with their review of several diesel models.

We also responded to inquiries from the German authority, the Kraftfahrt-Bundesamt ("KBA"), regarding emissions test results for FCA diesel vehicles, and discussed the KBA reported test results, our emission control calibrations and the features of the vehicles in question. After these initial discussions, the MIT, which has sole authority for regulatory compliance of the vehicles it has certified, asserted its exclusive jurisdiction over the matters raised by the KBA, tested the vehicles, determined that the vehicles complied with applicable European regulations and informed the KBA of its determination. Thereafter, mediations were held under European Commission ("EC") rules, between the MIT and the German Ministry of Transport and Digital Infrastructure, which oversees the KBA, in an effort to resolve their differences. The mediation concluded and no action was taken with respect to FCA. In May 2017, the EC announced its intention to open an infringement procedure against Italy regarding Italy's alleged failure to respond to EC's concerns regarding certain FCA emission control calibrations. The MIT responded to the EC's allegations by confirming that the vehicles' approval process was properly performed. On December 2, 2021, the EC notified Italy of its position that Italy did not comply with its obligation to enforce EU emission type approval rules.

In December 2019, the MIT notified FCA of communications with the Dutch Ministry of Infrastructure and Water Management ("I&W") regarding certain irregularities allegedly found by the RDW and the Dutch Center of Research TNO in the emission levels of certain Jeep Grand Cherokee Euro 5 models and a vehicle model of another OEM containing a Euro 6 diesel engine supplied by FCA. In January 2020, the Dutch Parliament published a letter from the I&W summarizing the conclusions of the RDW regarding those vehicles and engines and indicating an intention to order a recall and report their findings to the Public Prosecutor, the EC and other Member States. FCA engaged with the RDW to present our positions and cooperate to reach an appropriate resolution of this matter. FCA proposed certain updates to the relevant vehicles that have been tested and approved by the RDW and are now being implemented. Nevertheless, this matter is still pending.

In addition, as part of the judicial investigation of several automakers in France, commencing in 2016 and 2017, Automobiles Peugeot and Automobiles Citroën were placed under examination by the Judicial Court of Paris in June 2021 on allegations of consumer fraud in connection with the sale of Euro 5 diesel vehicles in France between 2009 and 2015. In July 2021, FCA Italy was placed under examination by the same court for possible consumer fraud in connection with the sale of Euro 6 diesel vehicles in France between 2014 and 2017. FCA Italy was also designated as a material witness in connection with allegations of obstruction of the actions of an economy ministry antifraud inspector in 2016 and 2017. As is typical in a French criminal inquiry, each of the companies were required to pay bail for the potential payment of damages and fines and to ensure representation in court, and to provide a guarantee for the potential compensation of losses. None of these amounts were, individually or in the aggregate, material to the Company.

In July 2020, unannounced inspections took place at several of FCA's sites in Germany, Italy and the UK at the initiative of the Public Prosecutors of Frankfurt am Main and of Turin, as part of their investigations of potential violations of diesel emissions regulations and consumer protection laws. In April 2022, former FCA companies received an order to produce documents to the Public Prosecutors. In October 2022, inspections took place at the Italian offices of FCA Italy and Maserati and at the German office of Maserati Deutschland. The Public Prosecutor of Frankfurt has also informed us that it is conducting a criminal investigation regarding the emissions of certain PSA diesel engines installed in approximately 1,000 PSA vehicles and 29,000 Mitsubishi vehicles sold in Germany. We continue to cooperate with these investigations.

We also face class actions and individual claims in several European countries. Several former FCA and PSA companies and our Dutch dealers have been served with two class actions filed in the Netherlands by Dutch foundations seeking monetary damages and vehicle buybacks in connection with alleged emissions non-compliance of certain diesel vehicles. We have also been notified of a potential class action on behalf of Dutch consumers alleging emissions non-compliance of certain former FCA vehicles sold as recreational vehicles, as well as a securities class action in the Netherlands, alleging misrepresentations by FCA, now Stellantis. A class action alleging emissions non-compliance has also been filed in Portugal regarding former FCA vehicles and similar claims in the UK regarding former FCA and PSA vehicles are in a pre-litigation phase. We are also defending approximately 11,300 individual consumer claims alleging emissions non-compliance of certain former FCA vehicles in Germany and approximately 150 in Austria.

In December 2018, the Korean Ministry of Environment ("MOE") announced its determination that approximately 2,400 FCA vehicles imported into Korea during 2015, 2016 and 2017 were not emissions compliant and that the vehicles with a subsequent update of the emission control calibrations voluntarily performed by FCA, although compliant, would have required re-homologation of the vehicles concerned. In May 2019, the MOE revoked certification of the above-referenced vehicles and announced an administrative fine for an amount not material to the Company which has been paid by our Korean subsidiary. Our appeal of the MOE's decision was rejected and we are no longer pursuing appeals other than in connection with calculation of the fine. Our Korean subsidiary has also paid an administrative fine, in an amount not material to the Company, imposed by the Korean Fair Trade Commission for a purported breach of the Act on Fair Labeling and Advertisement in connection with these vehicles.

In November 2021, the MOE issued notice of its intention to impose a recall order, revocation of certification and an administrative fine on the basis of the alleged non-compliance of approximately 2,250 other FCA vehicles. The amount of the administrative fine is not material to the Company. We are waiting for the MOE to issue the final disposition on this matter. Our subsidiary in Seoul, Korea is also cooperating with local criminal authorities in connection with their review of these matters. In both cases, the authorities decided to not refer the matter to prosecutors, as they had found no evidence of wrongdoing by our Korean subsidiary.

National Training Center

On January 27, 2021, FCA US announced an agreement with the U.S. Attorney's Office for the Eastern District of Michigan to resolve its investigation into past misconduct of certain former FCA US employees involving the UAW-Chrysler National Training Center ("NTC"). Pursuant to the agreement, which received court approval on July 19, 2021, FCA US agreed to plead guilty to a single count of conspiracy to violate the Labor Management Relations Act and the payment of a fine in an amount that is not material to the Company and which was accrued prior to the merger. FCA US also agreed to implement an independent compliance monitor for three years with respect to the dissolution of the NTC and internal controls as they relate to the trusts being implemented to replace the NTC.

Several putative class action lawsuits have been filed against FCA US in U.S. federal court alleging harm to UAW workers as a result of these acts. Those actions have been dismissed both at the trial court stage and on appeal. Three plaintiffs in these lawsuits also filed charges alleging unfair labor practices with the U.S. National Labor Relations Board (the "Board"). The Board issued a complaint regarding these allegations and sought a cease and desist order as well as the posting of a notification with respect to the alleged practices, but subsequently dismissed the charges.

On July 20, 2020, a group of employees in FCA's Toledo, Ohio Jeep plant filed a lawsuit in U.S. District Court for the Northern District of Ohio against FCA US, the UAW and certain individuals claiming violations of the Racketeer Influenced and Corrupt Organizations ("RICO") Act and civil conspiracy. On October 20, 2020, FCA US filed a motion to dismiss. Plaintiffs filed their second amended complaint on June 25, 2021. Briefing on the motion to dismiss has been stayed pending decisions on motions to dismiss in two related cases in the U.S. District Court for the Eastern District of Michigan.

On October 16, 2020 and February 28, 2021, lawsuits were filed in U.S. District Court for the Eastern District of Michigan, by groups of current and former employees making similar claims. The court granted our motion to dismiss one of the cases and that decision has been appealed by plaintiffs. Our motion to dismiss the other case remains pending.

General Motors Litigation

On November 20, 2019, General Motors LLC and General Motors Company (collectively, "GM") filed a lawsuit in the U.S. District Court for the Eastern District of Michigan against FCA US, FCA N.V., now Stellantis N.V., and certain individuals, claiming violations of the RICO Act, unfair competition and civil conspiracy in connection with allegations that FCA US made payments to UAW officials that corrupted the bargaining process with the UAW and as a result FCA US enjoyed unfair labor costs and operational advantages that caused harm to GM. GM also claimed that FCA US had made concessions to the UAW in collective bargaining that the UAW was then able to extract from GM through pattern bargaining which increased costs to GM and that this was done by FCA US in an effort to force a merger between GM and FCA N.V. The court dismissed GM's lawsuit with prejudice. GM subsequently appealed the dismissal to the U.S. Court of Appeals for the Sixth Circuit the court affirmed the dismissal of GM's complaint. On January 9, 2023, GM filed a petition with the U.S. Supreme Court, seeking review of the Sixth Circuit's decision.

Following dismissal of its Federal court case, GM filed an action against FCA US and FCA N.V., now Stellantis N.V., in Michigan state court, making substantially the same claims as it made in the federal litigation. On October 15, 2021, the court granted Stellantis N.V. and FCA US's motion for summary disposition. GM filed a motion for reconsideration and on December 6, 2021, the court granted GM's motion, permitting GM to amend its complaint. GM filed a second amended complaint on December 23, 2021. On May 16, 2022, the court denied FCA US's motion for summary disposition and permitted discovery to proceed against FCA US. On July 20, 2022, the court granted Stellantis N.V.'s motion for summary disposition, but on November 28, 2022 the court granted GM's motion for reconsideration and permitted jurisdictional discovery to proceed against Stellantis N.V..

Tigershark Engine

In addition, putative class action lawsuits have been filed against FCA US and consolidated into a single action in U.S. District court in Michigan asserting claims under federal and state laws claiming manufacturing and design defects in certain vehicles equipped with the 2.4L Tigershark engine, which has been installed in approximately 1.6 million vehicles sold in the U.S. The claims allege excessive oil consumption and related excess emissions. In November 2021, we entered into an agreement in principle to settle the litigation, contingent on court approval, for an amount that is not material to the Company. The court granted final approval of the settlement in December 2022.

Environmental and Other Regulatory Matters

At Stellantis, we engineer, manufacture and sell our products and offer our services around the world, subject to requirements applicable to our products that relate to vehicle emissions, fuel economy, emission control software calibration and on-board diagnostics and vehicle safety, as well as those applicable to our manufacturing facilities that relate to stack emissions, the management of waste, water and hazardous materials, prohibitions on soil contamination, and worker health and safety. Our vehicles and the propulsion systems that power them must also comply with extensive regional, national and local laws and regulations (including those that regulate end-of-life vehicles ("ELVs") and the chemical content of our parts). In addition, vehicle safety regulations are becoming increasingly strict.

We are subject to a range of global regulatory requirements affecting our facilities and products, and compliance with these requirements involves significant costs and risks. We consistently monitor the relevant global regulatory requirements affecting our facilities and products and adjust our operations and processes as we seek to remain in compliance, although we may from time to time fail to meet a particular regulatory requirement. See "*Risk Factors-Risks Related to the Legal and Regulatory Environment in which We Operate-Current and more stringent future or incremental laws, regulations and governmental policies, including those regarding increased fuel efficiency requirements and reduced greenhouse gas and tailpipe emissions, have a significant effect on how we do business and may increase our cost of compliance, result in additional liabilities and negatively affect our operations and results.*" and "*Risk Factors-Risks Related to the Legal and Regulatory Environment in which We Operate-We remain subject to ongoing diesel emissions investigations by several governmental agencies and to a number of related private lawsuits, which may lead to further claims, lawsuits and enforcement actions, and result in additional penalties, settlements or damage awards and may also adversely affect our reputation with consumers.*"

Automotive Tailpipe Emissions

Numerous laws and regulations place limits on vehicle emissions, including standards on tailpipe exhaust emissions standards and evaporative emissions. These standards govern a category of emissions called "criteria emissions" that does not include greenhouse gases ("GHGs"). Related laws impose requirements on how vehicles' emission control systems are designed to ensure emissions are controlled in normal, real driving conditions, as well as requirements to employ diagnostic software to identify and diagnose problems with emission control components, which if undiagnosed could lead to higher emissions. This diagnostic software is called an on-board diagnostic system ("OBD").

All global jurisdictions require manufacturers to conduct vehicle testing to demonstrate compliance with these emissions limits for the useful life of a vehicle as a prerequisite to obtaining emission compliance certification before any vehicle can be sold.

These requirements become more challenging each year, especially in light of increased global scrutiny of diesel emission control systems and we expect these emissions and certification requirements will continue to become even more rigorous worldwide.

North America Region

The U.S. Environmental Protection Agency ("EPA") has established federal Tier 3 emissions standards, and federal law allows the CARB to also establish its Low Emission Vehicle ("LEV") III emission standards. CARB is now in the process of adopting Advanced Clean Car II Regulations ("ACC II"), which will establish revised standards for new 2026 and subsequent model year California light-duty vehicles.

EPA and CARB both review manufacturers' emission control software design as part of their emission certification evaluation, whereas EPA has delegated the administration of OBD software requirements to CARB.

In addition to its LEV III emissions standards, CARB regulations also require that a specified percentage of cars and certain light-duty trucks sold in California qualify as zero emission vehicles, such as electric vehicles, hybrid electric vehicles or hydrogen fuel cell vehicles. ACC II will require that ZEV sales increase to 100 percent of new vehicle sales by the 2035 model year. Federal law further allows other states to adopt CARB's criteria emission, GHG and ZEV standards. Other states have adopted or are in the process of adopting CARB standards.

Manufacturers must comply with EPA's and CARB's criteria emission standards at a vehicle-level as well as a sales-weighted fleet level, whereas CARB's ZEV requirements, to the extent enforceable, are fleet-only standards.

For a discussion of inquiries into our compliance with certain regulations in the U.S., see Note 26, *Guarantees granted, commitments and contingent liabilities* within the Consolidated Financial Statements included elsewhere in this report. See also "*Risk Factors-Risks Related to the Legal and Regulatory Environment in which we Operate-Current and future more stringent or incremental laws, regulations and governmental policies, including those regarding increased fuel efficiency requirements and reduced greenhouse gas and tailpipe emissions, have a significant effect on how we do business and may increase our cost of compliance and negatively affect our operations and results.*"

Enlarged Europe Region

In Europe, emissions are regulated by the European Union ("EU") and the United Nations Economic Commission for Europe ("UNECE"). The EC imposes standardized emission control requirements on vehicles sold in all 27 EU member states, while non-EU countries bound by the "1958 UN Agreement" (an agreement concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted or used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions) apply regulations under the UNECE framework. EU Member States can provide tax incentives/contributions for the purchase of vehicles that are rated as zero emission vehicles (such as BEVs) or for vehicles that meet emission standards earlier than the compliance date. Vehicles must meet emission requirements and receive specific approval from an appropriate Member State authority before they can be sold in any EU Member State, and these regulatory requirements include random testing of newly assembled vehicles and market surveillance testing of vehicles in the field for emission compliance.

Euro 6 emission levels are currently in effect for all passenger cars and light commercial vehicles which required additional technologies and increased the cost of diesel engines compared to prior Euro 5 standards. These new technologies have put additional cost pressures on the already challenging European market for small and mid-size diesel-powered vehicles. Further requirements of Euro 6 have been developed by the EU and are effective for all new passenger cars and light commercial vehicles. In addition to WLTP, the new real driving emissions ("RDE") test procedure to directly assess the regulated emissions of light duty vehicles under real driving conditions is effective. More stringent test requirements related to RDE, as well as requirements relating to On-board Fuel and/or Energy Consumption Monitoring Device for Fuel Consumption Monitoring, is effective for all new passenger cars registered after January 1, 2021 and all new light commercial vehicles registered after January 1, 2022.

For a discussion of inquiries from relevant governmental agencies in the European Union, see Note 26, *Guarantees granted, commitments and contingent liabilities* within the Consolidated Financial Statements included elsewhere in this report. See also "*Risk Factors-Risks Related to the Legal and Regulatory Environment in which we Operate-We remain subject to diesel emissions investigations by several governmental agencies and to a number of related private lawsuits, as well as other claims and lawsuits which may lead to further enforcement actions, penalties or damage awards and may also adversely affect our reputation with consumers*"

South America Region

Certain countries in South America follow U.S. procedures, standards and OBD requirements, while others follow the European procedures, standards and onboard diagnostic requirements described above. In Brazil, vehicle emission standards are regulated by the Ministry of the Environment and have been in place since 1988 for passenger cars and light commercial vehicles (PROCONVE). The current phase of regulations (PROCONVE L7) set new fuel efficiency and safety standards from January 2022 and a next step (PROCONVE L8) will come into effect in January 2025 with fleet target limits (US BIN methodology) and RDE limits. Argentina has implemented regulations that mirror the EU Euro 5 standards for all new vehicles. In Chile, implementation of Euro 6 standards occurred in 2022 for new homologations and will go into effect in 2023 for all licensed vehicles.

China and India & Asia Pacific Region

China 6 standards were released in 2016 and were applied nationwide, beginning in January 2021, with China 6a thresholds and will be updated by July 2023 with China 6b thresholds. China 6a and 6b have more stringent tailpipe emissions thresholds than Euro 6, implement OBD requirements similar to U.S. OBD II and evaporative emission control requirements, and add RDE and U.S. onboard refueling vapor recovery requirements. Prior to July 2023, RDE is required for monitoring only and the emission durability mileage is set at 160,000 kilometers. Beginning July 2023, RDE conformity factor 2.1 will be implemented and emission durability mileage will be extended to 200,000 kilometers. Some regions within China implemented China 6b in 2019 such as Shanghai, Guangzhou, Shenzhen, Yangtze River Delta, Pearl River Delta, Chengdu, Chongqing and Tianjin. Beijing implemented China 6b at the beginning of 2020.

South Korea implemented regulations that are similar to California's LEV III regulations beginning in 2016 and became fully required in 2019 for all gasoline vehicles. Diesel vehicles are required to meet Euro 6 EU emissions requirements. Japan adopted the WLTP without Extra High phase in 2018 for new models and for all models beginning January 2021. WLTP is a global harmonized standard for regulating GHG emissions, non-GHG pollutants, and fuel or energy consumption for light-duty vehicles and electric range for battery electric vehicles or hybrids.

India implemented nationwide Bharat Stage VI ("BSVI") Emission norms (equivalent to Euro 6) in April 2020. Stage 2 of BSVI norms (with more stringent OBD limits, RDE and an in-use performance ratio) will be implemented beginning April 2023. The conformity Factor ("CF") for RDE has not been confirmed but a two-stage implementation for RDE CF (Stage 1 in April 2023 and Stage 2 in April 2024) is under discussion. Currently E5 fuel is the reference fuel for BSVI, and there is a plan to change the fuel to E20 in April 2025.

In addition, Australia is developing a revised Regulatory Impact Statement to introduce mandatory Euro 6 standards beginning in 2027 while Euro 5 standards are expected to remain in force until that time.

Automotive Fuel Economy and Greenhouse Gas Emissions

North America Region

In the U.S., since the enactment of the 1975 Energy Policy and Conservation Act, the National Highway Traffic Safety Administration ("NHTSA") has enforced minimum CAFE for fleets of new passenger cars and light-duty trucks sold in the U.S. for each model year. CAFE standards apply to all domestic and imported passenger car and light-duty truck fleets and currently target year-over-year increases in fuel economy. The requirement is scaled based on vehicle footprint size. The CAFE standards require that passenger cars imported into the U.S. from outside of North America are averaged separately from those manufactured within North America, and domestic cars and light duty trucks are also considered separately.

In 2012, EPA promulgated its first GHG rule under the federal Clean Air Act, which required manufacturers to comply with a similar footprint-based GHG standard, the stringency of which increases year-over-year through 2025. The GHG rule does not require separate domestic passenger car compliance reporting but, like the CAFE program, light trucks are reported separately from passenger cars.

In September 2019, EPA and NHTSA issued the first two parts of a new rule, which the agencies called the Safer Affordable Fuel Efficient Vehicle Rule (the "SAFE Rule").

In April 2020, EPA and NHTSA issued SAFE Part 2, which established new GHG and CAFE standards.

In August and September 2021, EPA and NHTSA published proposed GHG and fuel economy regulations, respectively. These regulations impose GHG and fuel economy standards that are stricter than the SAFE 2 Rule's standards. EPA published its final GHG regulation in December 2021, which includes stricter standards for model years 2023 through 2026. Similarly, NHTSA published its final fuel economy regulation in April 2022, which increased stringency for model years 2024 through 2026. In addition, EPA reinstated California's legal right to have and enforce its GHG and ZEV programs in March 2022. For more information, please refer to *"RISK MANAGEMENT - Risk Factors - Current and more stringent future or incremental laws, regulations and governmental policies, including those regarding increased fuel efficiency requirements and reduced greenhouse gas and tailpipe emissions, have a significant effect on how we do business and may increase our cost of compliance, result in additional liabilities and negatively affect our operations and results.*"

In April 2022, NHTSA published a final rule repealing an interim final rule issued in January 2021 and reverting to the December 2016 final rule which, beginning with the 2019 Model Year, increased the CAFE civil penalty rate from $5.00 to $14.00 for every tenth of a mile per gallon the new vehicles fall short of required fuel economy standards. This amount is multiplied by the number of noncomplying vehicles sold. NHTSA is expected to continue to make mandatory inflation adjustments to the CAFE civil penalty rate, as required by law for all civil monetary penalties. Applying the annual inflation adjustment procedures did not result in an increase in the $14.00 rate through 2021 Model Year, but did result in an increased fine rate to $15.00 for 2022 Model Year vehicles. For more information, refer to Note 26, *Guarantees granted, commitments and contingent liabilities* in the Consolidated Financial Statements included elsewhere in this report.

On March 9, 2022, the EPA reinstated California's authority under the Clean Air Act to enforce its own, more stringent, GHG emission standards for passenger vehicles and light duty trucks (the "California Waiver"). California emission standards covered by the California Waiver may be adopted by other states and to date 17 other states and the District of Columbia (the "California Waiver States") have adopted California's GHG emissions standards under the California Waiver.

Prior to the EPA's withdrawal of the California Waiver, automotive OEMs were deemed to be compliant with California's GHG emissions standards if they were compliant with the EPA's GHG standards. This "deemed to comply" mechanism was removed from the California regulation prior to the reinstatement of the California Waiver. As interpreted by CARB, the EPA's reinstatement of the California Waiver together with the removal of the "deemed to comply" mechanism means that automotive OEMs are retroactively subject to the separate California GHG standards beginning with the model year 2021 fleet. OEMs may achieve compliance with the California GHG emission standards in several ways, including through the sale of emission-compliant vehicles within their fleet for a given model year, through the carryforward or carryback of excess credits generated by a compliant fleet in past or future years, by the purchase of California-specific regulatory credits from third parties or by a combination of the foregoing.

For heavy duty vehicles (>8,500 pound gross vehicle weight rating), the U.S. GHG and fuel consumption standard is utility based (payload and towing) and is increasing in stringency through 2027.

The Canadian and Mexican markets have adopted GHG standards derived from the U.S. government's footprint-based structure and generally align with its technology-adoption compliance approach.

In 2012, Mexico adopted a fleet average target for CO_2 per kilometer. The annual target is based on the footprint of each vehicle and since 2012 the stringency of the annual target has increased annually and will do so until 2025, when it will reach 85-116.7 grams of CO_2 per kilometer. The Mexican government has also made available CO_2 credits for the use of efficient technologies, including electric vehicles, off-cycle technologies and efficient air conditioning systems.

Enlarged Europe Region

Each automobile manufacturer must meet a specific registrations-weighted fleet average target for CO_2 emissions. This regulation sets an industry fleet average target of 95 grams of CO_2 per kilometer starting in 2020 for passenger cars (130g/km until 2019). In order to promote the sale of ultra-efficient vehicles, automobile manufacturers that have registered vehicles emitting less than 50 grams of CO_2 per kilometer earned additional CO_2 credits from 2020 to 2022. Furthermore, automobile manufacturers that make use of innovative technologies, or eco-innovations, which improve real-world fuel economy but may not show results in the test cycles, such as solar panels or LED lighting, may gain an average credit for the manufacturer's fleet of up to seven grams of CO_2 per kilometer.

The EU has also adopted standards for regulating CO_2 emissions from LCVs. This regulation set an industry fleet average target of 147 grams of CO_2 per kilometer for LCVs.

In April 2019, the Regulation (EU) 2019/631 which sets new CO_2 emissions targets starting from 2025 and 2030 was adopted and requires a 15 percent reduction from 2021 levels in 2025 (both passenger cars and LCV), a 37.5 percent reduction for passenger cars and a 31 percent reduction for LCV in 2030 from 2021 levels.

WLTP entered into force in September 2018 for all registered passenger cars and in September 2019 for all registered LCVs. WLTP is intended to provide CO_2 emissions and fuel consumption values that are more representative of real driving conditions.

The quantity of CO_2 emissions in 2023 will be affected not only by market evolution (such as the expected reduction of diesel market share), but also by the continued commercialization of low-emission and electrified vehicles.

Other countries in Enlarged Europe region outside of the EU perimeter, such as Switzerland, have introduced specific regulations aimed to reduce vehicle CO_2 emissions or fuel consumption. The United Kingdom is continuing to follow the EU GHG policy for cars and LCVs post-Brexit, but changes are currently under discussion that might diverge from that regulation in the future.

South America Region

In December 2018, the first regulations related to the Rota 2030 Program were enacted in Brazil. Rota 2030 is a long-term program (three cycles of five years each) that replaced the Inovar Auto Program and establishes mandatory requirements for vehicle commercialization in Brazil: (a) adhesion to Vehicle Labeling Program; (b) commitment to achieve a minimum level of energy efficiency; and (c) commitment to achieve a minimum level of structural performance and driver assistance technologies. The regulation for the next phase of Energy Efficiency (CO_2 /fuel efficiency) beginning in 2022 incorporates three fleets split into passenger, large SUV and light commercial vehicle categories. Among other things, the rule rewards the improvement of sugar cane ethanol combustion efficiency and also recognizes and provides credit flexibilities for technologies that provide benefits in conditions that are not seen on the standardized government test cycles.

In Argentina, although there is no current mandatory greenhouse gas requirement, the government is in the process of implementing a comparative labeling based on the European statements (NEDC cycle) and legal text was published at the end of 2021 and implemented in 2022.

In Chile, a federal law was published to establish an energy efficiency program. The technical rules and targets were defined in February 2022 and must target implementation in February 2024 for light vehicles.

China Region

Beginning in 2021, China adopted WLTP for conventional and plug-in hybrid electric vehicles ("PHEVs") and a unique Chinese test cycle is applied to battery electric vehicles in the same year. The 2021-2025 Phase V Corporate Average Fuel Consumption ("CAFC") rules were released in 2019 by the Chinese government with increasing stringency reaching a target of 4.6 liters per 100 kilometers by 2025. The dual credit management rule for 2021-2023 was released in 2020, and the 2024-2025 CAFC and New Energy Vehicle ("NEV") Credits are expected to be issued at a later date.

NEVs consist of PHEVs, BEVs, and fuel cell vehicles, which generate positive NEV credits, improve CAFC performance and provide a volume multiplier in the CAFC calculation, subject to meeting certain criteria. Currently, off-cycle credit flexibilities in China are available in the areas of high efficiency air conditioning and regenerative braking technologies, subject to meeting certain standards.

In June 2020, China's Ministry of Industry and Information Technology released administrative rules regarding CAFC and NEV credits that became effective in January 2021. Non-compliance with the CAFC target in these administrative rules can be offset through carry-forward CAFC credits, transfer of CAFC credits within affiliates, the OEMs use of its own NEV credits, or the purchase of NEV credits. Non-compliance with the NEV target can only be offset by the purchase of NEV credits. The homologation of new products that exceed CAFC targets will be suspended for OEMs that are unable to offset CAFC and/or NEV deficits until the deficits are offset.

India & Asia Pacific Region

Certain markets within the India & Asia Pacific region have enacted fuel consumption and GHG targets. For example, India began enforcing phase I CAFC targets (CO_2 ~130gm/km @ 1037 kg) starting in April 2017 with more stringent phase II CAFC targets (CO_2 ~113gm/km @ 1082 kg) beginning in April 2022.

South Korea implemented a phase II of CAFE/CO_2 standards beginning in 2016. Phase III, with more stringent targets, became effective in January 2021. Japan implemented a new fuel economy standard in 2020 that switched from vehicle weight class average to corporate average fuel economy. In Australia, although there is no mandatory GHG standard, the Federal Chamber of Automotive Industries member companies implemented a voluntary CO_2 target for light vehicles starting in 2020. A new regulatory framework for CAFE/CO_2 standards is expected to be published in 2023 and to be equally or more stringent than EU new car CO_2 standards.

Management of end-of-life products

In European markets, pursuant to the EU End-of-Life Vehicle Directive (2000/53/EC) (the "EU ELV Directive"), all vehicle manufacturers are required to set up a take-back network with professional dismantling partners to collect the vehicles from their last owners or holders when such vehicles have reached the end of their lives, and recycle them to achieve a minimum recycling and recovery rate of 95 percent of the average weight vehicle. The EU is reviewing the EU ELV Directive for application beginning in 2024 to integrate the principles of eco-design and the obligations of recycled materials in new vehicles into the December 2015 circular economy directive by the European Commission. The EU has also initiated the revision of the European directive on batteries with a particular focus on automotive traction batteries.

In December 2022, France published a new ELV decree that aims to reduce illegal activity, take charge of abandoned ELVs, and offer a free service for collection of ELVs from the last owners residing in the French territories, including overseas. The Decree imposes the establishment either of an "Eco-Organism" (a collective non-profit system) on behalf of OEMs or a "Particular System" by each OEM to directly assume the collection and processing of all its ELVs. The OEMs have opted for implementation of the Particular System.

Vehicle Safety

North America Region

Under U.S. federal law, all vehicles sold in the U.S. must comply with Federal Motor Vehicle Safety Standards ("FMVSS") promulgated by NHTSA, and must be certified by their manufacturer as being in compliance with all such standards at the time of the first purchase of the vehicle. In addition, if a vehicle contains a defect that is related to motor vehicle safety or does not comply with an applicable FMVSS, the manufacturer must notify NHTSA and vehicle owners and provide a remedy at no cost. Moreover, the TREAD Act authorized NHTSA to promulgate regulations requiring Early Warning Reporting ("EWR"). EWR requires manufacturers to provide NHTSA several categories of information, including all claims which involve one or more fatalities or injuries; all incidents of which the manufacturer receives actual notice which involve fatalities or injuries alleged or proven to have been caused by a possible defect in such manufacturer's motor vehicle or motor vehicle equipment in the U.S.; and all claims involving one or more fatalities in a foreign country when the possible defect is in a motor vehicle or motor vehicle equipment that is identical or substantially similar to a motor vehicle or motor vehicle equipment offered for sale in the U.S., as well as aggregate data on property damage claims from alleged defects in a motor vehicle or in motor vehicle equipment; warranty claims; consumer complaints and field reports about alleged or possible defects. The rules also require reporting of customer satisfaction campaigns, consumer advisories, recalls, or other activity involving the repair or replacement of motor vehicles or items of motor vehicle equipment, even if not safety related.

NHTSA has secured a voluntary commitment from manufacturers to equip future vehicles with automatic emergency braking ("AEB") systems. The commitment made these braking systems standard on virtually all light-duty cars and trucks with a gross vehicle weight of 8,500 pounds or less beginning September 1, 2022 and these systems will become standard on virtually all trucks with a gross vehicle weight between 8,501 pounds and 10,000 pounds beginning no later than September 1, 2025. In 2023, NHTSA is expected to propose a rule regarding the requirement and standardization of AEB systems.

In September 2019, the Alliance of Automobile Manufacturers, Inc. and the Association of Global Automakers, Inc., which have combined to form the Alliance for Automobile Innovation, announced a voluntary commitment from auto manufacturers to introduce technology including a combination of auditory and visual alerts to remind parents and caregivers to check the back seat upon leaving a vehicle to help address the risk of pediatric heatstroke in children left in cars. The commitment is to install such technology in essentially all new cars and trucks by the 2025 model year or sooner.

At times, organizations like NHTSA or the U.S. Insurance Institute of Highway Safety issue or reissue safety ratings applicable to vehicles. In October 2019, NHTSA announced a plan to propose significant updates and upgrades to its New Car Assessment Program, also known as the Five-star Safety Ratings Program. The details are not known at this time, but are expected to include new test dummies, changes to the mandatory label, new test procedures and evaluation of new technologies. Depending on the content of the final changes, this set of changes could impact the market competitiveness of the affected vehicles.

NHTSA has also issued and updated non-binding guidelines for addressing cybersecurity issues in the design and manufacture of new motor vehicles, as well as guidance for the investigation and validation of cybersecurity measures.

In November 2020, voters in the State of Massachusetts passed a ballot initiative appearing to conflict with NHTSA cybersecurity guidelines and may require manufacturers to disable or compromise some of the cybersecurity measures they have put in place. The complete effects of this new law are still under review. In the meantime, the Alliance for Automation Innovation, an industry association to which Stellantis belongs, has filed a lawsuit seeking to enjoin enforcement of the new law and the litigation is pending.

A new FMVSS requiring artificial sound in electric and hybrid electric vehicles took effect for new motor vehicles built on or after March 1, 2021. The artificial sound is intended to provide persons with impaired vision an audible notice of the presence of a BEV or hybrid electric vehicle.

In January 2018, Mexico issued an amendment to the Consumers' Protection Law ("CPL") regarding safety regulations based on U.S. standards. The CPL, among other things, includes a deadline for vehicle manufacturers to provide to the Federal Consumer Protection Agency (i) the launch date and a detailed description of every safety campaign applicable to vehicles sold in Mexico, (ii) mandatory recall campaigns, based on international agencies' investigations and guidelines, (iii) mandatory repurchase, repair or replacement (with a new vehicle model having the same characteristics) of vehicles that risk the consumer's safety, health or life or threatens the consumer's personal financial condition, and (iv) mandatory product withdrawal, when the Federal Consumer Protection Agency determines that the vehicle could risk the consumer's safety, health or life or affect the consumer's personal financial condition. The consumer may also be eligible for compensation related to a recall. The rules of the CPL became effective in December 2019.

Enlarged Europe

Vehicles sold in Europe are subject to vehicle safety regulations established by the EU or, in very limited cases and aspects, by individual Member States. In 2009, the EU established a uniform legal framework for vehicle safety, repealing more than 50 then-existing directives and replacing them with a single regulation known as the "General Safety Regulation" aimed at incorporating relevant United Nations standards. The incorporation of United Nations standards commenced in 2012, leading adoption of Regulation (EU) 2019/2144, repealing various previous European regulations (the "New GSR"). Implementation of the New GSR for new vehicles and vehicle types started in 2022. The New GSR will lead, through deadlines scheduled in 2024, 2026 and 2029, to the gradual implementation of a variable suite of passive and active safety technologies, depending on vehicle type and classification. The significant items for the most common vehicles include, other than the manufacturer's certification for the cybersecurity features and related application on vehicles, mandatory features such as advanced emergency braking, intelligent speed assistance, emergency lane keeping, driver drowsiness and attention warning, advanced driver distraction warning, reversing detection, event data recorder, protection of pedestrians (including an extension of the pedestrian head protection area), cyclists and other vulnerable road users, and an expanded scope and addition of new test modes for front and side crash testing. Also included in the New GSR are the approvals of autonomous vehicle features, such as a driver availability monitoring system, automated lane keeping systems, systems to replace driver's control and vehicle platooning.

The most recent development for homologation purposes concerning automated driving is Regulation EU 2022/1426 in August 2022, defining standards to be complied with by level 4 automated driving systems (driverless vehicles, e.g., shuttles, valet parking, robot taxi, where no driver expected). UN Regulation on "highway chauffeur", setting new technical regulation on level 3 automated driving (hands off the steering wheel), will be included beginning in January 2023, in addition to "Traffic jam chauffeur". The UN Regulation on Software Updates for already registered vehicles is also expected to be introduced in Europe and will require manufacturers to trace the link between each software update and the vehicle type approval and define the requirements for securing software updates. In addition, in-vehicle emergency call systems became mandatory for new type-approved vehicles in the EU, Israel and Turkey markets in 2018. In Russia, a similar in-vehicle emergency call system became mandatory in 2015.

Effective in September 2020, Regulation (EU) 2018/858 improved the current legal framework for EU type-approval and introduced new provisions on market surveillance. This new regime on market surveillance specifies the obligations of the economic operators in the automotive supply chain (manufacturers, manufacturer's representatives, importers and distributors), the responsibilities of the enforcement authorities in the Member States, and the measures to be taken when vehicles and related components on the market appear to be affected by non-conformities to type approval and/or serious safety or environmental risks.

South America Region

Vehicles sold in the South America region are subject to different vehicle safety regulations according to each country, generally based on European and United Nations standards. Brazil published a draft of its 10-year safety regulatory roadmap in 2017, providing a staged approach to implementation of new testing requirements and active safety technology. More costly active safety technologies will be scheduled for implementation after 2024. In July 2018, the first regulation related to Rota 2030 was enacted. Rota 2030 is a long-term program (three cycles of five years each) which includes principles related to mandatory safety for all vehicles sold in Brazil. These regulations were approved by the Brazilian Congress and sanctioned by the Brazilian President in December 2018 as well as ordinary regulations to address certain minimum requirements and other metrics.

China and India & Asia Pacific Regions

China, India and many countries in the Asia Pacific region, including Australia, Japan and South Korea have adopted their own new car assessment program and vehicle safety regulations. As UN ECE1958 agreement countries, Australia, Japan and South Korea accept UN ECE safety requirements and are harmonizing their regulations with UN ECE. The U.S.-Korea Free Trade Agreement allows for the sale in Korea of U.S. vehicles that are manufactured in the U.S.

Most of the Chinese vehicle safety regulations are equivalent to UN ECE, but China has unique electric vehicle safety regulations and has developed a roadmap of autonomous driving and connectivity regulations. China published the Regulation for Administration of Recall of Defective Vehicles effective in 2013 and the Implementation Provisions on the Regulation for Administration of Recall of Defective Vehicles effective in 2016. In 2019, State Administration for Market Regulation in China issued a notice requiring close supervision of defects reporting and recall of new energy vehicles. China issued rules on emission recalls effective in July 2021. Further, beginning in early 2021, various authorities have issued administrative rules on cybersecurity and the software update of vehicles.

India has implemented vehicle crash regulations effective in 2019 for all models and pedestrian protection regulations effective in 2020 for all models. Provision of important safety features such as airbag on driver side, vehicle rear parking alert system, safety belt reminder for driver and passenger side, speed alert system and manual override for door latches have been mandatory for all models beginning in June 2019. Further, fitment of airbag on passenger side was made mandatory effective December 2021. Rules for vehicle recalls were also implemented, effective April 2021, and brake and electronic stability control system regulations will be aligned to EU regulations, beginning in 2022 for all models.

In Korea, the amended Motor Vehicle Management Act ("MVMA"), which changed the overall recall procedures for automobiles, while also imposing heightened obligations on vehicle manufacturers, took effect in February 2021. The amended MVMA increased the upper limit of administrative surcharges imposed for delayed recalls, to an amount three times higher than the previous cap. In addition, under the amended MVMA, if a delayed recall causes harm to a person's life, body or property, such person may file a claim for damages, including punitive damages of up to five times the amount of actual damages. Under the amended MVMA, vehicle manufacturers are also subject to increased administrative and criminal sanctions.

Industrial Environmental Control

Our operations are subject to a wide range of environmental protection laws including those laws regulating air emissions, water discharges, waste management and related environmental effects, and environmental clean-up if waste disposal was done outside of legal requirements. Certain environmental statutes require that responsible parties fund remediation actions regardless of fault, legality of original disposal, or ownership of a disposal site. Under certain circumstances, these laws impose liability for related damages to natural resources.

To best comply with these requirements, Stellantis imposes a self-governing environmental management system ("EMS") on its operations, which are designed to prevent or reduce the environmental impact of our manufacturing activities, and conduct internal environmental audits at our facilities. This program formalizes our commitment to responsible environmental management of our manufacturing methods and processes. We have established a corporate requirement that all of our manufacturing facilities become certified under the EMS requirements set forth in the ISO 14001 standard (ISO is an international standard-setting organization). As of December 31, 2022, the majority of Stellantis manufacturing plants had an ISO 14001 certified EMS in place.

Workplace Health and Safety

Stellantis implemented a self-governing occupational health and safety management system ("OHSMS") on its operations, which are designed to prevent or reduce the occupational injuries and incidents and conduct internal health and safety audits at our facilities. The goal of achieving zero accidents was formalized by internally-established OHSMS requirements. At December 31, 2022, 63 of Stellantis' manufacturing plants were certified under the International Organization of Standardization's global 45001 standard.

Applicability of Banking Law and Regulation to Financial Services

Several of our finance companies are regulated as financial institutions in the jurisdictions in which they operate.

In Italy, FCA Bank S.p.A., an equity method joint venture, is subject to European Central Bank ("ECB") and Bank of Italy supervision. Within FCA Bank Group, FCA Bank G.m.b.H., an Austrian subsidiary, is subject to the supervision of the ECB and of local central banks. Certain other Stellantis subsidiaries are subject to the supervision of the local supervisory financial or banking authority: Banco Fidis S.A. is subject to Brazilian Central Bank supervision, FCA Compañia Financiera S.A., incorporated in Argentina, is subject to Argentinian Central Bank supervision and FCA Automotive Finance Co., Ltd, is subject to the supervision of the Chinese Banking and Insurance Regulatory Commission and People's Bank of China.

In France, Banque PSA Finance S.A., a wholly owned consolidated entity, is subject to the supervision of the French local supervisory banking authority (ACPR), and Compagnie pour la Location de Véhicules S.A.(CLV), Crédipar, PSA Banque France S.A. and Opel Bank S.A. are subject to the supervision of ECB and the ACPR. In Germany, PSA Bank Deutschland GmbH is subject to the supervision of the ECB and the Federal Financial Supervisory Authority (BaFin). In Italy, Banca PSA Italia S.p.A. is subject to ECB and Bank of Italy supervision. In Spain, PSA Financial Services Spain EFC SA is subject to the supervision of the Bank of Spain. Banco PSA Finance Brasil S.A. is subject to Brazilian Central Bank supervision. Dongfeng Peugeot Citroën Financial Leasing is subject to the supervision of the Chinese Banking and Insurance Regulatory Commission and People's Bank of China. With the exception of Banque PSA Finance S.A, all of the above entities are joint ventures accounted by equity method.

In the U.S., Stellantis Financial Services US Corp., a wholly owned consolidated entity, is a financial services company which conducts sales finance and consumer lending activities in the U.S. market under the supervision of the Consumer Financial Protection Bureau ("CFPB") and various state regulatory agencies.

As a result of the regulation described above, these companies are, in certain circumstances, subject to requirements in a wide range of areas including solvency, capital, reporting, customer protection and account administration, among other matters.

FINANCIAL OVERVIEW

Management's Discussion and Analysis of the Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations should be read together with the information included under "STELLANTIS OVERVIEW" and the Consolidated Financial Statements included elsewhere in this report. This discussion includes forward-looking statements and involves numerous risks and uncertainties relating to Stellantis, including, but not limited to, those described under "Cautionary Statements Concerning Forward Looking Statements" and "Risk Factors". Actual results may differ materially from those contained in any forward looking statements.

Management's Discussion and Analysis of the Financial Condition and Results of Operations of the Company for the year ended December 31, 2020 on an IFRS and on a Pro Forma basis was previously included in the section "FINANCIAL OVERVIEW" in the 2021 Annual Report and Form 20-F, as filed with the SEC on February 25, 2021.

Trends, Uncertainties and Opportunities

The trends, uncertainties and opportunities facing Stellantis are summarized below:

Impact of Unfilled Semiconductor Orders. Our operations have been, and continue to be, affected by a significant semiconductor supply shortage as a result of unfilled orders that began in 2020, and increased chip delivery lead times, which has resulted in reduced vehicle production volumes, and increased costs to source available semiconductors. To the extent this unavailability of semiconductor chips as a result of unfilled orders continues or worsens, and we are unable to mitigate its effects, our ability to deliver planned quantities of our vehicles will continue to be adversely affected.

Shipments and Sales. Vehicle shipments are generally driven by expectations of consumer demand for vehicles, which is affected by economic conditions, availability and cost of dealer and customer financing and incentives offered to retail customers, as discussed further below.

In our financial information presented in this report, we recognized revenue at the same time as the transfer of control of goods sold. For new vehicles, this transfer generally corresponds to the date when the vehicles were made available to independent dealers or, in the case of direct sales to end-customers through owned dealers, the delivery date of the vehicle to end-customers.

Revenues from service contracts and connectivity services are generally recognized over the contract period in proportion to the costs expected to be incurred based on the Company's historical experience. These services are either included in the selling price of the vehicle or separately priced. Revenue for services is allocated based on the estimated stand-alone selling price. Costs associated with these services are deferred and are subsequently amortized to expense consistent with how the related revenue is recognized.

Logistics Challenges. Our overall vehicle shipment volumes were negatively impacted in 2022 by the continuing effects of logistics challenges in Europe. In particular, Europe is experiencing a continuing shortage of delivery drivers and specialized equipment to transport finished vehicles from production facilities to retailers or other points of sale. As a result, we experienced a significant increase in Company-owned inventory as of December 31, 2022 compared to December 31, 2021. We expect that this trend may continue in 2023.

Financing. Given that a large percentage of the vehicles we sell to dealers and retail customers worldwide are financed, the availability and cost of financing is a significant factor affecting our vehicle shipment volumes and Net revenues. Availability of customer financing could affect the vehicle mix, as customers who have access to greater financing are able to purchase higher priced vehicles, whereas when customer financing is constrained, vehicle mix could shift towards less expensive vehicles. The low interest rate environment in recent years has had the effect of reducing the effective cost of vehicle ownership. In response to the inflationary surge in Europe, in the United Kingdom, in the U.S. and elsewhere, central banks have aggressively increased interest rates in 2022 and such increases are being reflected in rates across credit markets, including consumer credit. More expensive vehicle financing may make our vehicles less affordable to retail consumers or steer consumers to less expensive vehicles that would be less profitable for us.

Electrification. In March 2022, we announced our Dare Forward 2030 long-term strategy and confirmed our plans to make significant investments in electrification and set aggressive targets for future low emission vehicle sales, including global annual BEV sales of five million vehicles by 2030. Our ability to meet our targets and recoup our significant anticipated investments will be subject to several factors, including BEV market demand, charging network deployment and the availability of government incentives.

Product Development and Technology. A key driver of consumer demand, and therefore our performance, is the continued refresh, renewal and evolution of our vehicle portfolio, and we have announced commitments of significant capital and resources toward the introduction of new vehicle platforms and new software technologies. In order to realize a return on the significant investments we intend to make, and to achieve competitive operating margins, we will have to continue significant investment in new vehicle launches. We believe past efforts in developing common vehicle platforms and propulsion systems have accelerated the time-to-market for many of our vehicle launches and over time resulted in cost savings. We expect this positive trend to accelerate as a result of the merger and ongoing integration, as well as our announced plans to converge on four vehicle platforms for future vehicle launches. However, achieving the benefits of integration and particularly the convergence of platforms will require significant investments over the medium term.

The costs associated with product development, vehicle improvements and launches, impact our Net profit. In addition, our ability to continue to make the necessary investments in product development, and recover the related costs, depends in large part on the market acceptance and success of the new or significantly refreshed vehicles we introduce. New launches are supported by marketing and profitability studies carried out several years prior to their actual launch, which increases the risk of not meeting customer preferences, resulting in lower volumes than forecasted or selling at lower prices and impacting profitability.

The research and development expenses presented in the financial information in this report include the cost of scientific and technical activities, intellectual property rights, and the education and training necessary for the development, production or implementation and marketing of new or substantially improved materials, methods, products, processes, systems or services. Development expenditures were recognized as an intangible asset if we could demonstrate (i) our intention to complete the intangible asset as well as the availability of technical, financial and other resources for this purpose; (ii) that it was probable that the future economic benefits attributable to the development expenditure will flow to the entity; and (iii) that the cost of the asset could be measured reliably. Capitalized development expenditures included related borrowing costs.

Future developments in our product portfolio could lead to significant capitalization of development assets and thereafter amortization of such assets. Our time to market is approximately 24 months, but varies depending on the specific product, from the date the design is signed-off for tooling and production, after which the product goes into production, resulting in an increase in amortization. Therefore, our operating results are impacted by the cyclicality of our research and development expenditures based on our product plans and our ability to bring projects timely into production.

In order to meet expected changes in consumer demand and regulatory requirements, we intend to invest significant resources in product development and research and development. New markets for alternative fuel source vehicles and autonomous vehicles are also continuing to emerge and we expect both to invest resources in these areas and to optimize our R&D investments as a result of the progressive integration of the former FCA and PSA businesses.

Vehicle Profitability. Our results of operations reflect the profitability of the vehicles we sell, which tends to vary based upon a number of factors, including vehicle size and model, the content of those vehicles, brand positioning, and the mix of internal-combustion, electric and hybrid engines. Vehicle profitability also depends on sales prices to dealers and fleet customers, net of sales incentives, costs of materials and components, as well as transportation and warranty costs.

Our larger vehicles, such as UVs and pickup trucks, have historically been more profitable on a per vehicle basis than smaller vehicles. In recent years, consumer preferences for certain larger vehicles, such as SUVs, have increased; however, there is no guarantee this trend will continue.

Newly introduced internal-combustion models are generally more profitable than older models, and vehicles equipped with additional options are generally more profitable than those with fewer options. As a result, our ability to offer attractive vehicle options and upgrades is critical to our ability to increase our profitability on these vehicles. In addition, in the U.S. and Europe, our vehicle sales to dealers for sale to their retail consumers are normally more profitable than our fleet sales, in part because the retail consumers are more likely to prefer additional optional features while fleet customers increasingly tend to concentrate purchases on smaller vehicles with fewer optional features, which have historically had a lower profitability per unit.

Vehicles sold under certain brand and model names are generally more profitable when there is strong brand recognition of those vehicles. In some cases this is tied to a long history of the brands and models, and in other cases to customers identifying these vehicles as being more attractive and responsive to customer needs.

In addition, against a backdrop of significant technological development, changing consumer patterns and new competitive forces, the cost of complying with tightening regulatory requirements could negatively impact our profitability. Vehicle models that are equipped with BEV or PHEV propulsion systems tend to have lower margins than those equipped with internal-combustion engines, with the significant costs of batteries largely accounting for this differential. Although battery prices are expected to gradually decline in the coming years and are partially offset in some cases by governmental subsidies and tax exemptions, we expect that in the near term the profitability of BEV or PHEV vehicles will continue to lag behind those equipped with internal-combustion engines.

Pricing. The automotive industry has historically experienced intense price competition resulting from the variety of available competitive vehicles and excess global manufacturing capacity. Manufacturers have typically promoted products by offering dealer, retail and fleet incentives, including cash rebates, option package discounts, and subsidized financing or leasing programs, leading to increased price pressure and sharpened competition within the industry. We plan to continue to use such incentives, as needed, to price vehicles competitively and to manage demand and support inventory management profitability.

Our ability to maintain or increase pricing has impacted, and will continue to impact, our results of operations and profitability. In 2022, our ability to maintain strong pricing across all of the regions where we operate, particularly in North America and Enlarged Europe, allowed us to offset significant inflationary, supply chain and logistics-related pressure.

Production costs. Production costs include purchases (including costs related to the purchase of components and raw materials), labor costs, depreciation, amortization, logistic and product warranty and recall campaign costs. We purchase a variety of components, raw materials, supplies, utilities, logistics and other services from numerous suppliers. Fluctuations in production costs are primarily related to the number of vehicles we produce and sell along with shifts in vehicle mix, as newer models of vehicles generally have more technologically advanced components and enhancements and therefore higher costs per unit.

Production costs may also be affected by fluctuations in raw material prices. For example, some of the batteries contained in our electric and hybrid models include rare raw materials, which are exposed to heightened shortage risks and potentially rising procurement costs. The cost of raw materials has historically comprised approximately 15-20 percent of our total purchases described above, while the remaining 80-85 percent of our total purchases is made of components, conversion of raw materials and overhead costs. In 2021, we experienced an increase in the cost of raw materials of approximately €2.2 billion and in 2022 we experienced a further increase of €6.7 billion. To the extent the cost of raw materials continues to increase as a result of inflationary pressures, and we are unable to mitigate its effects, our future profitability could be impacted.

We typically seek to manage production costs and minimize their volatility by using fixed price purchase contracts, commercial negotiations and technical efficiencies.

Despite our efforts, our production costs related to raw materials and components have increased as a result of tariffs introduced in recent years; uncertainty related to tariffs and trade policy in our larger markets including the U.S., the European Union and China has made it more difficult to predict our raw material and components costs. Our production costs have also increased as we have significantly enhanced the content of our vehicles as we renew and refresh our product offerings. Over time, technological advancements and improved material sourcing may reduce the cost to us of the additional enhancements. In addition, we seek to recover higher costs through pricing actions, but even when market conditions permit this, there may be a time lag between the increase in our costs and our ability to realize improved pricing. Accordingly, our results are typically adversely affected, at least in the short term, until price increases are accepted in the market.

Further, in many markets where our vehicles are sold, we are required to pay import duties on those vehicles, which are included in production costs. We reflect these costs in the price charged to our customers to the extent market conditions permit. However, for many of our vehicles, particularly in the mass-market vehicle segments, we cannot always pass along increases in those duties to our dealers and distributors and remain competitive. Our ability to price our vehicles to recover those increased costs has affected, and will continue to affect, our profitability.

Economic Conditions. Demand for new vehicles tends to reflect economic conditions in the various markets in which we operate because retail sales depend on individual purchasing decisions, which in turn are affected by many factors including inflation, employment levels, consumer confidence, and levels of disposable income. Fleet sales and sales of light commercial vehicles are also influenced by economic conditions, which drive vehicle utilization and investment activity. Further, demand for light commercial vehicles and pickup trucks is driven, in part, by construction and infrastructure projects. Therefore, our performance is directly correlated with the macroeconomic trends in the markets in which we operate.

Several of the markets in which we operate are entering a challenging macroeconomic climate with recessions probable in the near term. Fuel prices, in addition, have been highly volatile following Russia’s invasion of Ukraine and volatility and price increases may continue. Consumers are facing challenging cost inflation, negative real wages and higher borrowing rates, which may translate into lower sales, particularly in the more profitable segments of our product mix.

Russia & Ukraine War. In response to the on-going Russia-Ukraine war, various governments around the world have applied economic, trade and financial sanctions against Russia.

In Russia, we have a joint venture assembly plant, accounted for as a joint operation, as well as national sales companies. In March 2022, the import and export of vehicles to and from Russia were suspended by Stellantis. In April 2022, operations at the joint venture assembly plant were suspended. In Ukraine, we have a national sales company.

Due to the sustained Russia-Ukraine conflict, the continued economic, trade and financial sanctions imposed by various governments around the world and continued uncertainty related to the future of our operations in Russia, we have recognized an impairment of our assets in Russia for €137 million in the six months ended December 31, 2022. The impairment charges are comprised of €43 million related to inventories, €47 million related to tax assets and €47 million related to other assets.

Regulation. We are subject to a complex set of regulatory regimes throughout the world in which vehicle safety, emissions and fuel economy regulations have become increasingly stringent and the related enforcement regimes increasingly active. These developments may affect our vehicle sales as well as our profitability and reputation. We are subject to applicable national and local regulations with which we must comply in order to continue operations in every market, including a number of markets in which we derive substantial revenue. Developing, engineering and manufacturing vehicles that meet these requirements and therefore may be sold in those markets requires a significant expenditure of management time and financial resources.

We expect that our plans to converge on four platforms for future vehicle launches will allow us to deploy electrification technologies and CO_2 abating technologies across our range of brands and react quickly to changes in regulation. However, these costs and the costs incurred to meet other regulatory requirements may be difficult to pass through to customers, so the increased costs may affect our results of operations and profitability.

In addition, regulatory requirements in relation to GHG emissions from vehicles are increasingly stringent. For example, on March 9, 2022, the EPA reinstated California's authority under the Clean Air Act to enforce its own, more stringent, GHG emission standards for passenger vehicles and light duty trucks (the "California Waiver"). California emission standards covered by the California Waiver may be adopted by other states and to date 17 other states and the District of Columbia (the "California Waiver States") have adopted California's GHG emissions standards under the California Waiver.

Prior to the EPA's withdrawal of the California Waiver, automotive OEMs were deemed to be compliant with California's GHG emissions standards if they were compliant with the EPA's GHG standards. This "deemed to comply" mechanism was removed from the California regulation prior to the reinstatement of the California Waiver. As interpreted by CARB, the EPA's reinstatement of the California Waiver together with the removal of the "deemed to comply" mechanism means that automotive OEMs are retroactively subject to the separate California GHG standards beginning with the model year 2021 fleet. OEMs may achieve compliance with the California GHG emission standards in several ways, including through the sale of emission-compliant vehicles within their fleet for a given model year, through the carryforward or carryback of excess credits generated by a compliant fleet in past or future years, by the purchase of California-specific regulatory credits from third parties or by a combination of the foregoing.

We did not meet the California GHG targets for model year 2021 and do not expect to meet the California GHG targets for model year 2022, as in planning both model years prior to reinstatement of the California Waiver we assumed the ability to utilize existing credits based on regulations in force at the time. We intend to be compliant with the California GHG program, and for those years and any other model year with deficits, we intend to seek to cover such deficits with excess credits generated through our compliance in model years within the applicable five-year carryback period.

We are executing on several important steps to support our carryback strategy, including the allocation of significant capital to the development of electrified platforms for North American vehicles and the planned electrification of the Ram portfolio as well as agreements to secure battery production and related raw materials. Additionally, we expect to launch thirteen battery electric vehicles in the U.S. between 2023 and 2025. For more information regarding our electrification activities, refer to "*STELLANTIS OVERVIEW- Overview of Our Business - Research and Development*". The success of our carryback strategy depends on future levels and mix of production and sales, as well as general market demand for battery electric vehicles, all of which are inherently speculative. Moreover, the financial impact of our efforts to change the mix of vehicles we sell in California and the California Waiver States as we seek to comply are unclear but may be significant, and may have a material adverse impact on our financial position and results of operations in future years.

We understand that certain other automobile OEMs are subject to less stringent California GHG emissions standards pursuant to settlement agreements entered into with CARB on terms that are not available us. We are currently evaluating the enforceability of the California GHG emissions standards as applied by CARB, particularly in light of their retroactive application following the EPA's reinstatement of the California Waiver, as well as the disparate treatment of other automotive OEMs which are not subject to the same standards. If we were to challenge the retroactive or disparate application of the California GHG emissions standards, the direct and indirect costs of such challenge may be significant and there can be no assurance that it would be successful.

Effects of Foreign Exchange Rates. We are affected by fluctuations in foreign exchange rates (i) through translation of foreign currency financial statements into Euro for consolidation, which we refer to as the translation impact, and (ii) through transactions by our subsidiaries in currencies other than their own functional currencies, which we refer to as the transaction impact. Given our presence in numerous countries outside the Eurozone, a strengthening of foreign currencies (in particular of the U.S. Dollar, given the size of our U.S. operations) against the Euro generally would have a positive effect on our financial results, which are reported in Euro, and on our operations in relation to sales in those countries of vehicles and components produced in Europe. Our 2022 results benefited from the strength of the U.S. Dollar, which has traded at historically high levels against the Euro. Additionally, a significant portion of our operating cash flow is expected to be generated in U.S. Dollars and, although a portion of our debt is denominated in U.S. Dollars, the majority of our indebtedness is denominated in Euro. Given the mix of our debt and liquidity, strengthening of the U.S. dollar against the Euro generally has provided a positive impact on our net cash position. The recent strength of the U.S. Dollar against the Euro may reverse in future periods, which could have a correspondingly negative impact on our financial results and net cash position.

In order to reduce the impacts of foreign exchange rates, we historically hedged a percentage of certain exposures. Refer to Note 31*, Qualitative and quantitative information on financial risks* within the Consolidated Financial Statements included elsewhere in this report for additional information.

Shipment Information

As discussed in *STELLANTIS OVERVIEW—Overview of Our Business*, our activities were carried out through six reportable segments: five regional reportable vehicle segments North America, Enlarged Europe, Middle East & Africa, South America and China and India & Asia Pacific and the Maserati global luxury brand segment. The following table sets forth vehicle shipment information by segment. Vehicle shipments are generally aligned with current period production which is driven by plans to meet consumer demand. Revenue is recognized when control of our vehicles, services or parts has been transferred and the Company's performance obligations to customers has been satisfied. The Company has determined that our customers from the sale of vehicles and service parts are generally dealers, distributors, fleet customers or directly to retail customers. Transfer of control, and therefore revenue recognition, generally correspond to the date when the vehicles or service parts were made available to the customer, or when the vehicles or service parts were released to the carrier responsible for transporting them to the customer. New vehicle sales with guaranteed residual value guarantees provided by the Company are recognized as revenue when control of the vehicle transferred to the customer, except in situations where the Company issued a put option for which there is a significant economic incentive to exercise. The Company also sold vehicles where, the contract included a put option whereby the customer could require the Company to repurchase the vehicles. For these types of arrangements, the Company assessed whether a significant economic incentive did not exist for the customer to exercise its put option, then revenue was recognized when control of the vehicle transferred to the fleet customer. Refer to Note 2, *Basis of preparation*, within the Consolidated Financial Statements included elsewhere in this report for further details on our revenue recognition policy.

For a description of our dealers and distributors see *STELLANTIS OVERVIEW—Sales Overview*. Accordingly, the number of vehicles sold does not necessarily correspond to the number of vehicles shipped for which revenues were recorded in any given period.

	Years ended December 31,	
(thousands of units)	**2022**	**2021**
North America	1,861	1,764
Enlarged Europe	2,626	2,847
Middle East & Africa	283	272
South America	859	811
China and India & Asia Pacific	127	118
Maserati	26	24
Total Consolidated shipments	**5,782**	**5,836**
Joint venture shipments	221	213
Total Combined shipments	**6,003**	**6,049**

For discussion of shipments for North America, Enlarged Europe, Middle East & Africa, South America, and China and India & Asia Pacific and Maserati for 2022 as compared to 2021 refer to *Results by Segment* below.

Non-GAAP Financial Measures

We monitor our operations through the use of several non-generally accepted accounting principles ("non-GAAP") financial measures: Adjusted operating income, Industrial free cash flows and Industrial net financial position. We believe that these non-GAAP financial measures provide useful and relevant information regarding our operating results and enhance the overall ability to assess our financial performance. They provide us with comparable measures which facilitate management's ability to identify operational trends, as well as make decisions regarding future spending, resource allocations and other operational decisions. These and similar measures are widely used in the industry in which we operate, however, these financial measures may not be comparable to other similarly titled measures of other companies and are not intended to be substitutes for measures of financial performance as prepared in accordance with IFRS as issued by the IASB, as well as IFRS as adopted by the European Union.

Adjusted operating income: Adjusted operating income/(loss) excludes from Net profit/(loss) from continuing operations adjustments comprising restructuring, impairments, asset write-offs, disposals of investments and unusual operating income/(expense) that are considered rare or discrete events and are infrequent in nature, as inclusion of such items is not considered to be indicative of the Company's ongoing operating performance, and also excludes Net financial expenses/(income), Tax expense/(benefit) and Share of the profit/(loss) of equity method investees.

Unusual operating income/(expense) are impacts from strategic decisions as well as events considered rare or discrete and infrequent in nature, as inclusion of such items is not considered to be indicative of the Company's ongoing operating performance. Unusual operating income/(expense) includes, but may not be limited to:

- Impacts from strategic decisions to rationalize Stellantis' core operations;
- Facility-related costs stemming from Stellantis' plans to match production capacity and cost structure to market demand; and
- Convergence and integration costs directly related to significant acquisitions or mergers.

For the year ended December 31, 2021, Pro Forma Adjusted operating income includes the Adjusted operating income of FCA for the period January 1 - January 16, 2021. For the year ended December 31, 2020, Pro Forma Adjusted operating income includes the Adjusted operating income result of FCA for the period January 1 - December 31, 2020.

Adjusted operating income is used for internal reporting to assess performance and as part of the Company's forecasting, budgeting and decision making processes as it provides additional transparency to the Company's core operations. We believe this non-GAAP measure is useful because it excludes items that we do not believe are indicative of the Company's ongoing operating performance and allows management to view operating trends, perform analytical comparisons and benchmark performance between periods and among our segments. We also believe that Adjusted operating income is useful for analysts and investors to understand how management assesses the Company's ongoing operating performance on a consistent basis. In addition, Adjusted operating income is one of the metrics used in the determination of the annual performance bonus for the Chief Executive Officer of the Company and other eligible employees, including members of the Top Executive Team.

Refer to the sections *Company Results* and *Results by Segment* below for further discussion and for a reconciliation of this non-GAAP measure to Net profit from continuing operations, which is the most directly comparable measure included in our Consolidated Income Statement. Adjusted operating income should not be considered as a substitute for Net profit from continuing operations, cash flow or other methods of analyzing our results as reported under IFRS.

Industrial free cash flows: is our key cash flow metric and is calculated as Cash flows from operating activities less: cash flows from operating activities from discontinued operations; cash flows from operating activities related to financial services, net of eliminations; investments in property, plant and equipment and intangible assets for industrial activities, contributions of equity to joint ventures and minor acquisitions of consolidated subsidiaries and equity method and other investments; and adjusted for: net intercompany payments between continuing operations and discontinued operations, proceeds from disposal of assets and contributions to defined benefit pension plans, net of tax. For the year ended December 31, 2021, Pro Forma Industrial free cash flows include the Industrial free cash flows of FCA for the period January 1 - January 16, 2021. The timing of Industrial free cash flows may be affected by the timing of monetization of receivables and the payment of accounts payables, as well as changes in other components of working capital, which can vary from period to period due to, among other things, cash management initiatives and other factors, some of which may be outside of the Company's control. In addition, Industrial free cash flows is one of the metrics used in the determination of the annual performance bonus for the Chief Executive Officer of the Company and other eligible employees, including members of the Top Executive Team.

Refer to *Liquidity and Capital Resources —Industrial free cash flows* for further information and the reconciliation of this non-GAAP measure to Cash flows from operating activities, which is the most directly comparable measure included in our Consolidated Statement of Cash Flows. Industrial free cash flows should not be considered as a substitute for Net profit from continuing operations, cash flow or other methods of analyzing our results as reported under IFRS.

Industrial net financial position is calculated as: Debt plus derivative financial liabilities related to industrial activities less (i) cash and cash equivalents, (ii) financial securities that are considered liquid, (iii) current financial receivables from the Company or its jointly controlled financial services entities and (iv) derivative financial assets and collateral deposits. Therefore, debt, cash and cash equivalents and other financial assets/liabilities pertaining to Stellantis' financial services entities are excluded from the computation of the Industrial net financial position. Industrial net financial position includes the Industrial net financial position classified as held for sale. We believe Industrial net financial position is useful in providing a measure of the Company's net cash, considering cash and cash equivalents and financial securities. Due to different sources of cash flows used for the repayment of the financial debt between industrial activities and financial services (by cash from operations for industrial activities and by collection of financial receivables for financial services) and the different business structure and leverage implications, we provide a separate analysis of Net financial position between industrial activities and financial services. Refer to *Liquidity and Capital Resources —Industrial net financial position* for further information.

Results of Operations

Company Results – 2022 compared to 2021

The following is a discussion of the Company's results of operations for the year ended December 31, 2022 as compared to the year ended December 31, 2021, on both an IFRS and pro forma basis (refer to *UNAUDITED PRO FORMA CONSOLIDATED FINANCIAL INFORMATION* for additional information).

Years ended December 31, 2022	Years ended December 31, 2021	(€ million)	Pro Forma Year ended December 31, 2021
€ 179,592	€ 149,419	Net revenues	€ 152,119
144,327	119,943	Cost of revenues	122,207
8,981	9,130	Selling, general and other costs	9,320
5,200	4,487	Research and development costs	4,560
72	(35)	Gains/(Losses) on disposal of investments	(35)
1,144	698	Restructuring costs	698
20,012	**15,126**	**Operating income/(loss)**	**15,299**
768	734	Net financial expenses/(income)	746
19,244	**14,392**	**Profit/(loss) before taxes**	**14,553**
2,729	1,911	Tax expense/(benefit)	1,939
264	737	Share of the profit/(loss) of equity method investees	740
16,779	**13,218**	**Net profit/(loss) from continuing operations**	**13,354**
—	990	Profit/(loss) from discontinued operations, net of tax	990
€ 16,779	**€ 14,208**	**Net profit/(loss)**	**€ 14,344**
		Net profit/(loss) attributable to:	
€ 16,799	€ 14,200	Owners of the parent	€ 14,336
€ (20)	€ 8	Non-controlling interests	€ 8
		Net profit/(loss) from continuing operations attributable to:	
€ 16,799	€ 13,210	Owners of the parent	€ 13,346
€ (20)	€ 8	Non-controlling interests	€ 8
		Net profit/(loss) from discontinued operations attributable to:	
€ —	€ 990	Owners of the parent	€ 990
€ —	€ —	Non-controlling interests	€ —

Net revenues

Years ended December 31, 2022	Years ended December 31, 2021	Increase/(Decrease) 2022 vs. 2021	(€ million)	Pro Forma Year ended December 31, 2021	Increase/(Decrease) 2022 vs. Pro Forma 2021
€ 179,592	€ 149,419	20.2 %	Net revenues	€ 152,119	18.1 %

For a discussion of Net revenues on an IFRS and pro forma basis for each of the six reportable segments (North America, Enlarged Europe, Middle East & Africa, South America, China and India & Asia Pacific and Maserati) for 2022 as compared to 2021 see *Results by Segment* below.

Cost of revenues

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	**2021**	**2022 vs. 2021**	(€ million)	**2021**	**2022 vs. Pro Forma 2021**
€ 144,327	€ 119,943	20.3 %	Cost of revenues	€ 122,207	18.1 %
80.4 %	80.3%		Cost of revenues as % of Net revenues	80.3 %	

Cost of revenues includes purchases (including commodity and components costs), labor costs, depreciation, amortization, logistics cost, product warranty and recall campaign costs.

The increase in Cost of revenues in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 was primarily related to synergies for purchasing, manufacturing and supply chain activities more than offset by: (i) higher raw material costs (ii) product line mix in North America and South America (iii) higher volumes in North America (iv) higher energy and logistics costs (v) foreign currency translation differences mainly due to the fluctuations of the U.S. Dollar and Brazilian Real against the Euro and (vi) amounts that have been excluded from Adjusted operating income primarily related to an increase of €660 million in the provision related to Model Year 2019 - 2021 U.S. CAFE penalty rate adjustment and €951 million for extension of the Takata airbags recall campaign in Enlarged Europe, North America, Middle East & Africa and South America.

Selling, general and other costs

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	**2021**	**2022 vs. 2021**	(€ million)	**2021**	**2022 vs. Pro Forma 2021**
€ 8,981	€ 9,130	(1.6)%	Selling, general and other costs	€ 9,320	(3.6)%
5.0%	6.1%		Selling, general and other costs as % of Net revenues	6.1 %	

The decrease in Selling, general and other costs in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 was primarily related to synergies and cost containment actions partially offset by foreign currency translation differences.

Research and development costs

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	**2021**	**2022 vs. 2021**	(€ million)	**2021**	**2022 vs. Pro Forma 2021**
€ 3,233	€ 2,761	17.1 %	Research and development expenditures expensed	€ 2,818	14.7 %
1,889	1,575	19.9 %	Amortization of capitalized development expenditures	1,591	18.7 %
78	151	(48.3) %	Impairment and write-off of capitalized development expenditures	151	(48.3) %
€ 5,200	**€ 4,487**	**15.9 %**	**Total Research and development costs**	**€ 4,560**	**14.0 %**

Years ended December 31,			Pro Forma Year ended December 31,
2022	2021	(€ million)	2021
1.8 %	1.8 %	Research and development expenditures expensed as % of Net revenues	1.9 %
1.1 %	1.1 %	Amortization of capitalized development expenditures as % of Net revenues	1.0 %
— %	0.1 %	Impairment and write-off of capitalized development expenditures as % of Net revenues	0.1 %
2.9 %	**3.0 %**	**Total Research and development costs as % of Net revenues**	**3.0 %**

The increase in Research and development expenditures expensed in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 was primarily related to increased early vehicle development spending as well as foreign currency translation.

The increase in Amortization of capitalized development expenditures in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 was primarily related to the launch of the all-new Wagoneer/Grand Wagoneer and all-new Jeep Grand Cherokee during 2021 and foreign currency translation.

The following table summarizes total Research and development expenditures for the years ended December 31, 2022 and 2021 and total Pro Forma research and development expenditures for the year ended December 31, 2021:

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	2021	2022 vs. 2021	(€ million)	2021	2022 vs. Pro Forma 2021
€ 3,487	€ 2,976	17.2 %	Capitalized development expenditures[1]	€ 3,055	14.1 %
3,233	2,761	17.1 %	Research and development expenditures expensed	2,818	14.7 %
€ 6,720	**€ 5,737**	17.1 %	**Total Research and development expenditures**	**€ 5,873**	14.4 %
51.9 %	51.9 %		Capitalized development expenditures as % of Total Research and development expenditures	52.0 %	
3.7 %	**3.8 %**		**Total Research and development expenditures as % of Net revenues**	**3.9 %**	

(1) Does not include capitalized borrowing costs of €102 million and €140 million for the years ended December 31, 2022 and 2021, respectively, and €140 million for the year ended December 31, 2021, on a pro forma basis, in accordance with IAS 23 - Borrowing costs (Revised)

The Company conducts research and development for new vehicles and technology to improve the performance, safety, fuel efficiency, reliability, consumer perception and environmental impact of its vehicles. Research and development costs consist primarily of material costs, services and personnel related expenses that support the development of new and existing vehicles with propulsion systems technologies. For further details of research and development costs, see *Trends, Uncertainties and Opportunities—Product Development and Technology* and *Overview of Our Business - Research and Development*.

The increase in total Research and development expenditures in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 was primarily related to increased early vehicle development spending as well as increased spending on development of electrified vehicles and foreign currency exchange rates.

Restructuring Costs

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	2021	2022 vs. 2021	(€ million)	2021	2022 vs. Pro Forma 2021
€ 1,144	€ 698	63.9 %	Restructuring costs	€ 698	63.9 %

The increase in Restructuring costs in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 was primarily related to workforce reduction mainly in Enlarged Europe, North America and South America.

Net financial expenses/(income)

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	2021	2022 vs. 2021	(€ million)	2021	2022 vs. Pro Forma 2021
€ 768	€ 734	4.6 %	Net financial expenses/(income)	€ 746	2.9 %

The increase in Net financial expenses in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 primarily reflects the cost of hedging and currency depreciation in Argentina, the application of hyperinflationary accounting for entities whose functional currency is the Turkish Lira, the increased interest expense on notes and the lower amount of borrowing costs capitalized, partially offset by the increased return on cash investments.

Tax expense/(benefit)

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	2021	2022 vs. 2021	(€ million)	2021	2022 vs. Pro Forma 2021
€ 2,729	€ 1,911	42.8 %	Tax expense/(benefit)	€ 1,939	40.7 %
14.2 %	13.3 %	+90 bps	Effective tax rate	13.3 %	+90 bps

The effective tax rate was 14.2 percent and 13.3 percent for the years ended December 31, 2022, and 2021, respectively. The increase of 90 bps was primarily related to a lower tax benefit for net recognition of Deferred tax assets, primarily in Enlarged Europe.

Share of the profit/(loss) of equity method investees

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	2021	2022 vs. 2021	(€ million)	2021	2022 vs. Pro Forma 2021
€ 264	€ 737	(64.2)%	Share of the profit/(loss) of equity method investees	€ 740	(64.3)%

The decrease in Share of the profit of equity method investees in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 was primarily related to the impairment related to GAC-Stellantis JV for an amount of €297 million and an estimated loss of €133 million from the planned sale of FCA Bank to CACF in 2023. Refer to Note 3, *Scope of consolidation* within the Consolidated Financial Statements included elsewhere in this report for additional information.

Net profit/(loss) from continuing operations

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	2021	2022 vs. 2021	(€ million)	2021	2022 vs. Pro Forma 2021
€ 16,779	€ 13,218	26.9 %	Net profit/(loss) from continuing operations	€ 13,354	25.6 %

The increase in Net profit from continuing operations in 2022 on an IFRS basis compared to the IFRS and Pro Forma 2021 was primarily related to higher operating performance particularly in North America, South America and Enlarged Europe which is partially offset by higher restructuring expenses and lower share of profit of equity method investees.

Profit/(loss) from discontinued operations, net of tax

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	2021	2022 vs. 2021	(€ million)	2021	2022 vs. Pro Forma 2021
€ —	€ 990	(100.0)%	Profit/(loss) from discontinued operations, net of tax	€ 990	(100.0)%

For the year ended December 31, 2021, Profit/(loss) from discontinued operations related to the results of Faurecia. Following the loss of control of Faurecia at the beginning of January 2021, a gain of €990 million has been recognized consisting of a gain of €515 million upon the classification of the investment in Faurecia as a financial asset and the subsequent remeasurement at fair value through profit and loss of €475 million. Refer to Note 3, *Scope of consolidation*, within the Consolidated Financial Statements included elsewhere in this report for additional information.

Adjusted operating income

Years ended December 31,		Increase/ (Decrease)		Pro Forma Year ended December 31,	Increase/ (Decrease)
2022	2021	2022 vs. 2021	(€ million)	2021	2022 vs. Pro Forma 2021
€ 23,323	€ 17,827	30.8 %	Adjusted operating income	€ 18,011	29.5 %
13.0 %	11.9 %	+110 bps	Adjusted operating income margin (%)	11.8 %	+120 bps

The following charts present Company’s Adjusted operating income walk by segment for 2022 compared to the corresponding period in 2021 Pro Forma:

Adjusted operating income by segment
2022 compared to Pro Forma 2021
(€ million)

For a discussion of Adjusted operating income and Pro Forma Adjusted operating income for each of our six reportable segments (North America, Enlarged Europe, Middle East & Africa, South America, China and India & Asia Pacific, and Maserati) in 2022 as compared to Pro Forma 2021 see *Results by Segment* below.

The following table summarizes the reconciliation of Net profit from continuing operations, which is the most directly comparable measure included in the Consolidated Income Statement, to Adjusted operating income:

(€ million)		Year ended December 31, 2022
Net profit from continuing operations	**€**	**16,779**
Tax expense		2,729
Net financial expenses		768
Share of the profit of equity method investees		(264)
Operating income		**20,012**
Adjustments:		
Restructuring and other costs, net of reversals		1,144
Takata recall campaign		951
CAFE penalty rate		660
Change in estimate of non-contractual warranties		314
Impairment expense and supplier obligations		237
Patents litigation		134
Other		(129)
Total adjustments		3,311
Adjusted operating income	**€**	**23,323**

The following table is the reconciliation of Net profit from continuing operations, which is the most directly comparable measure included in the Consolidated Income Statement, to Pro Forma Adjusted operating income:

(€ million)		Year ended December 31, 2021
Net profit from continuing operations	**€**	**13,218**
Tax expense		1,911
Net financial expenses		734
Share of the profit of equity method investees		(737)
Operating income		**15,126**
Add: FCA operating income, January 1 - 16, 2021		77
Add: Pro Forma adjustments		96
Pro Forma Operating income		**15,299**
Adjustments:		
Restructuring and other costs, net of reversals		873
Change in estimate of non-contractual warranties		732
Reversal of inventory fair value adjustment in purchase accounting		522
Impairment expense and supplier obligations		309
Brazilian indirect tax - reversal of liability/recognition of credits		(253)
Other		529
Total adjustments January 1 - December 31, 2021		2,712
Pro Forma Adjusted operating income	**€**	**18,011**

The following table is the reconciliation of Net profit from continuing operations, which is the most directly comparable measure included in the Consolidated Income Statement, to Adjusted operating income:

(€ million)		Year ended December 31, 2021
Net profit from continuing operations	**€**	**13,218**
Tax expense		1,911
Net financial expenses		734
Share of the profit of equity method investees		(737)
Operating income		**15,126**
Adjustments:		
Restructuring and other costs, net of reversals		873
Change in estimate of non-contractual warranties		732
Reversal of inventory fair value adjustment in purchase accounting		522
Impairment expense and supplier obligations		309
Brazilian indirect tax - reversal of liability/recognition of credits		(253)
Other		529
Total adjustments January 1 - December 31, 2021		2,712
Less: Adjustments January 1- 16, 2021		11
Adjusted operating income	**€**	**17,827**

During the year ended December 31, 2022, Adjusted operating income excluded adjustments primarily related to:

- €1,144 million of restructuring costs, primarily related to workforce reductions mainly in Enlarged Europe, North America and South America;
- €951 million for an extension of Takata airbags recall campaign. Refer to Note 21, *Provisions*, within the Consolidated Financial Statements included elsewhere in this report for additional information;
- €660 million, resulting from an increase in provision related to Model Year 2019 - 2021 CAFE penalty rate adjustment;
- €314 million of further refinements in estimate for warranty costs incurred after the contractual warranty period;
- €237 million, primarily of impairment expense in Enlarged Europe, mainly related to Russia, as well as North America and South America;
- €134 million of provision related to litigation by certain patent owners related to the use of certain technologies in prior periods; and
- €129 million of Other, mainly related to release of litigation provisions, changes in ownership of equity method investments, partially offset by net losses on disposals.

During the year ended December 31, 2021, Pro Forma Adjusted operating income excluded adjustments primarily related to:

- €873 million of restructuring and other costs related to the reorganization of operations and the dealer network primarily in Enlarged Europe;
- €732 million of change in estimate for warranty costs incurred after the contractual warranty period. Refer to Note 21, *Provisions*, within the Consolidated Financial Statements included elsewhere in this report for additional information;
- €522 million of reversal of fair value adjustment recognized in purchase accounting on FCA inventories;
- €309 million of impairment primarily related to certain vehicle platforms in Enlarged Europe;

- €253 million benefit related to final decision of Brazilian Supreme Court on calculation of state value added tax, resulting in the recognition of €87 million in Net revenues and €166 million in Selling, general and other costs. Refer to Note 23, *Other liabilities*, within the Consolidated Financial Statements included elsewhere in this report for additional information; and

- €529 million of other costs primarily related to merger and integration activities.

During the year ended December 31, 2021, Adjusted operating income excluded the same adjustments excluded for Pro Forma Adjusted operating income, as well as, adjustments for the period January 1 - 16, 2021, which were primarily costs related to the merger.

Results by Segment – 2022 compared to 2021

(€ million, except shipments which are in thousands of units)	Net revenues		Adjusted operating income		Consolidated Shipments	
	Years ended December 31,					
	2022	2021	2022	2021	2022	2021
North America	€ 85,475	€ 67,715	€ 13,989	€ 11,103	1,861	1,764
Enlarged Europe	63,311	58,728	6,293	5,419	2,626	2,847
Middle East & Africa	6,453	5,165	1,078	554	283	272
South America	15,620	10,496	2,048	873	859	811
China and India & Asia Pacific	4,505	3,927	654	444	127	118
Maserati	2,320	2,003	201	116	26	24
Other activities	3,169	2,768	(495)	(713)	—	—
Unallocated items & eliminations(1)	(1,261)	(1,383)	(445)	31	—	—
Total	**€ 179,592**	**€ 149,419**	**€ 23,323**	**€ 17,827**	**5,782**	**5,836**

(1) Primarily includes intercompany transactions which are eliminated on consolidation

(€ million, except shipments which are in thousands of units)	Pro Forma		
	Net revenues	Adjusted operating income	Consolidated Shipments
	Year ended December 31, 2021		
North America	€ 69,736	€ 11,356	1,820
Enlarged Europe	59,060	5,370	2,860
Middle East & Africa	5,201	545	273
South America	10,681	882	830
China and India & Asia Pacific	3,980	442	120
Maserati	2,021	103	24
Other activities	2,728	(718)	—
Unallocated items & eliminations(1)	(1,288)	31	—
Total	**€ 152,119**	**€ 18,011**	**5,927**

(1) Primarily includes intercompany transactions which are eliminated on consolidation

Refer to Note 29, *Segment reporting* included elsewhere in this report for additional detail on the Company's reportable segments.

The following is a discussion of IFRS Net revenues and shipments and Adjusted operating income for each of our six reportable segments for the year ended December 31, 2022 as compared to IFRS and Pro Forma for the year ended December 31, 2021. We review changes in our results of operations with the following operational drivers:

- **Operating environment**
  - **Industry & Market Mix**: reflects changes in volumes of products sold to customers driven by industry volumes and market mix. Reflects also the gap between production and shipments (fixed manufacturing costs absorption).
- **Performance**
  - **Vehicle Net Price & Content**: reflects changes in net prices including discounts and incentives and related to new product content and option take rates. Includes also channel and trim mix;
  - **Vehicle Line Mix**: reflects the changes in nameplate mix;
  - **Market Share & Market Mix**: reflects changes of market share and market mix on new vehicle business;
  - **Industrial**: reflects manufacturing, logistics and purchasing efficiencies and inefficiencies, as well as changes to costs of raw materials. Warranty and compliance costs are also included here;

- **SG&A**: primarily includes costs for advertising and promotional activities, purchased services, information technology and administrative costs and other costs not directly related to the development and manufacturing of Stellantis products;
- **R&D**: includes research and development costs; and
- **FX and Other**: includes other items not mentioned above, such as used cars, parts & services, sales to other partners, owned dealer network, royalties, the difference between shipments and sales, as well as foreign currency exchange translation, transaction and hedging.

North America

Years ended December 31, 2022	Years ended December 31, 2021	Increase/(Decrease) 2022 vs. 2021		Pro Forma Year ended December 31, 2021	Increase/(Decrease) 2022 vs Pro Forma 2021
1,861	1,764	5.5 %	Shipments (thousands of units)	1,820	2.3 %
€ 85,475	€ 67,715	26.2 %	Net revenues (€ million)	€ 69,736	22.6 %
€ 13,989	€ 11,103	26.0 %	Adjusted operating income (€ million)	€ 11,356	23.2 %
16.4 %	16.4 %	0 bps	Adjusted operating income margin (%)	16.3 %	+10 bps

Shipments

The increase in North America shipments on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was mainly due to higher volumes of all-new Grand Wagoneer, Jeep Compass and Chrysler Pacifica, partially offset by lower volumes of Grand Cherokee and Ram pickups.

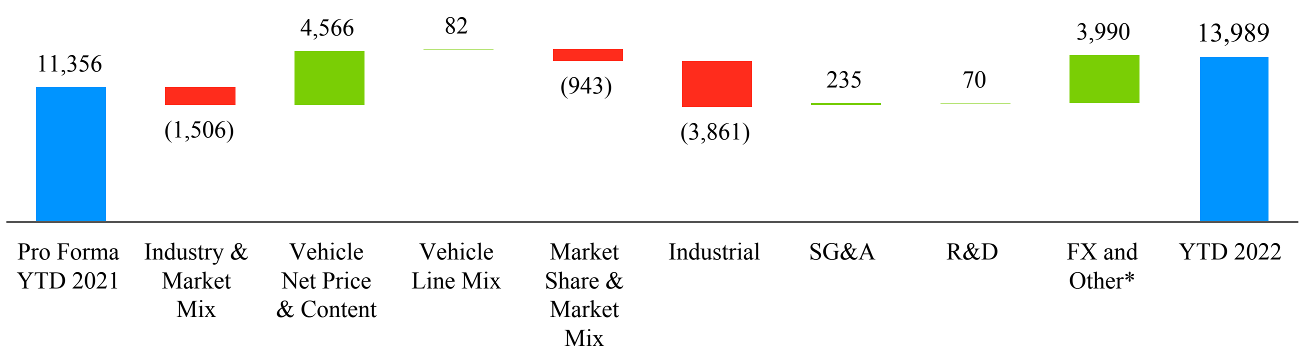
Net revenues

The increase in North America Net revenues on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was primarily due to strong net pricing, favorable vehicle mix and positive foreign exchange translation effects.

Adjusted operating income

The following chart reflects the change in North America Adjusted operating income by operational driver for 2022 as compared to the same period in 2021 Pro Forma:

Adjusted operating income by operational driver
2022 compared to Pro Forma 2021
(€ million)



**Change in dealer stock +€2.3 billion*

The increase in North America Adjusted operating income on an IFRS basis in 2022 compared to the Pro Forma basis for the corresponding period in 2021 was primarily due to higher Net revenues and favorable foreign exchange translation effects, partially offset by increased raw materials, components and logistics costs.

Enlarged Europe

Years ended December 31, 2022	Years ended December 31, 2021	Increase/(Decrease) 2022 vs. 2021		Pro Forma Year ended December 31, 2021	Increase/(Decrease) 2022 vs Pro Forma 2021
2,626	2,847	(7.8)%	Shipments (thousands of units)	2,860	(8.2)%
€ 63,311	€ 58,728	7.8 %	Net revenues (€ million)	€ 59,060	7.2 %
€ 6,293	€ 5,419	16.1 %	Adjusted operating income (€ million)	€ 5,370	17.2 %
9.9 %	9.2 %	+70 bps	Adjusted operating income margin (%)	9.1 %	+80 bps

Shipments

The Enlarged Europe shipments decreased on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021, with demand for all-new Peugeot 308, Fiat Panda, DS 4, Citroën C5 X and Alfa Romeo Tonale, more than offset by impact of unfilled semiconductor orders, logistics challenges and discontinuation of Peugeot 108 and Citroën C1 in 2022.

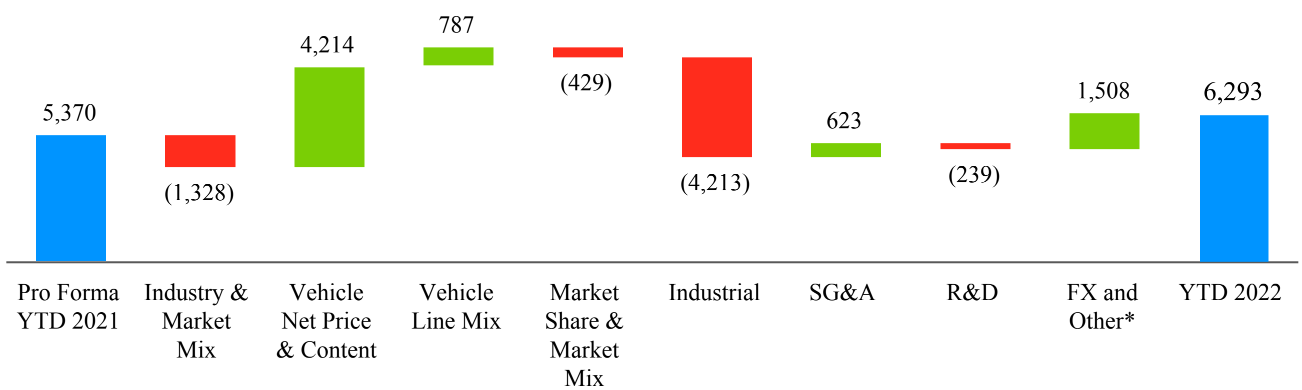
Net revenues

The Enlarged Europe Net revenues increased on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021, mainly due to positive net pricing, favorable vehicle mix, driven by new models, BEVs and PHEVs, and lower volumes with buyback commitments, partially offset by reduced shipment volumes.

Adjusted operating income

The following chart reflects the change in Enlarged Europe Adjusted operating income by operational driver for 2022 as compared to the same period in 2021 Pro Forma:

Adjusted operating income by operational driver
2022 compared to Pro Forma 2021
(€ million)



**Change in dealer stock +€1.0 billion*

The increase in Enlarged Europe Adjusted operating income on an IFRS basis in 2022 compared to the Pro Forma basis for the corresponding period in 2021 was primarily due to increased Net revenues, cost containment actions and elevated used car profitability, partially offset by higher raw materials, energy, components and logistics costs.

Middle East & Africa

Years ended December 31, 2022	Years ended December 31, 2021	Increase/(Decrease) 2022 vs. 2021		Pro Forma Year ended December 31, 2021	Increase/(Decrease) 2022 vs Pro Forma 2021
426	387	10.1 %	Combined shipments (thousands of units)	389	9.5 %
283	272	4.0 %	Consolidated shipments (thousands of units)	273	3.7 %
€ 6,453	€ 5,165	24.9 %	Net revenues (€ million)	€ 5,201	24.1 %
€ 1,078	€ 554	94.6 %	Adjusted operating income (€ million)	€ 545	97.8 %
16.7 %	10.7 %	+600 bps	Adjusted operating income margin (%)	10.5 %	+620 bps

Shipments

The increase in Middle East & Africa consolidated shipments on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was mainly due to higher volumes of Opel Mokka, Corsa and Crossland X.

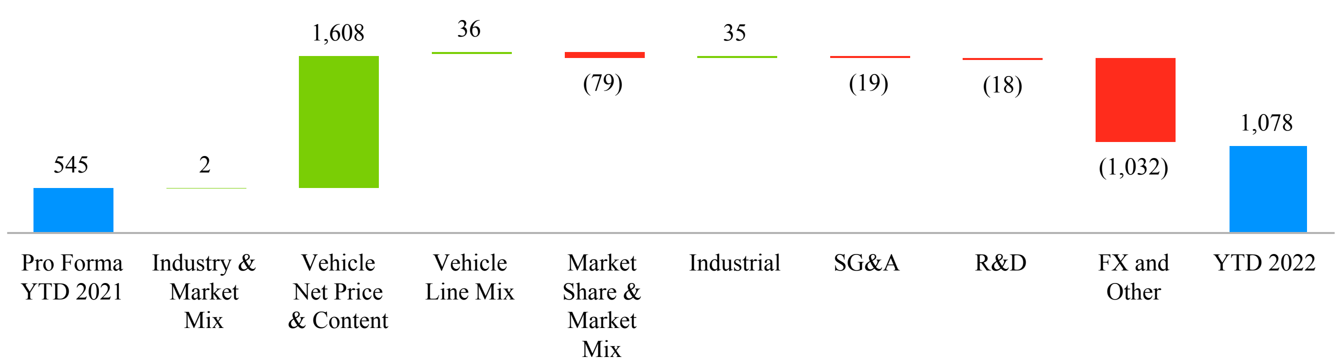
Net revenues

The increase in Middle East & Africa Net revenues on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was primarily due to strong net pricing, including pricing actions to offset Turkish lira devaluation, and improved market mix, partially offset by negative foreign exchange translation effects, mainly from Turkish lira.

Adjusted operating income

The following chart reflects the change in Middle East & Africa Adjusted operating income by operational driver in 2022 compared to the same period in 2021 Pro Forma:

Adjusted operating income by operational driver
2022 vs. Pro Forma 2021
(€ million)



The increase in Middle East and Africa Adjusted operating income on an IFRS basis in 2022 compared to the Pro Forma basis for the corresponding period in 2021 was mainly due to higher Net revenues and strong operating leverage, partially offset by negative foreign exchange transaction and translation effects.

South America

Years ended December 31, 2022	Years ended December 31, 2021	Increase/(Decrease) 2022 vs. 2021		Pro Forma Year ended December 31, 2021	Increase/(Decrease) 2022 vs Pro Forma 2021
859	811	5.9 %	Shipments (thousands of units)	830	3.5 %
€ 15,620	€ 10,496	48.8 %	Net revenues (€ million)	€ 10,681	46.2 %
€ 2,048	€ 873	134.6 %	Adjusted operating income (€ million)	€ 882	132.2 %
13.1 %	8.3 %	+480 bps	Adjusted operating income margin (%)	8.3 %	+480 bps

Shipments

The increase in South America shipments on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was primarily due to demand for all-new Fiat Pulse, Jeep Commander and Citroën C3, and higher Peugeot 208 volumes, partially offset by lower Jeep Renegade and Fiat Argo volumes and discontinuation of Fiat Uno.

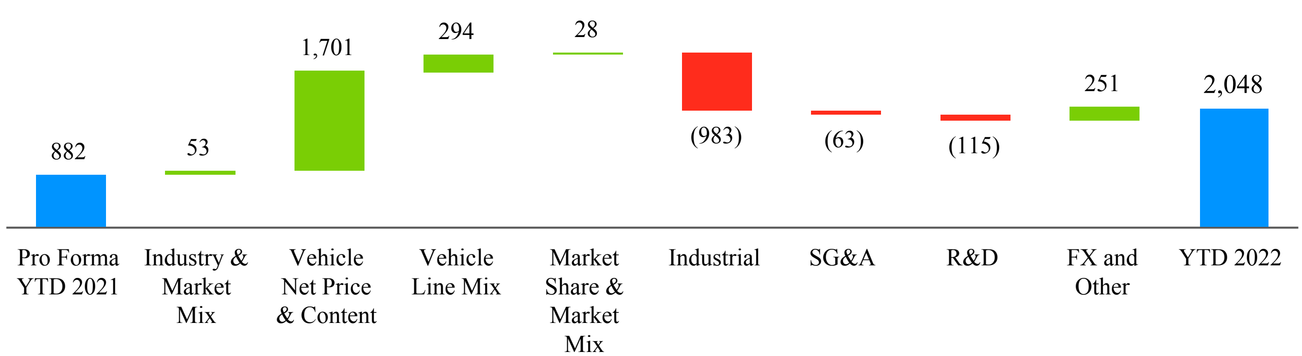
Net revenues

The increase in South America Net revenues on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was due to a combination of favorable net pricing, vehicle mix, volumes and foreign exchange translation effects, mainly Brazilian real.

Adjusted operating income

The following chart reflects the change in South America Adjusted operating income by operational driver for 2022 as compared to the same period in 2021 Pro Forma:

Adjusted operating income by operational driver
2022 compared to Pro Forma 2021
(€ million)



The increase in South America Adjusted operating income on an IFRS basis in 2022 compared to the Pro Forma basis for the corresponding period in 2021 was primarily due to increased Net revenues and favorable foreign exchange translation, more than offsetting higher raw materials costs.

China and India & Asia Pacific

Years ended December 31, 2022	Years ended December 31, 2021	Increase/(Decrease) 2022 vs. 2021		Pro Forma Year ended December 31, 2021	Increase/(Decrease) 2022 vs Pro Forma 2021
205	216	(5.1)%	Combined shipments (thousands of units)	219	(6.4)%
127	118	7.6 %	Consolidated shipments (thousands of units)	120	5.8 %
€ 4,505	€ 3,927	14.7 %	Net revenues (€ million)	€ 3,980	13.2 %
€ 654	€ 444	47.3 %	Adjusted operating income (€ million)	€ 442	48.0 %
14.5 %	11.3 %	+320 bps	Adjusted operating income margin (%)	11.1 %	+340 bps

In China we manufactured and distributed various Jeep models through our 50 percent owned GAC-Stellantis JV. In January 2022, we announced a plan to increase our shareholding with GAC-Stellantis JV from 50 percent to 75 percent. Due to lack of progress in the previously announced plan, Stellantis is cooperating with GAC Group in an orderly termination of the joint venture. On October 31, 2022, the shareholders of the GAC-Stellantis JV approved a resolution authorizing the JV to file for bankruptcy. Stellantis will focus on distributing imported vehicles for the Jeep brand in China through an asset-light approach. We also locally manufacture vehicles under the Dongfeng Peugeot and Dongfeng Citroën brands in China through the 50 percent owned DPCA JV, based in Wuhan. DPCS markets the vehicles produced by DPCA in China. Until June 2020, vehicles under the DS brand were manufactured and marketed in China through CAPSA, a 50 percent joint venture between PSA and the Changan group. After the sale of the joint venture by PSA and Changan to Shenzhen Baoneng Motor Co. Ltd. in June 2020, Shenzhen Baoneng Motor Co. Ltd. continues to manufacture DS vehicles for the Company.

The results of these joint ventures are accounted for using the equity method, with recognition of our share of the net result of the joint venture in the line item “Share of the profit of equity method investees” within the Consolidated Income Statement. We fully impaired the equity method investment in GAC-Stellantis JV at June 30, 2022. Refer to Note 3, *Scope of consolidation* in the Consolidated Financial Statements included elsewhere in this report for additional information.

We also produce the Jeep Compass and Jeep Meridian in India through our joint operation with FIAPL and we recognize our related interest in the joint operation on a line by line basis.

Shipments distributed by our consolidated subsidiaries, which include vehicles produced by FIAPL, are reported in both consolidated and combined shipments. Shipments of the GAC-Stellantis JV and DPCA JV are not included in consolidated shipments and are only in combined shipments.

Shipments

The increase in China and India & Asia Pacific consolidated shipments on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was primarily due to the increased demand for Peugeot 3008.

Net revenues

The increase in China and India & Asia Pacific Net revenues on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was primarily due to positive net pricing, favorable foreign exchange translation effects and vehicle line mix.

Adjusted operating income

The increase in China and India & Asia Pacific Adjusted operating income on an IFRS basis in 2022 compared to the Pro Forma basis for the corresponding period in 2021 was primarily driven by favorable net pricing and vehicle mix, primarily related to Jeep Grand Cherokee L, Jeep Meridian and Ram 1500, partially offset by unfavorable market mix.

Maserati

Years ended December 31,				Increase/ (Decrease)		Pro Forma Year ended December 31,		Increase/ (Decrease)
	2022		2021	2022 vs. 2021			2021	2022 vs Pro Forma 2021
	25.9		24.0	7.9 %	Shipments (thousands of units)		24.2	7.0 %
€	2,320	€	2,003	15.8 %	Net revenues (€ million)	€	2,021	14.8 %
€	201	€	116	73.3 %	Adjusted operating income (€ million)	€	103	95.1 %
	8.7 %		5.8 %	+290 bps	Adjusted operating income margin (%)		5.1 %	+360 bps

Shipments

The increase in Maserati shipments on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was primarily due to the all-new Grecale launch, partially offset by reduced Ghibli and Levante volumes particularly in China.

Net revenues

The increase in Maserati Net revenues on an IFRS basis in 2022 compared to the IFRS and Pro Forma basis for the corresponding period in 2021 was primarily due to higher volumes, positive model mix driven by MC20 and favorable foreign exchange both in U.S. Dollar and Chinese Renminbi.

Adjusted operating income

The increase in Maserati Adjusted operating income on an IFRS basis in 2022 compared to the Pro Forma basis for the corresponding period in 2021 was mainly due to increased net pricing, positive vehicle mix, due to MC20 and all-new Grecale, and favorable foreign exchange transaction effects, partially offset by increased depreciation and amortization.

Liquidity and Capital Resources

Liquidity Overview

We require significant liquidity in order to meet our obligations and fund the business. Short-term liquidity is required to purchase raw materials, parts and components for vehicle production, as well as to fund selling, administrative, research and development, other expenses and funding our captive financial services business. In addition to our general working capital and operational needs, we expect to use significant amounts of cash for the following purposes: (i) capital expenditures to support our existing and future products; (ii) principal and interest payments under our financial obligations; (iii) pension and employee benefit payments; (iv) capital injections to our joint ventures and M&A initiatives; and (v) funding our captive financial services business. We make capital investments in the regions in which we operate primarily related to initiatives to introduce new products, including for electrification and autonomous driving, enhance manufacturing efficiency, improve capacity and for maintenance, and for regulatory and environmental compliance.

Our business and results of operations depended on our ability to achieve certain minimum vehicle shipment volumes. As is typical for an automotive manufacturer, we have significant fixed costs and, as such, changes in our vehicle shipment volumes could have a significant effect on profitability and liquidity. We generally receive payment from dealers and distributors shortly after shipment, whereas there is a lag between the time we receive parts and materials from our suppliers and the time we are required to pay for them. Therefore, during periods of increasing vehicle shipments, there is generally a corresponding positive impact on the Company's cash flow and liquidity. Conversely, during periods in which vehicle shipments decline, there is generally a corresponding negative impact on the Company's cash flow and liquidity. Delays in shipments of vehicles, including delays in shipments in order to address quality issues or components shortage and logistic constraints, tend to negatively affect the Company's cash flow and liquidity. In addition, the timing of the Company's collections of receivables for export shipments of vehicles, fleet sales, as well as sales of propulsion systems and pre-assembled parts of vehicles tend to be longer due to different payment terms. Although we regularly enter into factoring transactions for such receivables in order to transfer relevant risks to the factor and to accelerate collections, a change in vehicle shipment volumes could cause fluctuations in the Company's working capital. The increased internationalization of our product portfolio could also affect our working capital requirements as there could be an increased requirement to ship vehicles to countries different from where they are produced. In addition, working capital could be affected by the trend and seasonality of shipments of vehicles with a buy-back commitment.

Management believes that the funds currently available to Stellantis at the date of this report, in addition to those funds that would be generated from operating and financing activities, will enable the Company to meet its obligations and fund its businesses including funding planned investments and working capital needs, as well as fulfill the Company's obligations to repay its debts in the ordinary course of business.

Fidis S.p.A., a 100 percent owned captive finance company, supports working capital needs in all regions at a Company level (including the Maserati segment), as well as selected suppliers, through the offering of receivable and payable financing activity (also known as factoring). In addition, Fidis S.p.A. provides financing to selected dealers in Italy.

Liquidity needs are met primarily through cash generated from operations, including the sale of vehicles, service and parts to dealers, distributors and other consumers worldwide.

The operating cash management and liquidity investment of the Company is coordinated with the objective of ensuring effective and efficient management of the Company's funds. We raise capital in the financial markets through various funding sources.

Certain notes issued by the Company and its treasury subsidiaries include covenants which could be affected by circumstances related to certain subsidiaries. In particular there are cross-default clauses which could accelerate repayments in the event that such subsidiaries failed to pay certain of their debt obligations.

Long-term liquidity requirements could involve some level of debt refinancing as outstanding debt becomes due or the Company is required to make principal payments. We regularly evaluate opportunities to improve our liquidity position in order to enhance financial flexibility and to achieve and maintain a liquidity and capital position consistent with that of other companies in the Company's industry.

However, any actual or perceived limitations of the Company's liquidity may limit the ability or willingness of counterparties, including dealers, consumers, suppliers, lenders and financial service providers, to do business with the Company, or require the Company to restrict additional amounts of cash to provide collateral security for its obligations. The Company's liquidity levels are subject to a number of risks and uncertainties, including those described in *Risk Factors*.

For additional information on distribution of profits, refer to *ADDITIONAL INFORMATION FOR NETHERLANDS CORPORATE GOVERNANCE - Dividends* and Note 27, *Equity* within the Consolidated Financial Statements included elsewhere in this report, for additional information on Stellantis' distribution of profits.

Available liquidity

The following table summarizes the Company's Available liquidity:

	At December 31,			
(€ million)	2022		2021	
Cash, cash equivalents and financial securities[1]	€	49,960	€	51,128
Undrawn committed credit lines		12,680		12,810
Cash, cash equivalents and financial securities - included with Assets held for sale		65		—
Total Available liquidity[2]	**€**	**62,705**	**€**	**63,938**
of which: Available liquidity of the Industrial Activities	**€**	**61,316**	**€**	**62,706**

(1) Financial securities are comprised of short term or marketable securities which represent temporary investments but do not satisfy all the requirements to be classified as cash equivalents as they may be subject to risk of change in value (even if they are short-term in nature or marketable)
(2) The majority of our liquidity is available to our treasury operations in Europe and U.S.; however, liquidity is also available to certain subsidiaries which operate in other countries. Cash held in such countries may be subject to restrictions on transfer depending on the foreign jurisdictions in which these subsidiaries operate. Based on our review of such transfer restrictions in the countries in which we operate and maintain material cash balances, (and in particular in Argentina, in which we have €959 million cash and securities at December 31, 2022, and Russia, in which we have €121 million cash at December 31,2022), we do not believe such transfer restrictions had an adverse impact on the Company's ability to meet its liquidity requirements at the dates presented above. Cash and cash equivalents also include €107 million at December 31, 2022 held in bank deposits which are restricted to the operations related to securitization programs and warehouses credit facilities of Stellantis Financial Services U.S.

Available liquidity of the Industrial Activities at December 31, 2022 decreased €1.4 billion from December 31, 2021 primarily due to the repayment of the €6.3 billion Intesa Sanpaolo credit facility, the payment of €3.4 billion of dividends, the €0.9 billion paid in the share repurchase transaction with GM and other financing activities flows for a net negative €1.7 billion, partially offset by the €10.8 billion industrial free cash flow of the period and positive foreign exchange translation effects.

Our Available liquidity is subject to intra-month and seasonal fluctuations resulting from business and collection payment cycles as well as to changes in foreign exchange conversion rates. Refer to the section — *Cash Flows* below for additional information regarding the change in cash and cash equivalents and refer to Note 30, *Explanatory notes to the Consolidated Statement of Cash Flows*, within the Consolidated Financial Statements included elsewhere in this report for additional information.

Our liquidity is principally denominated in Euro and U.S. Dollar, with the remainder being distributed in various countries and denominated in the relevant local currencies. Out of the total €49.9 billion of cash, cash equivalents and current securities available at December 31, 2022, €22.1 billion, or 44 percent (€29.7 billion, or 58 percent, at December 31, 2021), were denominated in Euro and €21.6 billion, or 43 percent (€15.5 billion or 30 percent at December 31, 2021), were denominated in U.S. Dollar.

At December 31, 2022, undrawn committed credit lines of €12.7 billion include the syndicated revolving credit facility ("RCF") of €12.0 billion, signed in 2021 with a group of relationship banks. The RCF is available for use in general corporate purposes and is structured in two tranches: €6.0 billion, with a 3 year tenor, and €6.0 billion, with a 5 year tenor, with each tranche benefiting from two further extension options, each of 1-year. In June 2022, the first 1-year extension option has been exercised. Current maturities are July 2025 and July 2027, respectively, for the two tranches.

Refer to Note 22, *Debt* within the Consolidated Financial Statements included elsewhere in this report for additional information.

Euro Medium Term Note Programme Notes

On April 1, 2022, the Company issued €1.0 billion principal amount of 2.750 percent notes due April 1, 2032, under the €30 billion Euro Medium Term Note Programme.

Other Notes

On September 12, 2022, Stellantis Finance U.S. issued US$0.6 billion 5.625 percent Senior Notes due January 12, 2028 and US$0.7 billion 6.375 percent Senior Notes due September 12, 2032, both guaranteed by Stellantis N.V..

At December 31, 2022, all of the notes were rated Baa2 by Moody's Investors Service, BBB by S&P Global Ratings and BBB by Fitch Ratings.

Refer to Note 22, *Debt* within the Consolidated Financial Statements included elsewhere in this report for additional information.

Financial Services Facilities

Stellantis Financial Services U.S. activities are primarily funded through securitization programs which are settled through the collection of the portfolio of financing receivables originating from dealers or consumers. The amount outstanding under the securitization programs was €1.5 billion as of December 31, 2022.

In 2022, Stellantis Financial Services U.S. implemented two additional separate warehouse credit facilities. The first Stellantis Financial Services U.S. facility, Stellantis Financial Services Funding, was implemented on August 31, 2022 and matures on September 1, 2024. The €2.3 billion ($2.5 billion) commitment bears interest based on variable commercial paper rates plus a spread or one month term Secured Overnight Funding Rate ("SOFR") plus a spread. The second Stellantis Financial Services U.S. facility, Stellantis Financial Services Funding II, was implemented on September 15, 2022 and matures on September 14, 2024. The €469 million ($500 million) commitment bears interest based on variable commercial paper rates plus a spread or one month term SOFR plus a spread. Stellantis Financial Services U.S. uses interest rate derivatives in order to reduce the interest risks of certain warehouse credit facilities.

Refer to Note 22, *Debt* within the Consolidated Financial Statements included elsewhere in this report for additional information.

European Investment Bank Borrowings

In July 2022, Stellantis repaid at maturity a €420 million four-year loan granted in 2018 by the European Investment Bank ("EIB") to support research and development ("R&D") projects.

Intesa Sanpaolo Credit Facilities

On January 28, 2022, Stellantis repaid early the €6.3 billion credit facility entered in June 2020 with Intesa Sanpaolo was due to mature in March 2023. The facility was structured to support the restart and transformation of Italy's automotive sector after the COVID-19 outbreak by providing liquidity to the Company's business in Italy and to its Italian suppliers.

Refer to Note 22, *Debt* within the Consolidated Financial Statements included elsewhere in this report for additional information.

Cash Flows

The following table summarizes cash flows from operating, investing and financing activities for each of the years ended December 31, 2022, 2021 and 2020 and does not include the impact of any Pro Forma adjustments or results of former FCA prior to the merger. Refer to the Consolidated Statement of Cash Flows for the years ended December 31, 2022, 2021 and 2020 and to Note 30, *Explanatory notes to the Consolidated Statement of Cash Flows* included elsewhere in this report for additional detail.

	Years ended December 31,		
(€ million)	**2022**	**2021**	**2020**
Cash flows from operating activities - continuing operations	€ 19,959	€ 18,646	€ 5,105
Cash flows from operating activities - discontinued operations(1)	—	—	1,136
Cash flows from (used in) investing activities - continuing operations(2)	(10,531)	11,789	(2,540)
Cash flows (used in) investing activities - discontinued operations(1)	—	(3,115)	(1,359)
Cash flows from (used in) financing activities - continuing operations	(13,167)	(1,366)	2,025
Cash flows from financing activities - discontinued operations(1)	—	—	1,091
Effect of changes in exchange rates	608	764	(397)
(Increase)/decrease in cash and cash equivalents included in asset held for sale	(65)	18	—
Increase/(decrease) in cash and cash equivalents	(3,196)	26,736	5,061
Net cash and cash equivalents at beginning of the period	49,629	22,893	17,832
NET CASH AND CASH EQUIVALENTS AT END OF PERIOD	**€ 46,433**	**€ 49,629**	**€ 22,893**

(1) Refer to Note 3, Scope of consolidation within the Consolidated Financial Statements included elsewhere in this report

(2) For the year ended December 31, 2021, Cash flow from (used) in investing activities includes the positive contribution of Cash and cash equivalents of FCA at the merger for €22,514 million

Industrial free cash flows

The following table provides a reconciliation of Cash flows from operating activities, the most directly comparable measure included in the Consolidated Statement of Cash Flows, to Industrial free cash flows for the years ended December 31, 2022 and 2021.

	Years ended December 31,	
(€ million)	2022	2021
Cash flows from operating activities	**€ 19,959**	**€ 18,646**
Less: Cash flows from operating activities - discontinued operations	—	—
Cash flows from operating activities - continuing operations	**19,959**	**18,646**
Less: Operating activities not attributable to industrial activities	211	276
Less: Capital expenditures and capitalized research and development expenditures and change in amounts payable on property, plant and equipment and intangible assets for industrial activities	8,938	10,081
Add: Proceeds from disposal of assets and other changes in investing activities	500	327
Less: Contributions of equity to joint ventures and minor acquisitions of consolidated subsidiaries and equity method and other investments	769	811
Add: Defined benefit pension contribution, net of tax	278	80
Industrial free cash flows	**10,819**	**7,885**
Add: Industrial free cash flows of FCA, January 1 - 16, 2021	—	(1,813)
Pro Forma Industrial free cash flows	**€ —**	**€ 6,072**

Industrial net financial position

(€ million)	At December 31, 2022 Company	Industrial activities	Financial services	At December 31, 2021 Company	Industrial activities	Financial services
Third parties debt (Principal)	(26,335)	(23,508)	(2,827)	(32,456)	(29,994)	(2,462)
Capital market[(1)]	*(19,088)*	*(18,488)*	*(600)*	*(17,920)*	*(17,475)*	*(445)*
Bank debt	*(2,937)*	*(2,264)*	*(673)*	*(10,567)*	*(9,442)*	*(1,125)*
Other debt[(2)]	*(2,051)*	*(517)*	*(1,534)*	*(1,483)*	*(608)*	*(875)*
Lease liabilities	*(2,259)*	*(2,239)*	*(20)*	*(2,486)*	*(2,469)*	*(17)*
Accrued interest and other adjustments[(3)]	(818)	(793)	(25)	(1,126)	(1,118)	(8)
Debt with third parties (excluding held for sale)	**(27,153)**	**(24,301)**	**(2,852)**	**(33,582)**	**(31,112)**	**(2,470)**
Debt classified as held for sale	(11)	(11)	—	—	—	—
Debt with third parties including held for sale	**(27,164)**	**(24,312)**	**(2,852)**	**(33,582)**	**(31,112)**	**(2,470)**
Intercompany, net[(4)]	—	918	(918)	—	123	(123)
Current financial receivables from jointly-controlled financial services companies[(5)]	321	321	—	103	103	—
Debt, net of intercompany, and current financial receivables from jointly-controlled financial service companies	**(26,843)**	**(23,073)**	**(3,770)**	**(33,479)**	**(30,886)**	**(2,593)**
Derivative financial assets/(liabilities), net and collateral deposits[(6)]	52	52	—	(9)	(10)	1
Financial securities[(7)]	3,527	3,326	201	1,499	1,370	129
Cash and cash equivalents	46,433	45,335	1,098	49,629	48,616	1,013
Cash and cash equivalents classified as held for sale	65	65	—	—	—	—
Net financial position	**23,234**	**25,705**	**(2,471)**	**17,640**	**19,090**	**(1,450)**

(1) Includes notes issued under the Medium Term Note Programme, or MTN Programme, and other notes for €18,003 million at December 31, 2022 (€16,990 million at December 31, 2021), Schuldschein for €485 million (€485 million at December 31, 2021) and other financial instruments issued in financial markets, mainly from South America financial services companies for €600 million (€445 million at December 31, 2021)
(2) Includes asset-backed financing, i.e., sales of receivables for which de-recognition is not allowed under IFRS, for €128 million at December 31, 2022 (€149 million at December 31, 2021), and debt for securitizations programs, for €1,527 million at December 31, 2022 (€844 million at December 31, 2021)
(3) Includes adjustments for purchase accounting and net (accrued)/deferred interest and other amortizing cost adjustments
(4) Net amount between industrial activities entities' financial receivables due from financial services entities (€1,116 million at December 31, 2022 and €550 million at December 31, 2021) and industrial activities entities' financial payables due to financial services entities (€198 million at December 31, 2022 and €427 million at December 31, 2021)
(5) Financial receivables due from FCA Bank and from the BPF JVs with Group Santander Consumer Finance and with BNP Paribas Personal Finance
(6) Fair value of derivative financial instruments (net positive €16 million at December 31, 2022 and net negative €42 million at December 31, 2021) and collateral deposits (€36 million at December 31, 2022 and €32 million at December 31, 2021)
(7) Excludes certain financial securities held pursuant to applicable regulations (€330 million at December 31, 2022 and €354 million at December 31, 2021) and non-liquid equity investments (€321 million at December 31, 2022 and €191 million at December 31, 2021) and other non-liquid securities (€143 million at December 31, 2022 and €173 million at December 31, 2021)

The €6.6 billion increase in Industrial net financial position at December 31, 2022, as compared to December 31, 2021, primarily reflects €10.8 billion of Industrial free cash flow, partially offset by a €3.4 billion dividend distributions including €130 million paid to GM in relation to the share repurchase transaction, as well as, and the €0.9 billion paid in the share repurchase transaction with GM.

Rating Agency updates

On March 18, 2022, S&P Global Ratings upgraded the long-term Issuer rating and Senior Unsecured Debt rating of Stellantis N.V. from “BBB -” to “BBB”, with the outlook on all ratings stable. The short-term credit rating was upgraded from “A-3” to “A-2”.

On August 4, 2022, Fitch Ratings upgraded Stellantis N.V.'s long-term Issuer Default Rating (“IDR”) and senior unsecured rating to from “BBB-“ to “BBB”, with the outlook on all ratings stable. The Short-Term IDR was upgraded from “F3” to “F2”.

On August 5, 2022, Moody's Investors Service upgraded the long-term issuer and senior unsecured instrument ratings of Stellantis N.V. from “Baa3” to “Baa2”, with the outlook on all ratings stable. Concurrently, Moody's upgraded the company's other short-term ratings from “(P)P-3“ to “(P)P-2”.

Refer to Note 22, *Debt* for further information regarding the Company's Capital Resources. Refer to Note 31, *Qualitative and quantitative information on financial risks* for further information regarding the Company’s qualitative and quantitative information on financial risks. Refer to *Contractual Obligations*, included elsewhere in this report, for further information on the Company’s significant contractual commitments as at December 31, 2022.

RISK MANAGEMENT

Risk Management

Risk management activities are an essential business driver to ensure the achievement of Stellantis' objectives and the sustainability of the business plan in the medium to long term. The Company has adopted an integrated approach aimed at strengthening the awareness, at every level of the organization, that adequate risk assessment and management can create and preserve value for Stellantis. A structured process has been implemented to integrate risks identification, assessment, monitoring and mitigation into business practices, and to provide Management with information necessary to take the appropriate decisions for achieving the strategic objectives.

Enterprise Risk Management (ERM) Framework

The Stellantis risk management framework is based on the principles of the 2017 COSO Framework "Enterprise Risk Management ("ERM") - Integrating with Strategy and Performance" and of the Dutch Corporate Governance Code.

In alignment with the COSO principles, the Stellantis ERM framework integrates risk management processes into the management of the Company's business with the aim of implementing the strategy, improving the performance measurement and creating long-term value.

The framework is integrated within the Stellantis organization and corporate governance and supports the protection of corporate assets, the efficiency and effectiveness of business processes, the reliability of financial information and the compliance with laws and regulations.

Stellantis ERM framework consists of five key components:

1. ERM Governance Structure

The risk management process is implemented across the whole organization. The Company leverages a risk management governance that involves several committees, regions and business functions, risk owners and ERM to manage business risks and to define the most effective strategies for their mitigation.

A Global Risk Management Committee ("GRMC") has been established to promote a culture of proactive risk management and monitoring throughout Stellantis and it is chaired by the Head of HR & Transformation. Other members are representatives from the legal, finance, internal audit, risk management and business functions. The GRMC provides guidance on the overall strategic risk management decisions and defines the Company's risk appetite.

The ERM team within the Risk Management function is responsible for designing and updating the Enterprise Risk Framework and working with business and global functions to support the identification, assessment, monitoring and reporting of risk exposures and their associated mitigation actions at a department level.

2. Strategy Setting and Risk Appetite

The alignment of business objectives to strategy is achieved through Stellantis governance committees which include senior management responsible for supporting risk governance. ERM is integrated into the strategic plan and business objectives through the GRMC members that are part of the governance committees. Through an integrated approach Stellantis governance committees support the Strategy Council that is ultimately responsible for risk management programs, providing guidance and direction, reviewing and approving the overall global Enterprise Risk Assessment results and ensuring accountability for effectively managing and mitigating significant risks. Status of risk monitoring and mitigating activities is assessed quarterly against the risk appetite and reported to the Strategy Council by the Head of Audit & Compliance. The Board of Directors has an oversight role over Stellantis' strategy and risk appetite.

Stellantis aligns its risk appetite to its business plan. Risk boundaries are set through Stellantis strategy, Code of Conduct, budgets and policies. Stellantis objectives are consistent with the organization's risk appetite.

Stellantis' risk appetite differs by risk category as shown below.

Risk category	Category description	Risk appetite
Strategic	Risk that may arise from the pursuit of Stellantis' business plan, from strategic changes in the business environment, and/ or from adverse strategic business decisions.	We are prepared to take risks in a responsible way that takes our stakeholders' interests into account and is consistent with our business plan.
Operational	Risk relating to internal processes, people and systems or external events (including legal and reputational risks).	We look to mitigate operational risks to the maximum extent based on cost/benefit considerations.
Financial	Risk relating to uncertainty of return and the potential for financial loss due to financial performance.	We seek capital market and other transactions to strengthen our financial position while allowing us to finance our operations on a consolidated global basis.
Compliance	Risk of non-compliance with relevant regulations and laws, internal policies and procedures.	We hold ourselves, as well as our employees, responsible for acting with honesty, integrity and respect, including complying with our Code of Conduct, applicable laws and regulations everywhere we do business.

3. Enterprise Risk Assessment

The enterprise risk assessment is the assessment of the main risks that may affect the achievement of Stellantis' strategy and its sustainability despite the risk mitigations in place. It is performed annually to identify and prioritize the major risks based on their criticality, with a bottom-up approach that leverages on the departments' risk assessment results, continuous risk assessment surveys, and targeted interviews conducted with a representative range of regional and business function managers.

Risk scenarios and evaluation are carried out using likelihood, impact and control effectiveness criteria.

The results of the assessment are consolidated on a risk mapping and compared with risk thresholds to determine priority and risk treatment methods. The risk mapping is then reviewed by executive leadership before presentation for approval to the Strategy Council and final validation by the Audit Committee.

4. Risk Mitigation and Monitoring

Major risks assigned to Strategy Council members, are detailed in more specific sub-risks and assigned to sub-risk owners in charge of deploying adequate risk mitigation measures. Key Risk Indicators ("KRI"s) have been identified for implementing quantitative metrics to measure and monitor sub-risks exposure in a more predictive way and to facilitate a timely reporting of risk change. An estimated maximum loss is also evaluated for specific sub-risks scenarios in order to provide an estimate of the potential financial impact in the event of risk materialization and to support the setting of risk appetite.

Progress made in implementing mitigation actions, as well as KRIs trends are monitored by the ERM team and reported to the Strategy Council periodically.

5. Risk Management Integration and Culture Dissemination

Management uses relevant information from both internal and external sources to support enterprise risk management. To support the business in pursuing continuous risk management process improvement and to promote a culture that proactively identify, evaluate and monitor risks, ERM relies on the support of a compliance champions network responsible for building or updating annually the risk assessment of their departments and supervising the relative risk mitigation action plans. Compliance Champions attend monthly meetings on ERM awareness programs.

Significant Risks Identified and Control Measures

Results of the annual risk assessment were consolidated into a Stellantis report for review with members of the GRMC before the presentation of the most significant risks to the Stellantis Strategy Council. Once validated, results were discussed with the Audit Committee, assisting the Board of Directors in their responsibility for strategic oversight of risk management activities. Control measures and mitigating actions were identified or enhanced to ensure risks were appropriately addressed.

The list of risks, control measures and mitigating actions presented below is not exhaustive. The sequence in which these risks and mitigating actions are described does not reflect any order of importance, likelihood of occurrence or control measures effectiveness.

Monitoring of risk mitigating actions and KRIs metrics are responsibility of the ERM team and compliance champions.

Risk Category	Risk	Risk Description	Control / Mitigating Actions
Strategic	Transition to Electrification	Main risk factors for transition to electrification include: the evolving nature of the regulatory environment, the higher prices of EV vehicles that could result in a sharp decrease of the automotive market share in western countries, the entrance of new competitors through the EV market that could reduce the automotive market share, and the dependence of EV market share on government incentives.	Cost-reduction strategies to make electric vehicle's price more affordable. Execution of battery/EDM (Electric Drive Module) roadmap to deliver performance at the right level. Secured access to key components and raw material by entering into long-term agreements or partnerships. Strategic partnerships to gain access to the latest innovations.
Operational	Supply Chain	Stellantis ability to manage critical supplies to prevent production interruptions, and the ability to manage limited availability and increased costs of commodities, energy and transportation.	To mitigate the risks related to potential unavailability of raw materials in the time required by production planning, Stellantis is: • analyzing the end-to-end value chain of supplies to identify possible critical resources; • monitoring global, political, environmental and economic events, to anticipate or identify events that could lead to supply chain disruption and implement timely mitigating actions; and • monitoring the suppliers' risk to mitigate disruption due to any kind of failure.

Risk Category	Risk	Risk Description	Control / Mitigating Actions
Compliance	Compliance	The increasing complexity of compliance requirements in different fields (e.g., corporate liability, market regulations, export controls, anti-bribery, emissions and vehicle safety, data privacy etc.) puts the organization at risk of non-compliance, that could result in potential fines, increased costs, and reputational damages.	Continued reduction of CO_2 emissions achieved through a combination of technologies aligned to the vehicle mix, consumer needs and regulatory framework in each market. Central coordination and regular oversight by senior management to monitor compliance with laws and regulatory requirements and to promote consistency in approach and process across Stellantis operations. Stellantis Code of Conduct clearly and affirmatively requires employees to report issues of non-compliance. The Stellantis Integrity Helpline program encourages employees, contractors, suppliers and dealers to report any issues that may concern vehicle safety, emissions or regulatory compliance. Stellantis continuously works to improve on emission compliance tools and implements these tools throughout the organization as appropriate.
Financial	Volatility of Macro-Economic Factors	The risk of being exposed to repeated increases and volatility in foreign exchange, raw material and energy prices, inflation and interest rates that could impact Stellantis plans and profitability. The impact of geopolitical tensions, protectionism and availability of natural resources on the global economy increases the criticality of this risk, and particularly its likelihood.	Risk is mitigated through: • natural and financial hedging strategies, • material substitution and circular economy strategy, • optimization in technical solutions to minimize the use of critical resources or find substitutions • constant monitoring of raw material market dynamics and of raw materials price trend.
Operational	Social Uprising	The extreme polarization and fragmentation of society in countries where Stellantis operates, exacerbated by geopolitical instability, financial inequality and disparate support of social networks, makes it more likely that unrest, violence or terrorist acts will occur in these countries that could impact on continuity and performance of Stellantis' operations.	Implementation of Stellantis business continuity policy and definition of business continuity and resumption plan at plant level to strengthen resilience in the event of acts that could endanger Stellantis' employees and operations.
Strategic	Carbon and Resources Neutrality	Risk due to the cost of potential plants and supply chain transformation to reach carbon neutrality considering also the carbon footprint of the entire value chain.	As part of the Dare Forward 2030 strategic plan, Stellantis committed to becoming the industry champion in climate change mitigation, reaching carbon net zero emissions by 2038 and with a 50 percent reduction by 2030.
Operational	Natural & Industrial Hazards	Global warming increases the likelihood of major climate events impacting production or distribution such as flash floods, tornadoes, hailstorms, heat waves or even water shortages.	Implementation and continuous monitoring of the prevention process and of the business continuity and resumption plan at plant level to reduce impact and reinforce resilience in case of fire, flood and other natural disasters.

Control measures and comprehensive mitigation actions for key global risks were monitored throughout the year by Stellantis senior leaders in the regions and in the business functions to ensure that these were relevant and sufficient, under the oversight of the related global leaders. This approach allowed Stellantis to address risks on a timely basis and ensure effectiveness of the control measures taken. A more detailed description of these risks and other operational risks is provided in the paragraph Risk Factors.

Improvements in the overall Stellantis risk management process

We will benchmark processes with peer companies and explore opportunities for improvement, in order to strengthen and improve ERM Governance. We will also continue engaging the business in reviewing our management and monitoring activities for top-risks throughout Stellantis.

Key Risk Indicators will be reviewed to ensure their consistency with the identified risks and KRI trends will be analyzed to identify needs for further remediation plans.

Risk Factors

We face a variety of risks in our business. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties that we are unaware of, or that we currently believe to be immaterial, may also become important factors that affect us.

Risks Related to Our Business, Strategy and Operations

If our vehicle shipment volumes deteriorate further, particularly shipments of pickup trucks and larger sport utility vehicles in the U.S. market, and overall shipments of vehicles in the European market, our results of operations and financial condition will suffer.

As is typical for automotive manufacturers, we have significant fixed costs primarily due to our substantial investment in product development, property, plant and equipment and the requirements of collective bargaining agreements and other applicable labor relations regulations. As a result, changes in certain vehicle shipment volumes could have a disproportionately large effect on our profitability. Our overall vehicle shipment volumes in 2022 were negatively impacted by supply chain constraints, European logistics challenges and the continuing effects of unfilled semiconductor orders.

Our profitability in North America, a region which contributed a majority of our profits and approximately 48 percent of our revenues in 2022, is particularly dependent on demand for pickup trucks and larger SUVs. Pickup trucks and larger SUVs have historically been more profitable than other vehicles and accounted for approximately 78 percent of our total U.S. retail vehicle shipments in 2022. Our profitability in North America is expected to continue to depend on demand for pickup trucks and larger SUVs in North America. Accordingly, a shift in consumer demand away from these vehicles within the North America region, and towards compact and mid-size passenger cars, whether in response to higher fuel prices, lower disposable income due to recession, higher borrowing costs or other factors, could adversely affect our profitability.

We are also significantly exposed to a further slowdown or downturn in economic conditions in Europe, as well as enhanced competition in, or a deterioration of, the European vehicle market, that would trigger a decline in vehicle shipments in that market. In 2022, we generated a significant percentage of our profits and approximately 35 percent of our revenues in the Enlarged Europe region.

In addition, our larger vehicles, such as SUVs, tend to be priced higher and be more profitable on a per vehicle basis than smaller vehicles, both across and within vehicle lines. In recent years, the profitability of these models has been supported by strong consumer preference for SUVs, but there is no guarantee that this trend will continue in the future, particularly in light of macroeconomic headwinds that are dampening consumer confidence. For additional information on factors affecting our vehicle profitability, see "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Trends, Uncertainties and Opportunities – Vehicle Profitability*".

Moreover, we operate with negative working capital, as we generally receive payment for vehicles within a few days of shipment and there is a lag between the time when parts and materials are received from suppliers and when we pay for such parts and materials. As a result, in periods in which vehicle shipments decline materially, we may suffer a significant negative impact on cash flow and liquidity as we continue to pay suppliers for components purchased in a high-volume environment during a period in which we receive lower proceeds from vehicle shipments. If vehicle shipments decline, or if they were to fall short of our assumptions, due to downturn in economic conditions, changes in consumer confidence, geopolitical events, inability to produce sufficient quantities of certain vehicles, enhanced competition in certain markets, loss of market share, limited access to financing or other factors, such decline or shortfall could have a material adverse effect on our business, financial condition and results of operations.

Our business may be adversely affected by global financial markets, general economic conditions, enforcement of government incentive programs, and geopolitical volatility as well as other macro developments over which we have little or no control.

With operations worldwide, our business, financial condition and results of operations may be influenced by macroeconomic factors within the various countries in which we operate, including changes in gross domestic product, the level of consumer and business confidence, changes in interest rates for, or availability of, consumer and business credit, the rate of unemployment, foreign currency controls and changes in exchange rates, as well as geopolitical risks, such as government instability, social unrest, the rise of nationalism and populism and disputes between sovereign states.

We are also subject to other risks, such as increases in energy and fuel prices and fluctuations in prices of raw materials, including as a result of tariffs or other protectionist measures, changes to vehicle purchase incentive programs, and contractions in infrastructure spending in the jurisdictions in which we operate. In addition, these factors may also have an adverse effect on our ability to fully utilize our industrial capacity in some of the jurisdictions in which we operate. Several of the markets in which we operate are entering a challenging macroeconomic climate with recessions probable in the near term. Consumers are facing challenging cost inflation, negative real wages and higher borrowing rates, which may translate into lower sales, particularly in the more profitable segments of our product mix. Unfavorable developments in any one or a combination of these risks (which may vary from country to country) could have a material adverse effect on our business, financial condition and results of operations and on our ability to execute planned strategies. For further discussion of risks related to the automotive industry, see "*Risk Factors—Risks Related to the Industry in which We Operate*".

We have operations in a number of emerging markets, including Turkey, Brazil, Argentina, India and Russia and are particularly susceptible to risks relating to local political conditions in these markets. For example, although we have not experienced a direct material impact on our business, financial condition or results of operations from the ongoing Russia-Ukraine military conflict, we have been significantly impacted by the global economic conditions that have followed, including substantially increased energy and commodity prices, disruptions to logistics and supply chains, and other costs. The long term impacts of the conflict remain uncertain.

We are also subject to import and/or export restrictions (including the imposition of tariffs on raw materials and components we procure and on the vehicles we sell), and compliance with local laws and regulations in these markets. For example, in Brazil, we have historically received certain tax benefits and other government grants, that favorably affected our results of operations which, if not further extended, would expire at the end of 2025. Expiration of these tax benefits and government grants without their renewal or any change in the amount of such tax benefits or government grants could have a material adverse effect on our business, financial condition and results of operations.

We are also subject to other risks inherent to operating globally. For a discussion of certain tax-related risks related to our operating globally, see "*Risk Factors—Risks Related to Taxation—We and our subsidiaries are subject to tax laws and treaties of numerous jurisdictions. Future changes to such laws or treaties could adversely affect us and our subsidiaries and our shareholders and holders of special voting shares. In addition, the interpretation of these laws and treaties is subject to challenge by the relevant governmental authorities*". European developments in data and digital taxation may also negatively affect some of our autonomous driving and infotainment connected services. Unfavorable developments in any one or a combination of these risk areas (which may vary from country to country) could have a material adverse effect on our business, financial condition and results of operations and on our ability to execute planned strategies.

We are also significantly impacted by tariffs and other barriers to trade imposed between governments in various regions, in particular the U.S. and its trading partners, China and the European Union. For example, we manufacture a significant number of our vehicles outside the U.S. (particularly in Canada, Mexico and Italy) for import into the U.S. We also manufacture vehicles in the U.S. that are exported to China. Tariffs or duties that impact our products could reduce consumer demand, make our products less profitable or the cost of required raw materials more expensive or delay or limit our access to these raw materials, each of which could have a material adverse effect on our business, financial condition and results of operations. In addition, an escalation in tariff or duty activity between the U.S. and its major trading partners could negatively impact global economic activity, which could in turn reduce demand for our products.

We may fail to realize some or all of the anticipated benefits of the merger.

Before the closing of the merger in January 2021, FCA and PSA operated independently as separate companies. The success of the merger depends, in part, on our ability to realize the anticipated cost savings, growth opportunities and other benefits from combining the businesses. Although significant progress has been made, the achievement of the anticipated benefits of the merger continues to be subject to a number of uncertainties, including general competitive factors and other challenges in the marketplace and whether we are able to integrate the businesses of FCA and PSA in an efficient and effective manner. Failure to achieve these anticipated benefits could result in increased costs, decreases in our revenues and diversion of management's time and energy, and could materially impact our business, cash flows, financial condition or results of operations. If we are not able to successfully achieve these objectives, the anticipated cost savings, growth opportunities and other benefits that we expect to achieve as a result of the merger may not be realized fully, or at all, or may take longer than expected to realize. An inability to realize the full extent of the anticipated benefits of the merger, as well as any delays encountered in the integration process, could have an adverse effect on our business, cash flows, financial condition or results of operations, which may affect the value of our common shares.

Our future performance depends on our ability to offer innovative, attractive and relevant products.

Our success depends on, among other things, our ability to develop innovative, high-quality products that are attractive to consumers and provide adequate profitability. We may not be able to effectively compete with other automakers with regard to electrification, autonomous driving, mobility, artificial intelligence and other emerging trends in the industry.

In March 2022, we announced our Dare Forward 2030 long-term strategy and confirmed our plans to make significant investments in electrification and set aggressive targets for future low emission vehicle sales. If we are unable to deliver a broad portfolio of electrified vehicles that are competitively priced and meet consumer demands, if consumers prefer our competitors' electrified vehicles or if the adoption of electrified vehicles develops slower than we expect, we may experience a material adverse effect on our business, financial condition and results of operations. We face challenges developing electrified vehicles with increased vehicle range and battery energy density and we may not successfully invest in new technologies that enable us to develop competitive electrified vehicles relative to our peers. In addition, the availability of BEVs and PHEVs has fueled highly competitive pricing among automakers in order to win market share, which may significantly and adversely affect our profits with respect to the sale of such vehicles. Furthermore, technological capabilities acquired through costly investment may prove short-lived, for example, if technology and vehicle capability progresses more quickly than expected. Vehicle electrification may also negatively affect after-sales revenues.

In certain cases, the technologies that we plan to employ are not yet commercially practical and depend on significant future technological advances by us, our partners and suppliers. These advances may not occur in a timely or feasible manner, we may not obtain rights to use these technologies and the funds that we have budgeted or expended for these purposes may not be adequate. Further, our competitors and others are pursuing similar and other competing technologies, and they may acquire and implement similar or superior technologies sooner than we will or on an exclusive basis or at a significant cost advantage. Even where we are able to develop competitive technologies, we may not be able to profit from such developments as anticipated.

Further, as a result of the extended product development cycle and inherent difficulty in predicting consumer acceptance, a vehicle that is expected to be attractive may not generate sales in sufficient quantities and at high enough prices to be profitable. It can take several years to design and develop a new vehicle, and a number of factors may lengthen that schedule. For example, if we determine that a safety or emissions defect, mechanical defect or non-compliance with regulation exists with respect to a vehicle model prior to retail launch, the launch of such vehicle could be delayed until we remedy the defect or non-compliance. Various elements may also contribute to consumers' acceptance of new vehicle designs, including competitors' product introductions, fuel prices, general economic conditions and changes in consumer preferences. In addition, vehicles we develop in order to comply with government regulations, particularly those related to fuel efficiency, greenhouse gas and tailpipe emissions standards, may not be attractive to consumers or may not generate sales in sufficient quantities and at high enough prices to be profitable.

If we fail to develop products that contain desirable technologies and are attractive to and accepted by consumers, the residual value of our vehicles could be negatively impacted. In addition, the increasing pace of inclusion of new innovations and technologies in our and our competitors' vehicles could also negatively impact the residual value of our vehicles. A deterioration in residual value could increase the cost that consumers pay to lease our vehicles or increase the amount of subvention payments that we make to support our leasing programs.

The failure to develop and offer innovative, attractive and relevant products on a timely basis could have a material adverse effect on our business, financial condition and results of operations.

We may continue to experience a negative impact on our operations as a result of unfilled semiconductor orders.

Our ability to manufacture vehicles depends on continued access to semiconductors and components that incorporate semiconductors and we depend upon third parties to supply these semiconductors and related components. Many of the key semiconductors used in our vehicles come from limited or single sources of supply.

In 2020, we began experiencing a significant semiconductor supply shortage as a result of unfilled orders, which has resulted in increased chip delivery lead times, reduced vehicle production volumes, and increased costs to source available semiconductors. Our overall vehicle shipment volumes in 2021 were significantly impacted by unfulfilled semiconductor orders, representing a loss of approximately 20 percent of our planned production. The issue persisted in 2022, particularly in North America and Enlarged Europe.

To the extent such unfilled orders continue or worsen, and we are unable to mitigate its effects, our ability to deliver planned quantities of our vehicles will continue to be adversely affected, which may have a material adverse effect on our results of operations and financial condition. See "*Management's Discussion and Analysis of the Financial Condition and Results of Operations*" for further discussion of the effect that unfilled semiconductor orders has had on our operations.

The coronavirus (COVID-19) pandemic could continue to disrupt the manufacture and sale of our products and the provision of our services and adversely impact our business.

On March 11, 2020, the COVID-19 outbreak was declared a global pandemic by the World Health Organization, leading to government-imposed quarantines, travel restrictions, "stay-at-home" orders and similar mandates for many individuals to substantially restrict daily activities and for businesses to curtail or cease normal operations.

COVID-19 related disruptions have had a significant negative impact on and, if repeated, may continue to negatively impact, our supply chain and the availability and price at which we are able to source components and raw materials globally, which could reduce the number of vehicles we will be able to sell. Furthermore, the long-term impact of the COVID-19 pandemic may lead to financial distress for our suppliers or dealers, as a result of which they may have to permanently discontinue or substantially reduce their operations. These and other factors arising from the COVID-19 pandemic have had, and could continue to have, a material adverse impact on our business, financial condition and results of operations.

Although the scale and efficacy of vaccination programs have led in 2022 to significantly lower mortality rates and therefore a lifting of restrictions in many countries, future developments of the pandemic including the risk of new variants resistant to vaccines cannot be predicted. The extent to which the COVID-19 pandemic may impact our future results will depend on the scale, duration, severity and geographic reach of future developments, which are highly uncertain and cannot be predicted. In the event of a significant pandemic resurgence, the ultimate impact for us will depend on the length and severity of restrictions on business and individuals, the pandemic's impact on customers, dealers, and suppliers, the impact of any permanent behavioral changes that the pandemic may cause, including with respect to remote work, and any future actions to mitigate the impact of the pandemic, whether government-mandated or elected by us.

The future impact of COVID-19 developments will be greater if the regions and markets that are most profitable for us are particularly affected. See "*If our vehicle shipment volumes deteriorate further, particularly shipments of pickup trucks and larger sport utility vehicles in the U.S. market, and shipments of vehicles in the European market, our results of operations and financial condition will suffer*". These disruptions could have a material adverse effect on our business, financial condition and results of operations. In addition, the COVID-19 pandemic may exacerbate many of the other risks described in this report, including, but not limited to, the general economic conditions in which we operate, increases in the cost of raw materials and components and disruptions to our supply chain and liquidity.

Our success largely depends on the ability of our management team to operate and manage effectively and our ability to attract and retain experienced management and employees.

Our success largely depends on the ability of our senior executives and other members of management to effectively manage the company and individual areas of the business. Our management team is critical to the execution of our direction and the implementation of our strategies. If members of our management team choose to leave Stellantis, we may not be able to replace these individuals with persons of equivalent experience and capabilities.

Attracting and retaining qualified and experienced personnel in each of our regions is critical to our competitive position in the automotive industry. For example, our ability to attract and retain qualified software engineers is an important component of our Dare Forward 2030 strategy.

An additional reduction in available labor, caused by the COVID-19 pandemic or as a result of general macroeconomic factors, could further challenge our ability to attract and retain key personnel. If we are unable to find adequate replacements or to attract, retain and incentivize senior executives, other key employees or new qualified personnel, such inability could have a material adverse effect on our business, financial condition and results of operations.

Our future performance depends on our ability to successfully manage the industry-wide transition from internal combustion engines to full electrification.

Regulatory actions and developing customer preferences in several of our principal markets are accelerating the industry's transition toward BEVs and away from internal combustion engines. Our performance will depend on our ability to develop and deliver new products and technologies that are responsive to this trend, while continuing to satisfy demand for vehicles with internal combustion engines. Therefore, our business, financial condition and results of operations as we manage the transition from internal combustion engines will depend in part on our ability to successfully allocate resources between development and delivery of BEVs and production of internal combustion engines. In particular, because our profitability in North America is expected to continue to depend on demand for pickup trucks and larger SUVs, our performance will depend on our ability to continue to satisfy demand for pickup trucks and larger SUVs with internal combustion engines in North America while developing new BEVs, or BEV versions of existing nameplates, that will be responsive to anticipated changes in consumer preferences in that market. The process of designing and developing new technology, products and services is costly and uncertain and requires extensive capital investment and the ability to retain and recruit scarce talent, and we may not be successful in our efforts to develop new technologies and products that are attractive to consumers. If we are unable to achieve our electrification goals, we may be unable to earn a sufficient return on these investments, which could have a material adverse effect on our business, financial condition and results of operations.

In the short to medium term, the expected economic slowdown and concomitant pressure on customers' spending may disproportionately impact BEVs, which are significantly more expensive than internal combustion engine vehicles. This may adversely affect our sales of those vehicles that we are striving to bring to market.

In addition, we operate in a very competitive industry with our competitors routinely introducing new and improved vehicle models and features designed to meet rapidly evolving consumer expectations. As the automotive industry transitions away from internal combustion engines and toward fully electrified vehicles, there could be increased opportunities for our competitors, including new entrants, such as non-OEM startup technology companies that may enter into alliances with our competitors, as well as startup OEMs, to obtain market share by introducing disruptive solutions that are attractive to consumers. Our competitors' integration with non-OEM startup technology companies or the emergence of new significant OEM competitors could have a material adverse effect on our business, financial condition and results of operations. See "*The automotive industry is highly competitive and cyclical, and we may suffer from those factors more than some of our competitors.*"

Our ability to transition successfully and profitably toward BEVs is also dependent on the development and implementation of government policies that support electrification in the markets in which we operate. If governments in the markets in which we operate do not establish policies that support electrification, including incentives that support consumer affordability and awareness, development of charging infrastructure and strengthening of the battery supply chain, this could have a material adverse effect on our business, financial condition and results of operations.

Labor laws and collective bargaining agreements with our labor unions could impact our ability to increase the efficiency of our operations, and we may be subject to work stoppages in the event we are unable to agree on collective bargaining agreement terms or have other disagreements.

Substantially all of our production employees are represented by trade unions, covered by collective bargaining agreements or protected by applicable labor relations regulations that may restrict our ability to modify operations and reduce personnel costs quickly in response to changes in market conditions and demand for our products. These and other provisions in our collective bargaining agreements may impede our ability to restructure our business successfully in order to compete more effectively, especially with automakers whose employees are not represented by trade unions or are subject to less stringent regulations, which could have a material adverse effect on our business, financial condition and results of operations. Additionally, our collective bargaining agreements with the UAW in the U.S. and Unifor in Canada will both expire in 2023. We may be subject to work stoppages in the event that we and our labor unions are unable to agree on collective bargaining agreement terms or have other disagreements. Any such work stoppage could have a material adverse effect on our business, financial condition and results of operations.

Our reliance on partnerships in order to offer consumers and dealers financing and leasing services exposes us to risks.

Unlike many of our competitors, we do not own and operate a wholly-owned finance company dedicated solely to our mass-market vehicle operations in the majority of key markets in Europe, Asia and South America. We have instead partnered with large international banks through joint ventures or commercial agreements, in order to provide financing to our dealers and retail consumers. In addition, although we are in the process of establishing a captive finance company in the U.S., we do not yet have a fully operational wholly-owned provider in that market. Our lack of a fully operational wholly-owned finance company in the U.S. and other key markets may increase the risk that our dealers and retail consumers will not have access to sufficient financing on acceptable terms, which may adversely affect our vehicle sales in the future.

Furthermore, many of our competitors are better able to implement financing programs designed to maximize vehicle sales in a manner that optimizes profitability for them and their finance companies on an aggregate basis. Since our ability to compete depends on access to appropriate sources of financing for dealers and retail consumers, our reliance on partnerships in those markets could have a material adverse effect on our business, financial condition and results of operations.

Potential capital constraints may impair the financial services providers' ability to provide competitive financing products to our dealers and retail consumers. For example, any financial services provider, including our joint ventures and controlled finance companies, will also face other demands on its capital, including the need or desire to satisfy funding requirements for dealers or consumers of our competitors as well as liquidity issues relating to other investments. Furthermore, they may be subject to regulatory changes that may increase their cost of capital or capital requirements.

To the extent that a financial services provider is unable or unwilling to provide sufficient financing at competitive rates to our dealers and retail consumers, such dealers and retail consumers may not have sufficient access to financing to purchase or lease vehicles. As a result, our vehicle sales and market share may suffer, which could have a material adverse effect on our business, financial condition and results of operations.

Our establishment of a captive financial services company in the U.S. will subject us to the risks inherent in that business.

In 2021, we completed the acquisition of a financial services company in the U.S., renamed Stellantis Financial Services US Corp., and in 2022 we began the process to grow it into a full-service captive finance arm that will provide U.S. customers, dealers and partners with a complete range of financing options. The growth and maintenance of a U.S. captive financial services company will subject us to the risks inherent in such business, including reliance on public debt markets to provide the capital necessary to support our financing programs, underwriting risk, default risk, compliance with laws and regulations related to consumer lending and competition with other consumer finance companies and third-party financial institutions.

We face risks related to changes in product distribution methods.

We are exposed to risks inherent in certain new methods of distribution, including the digitalization of points of sale and, more broadly, the transformation of our sales network in order to respond to developing trends in the automotive industry such as consumers' shift towards online sales, and the use of digital tools that are altering the relationship between brands and customers.

Stellantis is working on the development of online sales, now offered in most European countries as well as North America. Delays in the digital transformation of distribution methods, both at points of sale and in sales networks, as well as increased costs, whether as a result of the transformation of our sales network or new distribution methods, could impact our ability to effectively compete with other automakers. In addition, our employees may lack the necessary skills or training to implement or utilize such new distribution methods.

In 2023, Stellantis will also begin progressively implementing a retailer distribution model in Europe that makes dealers "genuine agents" and is intended to enable lower distribution costs, provide price transparency and introduce a more seamless customer experience. These and other changes in our product distribution methods may result in significant litigation with our dealer network, lengthen the timing or pattern of when we recognize revenue and increase our working capital requirements.

If there is a delay or failure to implement new distribution methods or such transitions are not successful, there may be a material adverse effect on our business, financial condition and results of operations.

A significant security breach compromising the electronic control systems contained in our vehicles could damage our reputation, disrupt our business and adversely impact our ability to compete.

Our vehicles, as well as vehicles manufactured by other original equipment manufacturers ("OEMs"), contain complex systems that control various vehicle processes including engine, transmission, safety, steering, brakes, window and door lock functions. These electronic control systems, which are increasingly connected to external cloud-based systems, are susceptible to cybercrime, including threats of intentional disruptions, loss of control over the vehicle, loss of functionality or services and theft of personal information. These disruptions are likely to increase in terms of sophistication and frequency as the level of connectivity and autonomy in our vehicles increases. In addition, we may rely on third parties for connectivity and automation technology and services, including for the collection of our customers' data. These third parties could unlawfully resell or otherwise misuse such information, or suffer data breaches. A significant malfunction, disruption or security breach compromising the electronic control systems contained in our vehicles could damage our reputation, expose us to significant liability and could have a material adverse effect on our business, financial condition and results of operations.

A significant malfunction, disruption or security breach compromising the operation of our information technology systems could damage our reputation, disrupt our business and adversely impact our ability to compete.

Our ability to keep our business operating effectively depends on the functional and efficient operation of our information, data processing and telecommunications systems, including our vehicle design, manufacturing, inventory tracking and billing and payment systems, as well as other central information systems and applications, employee workstations and other IT equipment. Our vehicles are also increasingly connected to external cloud-based systems while our industrial facilities have become more computerized. Our systems are susceptible to cybercrime and are regularly the target of threats from third parties, which could result in data theft, loss of control of data processed in an external cloud, compromised IT networks and stoppages in operations. In addition, the majority of our office personnel moved to a "remote work" model in response to the COVID-19 pandemic and full- or part-time remote work is now expected to be a permanent option for this personnel. Remote work relies heavily on the use of remote networking and online conferencing services, which exposes us to additional cybersecurity risks.

A significant or large-scale malfunction or interruption of any one of our computer or data processing systems, including through the exploitation of a weakness in our systems or the systems of our suppliers or service providers, could have a material adverse effect on our ability to manage and keep our manufacturing and other operations running effectively, and may damage our reputation. The computer systems of several of our suppliers and service providers have been the subject of unauthorized access but, to-date we have not been materially impacted by these events. A malfunction or security breach that results in a wide or sustained disruption to our business could have a material adverse effect on our business, financial condition and results of operations.

In addition to supporting our operations, our systems collect and store confidential and sensitive data, including information about our business, consumers and employees. As technology continues to evolve, it is expected that we will collect and store even more data in the future and that our systems will increasingly use remote communication features that are sensitive to both willful and unintentional security breaches. Much of our value is derived from our confidential business information, including vehicle design, proprietary technology and trade secrets, and to the extent the confidentiality of such information is compromised, we may lose our competitive advantage and our vehicle shipments may suffer. We also collect, retain and use personal information, including data gathered from consumers for product development and marketing purposes, and data obtained from employees. In the event of a breach in security that allows third parties access to this personal information, we will be subject to a variety of laws on a global basis that could require us to provide notification to the data owners and subject us to lawsuits, fines and other means of regulatory enforcement.

For example, the General Data Protection Regulation (Regulation (EU) 2016/679) (the “GDPR”) has increased the stringency of European Union data protection requirements and related penalties. Non-compliance with the GDPR can result in fines of the higher of €20 million or four percent of annual worldwide revenue. In addition, the California Consumer Privacy Act of 2018 became effective in 2020 and provides California residents with new data privacy rights. Several other U.S. states, and additional countries where we do business, are considering adopting laws and regulations imposing obligations regarding the handling of personal data. Complying with any new data protection-related regulatory requirements could force us to incur substantial expenses or require us to change our business practices in a manner that has a material adverse effect on our business, financial condition and results of operations.

Our reputation could also suffer in the event of a data breach, which could cause consumers to purchase their vehicles from our competitors. Ultimately, any significant compromise in the integrity of our data security could have a material adverse effect on our business, financial condition and results of operations.

Our reliance on joint arrangements in certain markets may adversely affect the development of our business in those regions. In addition, the termination of our joint arrangement with GAC in China may adversely affect the development of our business in China.

We operate, or expect to expand our presence, in markets, such as China and India, through partnerships and joint ventures. For instance, we operate a joint venture in China with Dongfeng Motor Group, namely Dongfeng Peugeot Citroën Automobile (“DPCA”), which manufactures vehicles under the Dongfeng Peugeot and Dongfeng Citroën brands in China, and Dongfeng Peugeot Citroën Automobile Sales Co, which markets the vehicles produced by DPCA in China. In India, we have a joint operation with TATA Motors Limited for the production of certain of our vehicles, engines and transmissions and joint ventures with CK Birla Group for the manufacture of vehicles and powertrains.

Although our sales in the markets where these arrangements exist are currently limited, our ability to grow in these markets is important to our strategy and any issues with these arrangements may adversely affect those growth prospects. Our reliance on joint arrangements to enter or expand our presence in some markets may expose us to the risk of disagreement with our joint arrangement partners and the need to divert management resources to oversee these arrangements. Further, as these arrangements require cooperation with third party partners, these joint arrangements may not be able to make decisions as quickly as we would if we were operating on our own or may take actions that are different from what we would do on a standalone basis in light of the need to consider our partners’ interests. As a result, we may be less able to respond timely to changes in market dynamics, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, in July 2022, we announced the termination of the GAC-Stellantis joint venture with Guangzhou Automobiles Group Co., Ltd., which locally produced the Jeep Cherokee, Jeep Renegade, Jeep Compass, Jeep Grand Commander and Jeep Commander PHEV primarily for the Chinese market. We expect to continue to market the Jeep brand in China, but the termination of GAC-Stellantis joint venture may adversely affect the development of the Jeep brand in China in the short-term and could adversely affect consumer perceptions about the Jeep brand in the medium-term.

Risks Related to the Industry in which We Operate

Vehicle retail sales depend heavily on affordable interest rates and availability of credit for vehicle financing and a substantial increase in interest rates could adversely affect our business.

In certain regions, including Europe and North America, financing for new vehicle sales had recently been available at relatively low interest rates for several years due to, among other things, expansive government monetary policies. In response to the inflationary surge in Europe, in the UK, in the U.S. and elsewhere, central banks have aggressively increased interest rates and such increases are being reflected in rates across credit markets, including consumer credit. More expensive vehicle financing may make our vehicles less affordable to retail consumers or steer consumers to less expensive vehicles that would be less profitable for us, adversely affecting our financial condition and results of operations. Additionally, if consumer interest rates continue to increase substantially or if financial service providers tighten lending standards or restrict their lending to certain classes of credit, consumers may not desire or be able to obtain financing to purchase or lease our vehicles. If recent and ongoing increases in inflation in key markets persist, there could be subsequent increases in the cost of borrowing and the availability of affordable credit for vehicle financing. As a result, a substantial increase in consumer interest rates or tightening of lending standards could have a material adverse effect on our business, financial condition and results of operations.

We face risks associated with increases in costs, disruptions of supply or shortages of raw materials, parts, components and systems used in our vehicles.

We use a variety of raw materials in our business, including steel, aluminum, lead, polymers, elastomers, resin and copper, and precious metals such as platinum, palladium and rhodium, as well as electricity and natural gas. Also, as we implement various electrified propulsion system applications throughout our portfolio, we will also depend on a significant supply of lithium, nickel and cobalt, which are used in lithium-ion batteries.

The prices for these raw materials fluctuate, and market conditions can affect our ability to manage our costs. Increased market power of raw material suppliers may contribute to such prices increasing. Additionally, as our production of electric vehicles increases, we will require substantially greater access to lithium cells and related raw materials. Accordingly, we may face shortages of these components and related raw materials and be forced to pay higher prices or, if we are unable to obtain them, reduce or suspend production of the impacted vehicles.

Substantial increases in the prices for raw materials would increase our operating costs and could reduce profitability if the increased costs cannot be offset by higher vehicle prices or productivity gains. In particular, certain raw materials are sourced from a limited number of suppliers and from a limited number of countries, particularly those needed in catalytic converters and lithium-ion batteries. From time to time these may be susceptible to supply shortages or disruptions. In addition, our industrial efficiency will depend in part on the optimization of the raw materials and components used in the manufacturing processes. If we fail to optimize these processes, we may face increased production costs.

We are also exposed to the risk of price fluctuations and supply disruptions and shortages, including due to supplier disputes, particularly with regard to warranty recovery claims, supplier financial distress, tight credit markets, trade restrictions, tariffs, natural or man-made disasters, epidemics or pandemics of diseases, or production difficulties. For example, we experienced a significant increase in the cost of raw materials and a shortage of certain key components in 2021 and these costs continued to increase in 2022. More broadly, inflationary pressures in many of the markets in which we operate have continued in 2022 at historically high levels in several markets and there is no certainty that the monetary policy response in these markets will effectively reduce inflation on a timely basis. Inflation has resulted in increased wages, fuel, freight and other costs and this trend may continue. To the extent we are unable to recoup related cost increases through pricing actions, our profits will decrease. In addition, even if we are able to increase prices, there may be a time lag between our cost increases and price adjustments, which may cause volatility in our earnings and cash flows. To the extent such inflation continues, increases, or both, it may reduce our margins and have a material adverse effect on our financial performance.

It is not possible to guarantee that we will be able to maintain arrangements with suppliers that assure access to these raw materials at reasonable prices in the future. Fluctuations in the price of parts and components can adversely affect our costs and profitability, and any such effect may be material. Further, trade restrictions and tariffs may be imposed, leading to increases in the cost of raw materials and delayed or limited access to purchases of raw materials, each of which could have a material adverse effect on our business, financial condition and results of operations.

Any interruption in the supply or any increase in the cost of raw materials, parts, components and systems could negatively impact our ability to achieve our vehicle shipment objectives and profitability and delay commercial launches. The potential impact of an interruption is particularly high in instances where a part or component is sourced exclusively from a single supplier. Long-term interruptions in the supply of raw materials, parts, components and systems may result in a material impact on vehicle production, vehicle shipment objectives, and profitability. Cost increases which cannot be recouped through increases in vehicle prices, or countered by productivity gains, could have a material adverse effect on our business, financial condition and results of operations. This risk can increase during periods of economic uncertainty such as the crisis resulting from the outbreak of COVID-19, as a result of regional economic disruptions such as that experienced in South America due to the deterioration in Argentina's economic condition in recent years or, beginning in early 2022, the Russia-Ukraine conflict. With respect to the potential impact of the outbreak of COVID-19 on our supply chain, see "*—The coronavirus (COVID-19) pandemic could continue to disrupt the manufacture and sale of our products and the provision of our services and adversely impact our business.*"

The automotive industry is highly competitive and cyclical, and we may suffer from those factors more than some of our competitors.

Substantially all of our revenues are generated in the automotive industry, which is highly competitive and cyclical, encompassing the production and distribution of passenger cars, light commercial vehicles and components and systems. We face competition from other international passenger car and light commercial vehicle manufacturers and distributors and components suppliers in Europe, North America, Latin America, the Middle East, Africa and the Asia Pacific region. These markets are all highly competitive in terms of product quality, innovation, the introduction of new technologies, response to new regulatory requirements, pricing, fuel economy, reliability, safety, consumer service and financial or software services offered. Some of our competitors are also better capitalized than we are and command larger market shares, which may enable them to compete more effectively in these markets. In addition, we are exposed to the risk of new entrants in the automotive market, which may have technological, marketing and other capabilities, or financial resources, that are superior to ours and of other traditional automobile manufacturers and may disrupt the industry in a way that is detrimental to us. In particular, we are exposed to risks from non-OEM startup technology companies that may enter into alliances with our competitors and enable them to introduce disruptive solutions, as well as risks from startup OEMs that have emerged in recent years as a result of the increased flow of capital toward potentially disruptive OEMs. Increased competition in our key U.S. pickup truck market may be particularly harmful to us.

If our competitors are able to successfully integrate with one another or enter into significant partnerships with non-OEM technology companies, or if new competitors emerge as a result of the increased flow of capital toward potentially disruptive OEMs, and we are not able to adapt effectively to increased competition, our competitors' integration or the emergence of new significant competitors could have a material adverse effect on our business, financial condition and results of operations. Our business, financial condition and results of operations may also experience a material adverse impact from the potential expansion of the Chinese automotive industry into European and U.S. markets and related competition given the lower costs of production for Chinese vehicle manufacturers.

In the automotive business, sales to consumers and fleet customers are cyclical and subject to changes in the general condition of the economy, the readiness of consumers and fleet customers to buy and their ability to obtain financing, as well as the possible introduction of measures by governments to stimulate demand, particularly related to new technologies (for example, technologies related to compliance with evolving emissions regulations). See "— *Our business may be adversely affected by global financial markets, general economic conditions, enforcement of government incentive programs, and geopolitical volatility as well as other macro developments over which we have little or no control.*"

The automotive industry is characterized by the constant renewal of product offerings through frequent launches of new models and the incorporation of new technologies in those models. A negative trend in the automotive industry or our inability to adapt effectively to external market conditions, coupled with more limited capital than our principal competitors, could have a material adverse effect on our business, financial condition and results of operations.

Intense competition, excess global manufacturing capacity and the proliferation of new products being introduced in key segments is expected to continue to put downward pressure on inflation-adjusted vehicle prices and contribute to a challenging pricing environment in the automotive industry for the foreseeable future. In the event that industry shipments decrease and overcapacity intensifies, our competitors may attempt to make their vehicles more attractive or less expensive to consumers by adding vehicle enhancements, providing subsidized financing or leasing programs, or by reducing vehicle prices whether directly or by offering option package discounts, price rebates or other sales incentives in certain markets. Manufacturers in countries that have lower production costs may also choose to export lower-cost automobiles to more established markets. In addition, our profitability depends in part on our ability to adjust pricing to reflect increasing technological costs (see "*—Our future performance depends on our ability to offer innovative, attractive and fuel efficient products*"). An increase in any of these risks could have a material adverse effect on our business, financial condition and results of operations.

We are subject to risks related to natural and industrial disasters, terrorist attacks and climatic or other catastrophic events.

Our production facilities and storage facilities for finished vehicles, as well as the production and storage facilities of our key suppliers, are subject to risks related to natural disasters, such as earthquakes, fires, floods, hurricanes, other climatic phenomena, environmental disasters and other events beyond our control, such as power loss and uncertainties arising out of armed conflicts or terrorist attacks.

Any catastrophic loss or significant damage to any of our facilities would likely disrupt our operations, delay production, and adversely affect our product development schedules, shipments and revenue. For example, in 2011, the earthquake off the coast of Fukushima in Japan disrupted part of PSA's diesel engine production due to a supply shortage at one of its Japanese suppliers.

In the last decade, seismic events affecting industrialized countries have demonstrated the risk of potential property damage and business interruption that we are exposed to as a result of our global manufacturing footprint. We are also exposed to industrial flood risk, with a number of our production sites identified by our industrial flood risk assessment as potentially exposed to flood risk. The occurrence of a major incident at a single manufacturing site could compromise the production and sale of several hundred thousand vehicles. In addition, any such catastrophic loss or significant damage could result in significant expense to repair or replace the facility and could significantly curtail our research and development efforts in the affected area, which could have a material adverse consequence on our business, financial condition and results of operations. Our key suppliers are similarly exposed to a potential catastrophic loss or significant damage to their facilities, and any such loss or significant damage to a key supplier's manufacturing facilities could disrupt our operations, delay production, and adversely affect our product development schedules, shipments and revenue.

Measures taken to protect against climate change, and limit the impact of catastrophic climate events, such as implementing an energy management plan, which sets out steps to reuse lost heat from industrial processes, making plants more compact and reducing logistics-related CO_2 emissions, as well as using renewable energy, may also lead to increased capital expenditures.

We are subject to risks associated with exchange rate fluctuations, interest rate changes and credit risk.

We operate in numerous markets worldwide and are exposed to risks stemming from fluctuations in currency and interest rates. The exposure to currency risk is mainly linked to differences in the geographic distribution of our manufacturing and commercial activities, resulting in cash flows from sales being denominated in currencies different from those of purchases or production activities.

Additionally, a significant portion of our operating cash flow is generated in U.S. Dollars and, although a portion of our debt is denominated in U.S. Dollars, the majority of our indebtedness is denominated in Euro. Our 2022 results have benefited from the strength of the U.S. Dollar, which has traded at historically high levels against the Euro. This trend may reverse in future periods.

We use various forms of financing to cover funding requirements for our activities. Moreover, liquidity for industrial activities is principally invested in variable and fixed rate or short-term financial instruments. Our financial services businesses normally operate a matching policy to offset the impact of differences in rates of interest on the financed portfolio and related liabilities. Nevertheless, changes in interest rates can affect our net revenues, finance costs and margins.

In addition, although we manage risks associated with fluctuations in currency and interest rates through financial hedging instruments, fluctuations in currency or interest rates could have a material adverse effect on our business, financial condition and results of operations.

Our financial services activities are also subject to the risk of insolvency of dealers and retail consumers and this risk is expected to increase with the establishment of our U.S. captive financial service company. Despite our efforts to mitigate such risks through the credit approval policies applied to dealers and retail consumers, we may not be able to successfully mitigate such risks.

Risks Related to the Legal and Regulatory Environment in which We Operate

Current and more stringent future or incremental laws, regulations and governmental policies, including those regarding increased fuel efficiency requirements and reduced greenhouse gas and tailpipe emissions, have a significant effect on how we do business and may increase our cost of compliance, result in additional liabilities and negatively affect our operations and results.

As we seek to comply with government regulations, particularly those related to fuel efficiency, vehicle safety and greenhouse gas and tailpipe emissions standards, we must devote significant financial and management resources, as well as vehicle engineering and design attention, to these legal requirements. For example, we intend to make significant investments, including through joint ventures, to secure the supply of batteries that are a critical requirement to support our electrification strategy and fuel efficiency and greenhouse gas compliance plans.

In addition, government regulations are not harmonized across jurisdictions and the regulations and their interpretations are subject to change on short notice. Greenhouse gas emissions standards also apply to our production facilities in several jurisdictions in which we operate, which may require investments to upgrade facilities and increase operating costs. In addition, a failure to decrease the energy consumption of plants may lead to penalties, each of which may adversely affect our profitability. In addition, the European Union's Green Deal could result in changes to laws and regulations, including requiring, or incentivizing, financial institutions to reduce lending to industries responsible for significant greenhouse gas emissions, which could result in an increase in the cost of our European financings.

Regulatory requirements in relation to greenhouse gas emissions from vehicles, such as by the CARB in the U.S., are increasingly stringent. For example, on March 9, 2022, the EPA reinstated California's authority under the Clean Air Act to enforce its own, more stringent, GHG emission standards for passenger vehicles and light duty trucks (the "California Waiver"). California emission standards covered by the California Waiver may be adopted by other states and to date 17 other states and the District of Columbia (the "California Waiver States") have adopted California's GHG emissions standards under the California Waiver.

Prior to the EPA's withdrawal of the California Waiver, automotive OEMs were deemed to be compliant with California's GHG emissions standards if they were compliant with the EPA's GHG standards. This "deemed to comply" mechanism was removed from the California regulation prior to the reinstatement of the California Waiver. As interpreted by CARB, the EPA's reinstatement of the California Waiver together with the removal of the "deemed to comply" mechanism means that automotive OEMs are retroactively subject to the separate California GHG standards beginning with the model year 2021 fleet. OEMs may achieve compliance with the California GHG emission standards in several ways, including through the sale of emission-compliant vehicles within their fleet for a given model year, through the carryforward or carryback of excess credits generated by a compliant fleet in past or future years, by the purchase of California-specific regulatory credits from third parties or by a combination of the foregoing.

We did not meet the California GHG targets for model year 2021 and do not expect to meet the California GHG targets for model year 2022, as in planning both model years prior to reinstatement of the California Waiver we assumed the ability to utilize existing credits based on regulations in force at the time. We intend to be compliant with the California GHG program, and for those years and any other model year with deficits, we intend to seek to cover such deficits with excess credits generated through our compliance in model years within the applicable five-year carryback period.

We are executing on several important steps to support our carryback strategy, including the allocation of significant capital to the development of electrified platforms for North American vehicles and the planned electrification of the Ram portfolio as well as agreements to secure battery production and related raw materials. Additionally, we expect to launch thirteen battery electric vehicles in the U.S. between 2023 and 2025. For more information regarding our electrification activities, refer to "*STELLANTIS OVERVIEW- Overview of Our Business - Research and Development*". The success of our carryback strategy depends on future levels and mix of production and sales, as well as general market demand for battery electric vehicles, all of which are inherently speculative. Moreover, the financial impact of our efforts to change the mix of vehicles we sell in California and the California Waiver States as we seek to comply are unclear but may be significant, and may have a material adverse impact on our financial position and results of operations in future years.

We understand that certain other automobile OEMs are subject to less stringent California GHG emissions standards pursuant to settlement agreements entered into with CARB on terms that are not available us. We are currently evaluating the enforceability of the California GHG emissions standards as applied by CARB, particularly in light of their retroactive application following the EPA's reinstatement of the California Waiver, as well as the disparate treatment of other automotive OEMs which are not subject to the same standards. If we were to challenge the retroactive or disparate application of the California GHG emissions standards, the direct and indirect costs of such challenge may be significant and there can be no assurance that it would be successful.

An increasing number of cities globally have also introduced restricted traffic zones, which do not permit entry to vehicles unless they meet strict emissions standards. As a result, consumer demand may shift towards vehicles that are able to meet these standards, which in turn could lead to higher research and development costs and production costs for us. A failure to comply with applicable emissions standards may lead to significant fines, vehicle recalls, the suspension of sales and third-party claims and may adversely affect our reputation. We are particularly exposed to the risk of such penalties in markets where regulations on fuel consumption are very stringent, particularly in Europe. In addition, the harmful effects of atmospheric pollutants, including greenhouse gases, on ecosystems and human health have become an area of major public concern and media attention. As a result, we may suffer significant adverse reputational consequences, in addition to penalties, in the event of non-compliance with applicable regulations.

The number and scope of regulatory requirements, along with the costs associated with compliance, are expected to increase significantly in the future, particularly with respect to vehicle emissions. These costs could be difficult to pass through to consumers, particularly if consumers are not prepared to pay more for lower-emission vehicles. For a further discussion of the regulations applicable to us, see the section "*STELLANTIS OVERVIEW —Environmental and Other Regulatory Matters*" in this report. For example, EU regulations governing passenger car and LCV fleet average CO_2 emissions have recently become significantly more stringent, imposing material penalties if targets are exceeded. The increased cost of producing lower-emitting vehicles may lead to lower margins and/or lower volumes of vehicles sold. Given the significant portion of our sales in Europe, our vehicles will be particularly exposed to such regulatory changes, as well as other European regulatory developments (including surcharges), which may have a serious impact on the number of cars we sell in this region and therefore on our profitability.

Our production facilities are also subject to a broad range of additional requirements governing environmental, health and safety matters, including those relating to registration, use, storage and disposal of hazardous materials and discharges to water and air (including emissions of sulphur oxide, nitrogen oxide, volatile organic compounds and other pollutants). A failure to comply with such requirements, or additional requirements imposed in the future, may result in substantial penalties, claims and liabilities which could have a material adverse effect on our business, financial condition and results of operations. We may also incur substantial cleanup costs and third-party claims as a result of environmental impacts that may be associated with our current or former properties or operations.

Furthermore, some of our competitors may be capable of responding more swiftly to increased regulatory requirements, or may bear lower compliance costs, thereby strengthening their competitive position compared to ours. See "*The automotive industry is highly competitive and cyclical, and we may suffer from those factors more than some of our competitors*".

Most of our suppliers face similar environmental requirements and constraints. A failure by our suppliers to meet applicable environmental laws or regulations may lead to a disruption of our supply chain or an increase in the cost of raw materials and components used in production and could have a material adverse effect on our business, financial condition and results of operations.

We remain subject to ongoing diesel emissions investigations by several governmental agencies and to a number of related private lawsuits, which may lead to further claims, lawsuits and enforcement actions, and result in additional penalties, settlements or damage awards and may also adversely affect our reputation with consumers.

We have received inquiries from regulatory authorities in a number of jurisdictions as they examine the on-road tailpipe emissions of several automakers' vehicles and, when jurisdictionally appropriate, we continue to cooperate with these governmental agencies and authorities.

In Europe, we have continued to work with the Italian Ministry of Transport ("MIT") and the Dutch Vehicle Regulator ("RDW"), the authorities that certified FCA diesel vehicles for sale in the European Union, and the UK Driver and Vehicle Standards Agency in connection with their review of several diesel models.

We also responded to inquiries from the German authority, the Kraftfahrt-Bundesamt ("KBA"), regarding emissions test results for FCA diesel vehicles, and discussed the KBA reported test results, our emission control calibrations and the features of the vehicles in question. After these initial discussions, the MIT, which has sole authority for regulatory compliance of the vehicles it has certified, asserted its exclusive jurisdiction over the matters raised by the KBA, tested the vehicles, determined that the vehicles complied with applicable European regulations and informed the KBA of its determination. Thereafter, mediations were held under European Commission ("EC") rules, between the MIT and the German Ministry of Transport and Digital Infrastructure, which oversees the KBA, in an effort to resolve their differences. The mediation concluded and no action was taken with respect to FCA. In May 2017, the EC announced its intention to open an infringement procedure against Italy regarding Italy's alleged failure to respond to EC's concerns regarding certain FCA emission control calibrations. The MIT responded to the EC's allegations by confirming that the vehicles' approval process was properly performed. On December 2, 2021, the EC notified Italy of its position that Italy did not comply with its obligation to enforce EU emission type approval rules.

In December 2019, the MIT notified FCA of communications with the Dutch Ministry of Infrastructure and Water Management ("I&W") regarding certain irregularities allegedly found by the RDW and the Dutch Center of Research TNO in the emission levels of certain Jeep Grand Cherokee Euro 5 models and a vehicle model of another OEM containing a Euro 6 diesel engine supplied by FCA. In January 2020, the Dutch Parliament published a letter from the I&W summarizing the conclusions of the RDW regarding those vehicles and engines and indicating an intention to order a recall and report their findings to the Public Prosecutor, the EC and other Member States. FCA engaged with the RDW to present our positions and cooperate to reach an appropriate resolution of this matter. FCA proposed certain updates to the relevant vehicles that have been tested and approved by the RDW and are now being implemented. Nevertheless, this matter is still pending.

In addition, as part of the judicial investigation of several automakers in France, commencing in 2016 and 2017, Automobiles Peugeot and Automobiles Citroën were placed under examination by the Judicial Court of Paris in June 2021 on allegations of consumer fraud in connection with the sale of Euro 5 diesel vehicles in France between 2009 and 2015. In July 2021, FCA Italy was placed under examination by the same court for possible consumer fraud in connection with the sale of Euro 6 diesel vehicles in France between 2014 and 2017. FCA Italy was also designated as a material witness in connection with allegations of obstruction of the actions of an economy ministry antifraud inspector in 2016 and 2017. As is typical in a French criminal inquiry, each of the companies were required to pay bail for the potential payment of damages and fines and to ensure representation in court, and to provide a guarantee for the potential compensation of losses. None of these amounts were, individually or in the aggregate, material to the Company.

In July 2020, unannounced inspections took place at several of FCA's sites in Germany, Italy and the UK at the initiative of the Public Prosecutors of Frankfurt am Main and of Turin, as part of their investigations of potential violations of diesel emissions regulations and consumer protection laws. In April 2022, former FCA companies received an order to produce documents to the Public Prosecutors. In October 2022, inspections took place at the Italian offices of FCA Italy and Maserati and at the German office of Maserati Deutschland. The Public Prosecutor of Frankfurt has also informed us that it is conducting a criminal investigation regarding the emissions of certain PSA diesel engines installed in approximately 1,000 PSA vehicles and 29,000 Mitsubishi vehicles sold in Germany. We continue to cooperate with these investigations.

We also face class actions and individual claims in several European countries. Several former FCA and PSA companies and our Dutch dealers have been served with two class actions filed in the Netherlands by Dutch foundations seeking monetary damages and vehicle buybacks in connection with alleged emissions non-compliance of certain diesel vehicles. We have also been notified of a potential class action on behalf of Dutch consumers alleging emissions non-compliance of certain former FCA vehicles sold as recreational vehicles, as well as a securities class action in the Netherlands, alleging misrepresentations by FCA, now Stellantis. A class action alleging emissions non-compliance has also been filed in Portugal regarding former FCA vehicles and similar claims in the UK regarding former FCA and PSA vehicles are in a pre-litigation phase. We are also defending approximately 11,300 individual consumer claims alleging emissions non-compliance of certain former FCA vehicles in Germany and approximately 150 in Austria.

We also remain subject to a number of emissions-related private lawsuits in the U.S.

The results of the unresolved governmental inquiries and private litigation cannot be predicted at this time and these inquiries and litigation may lead to further enforcement actions, penalties or damage awards, any of which may have a material adverse effect on our business, financial condition and results of operations. It is also possible that these matters and their ultimate resolution may adversely affect our reputation with consumers, which may negatively impact demand for our vehicles and consequently could have a material adverse effect on our business, financial condition and results of operations.

Our business operations and reputation may be impacted by various types of claims, lawsuits, and other contingencies.

We are involved in various disputes, claims, lawsuits, investigations and other legal proceedings relating to several matters, including product liability, warranty, vehicle safety, emissions and fuel economy, product performance, asbestos, personal injury, dealers, suppliers and other contractual relationships, alleged violations of law, environment, securities, labor, antitrust, intellectual property, tax and other matters. We estimate such potential claims and contingent liabilities and, where appropriate, record provisions to address these contingent liabilities. The ultimate outcome of the legal proceedings pending against us is uncertain, and such proceedings could have a material adverse effect on our financial condition or results of operations. Furthermore, additional facts may come to light or we could, in the future, be subject to judgments or enter into settlements of lawsuits and claims that could have a material adverse effect on our business, financial condition and results of operations. While we maintain insurance coverage with respect to certain claims, not all claims or potential losses can be covered by insurance, and even if claims could be covered by insurance, we may not be able to obtain such insurance on acceptable terms in the future, if at all, and any such insurance may not provide adequate coverage against any such claims. Further, publicity regarding such investigations and lawsuits, whether or not they have merit, may adversely affect our reputation and the perception of our vehicles with retail customers, which may adversely affect demand for our vehicles, and have a material adverse effect on our business, financial condition and results of operations.

For example, in November 2019, GM filed a lawsuit against FCA US, FCA N.V., now Stellantis N.V., and certain individuals, claiming violations of the RICO Act, unfair competition and civil conspiracy in connection with allegations that FCA US made payments to UAW officials that corrupted the bargaining process with the UAW and as a result FCA US enjoyed unfair labor costs and operational advantages that caused harm to GM. GM also claimed that FCA US had made concessions to the UAW in collective bargaining that the UAW was then able to extract from GM through pattern bargaining which increased costs to GM and that this was done by FCA US in an effort to force a merger between GM and FCA N.V. For more information regarding the GM litigation, refer to Note 26, *Guarantees granted, commitments and contingent liabilities* in the Consolidated Financial Statements included elsewhere in this report.

In addition, we and other Brazilian taxpayers have had significant disputes with the Brazilian tax authorities regarding the application of Brazilian tax law. We believe that it is more likely than not that there will be no significant impact from these disputes. However, given the current economic conditions and uncertainty in Brazil, new tax laws or more significant changes such as tax reform may be introduced and enacted. Changes to the application of existing tax laws may also occur or the realization of accumulated tax benefits may be limited, delayed or denied. Any of these events could have a material adverse effect on our business, financial condition and results of operations.

For additional risks regarding certain proceedings, see "*We remain subject to ongoing diesel emissions investigations by several governmental agencies and to a number of related private lawsuits, which may lead to further claims, lawsuits and enforcement actions, and result in additional penalties, settlements or damage awards and may also adversely affect our reputation with consumers*".

We face risks related to quality and vehicle safety issues, which could lead to product recalls and warranty obligations that may result in direct costs, and any resulting loss of vehicle sales could have material adverse effects on our business.

Our performance is, in part, dependent on complying with quality and safety standards, meeting customer expectations and maintaining our reputation for designing, building and selling safe, high-quality vehicles. Given the global nature of our business, these standards and expectations may vary according to the markets in which we operate. For example, vehicle safety standards imposed by regulations are increasingly stringent. In addition, consumers' focus on vehicle safety may increase further with the advent of autonomous and connected cars. If we fail to meet or adhere to required vehicle safety standards, we may face penalties, become subject to other claims or liabilities or be required to recall vehicles.

The automotive industry in general has experienced a sustained increase in recall activity to address performance, compliance or safety-related issues. For example, in 2022, we voluntarily recalled more than 248,000 Ram Heavy Duty pickup trucks due to engine fire risk. Our costs related to vehicle recalls could increase in the future.

Recall costs substantially depend on the nature of the remedy and the number of vehicles affected and may arise many years after a vehicle's sale. Product recalls may also harm our reputation, force us to halt the sale of certain vehicles and cause consumers to question the safety or reliability of our products. Given the intense regulatory activity across the automotive industry, ongoing compliance costs are expected to remain high. Any costs incurred, or lost vehicle sales, resulting from product recalls could materially adversely affect our financial condition and results of operations. Moreover, if we face consumer complaints, or receive information from vehicle rating services that calls into question the safety or reliability of one of our vehicles and we do not issue a recall, or if we do not do so on a timely basis, our reputation may also be harmed and we may lose future vehicle sales. We are also obligated under the terms of our warranty agreements to make repairs or replace parts in our vehicles at our expense for a specified period of time. These factors, including any failure rate that exceeds our assumptions, could have a material adverse effect on our business, financial condition and results of operations.

We are subject to laws and regulations relating to corruption and bribery, as well as stakeholder expectations relating to human rights in the supply chain and a failure to meet these legislative and stakeholder standards could lead to enforcement actions, penalties or damage awards and may also adversely affect our reputation with consumers.

We are subject to laws and regulations relating to corruption and bribery, including those of the U.S., the United Kingdom and France, which have an international reach and which cover the entirety of our value chain in all countries in which we operate. We also have significant interactions with governments and governmental agencies in the areas of sales, licensing, permits, regulatory, compliance, environmental matters and fleet sales among others. A failure to comply with laws and regulations relating to corruption and bribery may lead to significant penalties and enforcement actions and could also have a long-term impact on our presence in one, or more, of the markets in which such compliance failures have occurred.

In addition, our customers may have expectations relating to the production conditions and origin of the products they purchase. Therefore, it is important for us to seek to demonstrate transparency across the entire supply chain, which may result in additional costs being incurred. A failure by us, or any of our suppliers or subcontractors, to comply with employment or other production standards and expectations may result in adverse consequences to our reputation, disruptions to our supply chain and increased costs as a result of remedial measures needing to be undertaken to meet stakeholder expectations, which could have a material adverse effect on our business, financial condition and results of operations.

We may not be able to adequately protect our intellectual property rights, which may harm our business.

Our success depends, in part, on our ability to protect our intellectual property rights. If we fail to protect our intellectual property rights, others may be able to compete against us using intellectual property that is the same as or similar to our own. In addition, there can be no guarantee that our intellectual property rights will be sufficient to provide us with a competitive advantage against others who offer products similar to our products. For example, another OEM has produced a vehicle closely resembling one of our Jeep models for sale in the U.S. We have brought multiple proceedings to stop these practices, and have received rulings in our favor enjoining import and sale of the vehicle in the U.S. In response, the OEM created a redesigned model for which they originally received rulings that the redesign does not infringe the Jeep model trade dress. We are continuing to seek to enjoin the redesigned vehicle through the appeal process, but cannot be certain of the final outcome. More generally, despite our efforts, we may be unable to prevent third parties from infringing our intellectual property and using our technology for their competitive advantage. Any such infringement could have a material adverse effect on our business, financial condition and results of operations.

The laws of some countries in which we operate do not offer the same protection of intellectual property rights as do the laws of the U.S. or Europe. In addition, effective intellectual property enforcement may be unavailable or limited in certain countries, making it difficult to protect our intellectual property from misuse or infringement there. Our inability to protect our intellectual property rights in some countries could have a material adverse effect on our business, financial condition and results of operations.

It may be difficult to enforce U.S. judgments against us.

We are incorporated under the laws of the Netherlands, and a substantial portion of our assets are outside of the U.S. Most of our directors and senior management and our independent auditors are resident outside the U.S., and all or a substantial portion of their respective assets may be located outside the U.S. As a result, it may be difficult for U.S. investors to effect service of process within the U.S. upon these persons. It may also be difficult for U.S. investors to enforce within the U.S. judgments predicated upon the civil liability provisions of the securities laws of the U.S. or any state thereof. In addition, there is uncertainty as to whether the courts outside the U.S. would recognize or enforce judgments of U.S. courts obtained against us or our directors and officers predicated upon the civil liability provisions of the securities laws of the U.S. or any state thereof. Therefore, it may be difficult to enforce U.S. judgments against us, our directors and officers and our independent auditors.

As an employer with a large workforce, we face risks related to the health and safety of our employees, as well as reputational risk related to diversity, inclusion and equal opportunity.

We employ a significant number of people who are exposed to health and safety risks as a result of their employment. Working conditions can cause stress or discomfort that can impact employees' health and may result in adverse consequences for our productivity. In addition, as an automotive manufacturer, a significant number of our employees are shift workers in production facilities, involving physical demands which may lead to occupational injury or illness. The use or presence of certain chemicals in production processes may adversely affect the health of our employees or create a safety risk. As a result, we could be exposed to liability from claims brought by current or former employees and our reputation, productivity, business, financial condition and results of operations may be affected.

Our stakeholders are expected to place increased emphasis on the importance of diversity, inclusion and equal opportunity in the workplace, against a backdrop of developing legal requirements in these areas. We may suffer adverse effects on our reputation if we fail to meet our stakeholders' expectations, which could result in an adverse effect on our business, financial condition and results of operations.

Failure to maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 could have an adverse effect on our business and the value of our common shares.

Effective internal controls, enable us to provide reliable and accurate financial statements and to effectively prevent fraud. While we have devoted, and will need to continue to devote, significant management attention and resources to complying with the internal control over financial reporting requirements of the Sarbanes-Oxley Act of 2002, as amended, there is no assurance that material weaknesses or significant deficiencies will not occur or that we will be successful in adequately remediating any such material weaknesses and significant deficiencies. Furthermore, as we transform our business, our internal controls may become more complex, and we may require significantly more resources to ensure internal controls remain effective.

Risks Related to Our Liquidity and Existing Indebtedness

Limitations on our liquidity and access to funding, as well as our significant outstanding indebtedness, may restrict our financial and operating flexibility and our ability to execute our business strategies, obtain additional funding on competitive terms and improve our financial condition and results of operations.

Our performance depends on, among other things, our ability to finance debt repayment obligations and planned investments from operating cash flow, available liquidity, the renewal or refinancing of existing bank loans and/or facilities and possible access to capital markets or other sources of financing. Our indebtedness may have important consequences on our operations and financial results, including:

- we may not be able to secure additional funds for working capital, capital expenditures, debt service requirements or general corporate purposes;

- we may need to use a portion of our projected future cash flow from operations to pay principal and interest on our indebtedness, which may reduce the amount of funds available to us for other purposes, including product development; and

- we may not be able to adjust rapidly to changing market conditions, which may make us more vulnerable to a downturn in general economic conditions or our business.

In addition, while our credit ratings are investment grade, any deterioration of our credit ratings may significantly affect our funding and prospects.

We could, therefore, find ourselves in the position of having to seek additional financing or having to refinance existing debt, including in unfavorable market conditions, with limited availability of funding and a general increase in funding costs. In addition, should a general increase in market borrowing rates arise because of current inflationary pressures, the cost of our future debt may increase. Any limitations on our liquidity, due to a further decrease in vehicle shipments, the amount of, or restrictions in, our existing indebtedness, conditions in the credit markets, our perceived creditworthiness, general economic conditions or otherwise, may adversely impact our ability to execute our business strategies and impair our financial condition and results of operations. In addition, any actual or perceived limitations of our liquidity may limit the ability or willingness of counterparties, including dealers, consumers, suppliers, lenders and financial service providers, to do business with us, which could have a material adverse effect on our business, financial condition and results of operations.

We may be exposed to shortfalls in our pension plans which may increase our pension expenses and required contributions and, as a result, could constrain liquidity and materially adversely affect our financial condition and results of operations.

Certain of our defined benefit pension plans are currently underfunded. For example, as of December 31, 2022, our defined benefit pension plans were underfunded by approximately €2.8 billion and may be subject to significant minimum contributions in future years. Our pension funding obligations may increase significantly if the investment performance of plan assets does not keep pace with benefit payment obligations. Mandatory funding obligations may increase because of lower than anticipated returns on plan assets, whether as a result of overall weak market performance or particular investment decisions, changes in the level of interest rates used to determine required funding levels, changes in the level of benefits provided for by the plans, or any changes in applicable law related to funding requirements. Our defined benefit plans currently hold significant investments in equity and fixed income securities, as well as investments in less liquid instruments such as private equity, real estate and certain hedge funds. Due to the complexity and magnitude of certain investments, additional risks may exist, including the effects of significant changes in investment policy, insufficient market capacity to complete a particular investment strategy and an inherent divergence in objectives between the ability to manage risk in the short term and the ability to quickly re-balance illiquid and long-term investments.

To determine the appropriate level of funding and contributions to our defined benefit plans, as well as the investment strategy for the plans, we are required to make various assumptions, including an expected rate of return on plan assets and a discount rate used to measure the obligations under defined benefit pension plans. Interest rate increases generally will result in a decline in the value of investments in fixed income securities and the present value of the obligations. Conversely, interest rate decreases will generally increase the value of investments in fixed income securities and the present value of the obligations. See Note *2, Basis of preparation-Significant accounting policies—Employee benefits* within the Consolidated Financial Statements included elsewhere in this report.

Any reduction in the discount rate or the value of plan assets, or any increase in the present value of obligations, may increase our pension expenses and required contributions and, as a result, could constrain liquidity and materially adversely affect our financial condition and results of operations. If we fail to make required minimum funding contributions to our U.S. pension plans, it could be subject to reportable event disclosure to the U.S. Pension Benefit Guaranty Corporation, as well as interest and excise taxes calculated based upon the amount of any funding deficiency.

Risks Related to the Ownership of Our Shares

Our maintenance of three exchange listings may adversely affect liquidity in the market for our common shares and result in pricing differentials of Stellantis common shares between the three exchanges.

Our common shares are currently traded on the NYSE, Euronext Milan and Euronext Paris. The tripartite listing of our common shares may adversely affect the liquidity of the shares in one or several markets. In addition, the tripartite listing of our common shares may result in price differentials between the exchanges. Differences in the trading schedules, as well as volatility in the exchange rate of the trading currencies, among other factors, may result in different trading prices for our common shares on the three exchanges.

Our loyalty voting structure may concentrate voting power in a small number of our shareholders and such concentration may increase over time.

Shareholders who hold our common shares for an uninterrupted period of at least three years may elect to receive one special voting share in addition to each common share held, provided that such shares have been registered in the Loyalty Register upon application by the relevant holder. If our shareholders holding a significant number of common shares for an uninterrupted period of at least three years elect to receive special voting shares, a relatively large proportion of voting power could be concentrated in a relatively small number of shareholders who would have significant influence over Stellantis. As a result, the ability of other shareholders to influence decisions would be reduced.

The loyalty voting structure may affect the liquidity of our common shares and reduce our share price.

Our loyalty voting structure could reduce the liquidity of our common shares and adversely affect the trading prices of our common shares. The loyalty voting structure is intended to reward our shareholders for maintaining long-term share ownership by granting persons holding shares continuously for at least three years the option to elect to receive special voting shares. Special voting shares cannot be traded and, immediately prior to the transfer of our common shares from the Loyalty Register, any corresponding special voting shares will be transferred to us for no consideration (*om niet*). This loyalty voting structure is designed to encourage a stable shareholder base and, conversely, it may deter trading by those shareholders who are interested in gaining or retaining special voting shares. Therefore, the loyalty voting structure may reduce liquidity in our common shares and adversely affect their trading price.

The loyalty voting structure may prevent or frustrate attempts by our shareholders to change our management and hinder efforts to acquire a controlling interest in us, and the market price of our common shares may be lower as a result.

Our loyalty voting structure may make it more difficult for a third party to acquire, or attempt to acquire, control of us, even if a change of control were considered favorably by shareholders holding a majority of our common shares. As a result of the loyalty voting structure, a relatively large proportion of voting power could be concentrated in a relatively small number of shareholders, which may make it more difficult for third parties to seek to acquire control of us by purchasing shares that do not benefit from the additional voting power of the special voting shares. The possibility or expectation of a change of control transaction typically leads to higher trading prices and conversely, if that possibility is low, trading prices may be lower. The loyalty voting structure may also prevent or discourage shareholders' initiatives aimed at changing our management.

Resales of Stellantis common shares following the merger may cause the market value of Stellantis common shares to decline.

Several reference shareholders of Stellantis are subject to restrictions on share sales for a three-year period following the merger, but will be free to sell once those restrictions expire. Furthermore, Dongfeng, which owned approximately 3 percent of our issued common shares as of February 21, 2023, has entered into an agreement with us describing the framework for our potential repurchase of their shares in certain circumstances, but is not otherwise subject to resale restrictions on its Stellantis common shares. All other shareholders, which own the majority of our common shares, are not subject to any resale restrictions. The resale of such shares in the public market from time to time, particularly on the part of Dongfeng, or on the part of any reference shareholder following expiration of the lock-up, or the perception that such resales may occur could have the effect of depressing the market value for Stellantis common shares.

Risks Related to Taxation

The French tax authorities may revoke or disregard in whole or in part the rulings confirming the neutral tax treatment of the merger for former PSA and the transfer of tax losses carried forward by the legacy PSA French tax consolidated group.

The French tax authorities have confirmed that the merger will fulfill the conditions to benefit from the favorable corporate income tax regime set forth in Article 210 A of the French Tax Code (which mainly provides for a deferral of taxation of the capital gains realized by PSA as a result of the transfer of all its assets and liabilities pursuant to the merger).

In addition, as required by law, a tax ruling was issued on February 18, 2022 by the French tax authorities confirming the transfer of the French tax losses carried forward of the former PSA French tax consolidated group to our French permanent establishment and the carry-forward of such French tax losses transferred to our French permanent establishment against future profits of our French permanent establishment and certain companies of the former PSA French tax consolidated group pursuant to Articles 223 I-6 and 1649 *nonies* of the French Tax Code.

Such tax regimes and tax rulings are subject to certain conditions being met and are based on certain declarations, representations and undertakings given by us to the French tax authorities. If the French tax authorities consider that the relevant declarations, representations, conditions or undertakings were not correct or are not complied with, they could revoke or disregard the rulings that have been granted in respect of the merger.

A decision by the French tax authorities to revoke or disregard the tax rulings in the future would likely result in significant adverse tax consequences to us that could have a significant effect on our results of operations or financial position. If the requested tax rulings are revoked or disregarded, the main adverse tax consequences for us would be that (i) all unrealized capital gains at the level of former PSA at the time of the merger would be taxed; and (ii) the tax losses carried forward at the level of former PSA would not have been validly transferred to our French permanent establishment or would be forfeited.

We operate so as to be treated exclusively as a resident of the Netherlands for tax purposes after the transfer of our tax residency to the Netherlands, but the tax authorities of other jurisdictions may treat us as also being a resident of another jurisdiction for tax purposes.

Since we are incorporated under Dutch law, we are considered to be resident in the Netherlands for Dutch corporate income tax and Dutch dividend withholding tax purposes. In addition, with effect from January 17, 2021 and taking into account the sanitary restrictions and limitations that applied under the COVID-19 crisis, we have operated so as to maintain our management and organizational structure in such a manner that we (i) should be regarded to have our residence for tax purposes (including, for the avoidance of doubt, withholding tax and tax treaty eligibility purposes) exclusively in the Netherlands, (ii) should not be regarded as a tax resident of any other jurisdiction (and in particular of France or Italy) either for domestic law purposes or for the purposes of any applicable tax treaty (notably any applicable tax treaty with the Netherlands) and (iii) should be deemed resident only in the Netherlands, including for the purposes of the France-Netherlands and Italy-Netherlands tax treaties. We also hold permanent establishments in France and Italy.

However, the determination of our tax residency primarily depends upon our place of effective management, which is a question of fact based on all circumstances. Because the determination of our residency is highly fact sensitive, no assurance can be given regarding the final determination of our tax residency.

If we were concurrently resident in the Netherlands and in another jurisdiction (applying the tax residency rules of that jurisdiction), we may be treated as being tax resident in both jurisdictions, unless such other jurisdiction has a double tax treaty with the Netherlands that includes either (i) a tie-breaker provision which allocates exclusive residence to one jurisdiction only or (ii) a rule providing that the residency needs to be determined based on a mutual agreement procedure and the jurisdictions involved agree (or, as the case may be, are compelled to agree through arbitration) that we are resident in one jurisdiction exclusively for treaty purposes. In the latter case, if no agreement is reached in respect of the determination of the residency, the treaty may not apply and we could be treated as being tax resident in both jurisdictions.

A failure to achieve or maintain exclusive tax residency in the Netherlands could result in significant adverse tax consequences to us, our subsidiaries and our shareholders and could result in tax consequences for our shareholders that differ from those described in the section entitled "*Taxation*". The impact of this risk would differ based on the views taken by each relevant tax authority and, in respect of the taxation of shareholders and holders of special voting shares, on the specific situation of each shareholder or each holder of special voting shares.

We may not qualify for benefits under the tax treaties entered into between the Netherlands and other countries.

With effect from January 17, 2021, and taking into account the sanitary restrictions and limitations that applied under the COVID-19 crisis, we operate in a manner such that we should be eligible for benefits under the tax treaties entered into between the Netherlands and other countries, notably France, Italy and the U.S. However, our ability to qualify for such benefits depends upon (i) being treated as a Dutch tax resident for purposes of the relevant tax treaty, (ii) the fulfillment of the requirements contained in each applicable treaty as modified by the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (including, but not limited to, any principal purpose test clause) and applicable domestic laws, (iii) the facts and circumstances surrounding our operations and management and (iv) the interpretation of the relevant tax authorities and courts.

Our failure to qualify for benefits under the tax treaties entered into between the Netherlands and other countries could result in significant adverse tax consequences to us, our subsidiaries and our shareholders and could result in tax consequences for our shareholders that differ from those described in the section entitled "*Taxation*".

The tax consequences of the Loyalty Voting Structure are uncertain.

No statutory, judicial or administrative authority directly discusses how the receipt, ownership, or disposition of special voting shares should be treated for French, Italian, UK, or U.S. tax purposes, and as a result, the tax consequences in those jurisdictions are uncertain.

In addition, the fair market value of the special voting shares, which may be relevant to the tax consequences, is a factual determination and is not governed by any guidance that directly addresses such a situation. Because, among other things, the special voting shares are not transferable and a shareholder will receive amounts in respect of the special voting shares only if we are liquidated, we believe and intend to take the position that the value of each special voting share is minimal. However, the relevant tax authorities could assert that the value of the special voting shares as determined by us is incorrect, which could result in significant adverse tax consequences to shareholders holding special voting shares.

The tax treatment of the loyalty voting structure is unclear and shareholders are urged to consult their tax advisors in respect of the consequences of acquiring, owning and disposing of special voting shares. See "*Taxation*" for further discussion.

There may be potential Passive Foreign Investment Company tax considerations for U.S. Shareholders.

We would be a "passive foreign investment company" (a "PFIC") for U.S. federal income tax purposes with respect to a U.S. shareholder (as defined in "*Taxation—Material U.S. Federal Income Tax Consequences*") if for any taxable year in which such U.S. shareholder held our common shares, after the application of applicable "look-through rules" (i) 75 percent or more of our gross income for the taxable year consists of "passive income" (including dividends, interest, gains from the sale or exchange of investment property and rents and royalties other than rents and royalties which are received from unrelated parties in connection with the active conduct of a trade or business, as defined in applicable Treasury Regulations), or (ii) at least 50 percent of our assets for the taxable year (averaged over the year and determined based upon value) produce or are held for the production of "passive income".

U.S. persons who own shares of a PFIC are subject to a disadvantageous U.S. federal income tax regime with respect to the income derived by the PFIC, the dividends they receive from the PFIC, and the gain, if any, they derive from the sale or other disposition of their shares in the PFIC.

In particular, if we were treated as a PFIC for U.S. federal income tax purposes for any taxable year during which a U.S. shareholder owned our common shares, then any gain realized by the U.S. shareholder on the sale or other disposition of our common shares would in general not be treated as capital gain. Instead, a U.S. shareholder would be treated as if it had realized such gain ratably over its holding period for our common shares. Amounts allocated to the year of disposition and to years before we became a PFIC would be taxed as ordinary income and amounts allocated to each other taxable year would be taxed at the highest tax rate applicable to individuals or corporations, as appropriate, in effect for each such year to which the gain was allocated, together with an interest charge in respect of the tax attributable to each such year. Similar treatment may apply to certain "excess distributions" as defined in the Code.

While we believe our common shares are not stock of a PFIC for U.S. federal income tax purposes, this conclusion is a factual determination made annually and thus may be subject to change. Moreover, we may become a PFIC in future taxable years if there were to be changes in our assets, income or operations. In addition, because the determination of whether a foreign corporation is a PFIC is primarily factual and because there is little administrative or judicial authority on which to rely to make a determination, the IRS may take the position that we are a PFIC. See "*Taxation*" for a further discussion.

The IRS may not agree with the determination that we should not be treated as a domestic corporation for U.S. federal income tax purposes, and adverse tax consequences could result to us and our shareholders if the IRS were to successfully challenge such determination.

Section 7874 of the Code provides that, under certain circumstances, a non-U.S. corporation will be treated as a U.S. "domestic" corporation for U.S. federal income tax purposes. In particular, certain mergers of foreign corporations with U.S. subsidiaries can, in certain circumstances, implicate these rules. We do not believe we should be treated as a U.S. "domestic" corporation for U.S. federal income tax purposes. However, the relevant law is not entirely clear, is subject to detailed but relatively new regulations (the application of which is uncertain in various respects, and whose interaction with general principles of U.S. tax law remains untested) and is subject to various other uncertainties. Therefore, the IRS could assert that we should be treated as a U.S. corporation (and, therefore, a U.S. tax resident) for U.S. federal income tax purposes pursuant to Code Section 7874. In addition, changes to Section 7874 of the Code or the U.S. Treasury Regulations promulgated thereunder, or interpretations thereof, could affect our status as a foreign corporation. Such changes could potentially have retroactive effect.

If the IRS successfully challenged our status as a foreign corporation, significant adverse tax consequences would result for us and for certain of our shareholders. For example, if we were treated as a domestic corporation in the U.S., we would be subject to U.S. federal income tax on our worldwide income as if we were a U.S. domestic corporation, and dividends we pay to non-U.S. shareholders would generally be subject to U.S. federal withholding tax, among other adverse tax consequences. If we were treated as a U.S. domestic corporation, such treatment could materially increase our U.S. federal income tax liability.

The closing of the merger was not conditioned on our not being treated as a domestic corporation for U.S. federal income tax purposes or upon a receipt of an opinion of counsel to that effect. In addition, neither former FCA nor former PSA requested a ruling from the IRS regarding the U.S. federal income tax consequences of the merger. Accordingly, while we do not believe we will be treated as a domestic corporation, no assurance can be given that the IRS will agree, or that if it challenges such treatment, it will not succeed.

If we fail to maintain a permanent establishment in France, we could experience adverse tax consequences.

We maintain a permanent establishment in France to which the assets and liabilities of former PSA were allocated upon the merger for French tax purposes. However, no assurance can be given regarding the existence of a permanent establishment in France and the allocation of each asset and liability to such permanent establishment because such determination is highly fact sensitive and may vary in case of future changes in our management and organizational structure.

If we were to fail to maintain a permanent establishment in France, the main adverse tax consequences would be that (i) all unrealized capital gains at the level of the permanent establishment at that time would be taxed and (ii) the tax losses carried forward that may still be available at that time would be forfeited. In addition, if, in the future, any of former PSA's assets and liabilities cease to be allocated to such establishment, this may result in (i) Stellantis being taxed in France on unrealized capital gains or profits with respect to the assets and liabilities deemed transferred outside of France and (ii) a portion of the tax losses carried forward that may still be available at that time being forfeited.

We and our subsidiaries are subject to tax laws and treaties of numerous jurisdictions. Future changes to such laws or treaties could adversely affect us and our subsidiaries and our shareholders and holders of special voting shares. In addition, the interpretation of these laws and treaties is subject to challenge by the relevant governmental authorities.

We and our subsidiaries are subject to tax laws, regulations and treaties in the Netherlands, France, Italy, the U.S. and the numerous other jurisdictions in which we and our affiliates operate. These laws, regulations and treaties could change on a prospective or retroactive basis, and any such change could adversely affect us and our subsidiaries and our shareholders and holders of special voting shares.

Furthermore, these laws, regulations and treaties are inherently complex and we and our subsidiaries will be obligated to make judgments and interpretations about the application of these laws, regulations and treaties to us and our subsidiaries and our operations and businesses. The interpretation and application of these laws, regulations and treaties could differ from that of the relevant governmental authority, which could result in administrative or judicial procedures, actions or sanctions, which could be material.

Additionally, we operate in countries where the Organization for Economic Co-operation and Development ("OECD") Pillar Two minimum taxation rules apply, and there is uncertainty surrounding the implementation and application of these rules. The OECD Pillar Two agreement has been joined by over 140 countries and aims to ensure that multinational corporations pay a minimum effective tax rate of 15 percent. Many countries have initiated domestic legislative procedures to enact these global minimum tax rules. Depending on each country's final enactment, these rules may apply to Stellantis starting with our fiscal year beginning on January 1, 2024. While we have begun to analyze the impact of the global minimum tax rules on our operations, we are awaiting final legislation and detailed guidance to assess the full implications in the jurisdictions in which we operate.

On December 23, 2022, South Korea became the first country to codify the global minimum tax rules in its domestic legislation. Further details relating to the new legislation and implementation guidance are expected to be released later in 2023, therefore this new legislation is not considered substantially enacted at December 31, 2022. As we have operations in South Korea, we will continue to evaluate the impacts to Stellantis.