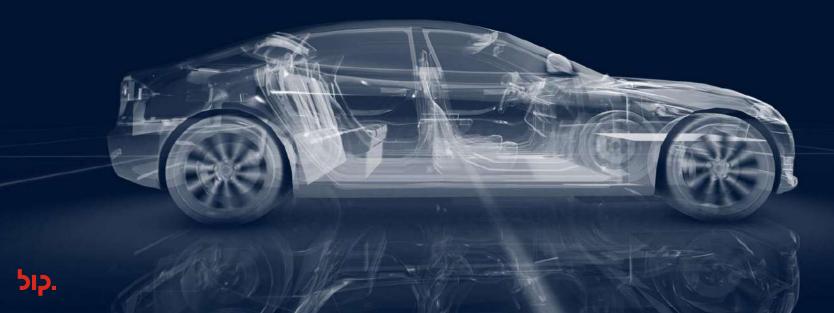
BIP AutObserver

Analysis of new car registrations

December 2022



Executive Summary

Analysis of new car registrations in Europe & Italy – December 2022



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Top Countries by growth of new registrations: 18 countries grew in December 2022 compared to December 2021, the highest rates for Estonia (+123,9%) and Norway (+92,0%). On a YTD base only 10 countries grew, double-digit increase for Iceland (+30,4%), Bulgaria (+16,9%) and Latvia (+16,5%)

Top 3 Countries by market share: Germany 23,5% (+1,2 p.p.), United Kingdom 14,3% (+0,3 p.p.) and France 13,5% (-0,5 p.p.) in December 2022 YTD compared to December 2021 YTD.

Brands: among the **Top 15 by volume**, highest growth comparing December 2022 to December 2021 for BMW (+35,9%), Audi (+35,0%) and Volkswagen (+26,5%). Considering YTD data, only Dacia (+15,8%), Kia (+7,9%), Toyota (+7,6%), Audi (+2,9%) and Hyundai (+0,5%) registered an increase

Premium brands:** Audi is the only brand that increased both in monthly (+35,0%) and YTD (+2,9%), while **BMW** (+35,9%) and **Mercedes-Benz** (+10,8%) grew in December 2022 but are still under 2021 on a YTD basis (-5,4% and -1,5% respectively)

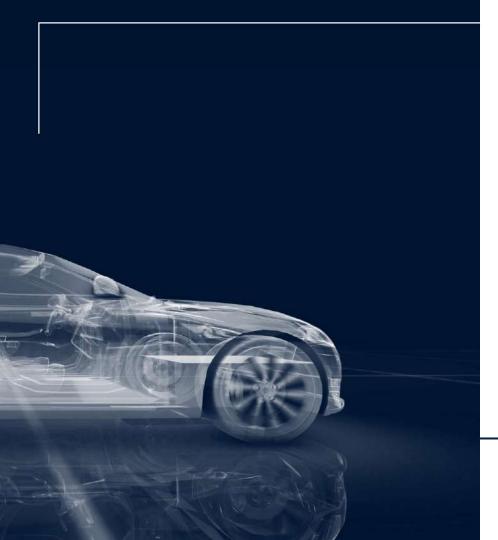


Areas monthly results: North-East +19,0%, North-West +28,6%, Center +29,8%, South +0,6% and Islands +0,8%, comparing December 2022 to December 2021

Customer segments: Retail +8,0%, Fleet +78,2% and Business -4,8% December 2022 vs December 2021

Brands: considering YTD results, among the **Top 15 by volume** only **Dacia** and **Toyota** grew (+9,2% and +8,6% respectively); all the other brands registered a drop, the highest for **Fiat** (-19,9%) and **Renault** (-19,9%)

Premium brands:** Audi (+57,1%), Mercedes-Benz (+56,7%) and BMW (+28,9%) registered an increase in December 2022 compared to December 2021. On a YTD basis BMW, Mercedes-Benz and Audi fell less than the overall market (respectively -7,5%, -3,0% and -0,04% vs -9,7%)



01. Europe

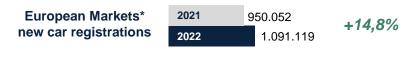
Market overview New car registrations by brands

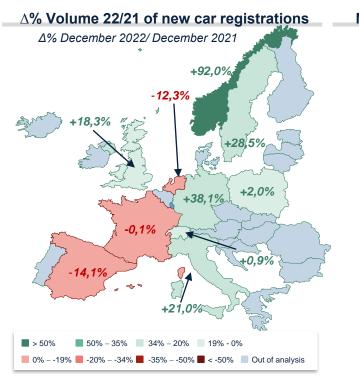
02. Italy

03. New car models launches in Italy

04. News on key industry trends

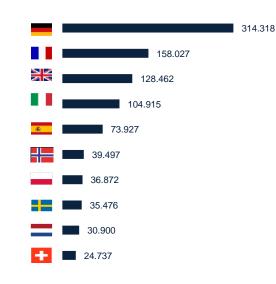
Europe | *Market Overview* Top 10 European Markets^{*} – December 2022





Number of EU new car registrations 2022

New car registration December 2022



Highlights

- The European market (EU+UK+EFTA) had an increase in registrations from 950.052 in December 2021 to 1.091.119 cars in December 2022.
- In line with the previous months the EU car market confirmed an overall increase in registrations compared to the other months of 2022.
- The **highest rates** among the top 10 markets for:
 - Norway (+92,0%)
 - Germany (+38,1%)
 - o Sweden (+28,5%)
- Considering the top 10 by volume only Spain, Netherlands and France registered a decrease in December 2022 compared to the same month of 2021

Europe | Market Overview

Top 10 European Markets* – December 2022 YTD

European Markets* new car registrations



Highlights - ∆% Volume 22/21 & Market Share (MS)

 Δ % Volume December 22/21

#	Country	MS December 2022 YTD	∆ VS 2021	Sales Volume December 2022 YTD
1	GER	23,5%	+1,1	2.651.357
2	K UK	14,3%	-2,0	1.614.063
3	FRA	13,5%	-7,8	1.529.035
4	ITA	11,7%	-9,7	1.316.702
5	SPA	7,2%	-5,4	813.396
6	POL	3,7%	-6,0	419.749
7	BEL	EL 3,2% -	-4,4	366.303
8	NET	2,8%	-3,2	312.129
9	SWE	2,6%	-4,3	288.087
10	- SWI	2,0%	-5,3	225.934
	2 3 4 5 6 7 8 9	 2	1 GER 23,5% 2 UK 14,3% 3 FRA 13,5% 4 ITA 11,7% 5 SPA 7,2% 6 POL 3,7% 7 BEL 3,2% 8 NET 2,8% 9 SWE 2,6%	1 GER 23,5% +1,1 2 UK 14,3% -2,0 3 FRA 13,5% -7,8 4 ITA 11,7% -9,7 5 SPA 7,2% -5,4 6 POL 3,7% -6,0 7 BEL 3,2% -4,4 8 NET 2,8% -3,2 9 SWE 2,6% -4,3

(*) EU (26 Countries) + EFTA Countries (Iceland, Norway, Switzerland) + UK



- Up to December 2022, 11.286.939
 units were registered in the European
 passenger cars market, with a
 decrease of -4,1% compared to the
 same period of 2021. The gap vs 2021
 is reducing thanks to the positive
 results of the last 5 months
- Only 10 out of 30 countries registered an **increase** (Iceland confirmed the highest increase with +30,4%) and only Germany (+1,1%) considering the top 10 for registrations.

20 countries recorded a **decrease:** considering the top 10 by volume highest decline for Italy (-9,7%)

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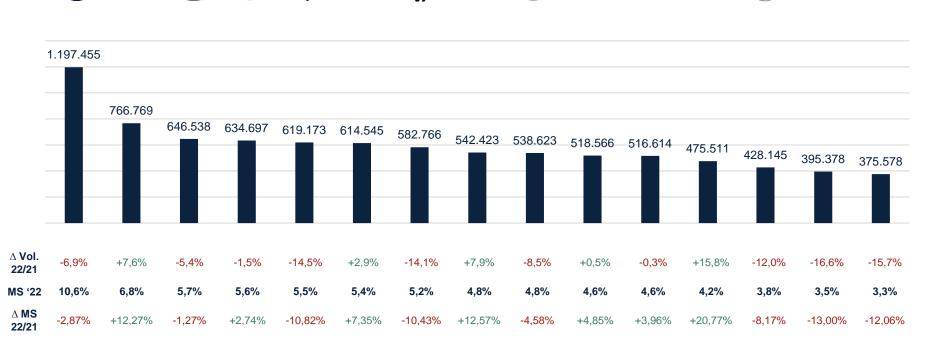
Europe | New car registrations by brand Top 15 – December 2022 YTD

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(*) Opel includes Vauxhall New Car Registrations



01. Europe

02. Italy

Market overview
Market highlights
New car registrations by brand
New car registrations by group
New car registrations by fuel type
New car registrations by segment

03. New car models launches in Italy

04. News on key industry trends

December 2022 Highlights

December 2022 is the 5th consecutive positive month, with a strong increase (+21,0%) compared to the December 2021 registrations.

The end of this year confirms the **consolidation of the industry recovery**, thanks to the mitigation of production difficulties and at the Italian level, thanks to the government incentives and their boost especially on **fleet** registrations.

However, the year ended negatively, considering the total volumes for the whole 2022 compared to 2021 (-9,7%), recording a -31,3% compared to the year before Covid (2019). Overall, 2022 thus recorded lower volumes than 2021, especially in relation to the performance in the first half of the year, the period most impacted by microchips shortage and the Ukraine war.

Analyzing 2022 full year results, the decrease was widespread geographically in Italy; LTR is the only distribution channel with a positive trend; regarding the fuel type the LPG and EV grew while all the others declined.

Regarding the beginning of 2023, the refinancing of the incentives (from 10th January) is expected to continue to sustain the market.

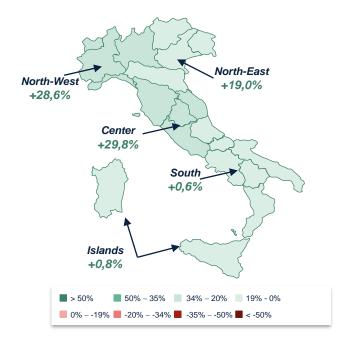


Italy | Market Overview Italian Market – December 2022 vs December 2021



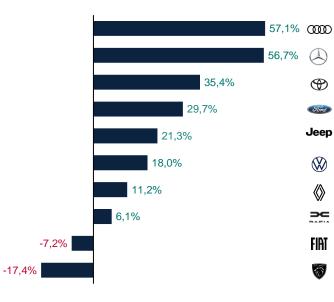
∆% Volume 22/21 of New Car Registrations

∆% December 2022/ December 2021





Δ% December 2022/ December 2021



Highlights

- In December 2022, the Italian market showed again a positive sign with an increase of +21,0% compared to December 2021
- The highest growth for Audi (+57,1%), Mercedes (+56,7%) and Toyota (+35,4%)
- Considering the top 10 brands by volume, only 2 out of 10 recorded a drop, Fiat (-7,2%) followed by Peugeot (-17,4%).
- In December, in line with previous months, the growth was recorded mainly in central-northern Italy, particularly in the Center.
- **Islands** also showed a growth, reversing the negative result of November.

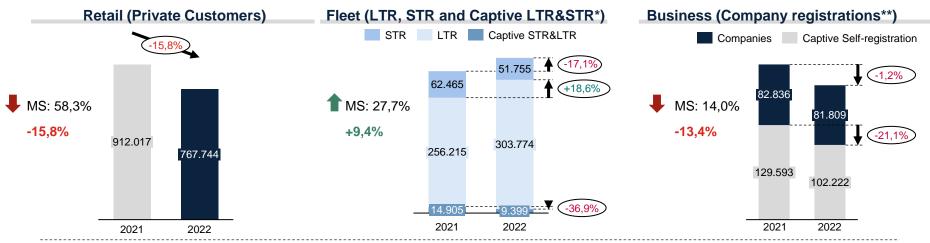
2021 1.458.032 Italy | Market Overview **Italy New Car** -9.7% **Registrations (YTD)** 2022 1.316.702 Italian Market – December 2022 YTD vs December 2021 YTD Analysis by "Customer Segment" Analysis by "Fuel Type" Analysis by "Geographical Area" Analysis by "Car Segment" Registration YTD '22/'21 Registration YTD '22 Registration YTD '22/'21 Registration YTD '22/'21 2021 2022 2021 2022 -22,5% 199.701 А Diesel -20.2% 433.473 Petrol 262.916 North-West 767.744 < -7,3% 401.761 LPG Retail 517.240 -5,7% В 912.017 CNG EV* 451.297 -16.4% North-Est -11,2% -9.9% С 390.643 361.662 400.939 < 364.928 🗲 Fleet -5.8% +9.4%175.268 322.675 D 333.586 +9.9% Centre 117.120 -5,9% 303.687 10.573 -65,9% Е 28.548 +4,2% 167.853 South -16,0% 184.030 141.080 +1.1% F 5.302 +7,5% Business 564.420 212.429 82.734 Islands -16,3% 1.316.702 69.234

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Source: UNRAE

(*) EV: Electric Vehicle (Hybrid and Electric); CNG: Compressed Natural Gas (Methane and Ethanol)

ItalyMarket HighlightsItaly New Car
Registrations (YTD)20211.458.032-9,7%Italian Market – Distribution channels – December 2022 YTD vs December 2021 YTD20221.316.7021.316.702



- Compared to December 2021 YTD, in 2022, the Retail segment confirmed the decrease of 2022 with -15,8% (-144.273 units sold lost) and a further decrease in its YTD Market Share with respect to December 2021 (58,3% in December 2022 vs. 62,6% in December 2021, -4,3 p.p.)
- Captive STR<R (-36,9%) and STR (-17,1%) decreased in December 2022 vs. 2021 YTD, while LTR (+18,6%) registered a slight increase.

The **Market share** of **Captive STR<R** (0,7% in December 2022 YTD vs 1,0% in December 2021 YTD) and **SRT** (3,9% in 2022 vs 4,3% in 2021) also decreased, while **LTR** market share increased from 17,6% in December 2021 YTD to 23,1% in December 2022 YTD

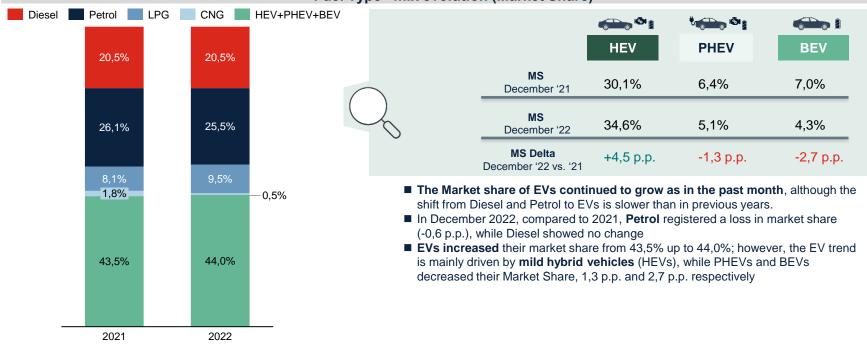
- The decrease of the Business segment registrations in December 2022 vs. December 2021 YTD was related both to the reduction of Captive self-registrations (-21,1% or 27.372 units less sold) and Companies registrations (-1,2% or 1.027 units less sold)
 Market Share YTD increase / decrease
- December 2022 / December 2021 (YTD)

∆% Volume December 2022 / December 2021 (YTD)

Source: UNRAE

(*) Self-registrations related to LTR&STR use made by Dealers and OEMs; (**) Including Dealers and OEMs self-registrations not related to LTR & STR

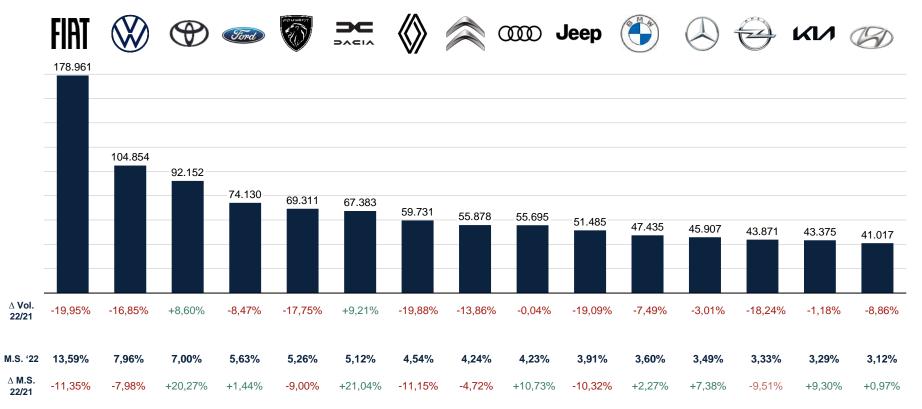
Italy | Market Highlights Italian Market – December 2022 vs December 2021



"Fuel Type" mix evolution (Market Share)

Italy | New car registrations by brand

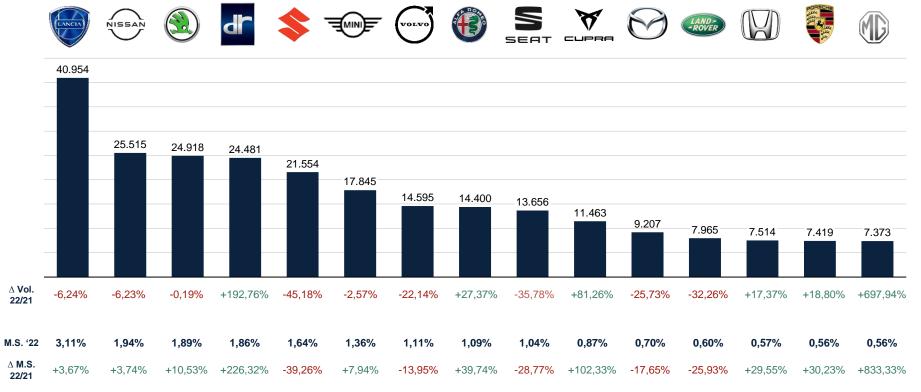
New car registrations by brand – December 2022 YTD (1/3)



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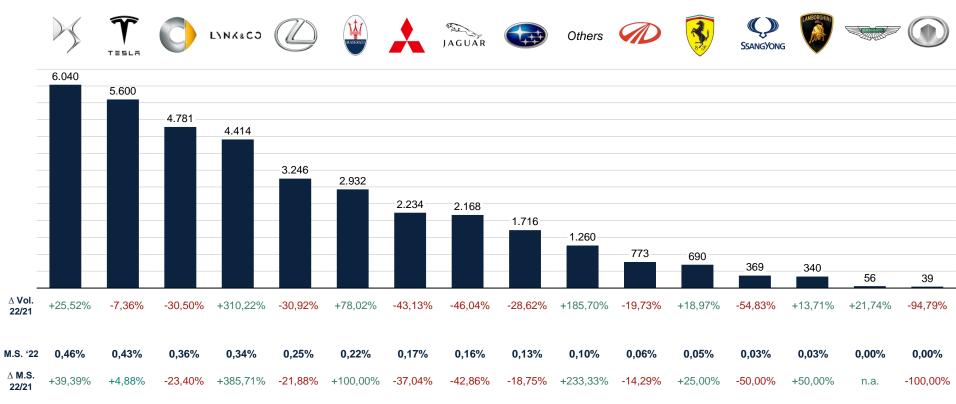
Italy | New car registrations by brand

New car registrations by brand – December 2022 YTD (2/3)



Italy | New car registrations by brand

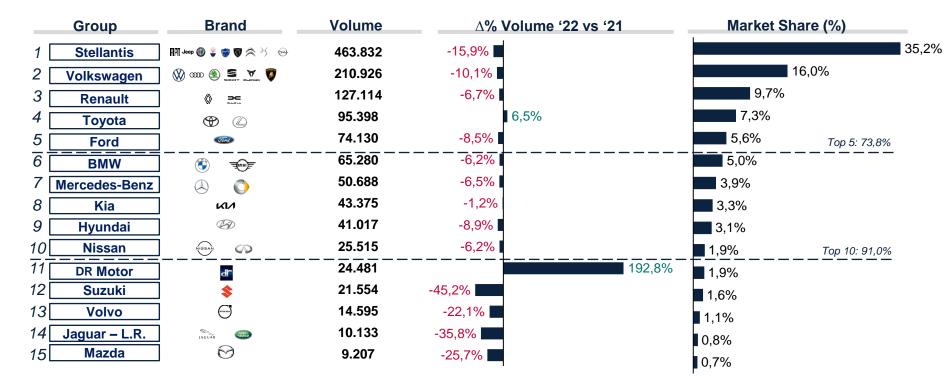
New car registrations by brand – December 2022 YTD (3/3)



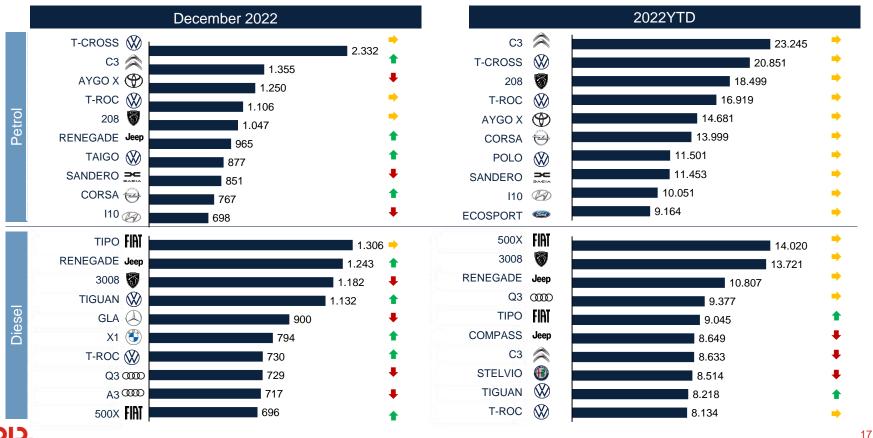
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Italy | New car registrations by group

New car registrations by group - Top 15 - December 2022 YTD

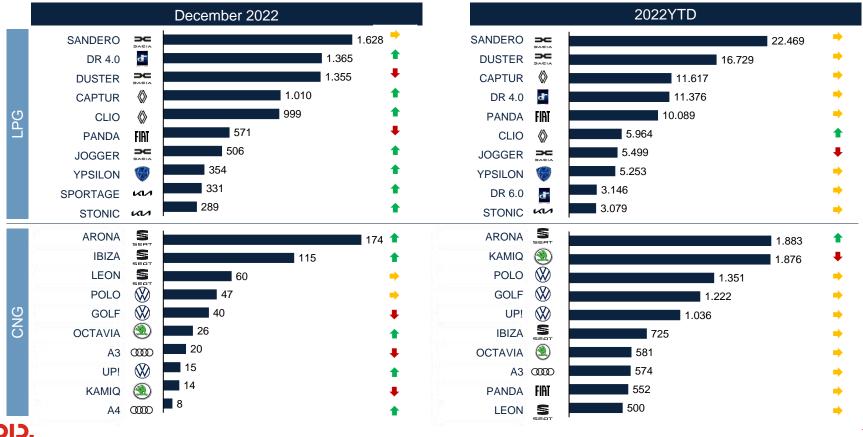


New car registrations by fuel type - Top 10 - Petrol and Diesel



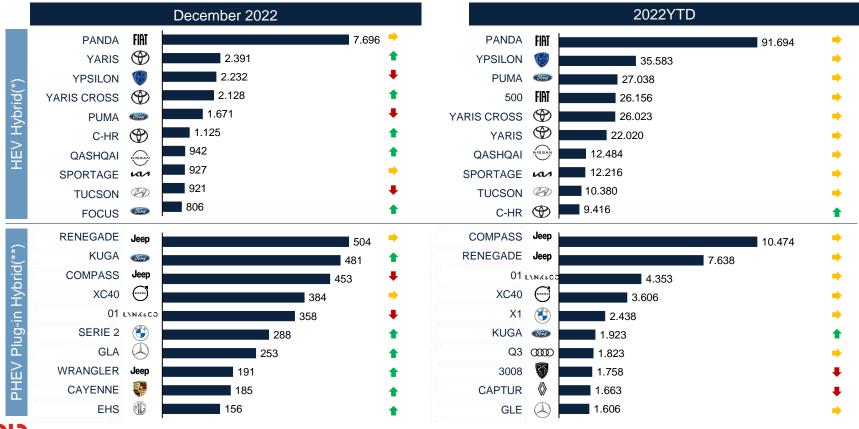
Ranking variation compared to previous period

New car registrations by fuel type - Top 10 - LPG and CNG



Source: UNRAE

New car registrations by fuel type – Top 10 – Hybrid (HEV and PHEV)

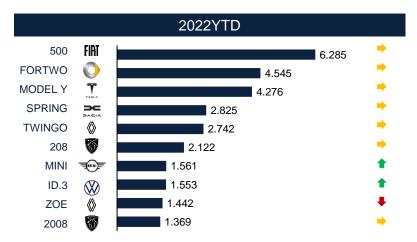


(*) Hybrid Electric Vehicle (HEV), (**) Plug-in Hybrid Electric Vehicle (PHEV)

Source: UNRAE

New car registrations by fuel type – Top 10 – Pure Electric (BEV)



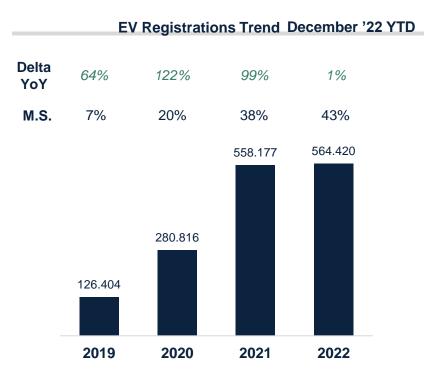


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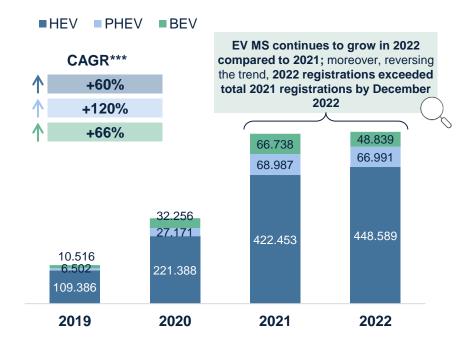
Source: UNRAE (*) Battery Electric Vehicle (BEV)

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Italy | *New car registrations by fuel type* New car registrations of Hybrid vs Pure Electric vehicles



HEV*, PHEV* and BEV** Vehicles Trend December '22 YTD



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Source: UNRAE

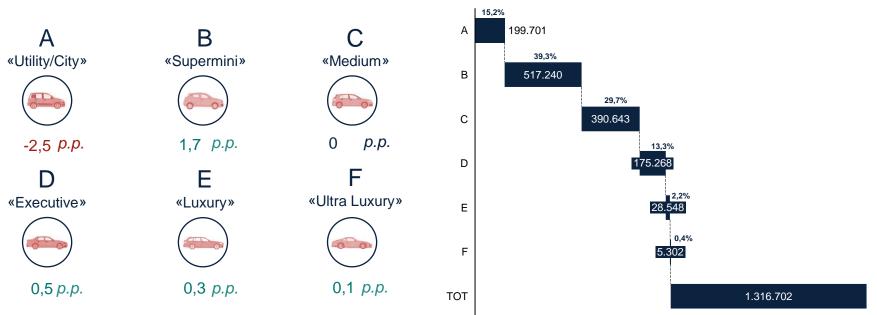
(*) HEV = Hybrid Electric Vehicles; PHEV = Plug-in Hybrid Electric Vehicles; (**) BEV = Pure Electric; (***) Related to the time frame 2019-2022

Italy | New car registrations by segment

Segments Growth in Market Share*

Overview of new car registrations by segment





(*) Δ% December 2022 YTD / December 2021 YTD; (**) Market Share and Volume December 2022 YTD

Italy | New car registrations by segment Segment A and Segment B - Top 10 - December '22 YTD

In terms of MS, respectively vs December 2021 YTD, Segment A registered a decrease (-2,5 p.p.) while Segment B recorded an



	105.384		/	/ b	ocrease (+1, oth Segme -22,5% and -	nt A and S				
		33.996	14.681	11.480	11.255	5.705	5.048	4.691	4.546	2.825
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∆ Vol. % 22/21 YTD	-6,1%	-24,1%	+0,0%	-15,4%	-16,7%	-61,1%	-53,1%	-41,4%	-26,3%	-48,6%
	40.970	33.922	31.878	29.477	27.813	26.023	25.826	25.456	20.851	17.880
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∆ Vol. %	Ø			Sind	(1	$\langle \rangle$	\bigotimes	Θ
22/21 YTD	-6,3%	+16,6%	+2,8%	+3,2%	-14,8%	+245,3%	+9,5%	-9,8%	-13,2%	-28,5%

Β "Supermini"

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Italy | New car registrations by segment Segment C and Segment D – Top 10 – December '22 YTD

 Δ Vol. %

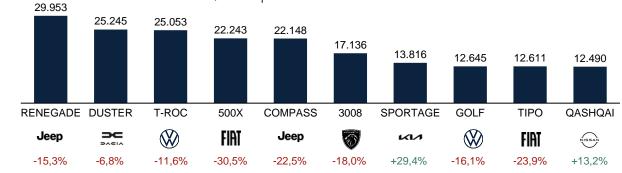
22/21 YTD

 \wedge Vol %

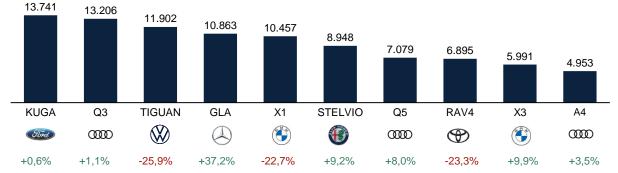
22/21 YTD

In terms of **MS**, respectively vs December 2021 YTD, **Segment C** did not register any changes (+0,0 p.p.) while **Segment D** recorded an increase (+0,5 p.p.). Considering the volumes, in December 2022 YTD both **Segment C** and **Segment D** decreased vs. December 2021 (-9,9% and -5,8% respectively)









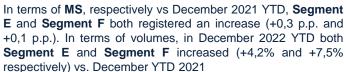
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Italy | New car registrations by segment Segment E and Segment F – Top 10 – December '22 YTD

 Δ Vol. %

22/21 YTD

∆ Vol. % 22/21 YTD

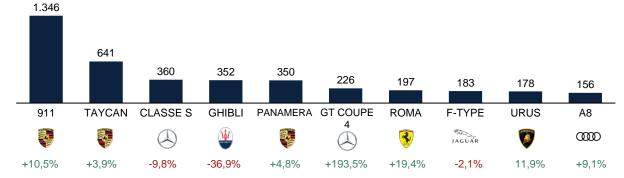






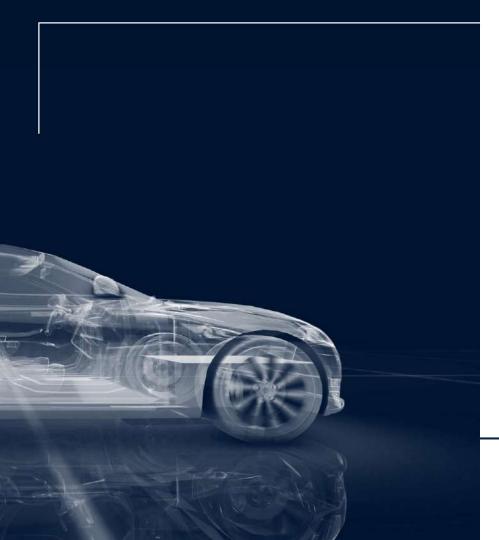
F "Ultra Luxury"

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Source: UNRAE

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01. Europe

02. Italy

03. New car models launches in Italy

04. News on key industry trends

New Car Models Launches in Italy

New models launch per brand – Roadmap 2022-2023 (1/3)

		Α		В		2		D			F			н
			0000		\approx			dr	\searrow	*	FIAT	Ford		B
Sep		 	 	×1							 			
Oct		 	 	×7					DS7 Crossback			Ranger	Civic	
Nov		1	1	iX1										
Dec			1											
Jan		DBX707	A3 Allstreet	M3 Touring						Purosangue				
Feb	Giulia		S4	ХМ	C4 X				1					
Mar	Stelvio		\$5	X5	C5				1					loniq 6
Apr				M2			Jogger Ecosmart					Kuga		
Мау				Serie 5							595 E		Civic Type R	
Jun				Serie 7									Kona	
Jul		 	 	M3CS					1		B-Suv		CR-V	Santa Fe
Aug	Brennero											1 1 1		

✓ Launch Concluded ➡Launch Postponed Launch Anticipated



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New Car Models Launches in Italy

New models launch per brand – Roadmap 2022-2023 (2/3)

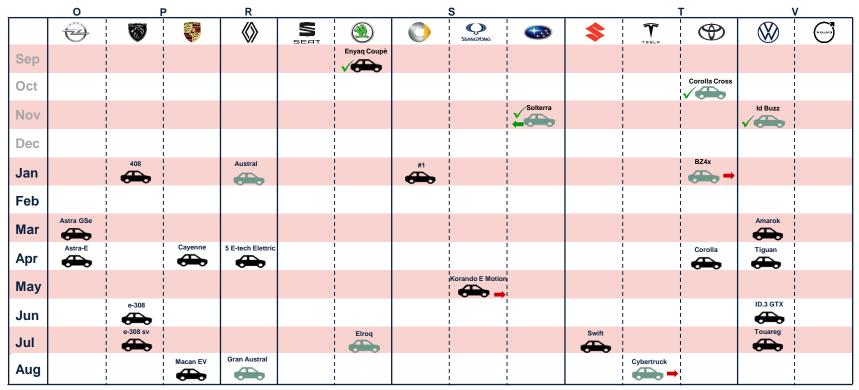
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Sep		 						 			AMG GT 63 S E		X-Trail
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Dec		1											
Jan		F-Type 75									EQS Suv		1
Feb									1		AMG c 63		
Mar		1							Gran Turismo/ Folg	ore	GLE	ASX	1
Apr		1						1			GLC Hybrid		1
Мау			Avenger e								EQE Suv		1
Jun		1						G	iran Cabrio/ Folgore		GLC Coupè		
Jul				EV9	Urus Evo					CX-80		Colt	1
Aug					Aventador				Grecale/ Folgore		Classe G		

✓ Launch Concluded →Launch Postponed ← Launch Anticipated



New Car Models Launches in Italy

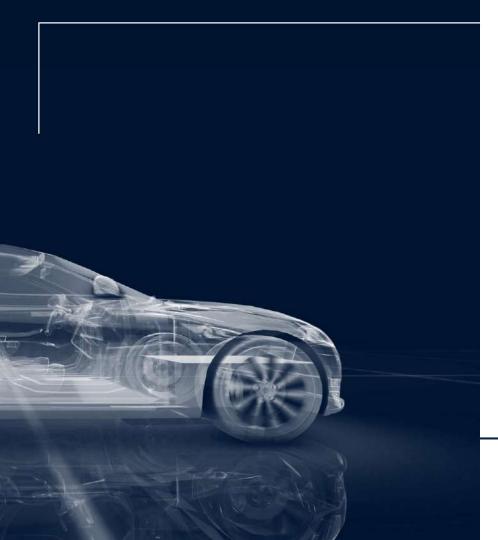
New models launch per brand – Roadmap 2022-2023 (3/3)



Source: Quattroruote, Motor1

✓ Launch Concluded → Launch Postponed ← Launch Anticipated





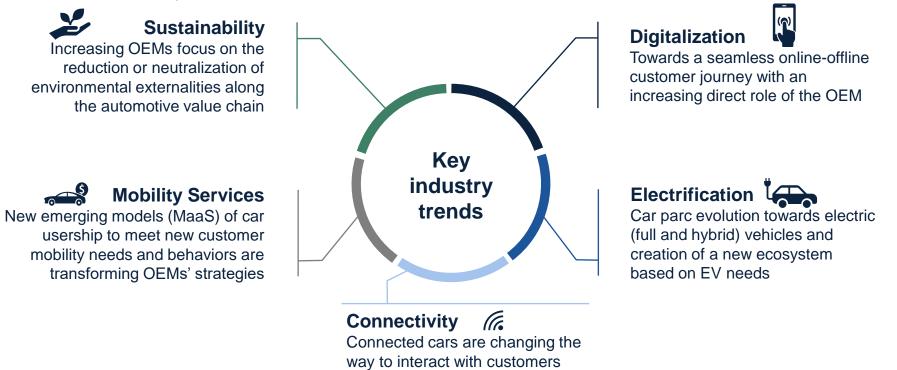
01. Europe

02. Italy

03. New car models launches in Italy

04. News on key industry trends

5 key trends are expected to push the evolution of the automotive industry. For each one in the following slides there is a selection of main news published from 20/12/2022 to 20/01/2023



and opening new business

streams related to data utilization

Digitalization

Stellantis creates data services business The new unit, called Mobilisights, will license data to a wide range of customers including rival carmakers, drawing on Stellantis' connected vehicles, which are expected to total 34 million by 2030 (...)

(?)

https://europe.autonews.com/automakers/stellantis-creates-new-data-services-business

Geely & Alibaba to develop digital automotive solutions Geely and Alibaba will further explore areas such as cloud computing, vehicle production and sales, digital plants, autonomous driving, intelligent cockpit, mobility services, and sustainable development (...)

https://telematicsnews.info/2023/01/16/geely-alibaba-to-develop-digital-automotive-solutions/



Electrification (1/2)

Mercedes-Benz launches branded HPC network The German carmaker wants to build its own highpower charging network covering North America, Europe, China and other key markets. Overall, Mercedes-Benz targets installing more than 10,000 ultra-rapid chargers worldwide (...)

https://www.electrive.com/2023/01/06/mercedes-benz-launches-branded-hpc-network/

Stellantis signs binding agreement with Element 25 Limited for manganese sulphate supply for electric vehicle batteries Stellantis N.V. and Element 25 Limited announced today the signing of a binding agreement for Element 25 to supply battery grade, high purity manganese sulphate monohydrate to Stellantis for use in electric vehicle (EV) battery packs (...)

https://www.automotiveworld.com/news-releases/stellantis-signs-binding-agreement-with-element-25-limited-formanganese-sulphate-supply-for-electric-vehicle-batteries/

ZF develops range-saving 'Heat Belt' for EVs The ZF 'Heat Belt' for electric vehicles allows drivers to reduce the energy used to heat the car, especially in combination with other contact heaters such as a seat heater, explains ZF(...)

https://www.electrive.com/2023/01/05/zf-develops-range-saving-seat-belt-for-evs-called-heat-belt/



Electrification (2/2)

VinFast and NXP collaborate on developing the next generation of smart electric vehicles VinFast seeks to leverage NXP's processors, semiconductors and sensors. Both will engage in the early development phases of new VinFast automotive projects, leveraging NXP's rich portfolio of system solutions for innovative applications.(...)

https://www.automotiveworld.com/news-releases/vinfast-and-nxp-collaborate-on-developing-the-next-generation-of-smartelectric-vehicles/

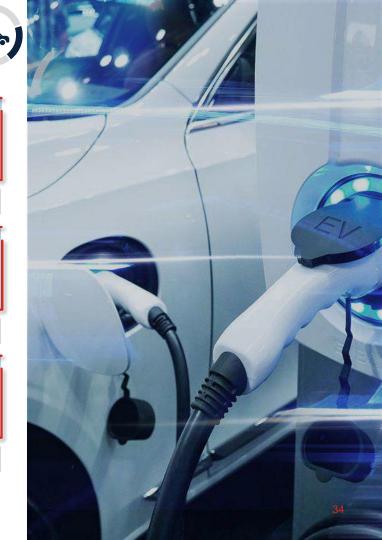
Audi to upgrade all factories for EV production by 2029 By the end of this decade, the brand will manufacture electrically powered models at all production sites worldwide. The background to this is Audi's announcement that from 2026 it will only be launching new battery-electric models on the market (...)

https://www.electrive.com/2022/12/20/audi-to-upgrade-all-factories-for-ev-production-by-2029/

Shell acquired the US EV charging manufacturer Volta

Shell has officially announced the acquisition of Volta, a US manufacturer of mega-screen charging stations, known for having launched a business model based on free recharging at shopping centers: an energy supply that, in practice, is 'reimbursed' by (...)

https://e-ricarica.it/shell-ha-acquisito-il-produttore-americano-di-colonnine-volta/





MIMO and Indy Autonomous Challenge at CES for autonomous driving

Connectivity

A two-year agreement between MIMO and Indy Autonomous Challenge presented during the first day of the Consumer Electronics Show (CES) in Las Vegas. The collaboration that will lead to the futuristic challenge between universities around the world (...)

https://www.fleetmagazine.com/mimo-indy-autonomous-challenge-ces-las-vegas-guida-autonoma/

NTT DATA, Valeo and Embotech form consortium to provide automated parking solutions

Together, the three companies have built a consortium, VEN.AI, that aims to be the go-to solution provider for production ready parking automation with global roll out capabilities (...)

https://www.automotiveworld.com/news-releases/ntt-data-valeo-and-embotech-form-consortium-to-provide-automated-parking-solutions/

Stellantis completes acquisition of aiMotive to accelerate autonomous driving journey Stellantis N.V. today announced that it has finalized the acquisition of aiMotive, a leading developer of advanced artificial intelligence and autonomous driving software. aiMotive will operate as a subsidiary of Stellantis (...)

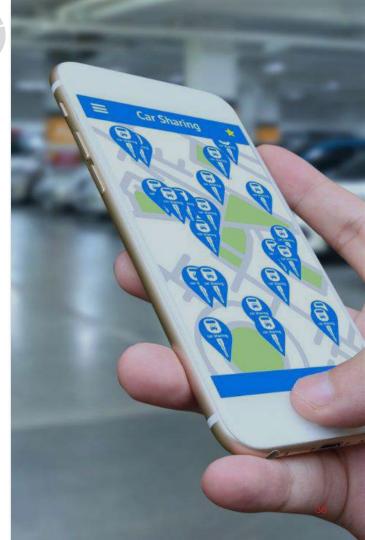
https://www.automotiveworld.com/news-releases/stellantis-completes-acquisition-of-aimotive-to-accelerate-autonomousdriving-iourney/



Mobility Services

Mobilize tech company Karhoo partners with Renfe to enable taxi booking directly from doco application By using doco, travellers will be able to plan, book and pay for various modes of transportation including trains, cabs, scooters, and electric motorcycles, all in one application. The partnership with Karhoo gives doco users access to more than 22.000 taxis (...)

https://www.automotiveworld.com/news-releases/mobilize-tech-company-karhoo-partners-with-renfe-to-enable-taxi-booking-directly-from-doco-application/



Sustainability

Daimler Truck further expands CO₂-neutral energy supply at production sites through photovoltaics The company aims to achieve CO_2 -neutral production in all plants and business units worldwide by 2039. The European sites will already be CO_2 -neutral from this year onwards – partly by sourcing electricity from solar, wind and hydroelectric power.(...)

https://www.automotiveworld.com/news-releases/daimler-truck-further-expands-co%e2%82%82-neutral-energy-supply-atproduction-sites-through-photovoltaics/

Hyundai experiments with Vehicle to load technology by powering a farm with no electricity grid Hyundai demonstrated how this e-mobility technology can be extremely useful in regions with no electricity grid. In fact, the car managed to power the arctic farm in Tromsø for 3 days, also allowing to cook a dinner (...)

https://e-ricarica.it/hyundai-sperimenta-la-tecnologia-vehicle-to-load-alimentando-una-fattoria-sprovvista-di-rete-elettrica/



Thank you.

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