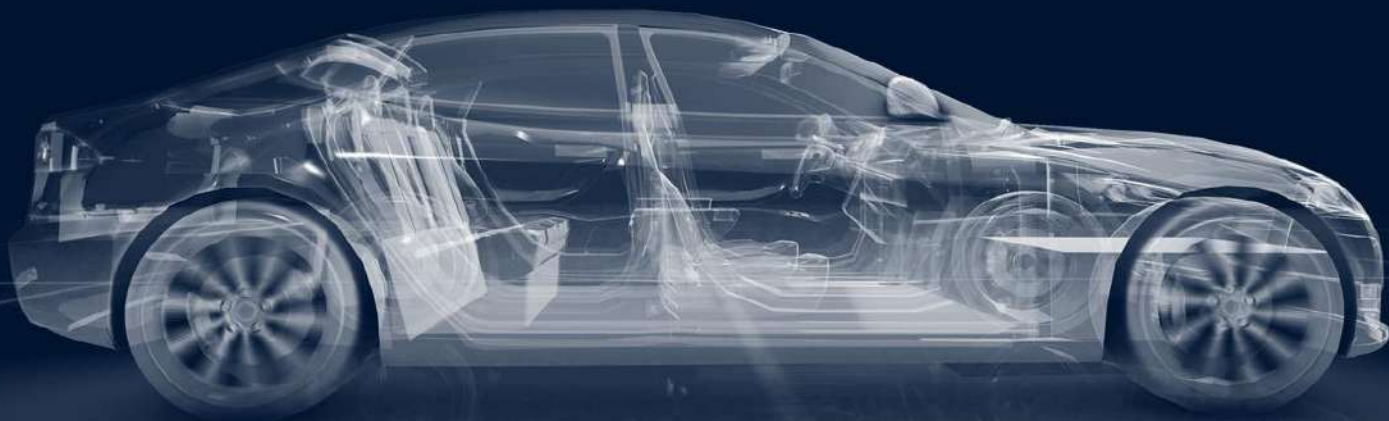


# BIP AutoObserver

Analysis of new car registrations

*March 2022*



# Executive Summary

## Analysis of new car registrations in Europe & Italy – March 2022



### Europe\*

**-18,8%**

**Top 3 Countries by growth of new registrations:** Iceland +52,3%, Ireland +40,4% and Romania +40,2% in volume in March 2022 compared to March 2021

**Top 3 Countries by market share:** Germany 22,7% (+1,4 p.p.), United Kingdom 15,2% (+1,4 p.p.) and France 13,3% (-1,1 p.p.) in March 2022 YTD compared to March 2021 YTD

**Brands:** among the Top 15 by volume, greatest grow for Kia +27,6%, Dacia +16,9% and Hyundai +14,7%, in March 2022 YTD compared to March 2021 YTD

**Premium brands:** among the Top 15 by volume, Audi -3,3%, Mercedes-Benz -10,5%, BMW -14,1% in volume in March 2022 YTD compared to March 2021 YTD



### Italy

**-29,7%**

**Areas:** North-East -30,2%, North-West -31,3%, Centre -24,9%, South -32,3% and Islands -30,8%, in volume in March 2022 compared to March 2021

**Customer segments:** Retail -26,0%, Fleet -21,8% and Business -20,7% in volume in March 2022 YTD compared to March 2021 YTD

**Brands:** among the Top 15 by volume, highest rate for Dacia +27,9%, Kia -2,1% and Ford -16,6% in March 2022 YTD compared to March 2021 YTD

**Premium brands:** among the Top 15 by volume, BMW -21,7%, Mercedes-Benz -23,1% and Audi -24,8% in volume in March 2022 YTD compared to March 2021 YTD



## 01. Europe

- | Market overview
- | New car registrations by brands

02. Italy

03. New car models launches in Italy


04. Quarterly special topic:  
European charging infrastructure

05. News on key industry trends

# Europe | Market Overview

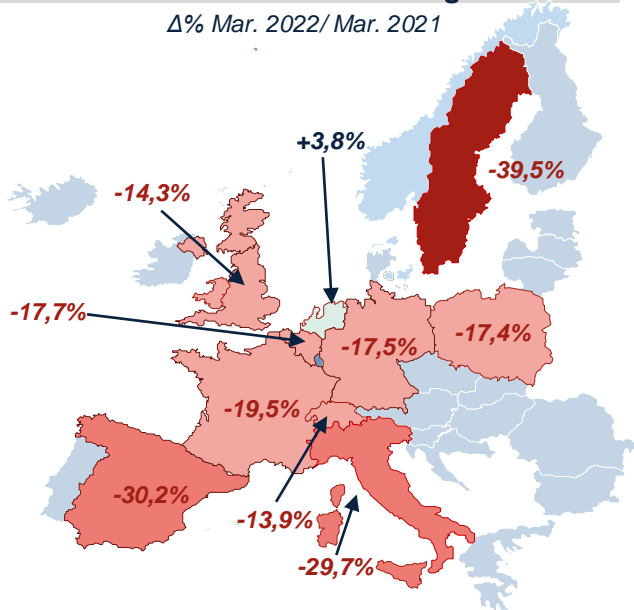
## Top 10 European Markets\* – March 2022

European Markets\*  
new car registrations

2021	1.387.985	<b>-18,8%</b>	
2022	1.127.077		

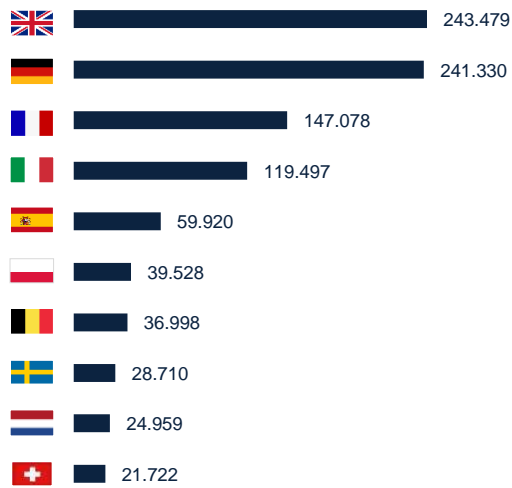
### Δ% Volume 22/21 of new car registrations

Δ% Mar. 2022/ Mar. 2021



### Number of EU new car registrations 2022

New car registration Mar. 2022

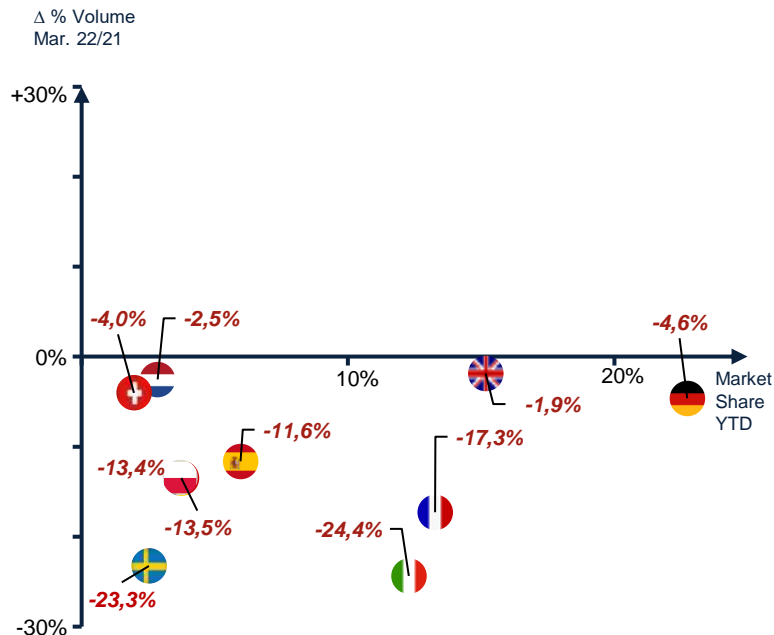


### ! Highlights

- The European market (EU+UK+EFTA) had a **decrease in registrations** from 1.387.985 in March 2021 to 1.127.077 cars compared to the **same period of 2022**
- During March, the EU passenger car market continued to suffer mainly due to the **"shortage"** of **microchips** and **raw materials** that is slowing down the production and therefore cars delivery. An increase has been registered for 9 out of 30 countries (only Netherlands, among the top 10 for volume) and a decrease for 21 countries (highest decline for Sweden -39,5% in March 2022 vs. 2021 among the top 10 for volume)



### Highlights - $\Delta$ % Volume 22/21 & Market Share (MS)



#	Country	MS Mar. 2022 YTD	$\Delta$ VS 2021	Sales Volume Mar 2022 YTD
1	GER	22,7%	-4,6%	625.954
2	UK	15,2%	-1,9%	417.560
3	FRA	13,3%	-17,3%	365.360
4	ITA	12,3%	-24,4%	338.258
5	SPA	6,0%	-11,6%	164.399
6	BEL	3,7%	-13,5%	103.146
7	POL	3,7%	-13,4%	102.041
8	NET	2,9%	-2,5%	78.539
9	SWE	2,5%	-23,3%	69.739
10	CHE	2,0%	-4,0%	54.227

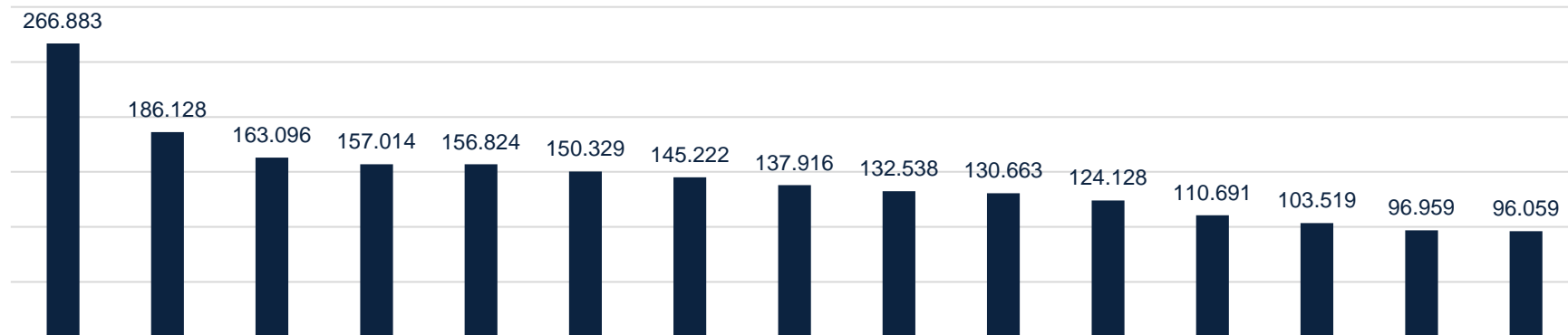
### ! Highlights

- In the first 3 months of 2022 European passenger cars **registrations** (2.753.256 units in total) **decreased** by -10,6% compared to 2021 YTD.
- An **increase** has been registered for 8 out of 30 countries and a decrease for 22 countries (among them all the top 10)

# Europe | New car registrations by brand



Top 15 – March 2022 YTD



Δ Vol. 22/21	-19,9%	+1,1%	-24,2%	-10,5%	-14,1%	-3,3%	+27,6%	-19,2%	-15,4%	-19,4%	+14,7%	-16,5%	+16,9%	-23,6%	-25,6%
MS '22	9,7%	6,8%	5,9%	5,7%	5,7%	5,5%	5,3%	5,0%	4,8%	4,7%	4,5%	4,0%	3,8%	3,5%	3,5%
Δ MS 22/21	-0,10%	+0,13%	-0,15%	+0,00%	-0,04%	+0,08%	+0,43%	-0,10%	-0,05%	-0,10%	+0,28%	-0,07%	+0,31%	-0,15%	-0,17%



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. Quarterly special topic:  
European charging infrastructure

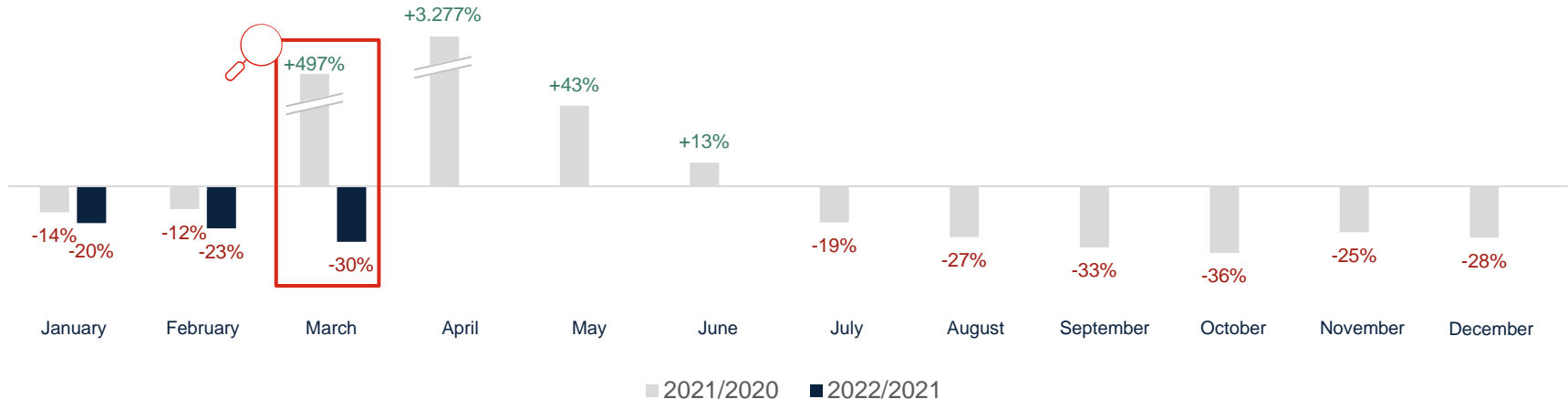
05. News on key industry trends



## Italian Market – Variation of new car registrations 2022 vs 2021

### March 2022 Highlights

In the **first quarter of 2022** the Italian car market suffered a **decline** compared to the first quarter of 2021. The "**shortage**" of **microchips and raw materials** is slowing down the production and therefore cars delivery (OEM supply chain has lack of stocks and production rhythm is slowing for all brands). There are also **uncertainties** related to the **progress of the pandemic** and the **Ukraine war** with impacts on the production and sales. In the meantime, **new incentives** have been allocated that should lead to a **positive boost** on **EV sales in the next months**. In **March 2022**, 119.497 new cars were registered, -29,7% vs. 169.886 of March 2021. All customers segments **have lost in volumes** compared to 2021: Retail (-35,0%), Fleet (-34,1%), Business (-27,2%). Regarding the fuel type, the LPG sales are still increasing (+6,4% in March 2022 vs. 2021 with 11.079 registered units this month). In the first three months of 2022 more than 108.987 cars were lost, with 338.258 units registered, down 24,4% in 2021.





# Italy | Market Overview

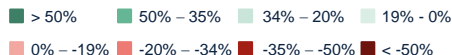
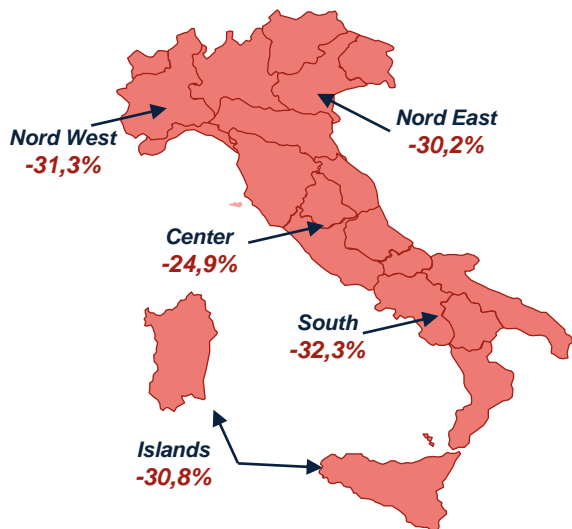
Italian Market – March 2022 vs March 2021

Italy New Car Registrations

2021	169.886	-29,7%	
2022	119.497		

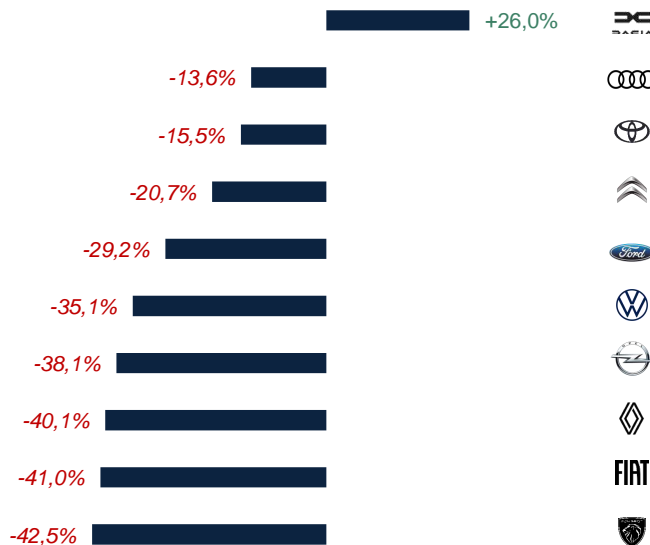
## Δ% Volume 22/21 of New Car Registrations

% Mar. 2022/ Mar. 2021



## Growth of Top 10 Brands by Volumes

Δ% Mar. 2022/ Mar. 2021



## ! Highlights

- The Italian market had an **overall decrease in registrations for all geographical regions**, as shown in the map
- Regarding the top 10 brands by volume an **increase has been registered only for Dacia** (+26,0%) while for the other 9 brands the variation still is negative (highest for Peugeot -42,5% and Fiat -41,0% in March 2022 vs. 2021)

# Italy | Market Overview

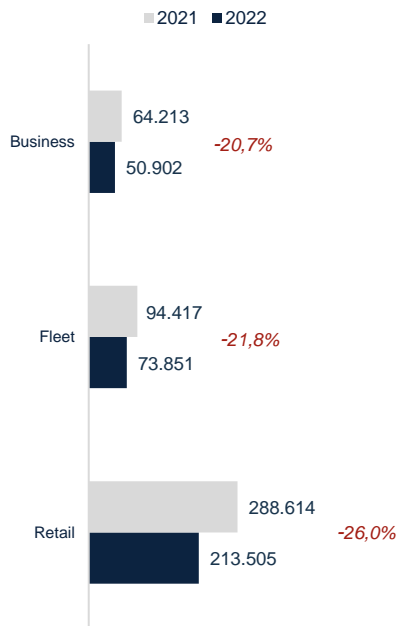
Italian Market – March 2022 YTD vs March 2021 YTD

## Italy New Car Registrations (YTD)



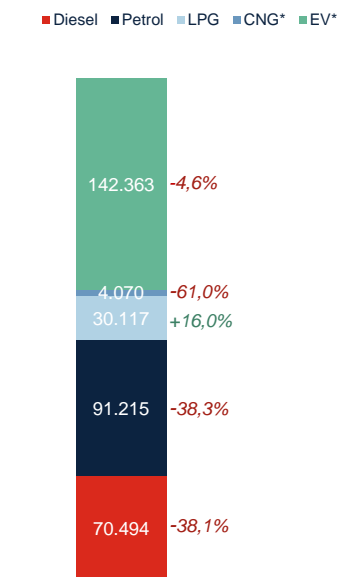
### Analysis by “Customer Segment”

Registration YTD '22/'21



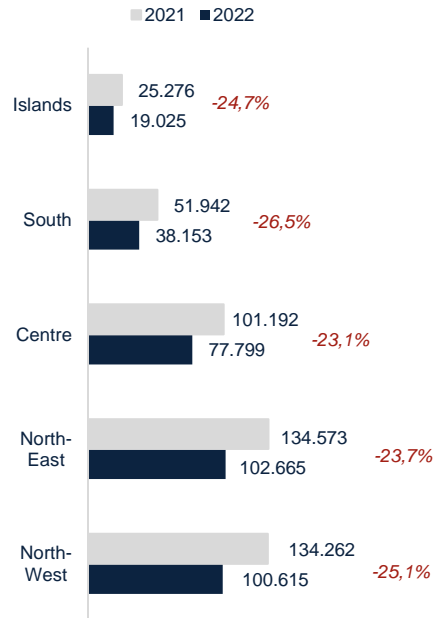
### Analysis by “Fuel Type”

Registration YTD '22



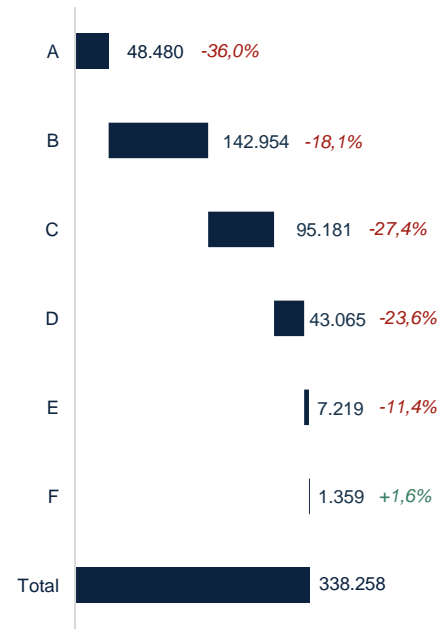
### Analysis by “Geographical Area”

Registration YTD '22/'21



### Analysis by “Car Segment”

Registration YTD '22/'21




Source: UNRAE

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

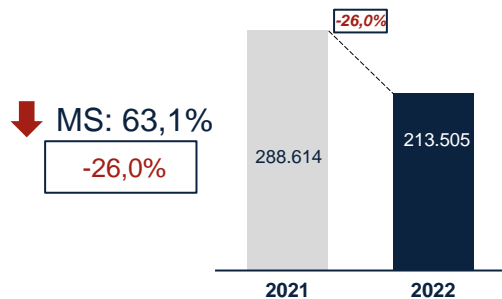
# Italy | Market Highlights

## Italian Market – Distribution channels – March 2022 YTD vs March 2021 YTD

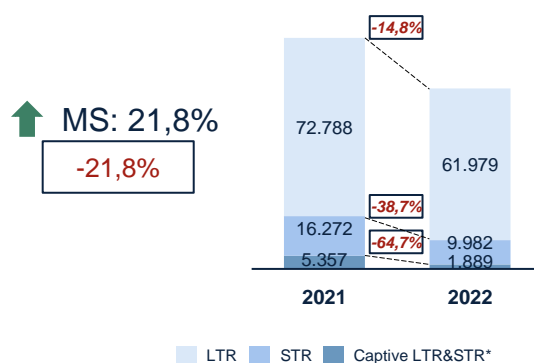
Italy New Car Registrations (YTD)

2021	447.245	-24,4%	 
2022	338.258		

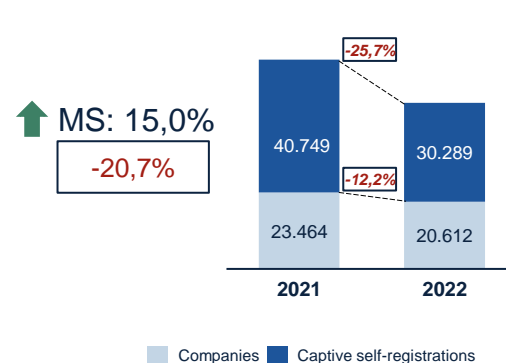
### Retail (Private Customers)



### Fleet (LTR, STR and Captive LTR&STR\*)



### Business (Company registrations\*\*)



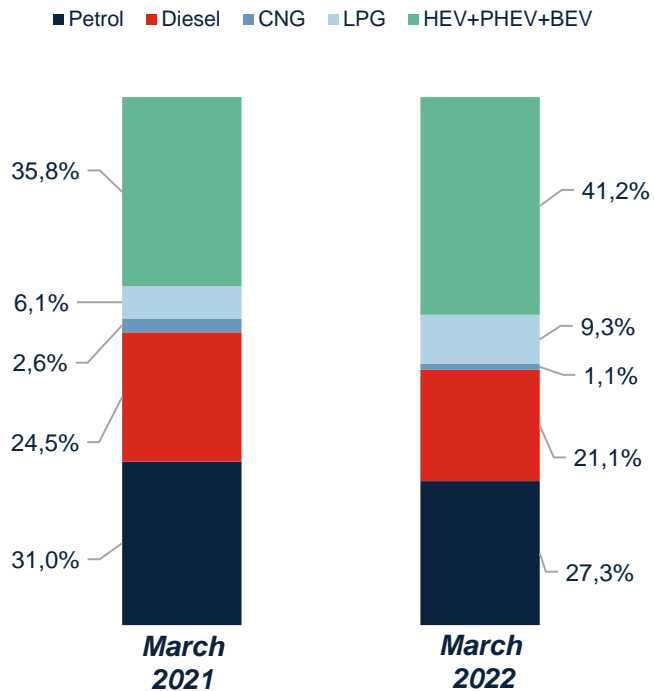
■ Compared to **March 2021 YTD**, in **2022**, **Retail** segment of the Italian market has registered -75.109 units sold lost and has decreased its Market Share YTD (64,5% in March 2021 vs. 63,1% in March 2022, -1,4 p.p.)

■ **All Fleet subsegments** decreased in March **2022 vs. 2021 YTD**, the **drop of Captive LTR&STR** segment was the most relevant (-64,7% or 3.468 units sold less vs. March 2021)

■ The decrease of the **Business segment** registrations in **March 2022 vs. March 2021 YTD** was related **both** to the reduction of **Captive self-registrations** (-25,7% or 10.460 units less sold) and **Company** registrations (-12,2% or 2.852 units less sold)



### “Fuel Type” mix evolution (Market Share)



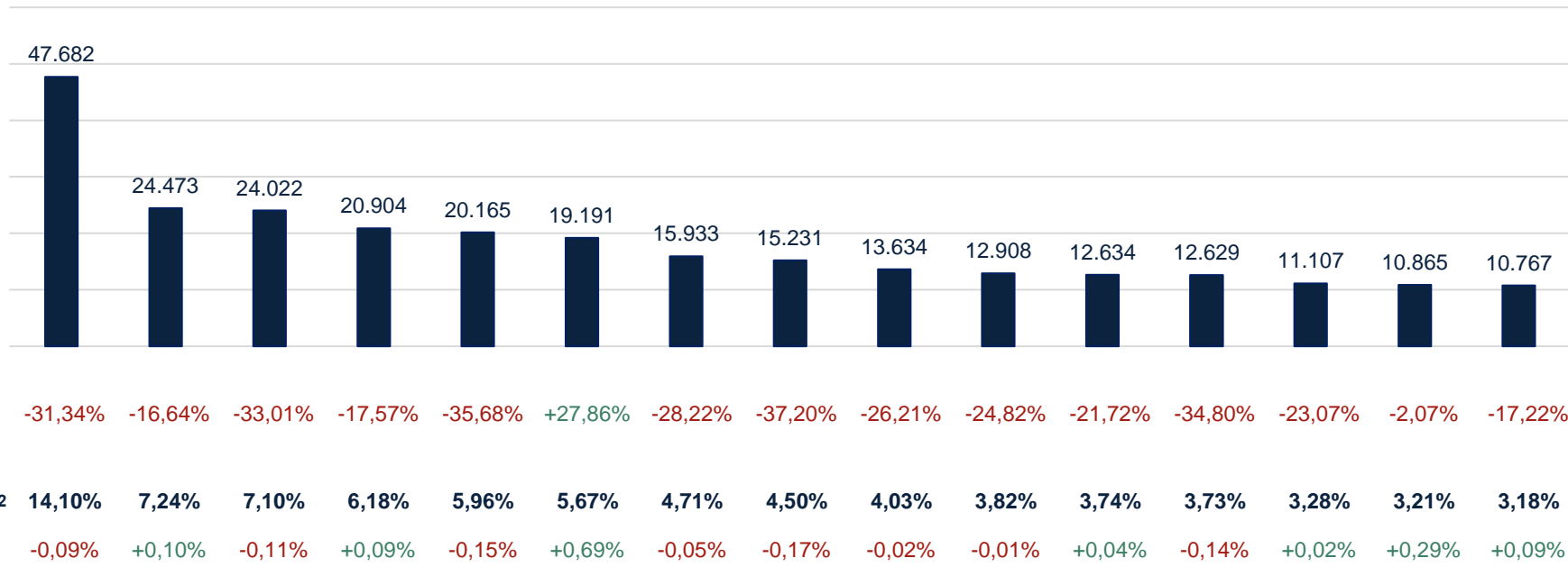
	HEV	PHEV	BEV
<b>MS</b> Mar '21	27,0%	4,5%	4,3%
<b>MS</b> Mar '22	32,5%	5,0%	3,7%
<b>MS Delta</b> Mar '22 vs. '21	+5,5 p.p	+0,5 p.p	-0,6 p.p

- During the last year the **fuel type mix still is registering a shift** from Diesel and Petrol to **EV**, even though to a **small extent** compared to the last years
- In particular, compared to 2021, in March 2022 **Petrol and Diesel registered a lost** in terms of market share (-3,7 p.p and -3,4 p.p respectively) while **EV increased** their market share from 35,8% up to 41,2%
- Still, this increase was **due mainly to mild hybrid vehicles (HEV)** while the contribute of PHEV was less important. BEV registered a slight decrease due to incentives uncertainties

# Italy | New car registrations by brand



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

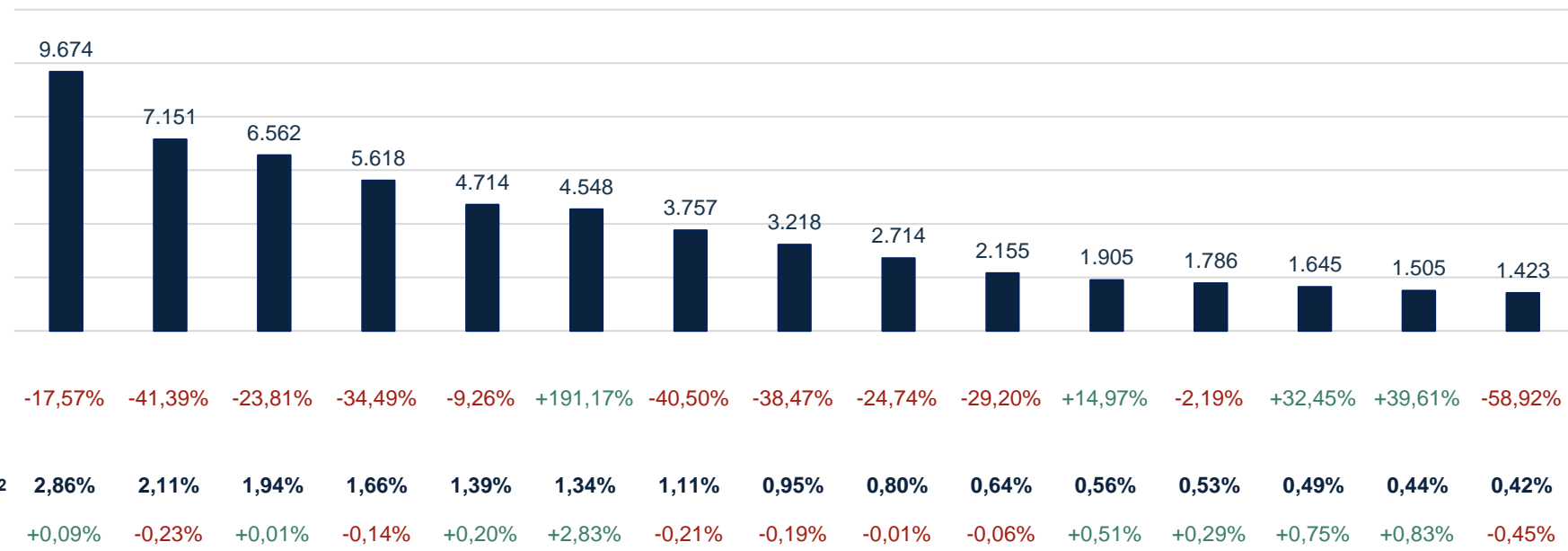


Source: UNRAE

# Italy | New car registrations by brand



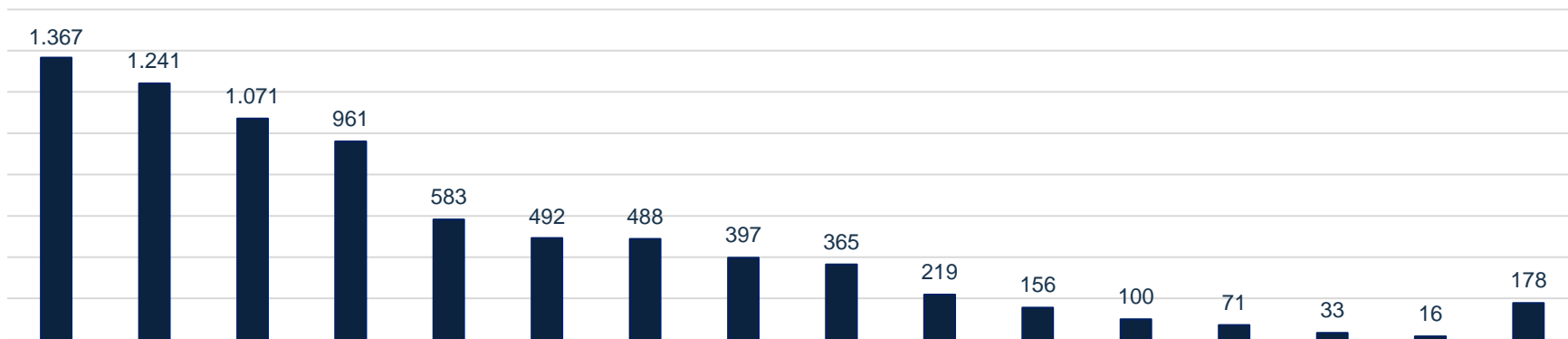
New car registrations by brand – March 2022 YTD (2/3)



# Italy | New car registrations by brand



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



Brand	Δ Vol. 22/21
Tesla	-19,78%
MG	-
Lexus	-25,73%
Opel	-49,34%
Jaguar	-49,17%
Mitsubishi	-54,15%
Subaru	-21,42%
Lynk & Co	-
Maserati	-23,16%
Ferrari	+32,73%
Ssangyong	-28,44%
Acura	-52,61%
Lamborghini	0,00%
Honda	-83,42%
Others	0,00%
Others	+58,90%

Brand	M.S. '22
Tesla	0,40%
MG	0,37%
Lexus	0,32%
Opel	0,28%
Jaguar	0,17%
Mitsubishi	0,15%
Subaru	0,14%
Lynk & Co	0,12%
Maserati	0,11%
Ferrari	0,06%
Ssangyong	0,05%
Acura	0,03%
Lamborghini	0,02%
Honda	0,01%
Others	0,00%
Others	0,05%

Brand	Δ M.S. 22/21
Tesla	+0,05%
MG	-
Lexus	0,00%
Opel	-0,33%
Jaguar	-0,35%
Mitsubishi	-0,38%
Subaru	0,00%
Lynk & Co	-
Maserati	0,00%
Ferrari	+0,50%
Ssangyong	0,00%
Acura	-0,40%
Lamborghini	0,00%
Honda	-0,75%
Others	-
Others	+0,67%



Source: UNRAE

# Italy | New car registrations by group



New car registrations by group – Top 15 – March 2022 YTD

	Group	Brand	Volume	Δ% Volume '22 vs '21	Market Share (%)
1	Stellantis		124.133	-31,2%	36,7%
2	Volkswagen		48.021	-30,6%	14,2%
3	Renault		35.124	-5,6%	10,4%
4	Ford		24.473	-16,6%	7,2%
5	Toyota		21.975	-18,0%	6,5%
<hr/>					
6	BMW		17.348	-18,7%	5,1%
7	Daimler		12.068	-26,1%	3,6%
8	Kia		10.865	-2,1%	3,2%
9	Hyundai		9.674	-17,6%	2,9%
10	Suzuki		7.151	-41,4%	2,1%
<hr/>					
11	Nissan		6.562	-23,8%	1,9%
12	DR Motor		4.548	+191,2%	1,3%
13	Volvo		3.218	-38,5%	1,0%
14	Mazda		2.714	-24,7%	0,8%
15	Jaguar – L.R.		2.006	-56,5%	0,6%

Top 5: 75%

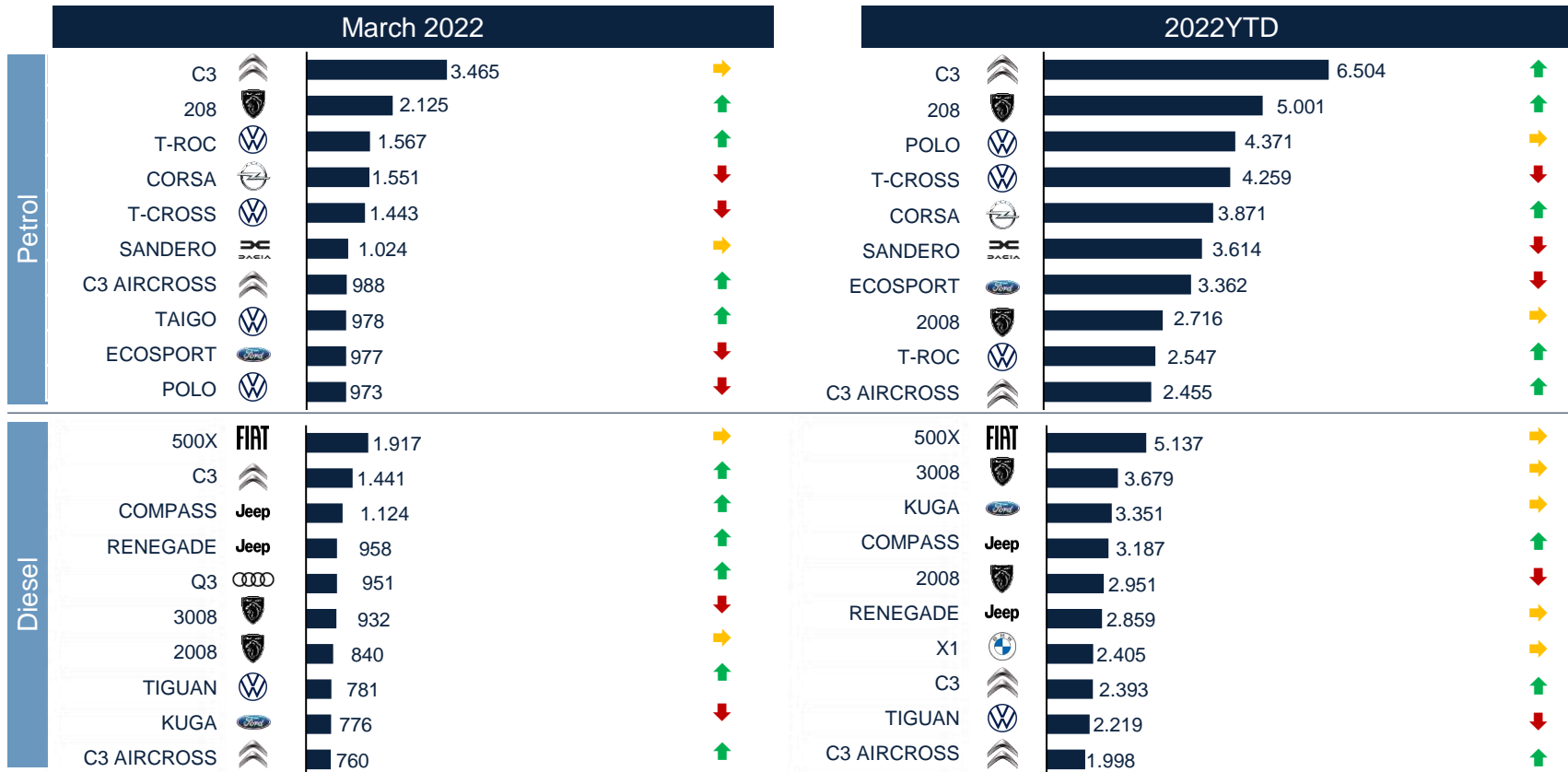
Top 10: 91,9%



# Italy | New car registrations by fuel type



## New car registrations by fuel type – Top 10 – Petrol and Diesel



Source: UNRAE

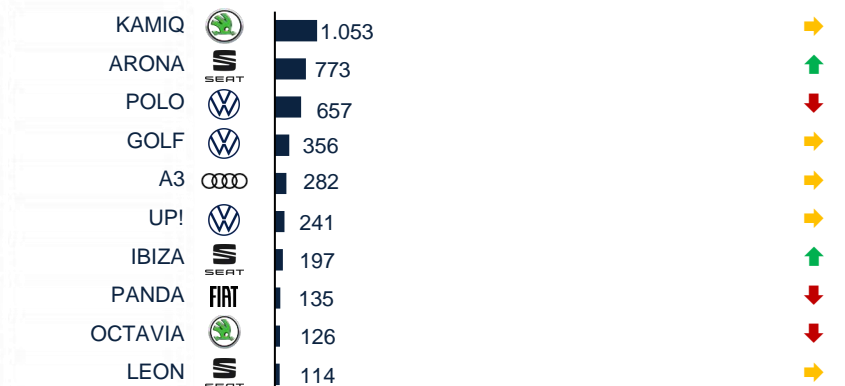
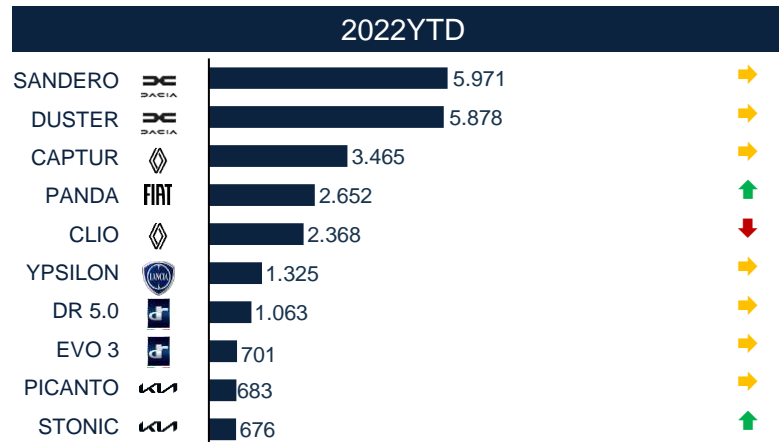
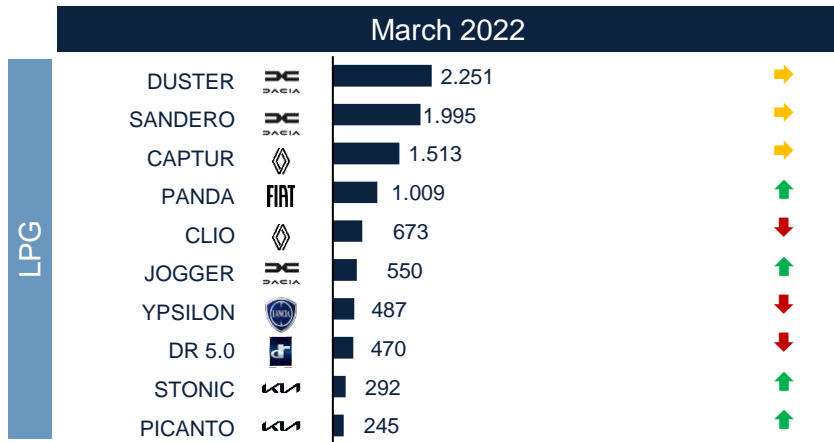


Ranking variation compared to previous period

# Italy | New car registrations by fuel type



## New car registrations by fuel type – Top 10 – LPG and CNG



Source: UNRAE

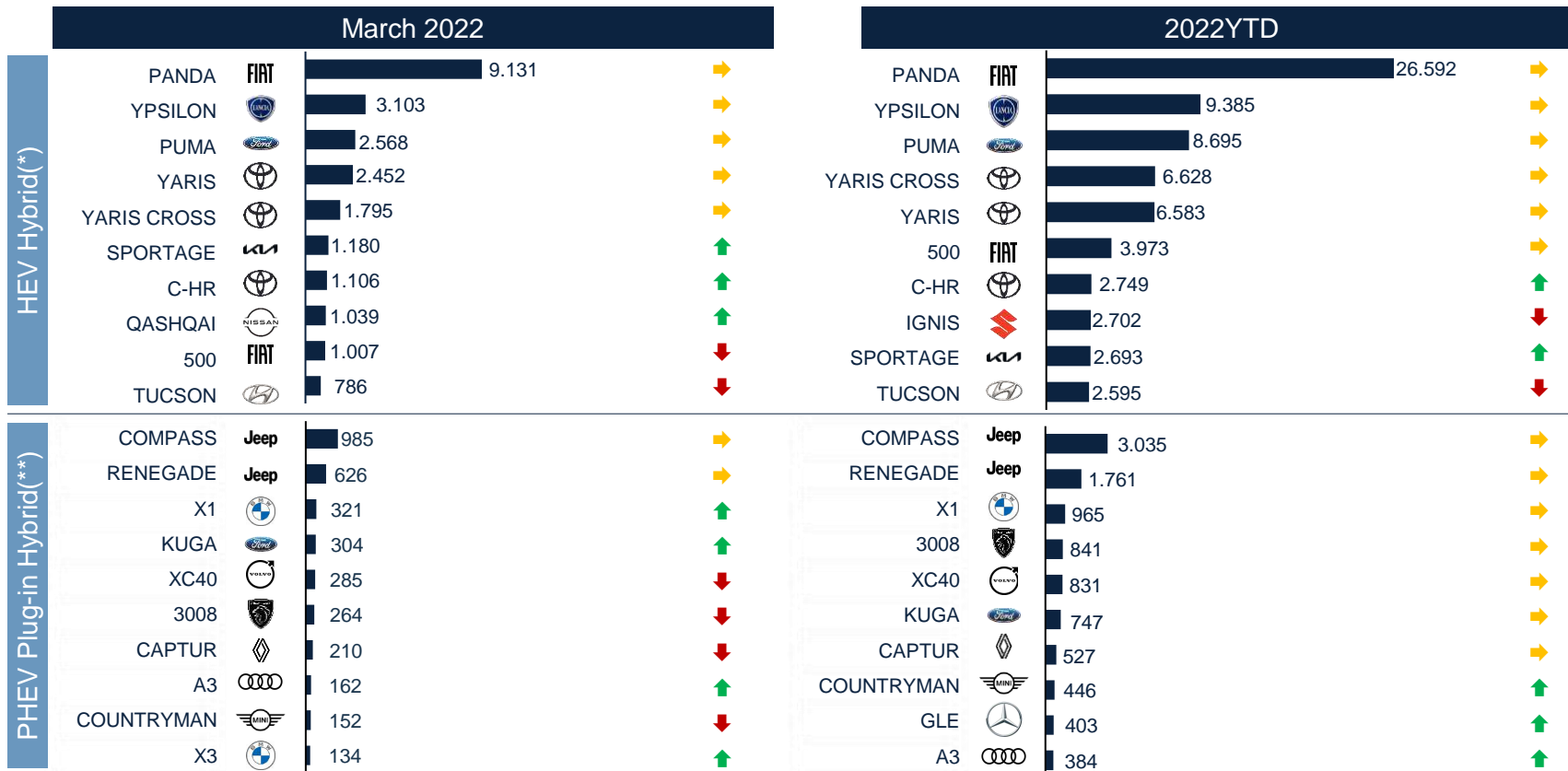


Ranking variation compared to previous period

# Italy | New car registrations by fuel type



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



Source: UNRAE

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



Ranking variation compared to previous period

# Italy | New car registrations by fuel type



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

		March 2022		
BEV Pure Electric(*)	MODEL Y		678	↑
	SPRING		516	↑
	500		495	↓
	MODEL 3		378	↑
	FORTWO		314	↓
	MINI		155	↑
	208		141	↑
	ZOE		111	↓
	KONA		109	↓
	ID.3		86	↓

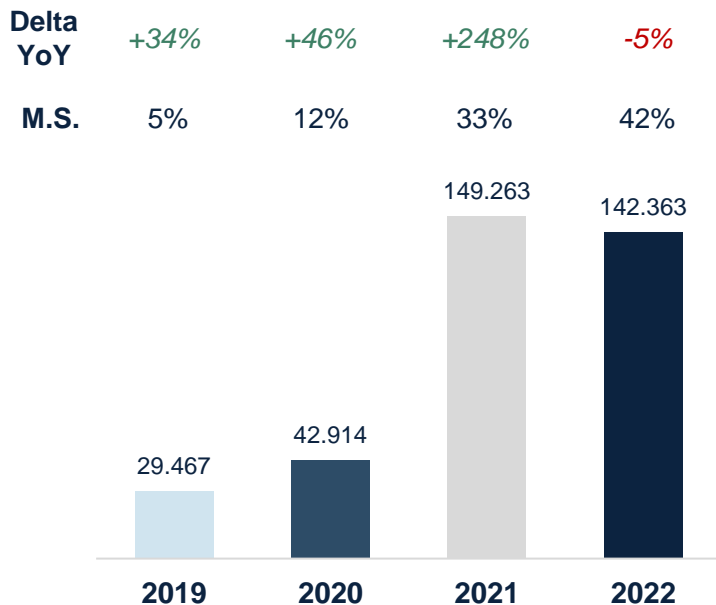
		2022YTD		
	500		1.552	→
	SPRING		1.234	→
	MODEL Y		912	↑
	FORTWO		841	↓
	ZOE		484	→
	MODEL 3		455	↑
	TWINGO		435	↓
	208		412	↓
	ID.3		351	↓
	2008		329	↓

# Italy | New car registrations by fuel type

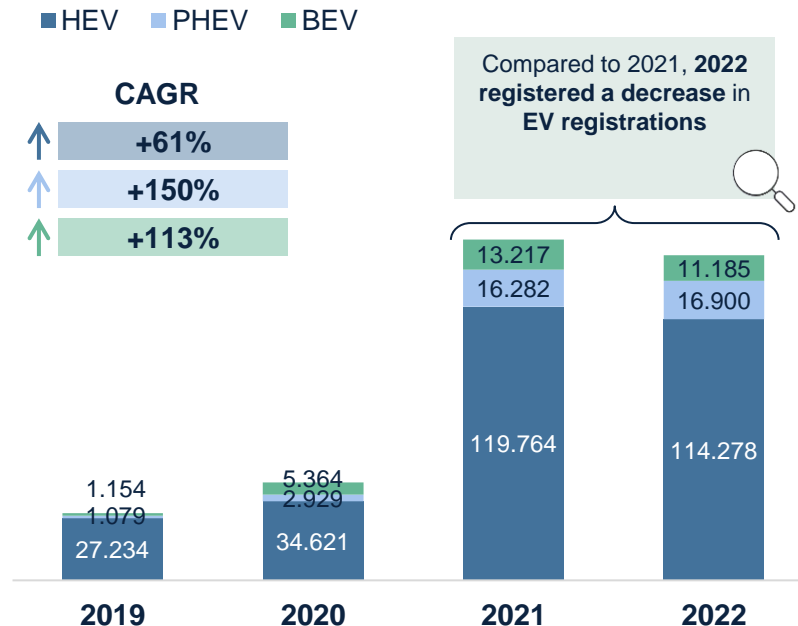


## New car registrations of Hybrid vs Pure Electric vehicles

### EV Registrations Trend March '22 YTD



### HEV\*, PHEV\* and BEV\*\* Vehicles Trend March '22 YTD

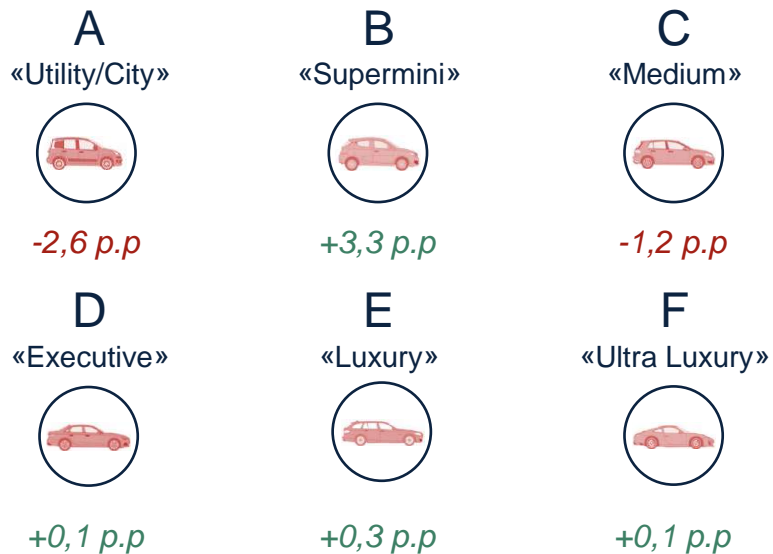


# Italy | New car registrations by segment

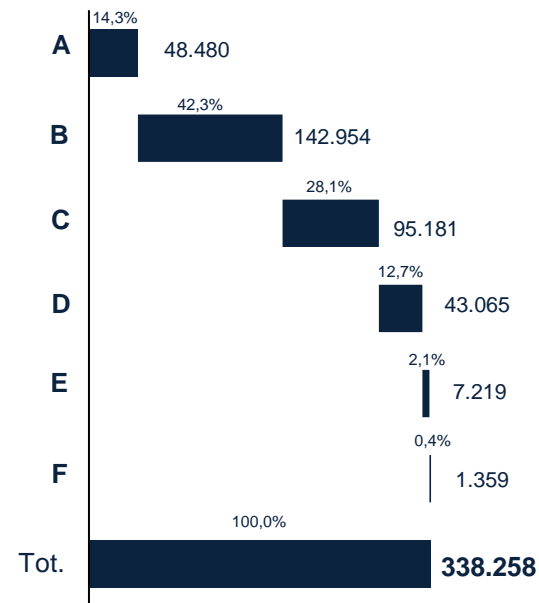


## Overview of new car registrations by segment

### Segments Growth in Market Share\*



### Market Share and Volume\*\*

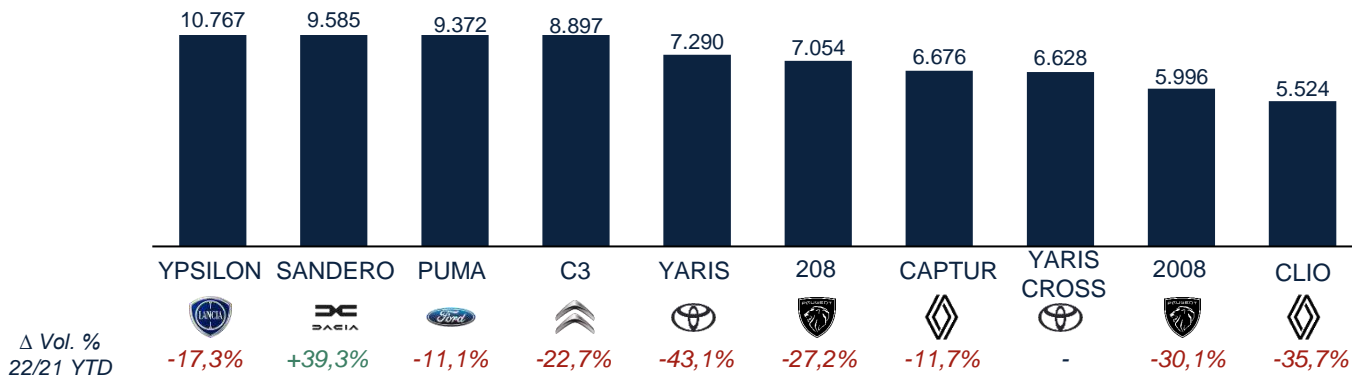
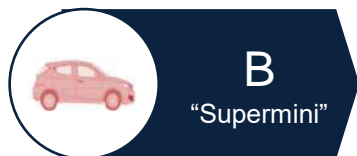
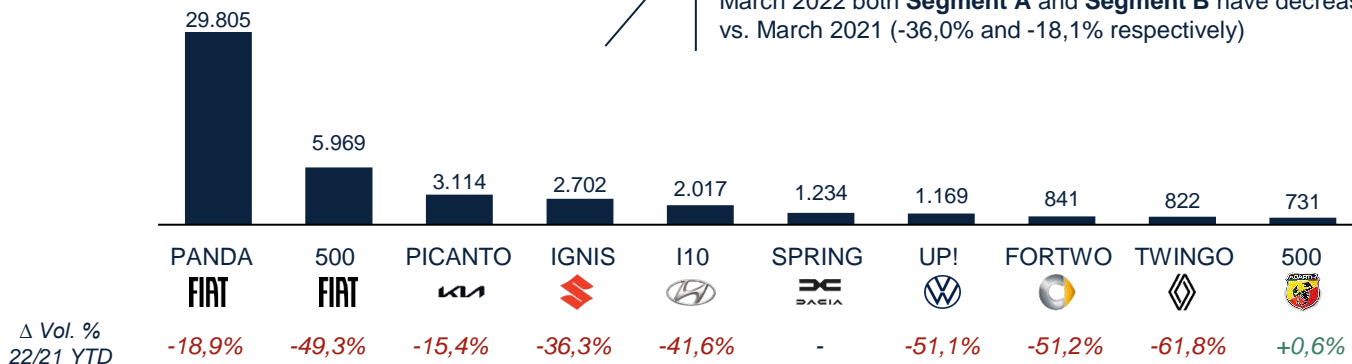


# Italy | New car registrations by segment



## Segment A and Segment B – Top 10 – March 2022 YTD

In terms of **MS**, respectively vs March 2021YTD, **Segment A** has registered a decrease (-2,6 p.p.) while **Segment B** has registered an increase (+3,3 p.p). Considering the volumes, in March 2022 both **Segment A** and **Segment B** have decreased vs. March 2021 (-36,0% and -18,1% respectively)

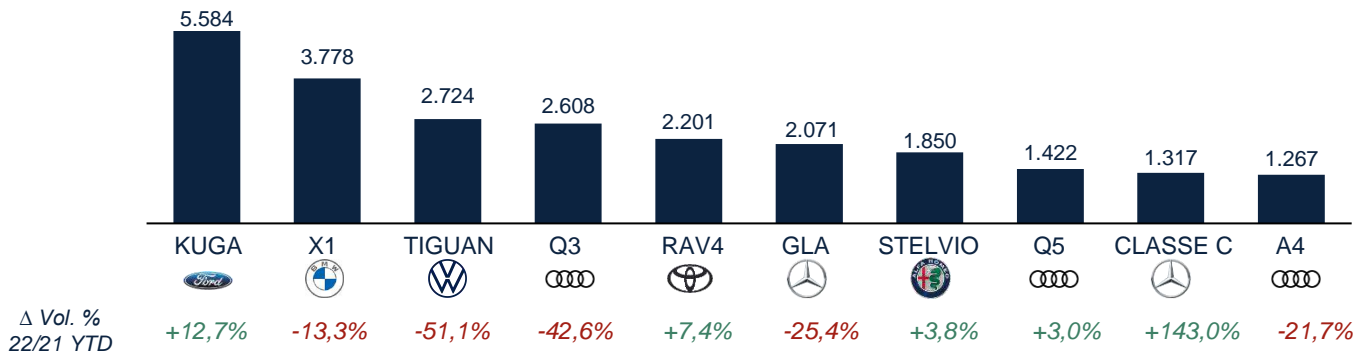
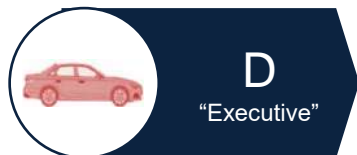
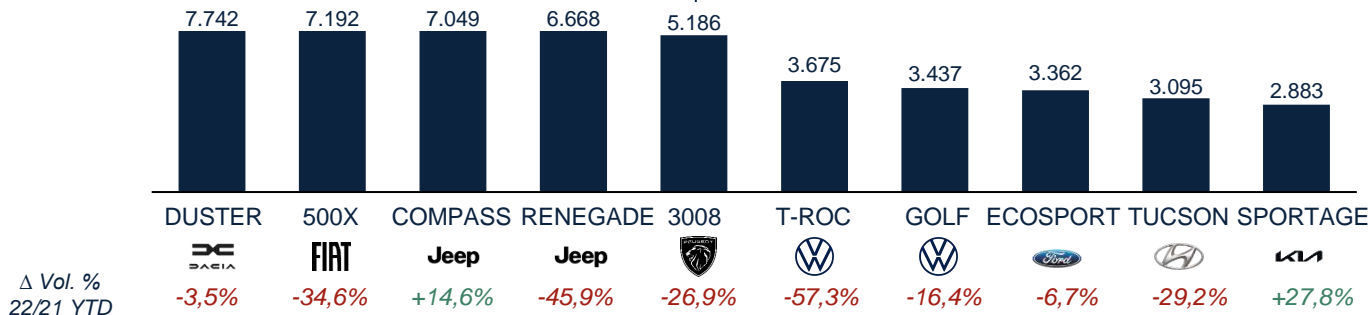
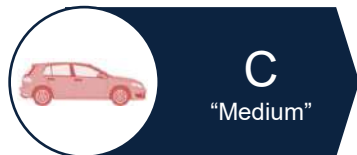


# Italy | New car registrations by segment



## Segment C and Segment D – Top 10 – March 2022 YTD

In terms of **MS**, respectively vs March 2021YTD, **Segment C** has registered a decrease (-1,2 p.p.) while **Segment D** has registered an increase (+0,1 p.p). Considering the volumes, in March 2022 both **Segment C** and **Segment D** have decreased vs. March 2021 (-27,4% and -23,6% respectively)





# Italy | New car registrations by segment

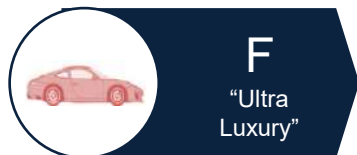
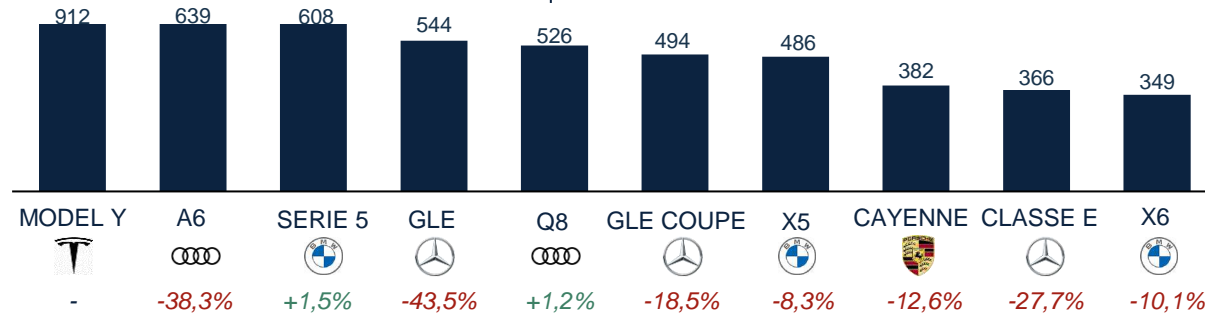


## Segment E and Segment F – Top 10 – March 2022 YTD

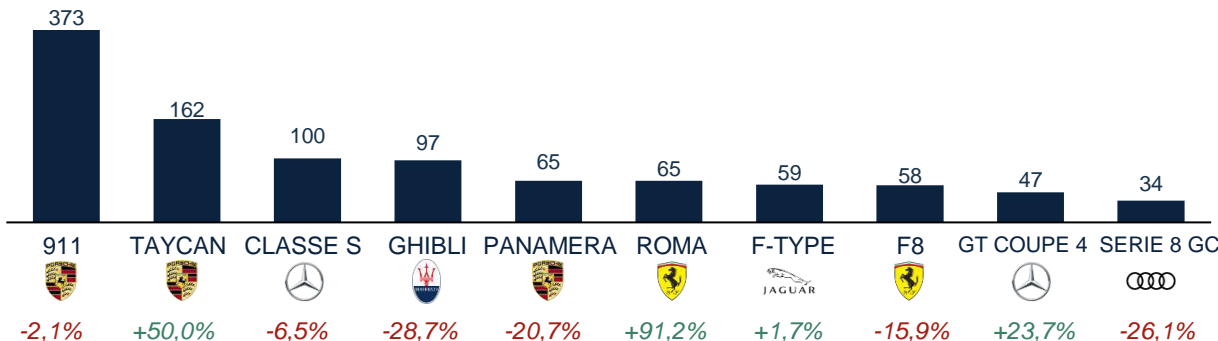
In terms of **MS**, respectively vs March 2021YTD, **Segment E** and **Segment F** have remained almost unmodified (+0,3 p.p. and +0,1 p.p.), while in terms of volumes, in March 2022 **Segment E** has decreased and **Segment F** has increased vs. March 2021 (-11,4% and +1,6% respectively)



Δ Vol. %  
22/21 YTD



Δ Vol. %  
22/21 YTD





01. Europe

02. Italy

**03. New car models launches in Italy**

04. Quarterly special topic:  
European charging infrastructure

05. News on key industry trends

# New Car Models Launches in Italy

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

	A		B		C		D		F		H			
											FIAT			
Jan				✓  Serie 2 Coupé								✓  Fiesta		
Feb			✓  A8	✓  Serie 2 Active T		✓  Born		✓  5.0		✓  812 Competizione			✓  HR-V	
Mar					✓  C5 Aircross		✓  Jogger			✓  296 GTB	✓  Tipo Cross SW	✓  Focus		
Apr		DBX707							✓  DS7 Crossback					
May														
Jun	Tonale			X1										
Jul				X7										
Aug				M2								Ranger		
Sep			Q6 e-tron										Civic	Ioniq 5 77Kwh
Oct		DBX Hybrid									Panda			
Nov														
Dec				iX1										Ioniq 6

- ✓ Launch Concluded
- ➔ Launch Postponed
- ➔ Launch Anticipated

- Commercial Launch of New Model
- Facelift / Technical Update
- (P) Premiere

# New Car Models Launches in Italy

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

	I	J	K	L	M	N								
Jan				Sportage ✓						Mazda 2 ✓	EQB ✓			
Feb		I-Pace ✓						NX ✓						
Mar							Range Rover ✓			Mazda 2 Hybrid ✓				
Apr											SL			
May								RZ			EQE			Ariya ←
Jun			Cherokee 4xe →		Urus Evo				Grecale		GLC			
Jul			Renegade →											
Aug														X-Trail
Sep										CX-60 →	AMG GT 63 S E			Qashqai E-power →
Oct								RX						
Nov					Aventador							Countryman		
Dec														

# New Car Models Launches in Italy

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

	O	P	R	S	S	T	T	V				
Jan								S-Cross ✓			ID 5 ✓	
Feb	Astra ✓	308 SW ✓	Macan T ✓	Mégane E-Tech ✓				Forester ✓		Aygo X ✓	Taigo ✓	XC40 ✓
Mar	Astra Sports T. ✓		718 Cayman GT4RS ✓		Karoq ✓						T-Roc ✓	
Apr												
May										GR86 		
Jun					Enyaq Coupé 							
Jul								Solterra 		BZ4x 		
Aug						Korando E-Motion 						
Sep										Corolla Cross 		
Oct							X200 				Id Buzz 	
Nov												
Dec						J100 			Cybertruck 			XC20 



Source: Quattroruote, Motor1

- ✓ Launch Concluded
- ➔ Launch Postponed
- ➡ Launch Anticipated

- Commercial Launch of New Model
- Facelift / Technical Update
- (P) Premiere



01. Europe

02. Italy

03. New car models launches in Italy

**04. Quarterly special topic:  
European charging infrastructure**

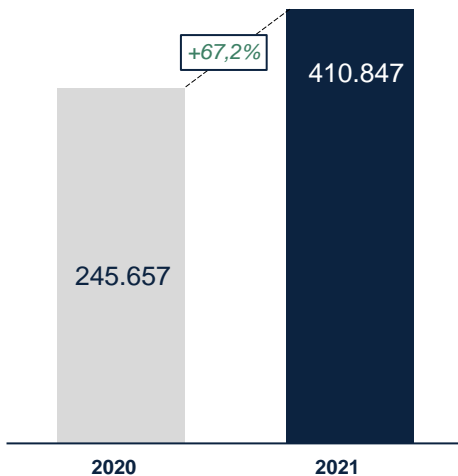
05. News on key industry trends

# European charging infrastructure | Overview

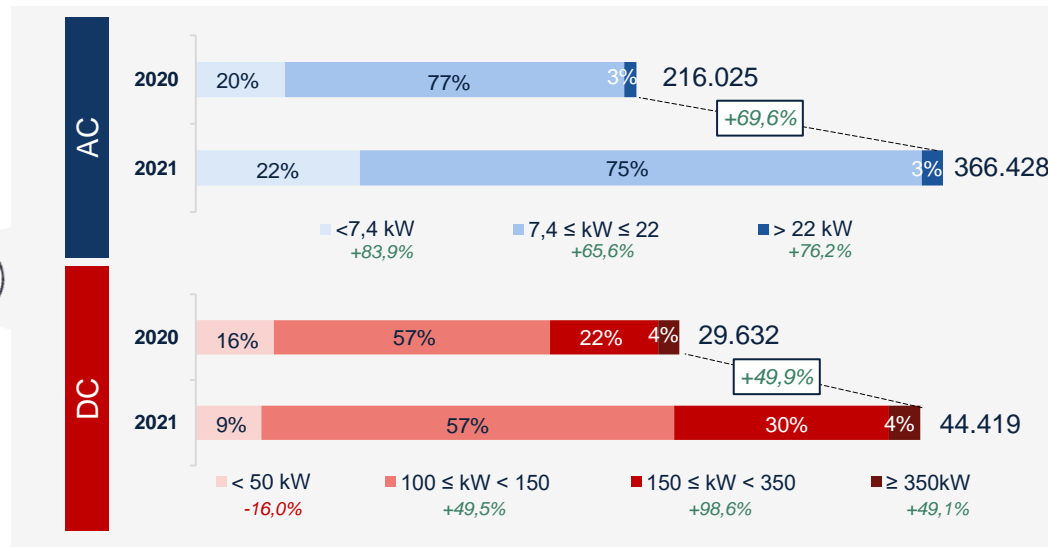


## Public charging points evolution – 2021 vs 2020

Total European Charging Points  
(2021 vs 2020)



European Charging Points By Type  
(2021 vs 2020)



### Highlights

- **AC charging points are growing faster than DC** in 2021 (69,6% vs 49,9%). Among them medium speed AC (7,4 ≤ kW ≤ 22) are by far the most widespread (75% of total AC), however slow AC (<7,4kW) are growing at the fastest pace
- Among **DC charging points** the fast 100 ≤ kW < 150 are the 57% of the total, while ultra fast 150 ≤ kW < 350 are increasing at twice the rate of others



Source: EAFO

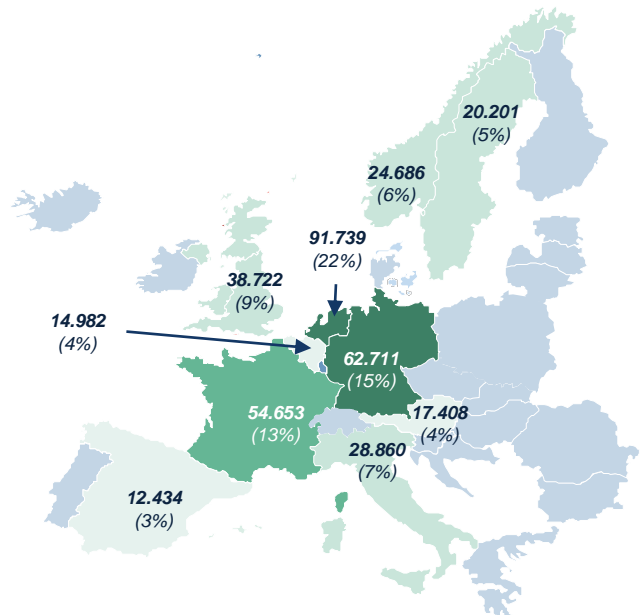
(\*) EU (27 Countries) + EFTA Countries (Iceland, Norway, Switzerland) + UK

# European charging infrastructure | Country details

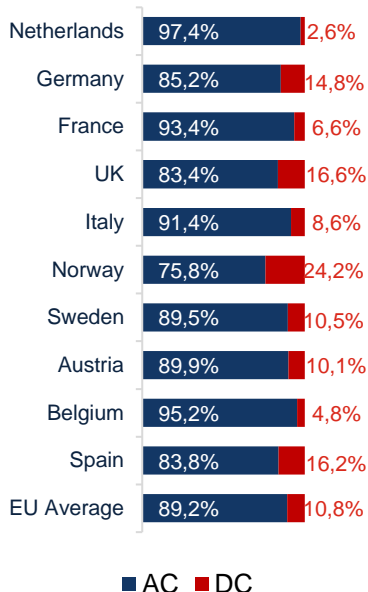


## Public charging infrastructure details of main countries

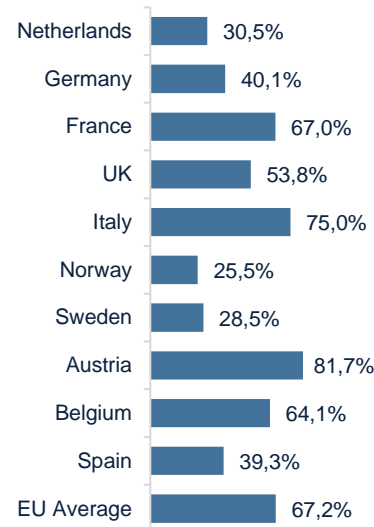
### Total Charging Points Top 10 Countries (2021)



### Charging Points By Type (Top 10; 2021)



### Charging Points Increase By Country (Top 10; 2021 vs 2020)



### ! Highlights

- **3 countries** (Netherlands, Germany and France) polarized **half of European charging points**
- Only the **11%** of total charging points **are in DC**
- **Netherlands** (where there is the most widespread network) has the **lowest DC incidence** (only 2,6%), while **Norway** (the most advanced EV market) has the **highest** (24,2%)
- Among main countries, **Austria and Italy in 2021 increased faster** than European average



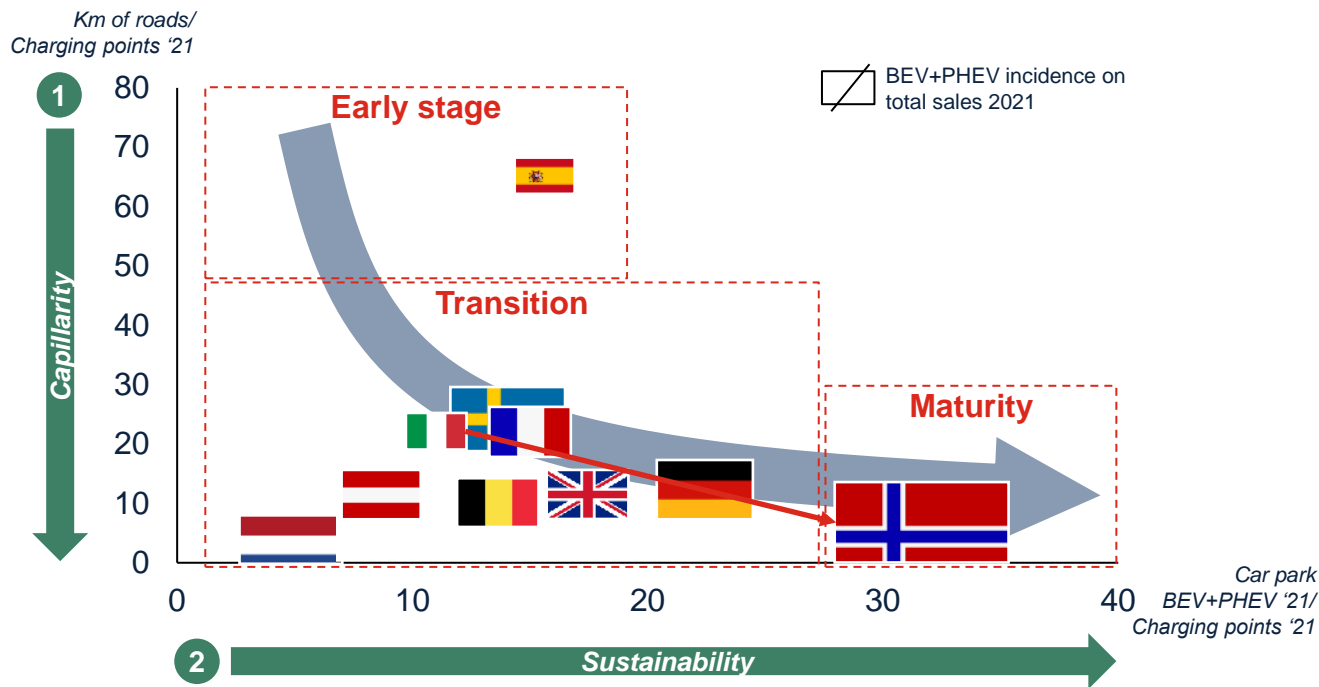
# European charging infrastructure | *Development stage*



Focus on public charging infrastructure development stage of main countries

Charging infrastructure development stage – Comparison among European countries  
(Top 10 countries by charging points number)

## ! Highlights



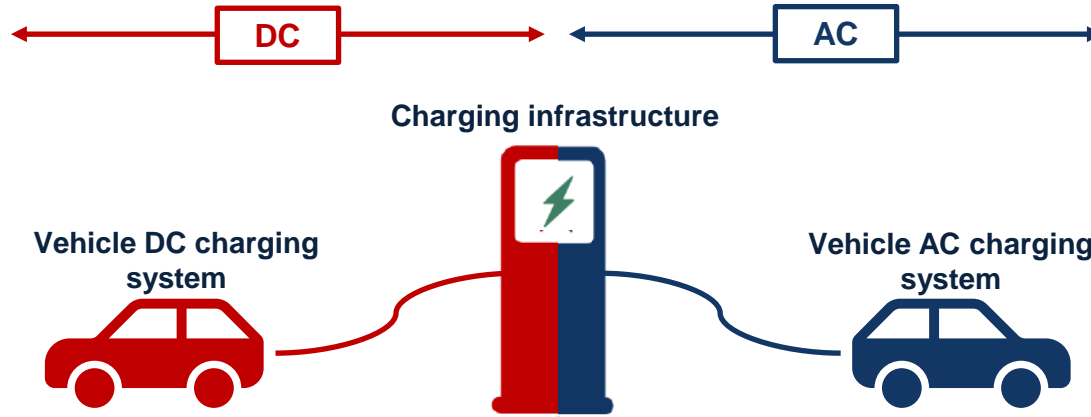
- Charging infrastructure development stage can be analyzed according to 2 key parameters:
  - Km of roads/Charging points* that measures network **capillarity**
  - Car park BEV+PHEV/Charging points*, essential to understand charging points **financial sustainability**
- Typically **charging infrastructure evolution path** follows 2 main phases:
  - First phase: focus on network capillarity** as enabler of electric vehicles sales (reduction of the average distance between charging points)
  - Second phase: focus on assuring the financial sustainability** of the network (increasing the average utilization of charging points)
- Only Norway** can be considered in the **maturity phase**, while Spain seems to be quite distant from the other main European countries

# European charging infrastructure | Infrastructure and vehicles' charging systems



The development of charging infrastructure should consider vehicles' charging systems characteristics to optimize charging speed and ecosystem investments

## ! Highlights



### Main factors influencing charging infrastructure speed and related costs

- |   |  |   |   |
|---|--|---|---|
| <ul style="list-style-type: none"><li>• DC charge availability</li><li>• Maximum accepted power</li></ul> | <ul style="list-style-type: none"><li>• Charging point DC maximum available power</li><li>• Medium voltage connection availability</li></ul> | <ul style="list-style-type: none"><li>• Charging point AC maximum available power</li></ul> | <ul style="list-style-type: none"><li>• Onboard charger characteristics (max. accepted power)</li></ul> |
|---|--|---|---|

- An **alignment between charging point maximum AC/DC available power and the maximum power accepted by vehicle's AC/DC charging system** is essential because the charging speed is connected to the lower value of the two
- Charging infrastructure configuration should consider also the **impact on car manufacturers and infrastructure provider costs** because:
  - More powerful onboard chargers are more expensive and voluminous
  - DC charging points > 100 kW could require additional investments related to medium voltage connection
  - 11-22 kW AC charging points are much more expensive than slow ones
- Moreover, the **mix between DC and AC** charging points should consider that part of current EVs don't allow the DC recharge

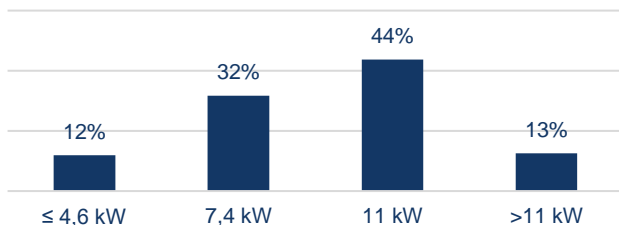
# European charging infrastructure | Vehicles' charging system details



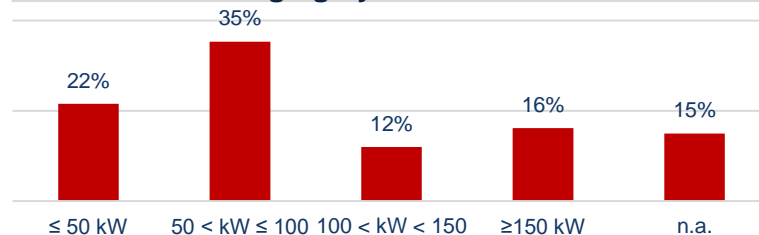
BEV and PHEV vehicles' versions in circulation – Charging systems maximum accepted power

FULL  
ELECTRIC  
VEHICLES

### AC Charging Systems Max Power\*

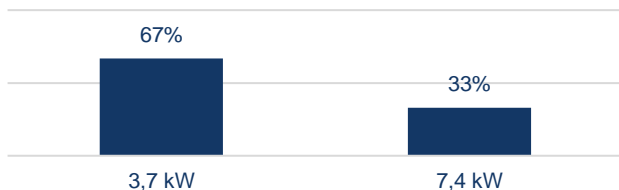


### DC Charging Systems Max Power\*



PHEV  
VEHICLES

### AC Charging Systems Max Power\*



### DC Charging Availability\*



## Highlights

- **Full electric vehicles: only 13%** currently accepts an **AC recharge >11 kW**; regarding **DC charging 57%** supports maximum between **50 kW and 100 kW**
- **PHEV: only 8%** can recharge in **DC**; **3,7 kW** is by far the most widespread in **AC** (2/3 of the total vehicles' versions analyzed)



Source: BIP analysis on web data

(\*) BEV in circulation analyzed: 82 models and 167 versions; PHEV in circulation analyzed: 89 models and 121 versions



Public charging infrastructure development is not completely aligned to the characteristics of BEV and PHEV vehicles currently in circulation



- In Europe **AC** charging points are **growing faster** than DC ones and now represent **89%** of the total
- **AC** is the **reference charging systems of plug-in hybrids** that typically are not equipped with DC charging
- European **AC infrastructure is growing faster on slow charging points** (< 7,4 kW) that is **not optimal for BEVs** whose reference onboard charger maximum accepted power is between 7,4 kW and 11 kW, while is **aligned to PHEV** characteristics (generally accepting maximum 3,7 kW)
- **Charging >11 kW in AC is currently supported only by a small percentage of BEVs.** It is still not clear the direction of car manufacturers on this type of recharge
- **DC** charging is mostly for **BEVs** whose **charging systems generally support a power between 50 and 150 kW**. However, **DC charging infrastructure is evolving more on ultra-fast charging points between 150 and 350 kW** more in line with some of the most advanced / recently launched premium cars (e.g., Porsche, Audi, BMW, Mercedes-Benz and Tesla)



01. Europe

02. Italy

03. New car models launches in Italy

04. Quarterly special topic:  
European charging infrastructure

**05. News on key industry trends**

# 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 25/03/22 to 19/04/22



## Sustainability

Increasing OEMs focus on the reduction or neutralization of environmental externalities along the automotive value chain



## Digitalization

Towards a seamless online-offline customer journey with an increasing direct role of the OEM



## Mobility Services

New emerging models (MaaS) of car usership to meet new customer mobility needs and behaviors are transforming OEMs' strategies



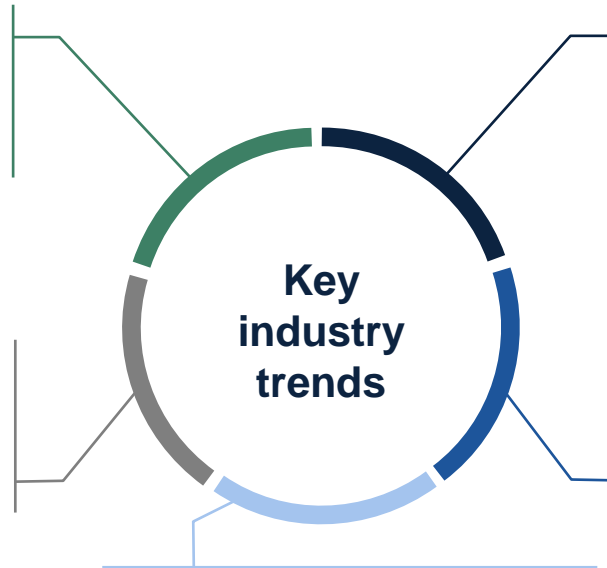
## Electrification

Car parc evolution towards electric (full and hybrid) vehicles and creation of a new ecosystem based on EV needs



## Connectivity

Connected cars are changing the way to interact with customers and opening new business streams related to data utilization



# News on key industry trends

## Digitalization



### Processors, Avatars, Omniverse & Autonomous Driving – a Round-up of NVIDIA GTC 2022

Automotive technology was one of the big draws at NVIDIA's twice-yearly GTC conference. The brightest minds and experts in the field talked about how NVIDIA technology is being used in autos for autonomous driving, conversational AI, luxury (...)

<https://www.autofutures.tv/2022/03/28/nvidia-gtc/>

### Volkswagen launches online sales

Customers can now lease new vehicles online from Volkswagen in Germany. The all-electric ID.4 and ID.5 models from Volkswagen's ID. family will initially be offered. They will be joined later by the ID.3. "This marks a key step in digitalizing our sale (...)

<https://www.automotiveworld.com/news-releases/volkswagen-launches-online-sales/>



# News on key industry trends



## Electrification (1/2)

Volkswagen Group and SEAT announce electrification plan for Spain

The Volkswagen Group and SEAT have laid out a new electrification plan for Spain. Through it, the companies and their external suppliers will invest more than €7 billion (\$7.7 billion) to develop a new battery plant in the country and establish a EV (...)

<https://telematicsnews.info/2022/03/25/volkswagen-group-and-seat-reveal-electrification-plan-for-spain/>

The free or super discounted electric charging column is here. Pay for advertising

After having created a network of over 2,000 charging points for electric cars in the United States, Volta Charging lands in Europe with a new business model that is financed thanks to advertising on the large screens of the column. A model that allows (...)

<https://www.breakinglatest.news/entertainment/the-free-or-super-discounted-electric-charging-column-is-here-pay-for-advertising/>

BYD and Shell Partner on EV Charging Across China and Europe

On April 7th BYD and Shell have signed a strategic cooperation agreement to help accelerate the energy transition and improve charging experience for BYD's battery electric vehicle (BEV) and plug-in hybrid electric vehicle (PHEV) customers (...)

<https://www.nasdaq.com/press-release/byd-and-shell-partner-on-ev-charging-across-china-and-europe-2022-04-11>





# News on key industry trends

## Electrification (2/2)



**Stellantis: Shop & Charge: for a more sustainable lifestyle, go shopping the electric way**

Making a concrete contribution to taking on a more sustainable lifestyle. This is the goal of the Shop & Charge project, now announcing its initial results. Created in conjunction with Be Charge, a Plenitude (Eni) company, Carrefour Italia and the Stellantis (...)

<https://www.automotiveworld.com/news-releases/stellantis-shop-charge-for-a-more-sustainable-lifestyle-go-shopping-the-electric-way/>

**Mobile EV charging can ease infrastructure worries**

Mobile charging solutions will provide solutions for EV drivers who don't have regular access to hard-wired chargers. As automakers build more electric vehicles, a lack of charging infrastructure continues to be a barrier for some shoppers. (...)

<https://www.autonews.com/mobility-report/mobile-ev-charging-can-ease-infrastructure-worries>

**The mobility rEVolution: Nissan moves forward with in-house all-solid-state battery production**

In other news, GM and Honda are jointly developing affordable EVs, the Biden administration holds an EV industry meeting, and Mercedes-Benz Energy agrees to supply EV batteries to BatteryLoop for its scalable, circular energy storage products. (...)

<https://www.pv-magazine.com/2022/04/08/the-mobility-revolution-nissan-moves-forward-with-in-house-all-solid-state-battery-production/>



# News on key industry trends

## Connectivity (1/2)



### Recharging EVs while you drive

Electric vehicle drivers of the future might not need to plug in to charge their batteries, and they may not even need to stop. Projects underway in Florida, Indiana, Michigan and Utah are testing (...)

<https://www.autonews.com/mobility-report/recharging-evs-while-you-drive>

### Polestar continues to deliver evolving digital car connectivity with Android R OTA software update

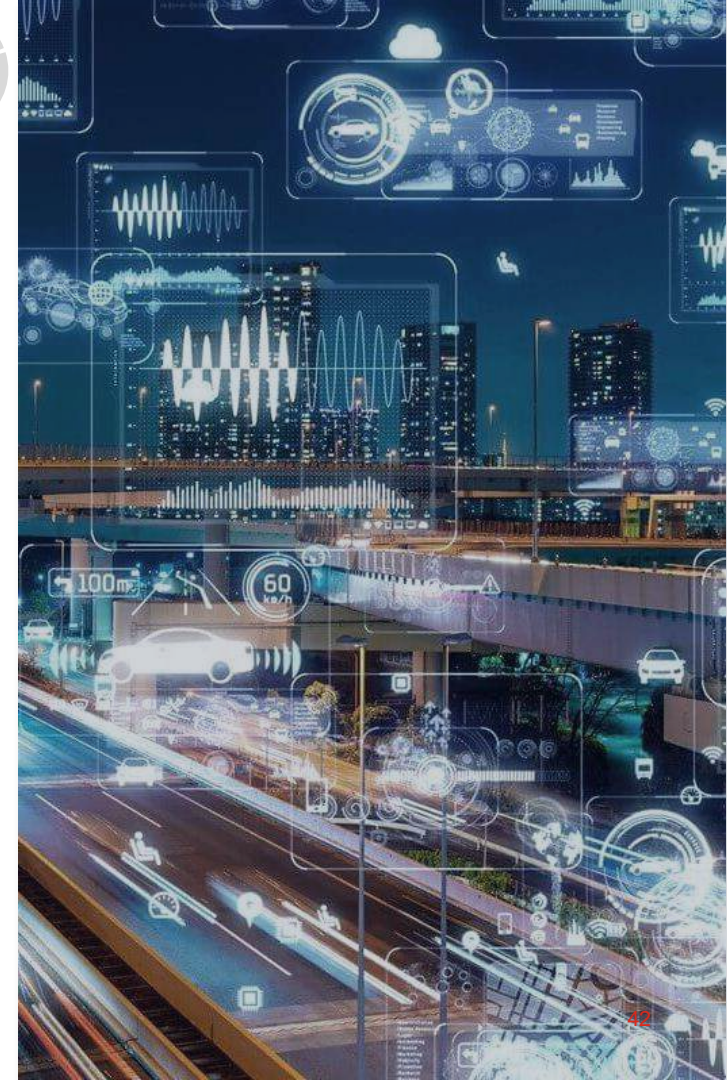
Polestar continues to deliver evolving digital car connectivity to Polestar 2 owners with the latest upgrade including Android R for the Android Automotive OS infotainment system. The latest software update also brings enhanced app and (...)

<https://www.automotiveworld.com/news-releases/polestar-continues-to-deliver-evolving-digital-car-connectivity-with-android-r-ota-software-update/>

### Stellantis Participates In U.S. Test of 5G Connected Vehicle Technologies for Real-time Safety Notifications

5G Automotive Association tests in-vehicle and pedestrian real-time safety notifications using high-speed 5G cellular and multi-access edge computing technology. Stellantis was only automaker involved in Virginia trial; Jeep Wrangler 4xe plug-in hybrid (...)

<https://www.stellantis.com/en/news/press-releases/2022/april/stellantis-participates-in-u-s-test-of-5g-connected-vehicle-technologies-for-real-time-safety-notifications>



# News on key industry trends

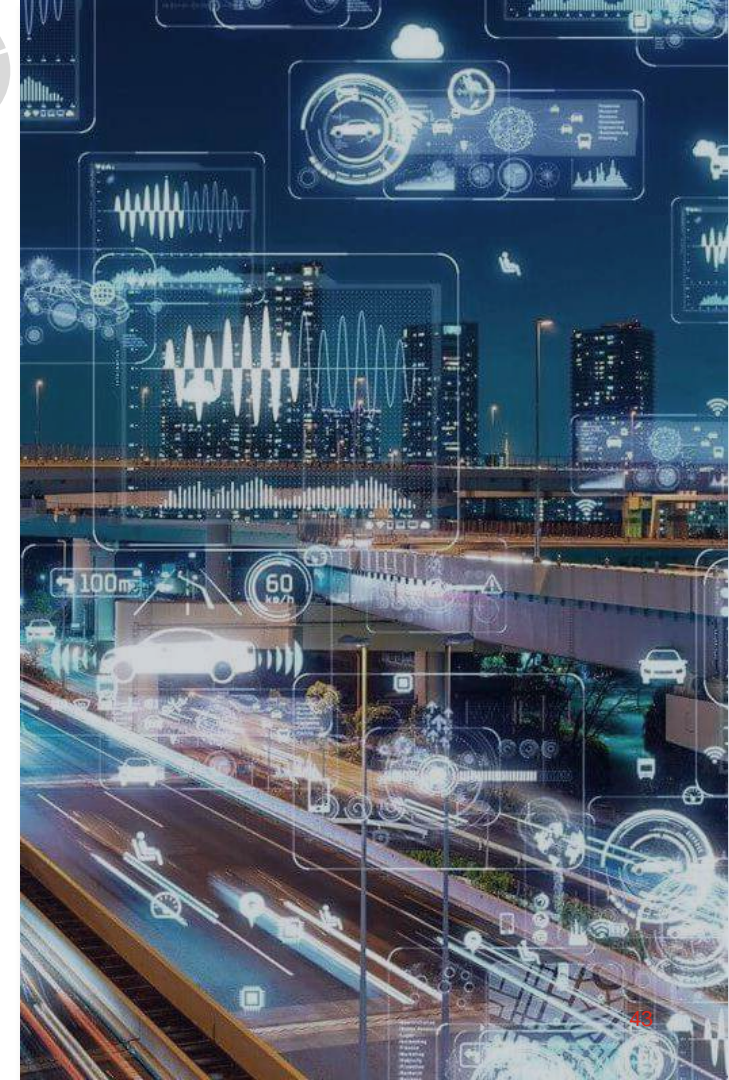
## Connectivity (2/2)



First Indian Automotive  
OEM to enter NFT space  
Mahindra Gallery

Mahindra & Mahindra Ltd has announced its entry into the NFT (non-fungible token) universe, with the release of its first tranche of tokens, becoming the first Indian automotive OEM to enter this space (...)

<https://in.investing.com/analysis/first-indian-automotive-oem-to-enter-nft-space-mahindra-gallery-200516002>



# News on key industry trends

## Mobility Services



In Rome the first Italian club of Lynk & Co, the Netflix style car

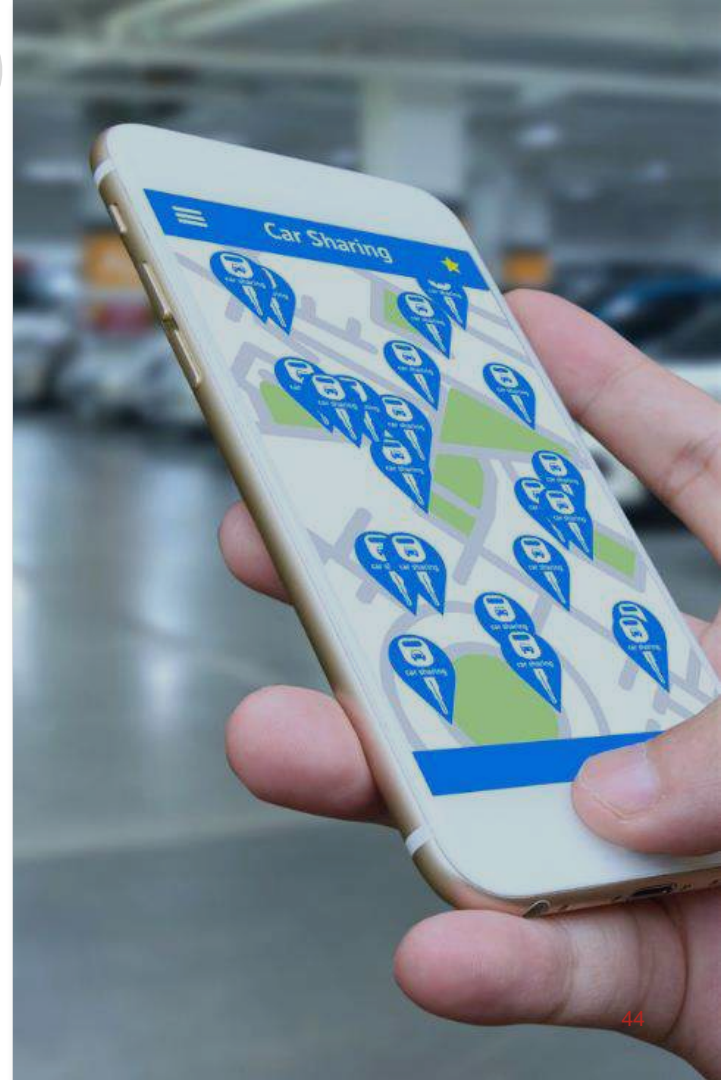
The first in Italy of the Molto in auto spazio electric brand is located in via del Corso 265. Far from the concept of a sales point (...)

<https://europe-cities.com/2022/04/02/in-rome-the-first-italian-club-of-lynk-co-the-netflix-style-car/>

Volvo launches the first neighborhood electric car sharing with XC 40 Recharge

It is one of the most innovative neighborhoods in Milan. It is here that on the eve of Easter exactly on April 15, Volvo will launch the ELEC3City project: the car sharing of one of its most significant models (...)

<https://www.breakinglatest.news/business/volvo-launches-the-first-neighborhood-electric-car-sharing-with-xc-40-recharge/>



# News on key industry trends

## Sustainability (1/2)



**Accelerating innovation in tyre technology for tomorrow's sustainable vehicles**

With increasing concern about climate change, sustainability has become a strategic priority for the automotive industry. Bridgestone, the world's largest tire and rubber company, says that their advances in tire technology have a crucial role to play in (...)

<https://gulfnews.com/business/accelerating-innovation-in-tyre-technology-for-tomorrows-sustainable-vehicles-1.1648468042523>

**100-percent green power: BMW Group to use sustainably produced aluminum wheels from 2024**

The BMW Group is stepping up its activities in the field of sustainability and will use cast aluminum wheels produced with 100-percent green power for its BMW and MINI brands from 2024 onwards (...)

<https://www.automotiveworld.com/news-releases/100-percent-green-power-bmw-group-to-use-sustainably-produced-aluminium-wheels-from-2024/>

**Gone green: Hyundai's first factory powered by 100% renewable energy**

With Hyundai Motor fully committed to achieving carbon neutrality by 2045, the Are We There Yet? podcast visits the Czech Republic-based factory that represents a major milestone in its journey to achieving this ambitious sustainability goal (...)

<https://www.hyundai.news/eu/articles/press-releases/gone-green-hyundais-first-factory-powered-by-100-percent-renewable-energy.html>



# News on key industry trends

## Sustainability (2/2)



Mercedes-Benz Cars aims to slash CO2 emissions by more than 50 percent by end of this decade

At its first digital ESG (Environment, Social and Governance) Conference for investors and analysts, the inventor of the automobile announced measures aimed at cutting CO2 emissions, creating lasting value for all stakeholders. (...)

<https://www.automotiveworld.com/news-releases/mercedes-benz-cars-aims-to-slash-co2-emissions-by-more-than-50-percent-by-end-of-this-decade/>



**Thank you.**

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