

# Lead the Charge



ENERGICA







## Activity

- **Italian Manufacturer of High Performing Electric Motorcycles and system integration for electric vehicles**
- **born in Modena** in 2014 as a Spin-off of **CRP Group**, **50 years** of experience in the hi-tech industry (F1, motorsport, aerospace etc.)
- listed on the **AIM Italia market** since 2016



## Operations

- **32,000 square foot HQ** in the **Italian Motor Valley** (Modena)
- **Actual production capacity of 500 units per year**
- **More than 50 people** (20% female employees)

### Value chain presidium

- **Design and R&D** for a continuous innovation
- **Accurate selection of suppliers**
- **Assembly and quality control**
- **Distribution and marketing**



## Financials

- **FY 2020 Sales:** €6.0 m, +91% vs FY 2019
- **Order book (as of 31 May 2021):** 67% of sales in 2020
- **Concluded capital increase successfully of Euro 15 million** whose **Euro 11 million** from **Ideanomics**, global company driving mobile energy transformation and the green fintech revolution
- **Breakeven expected in 2022**



## R&D

- **INNOVATIVE SOLUTIONS** some of which already patented: VCU, Supply unit, e-ABS
- **STRATEGIC PARTNERSHIPS** - with Dell'Orto, Octo Telematics, Total Lubrifiants and Mavel - to **develop new solutions and applications**.
- **SYSTEM INTEGRATION add-ons:**
  - ✓ **E-POWER:** new **Power Unit** for **small-size** (4/11kW) and **medium size** (up to 30 kW) motors
  - ✓ **Boats, vehicle to grid, and more**



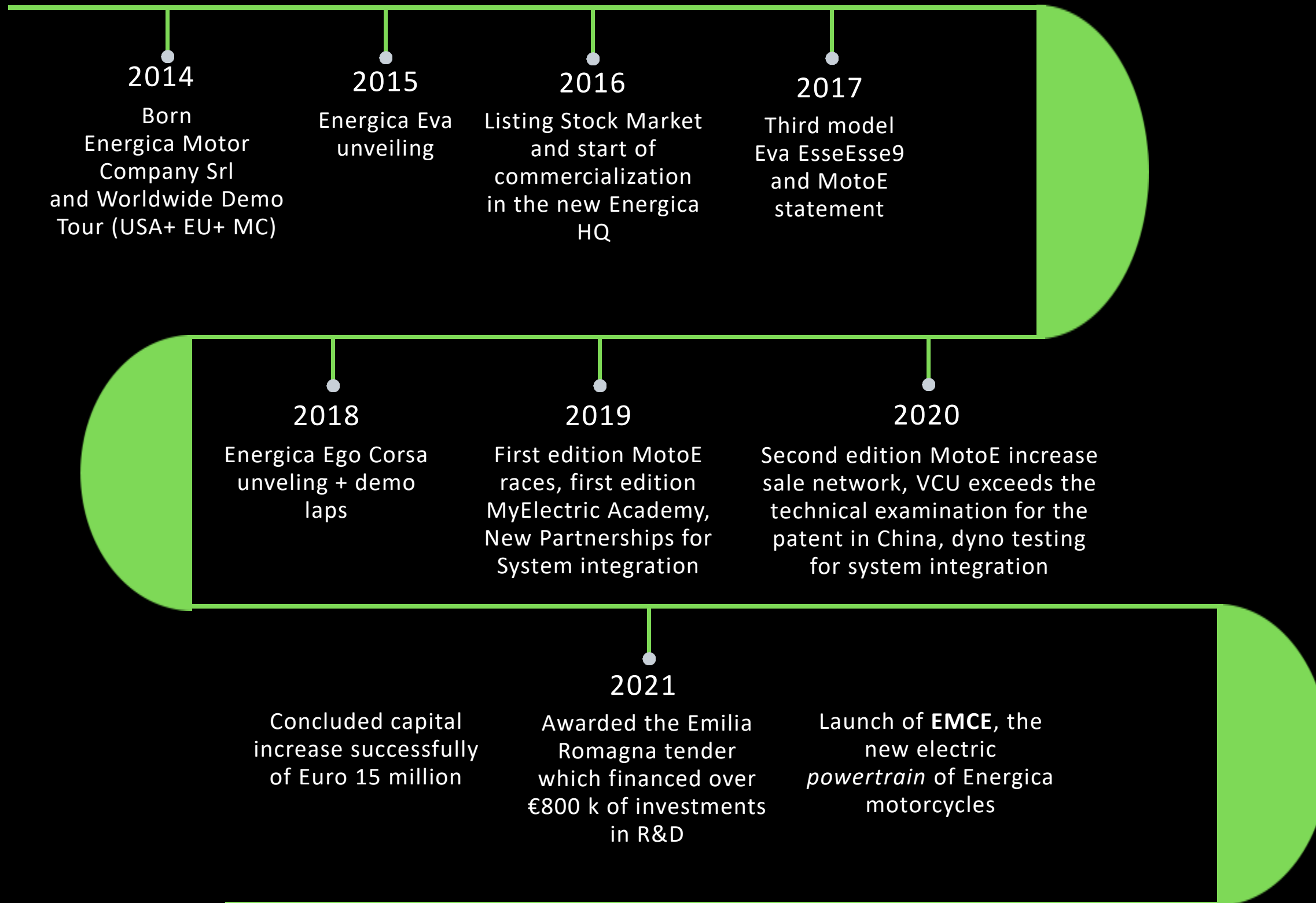
## Sales Network

- **88 dealers/importers worldwide as of June, 2021 vs 72 dealers as of December 31, 2020**
- **New agreements** with major **rental** (Cooltra) and **financing companies** (Agos)
- Signed new **factoring agreement** with General Finance S.p.A. to finance the dealer network



## People & Sustainability

- **Environmental Impact:** creation of electric motorcycles with a fundamental role in fighting climate change.
- **Social:** professional development of people, equal opportunities, diversity, health and safety. Business model based on a network of suppliers, mostly Italian and local.
- **Governance:** experience, transparency, values and procedures to guarantee the spread of values inside the company.



*“Born in the **Italian Motor Valley** to be the world leader of **High Performing Electric Motorcycles and more** with a focus on **design**, the most **innovative** and **performing** technological **solutions** and **international growth**.”*



## INNOVATION & TECHNOLOGY LEADERSHIP

### Continuous Innovation

- Innovative solutions, some of which **patented**: **VCU control unit, Supply unit, e-ABS.**
- **DC Fast Charging technology based on CCS Combo**
- **MY2021 models: 5% lighter, more powerful** (+7.5% for Ego and Eva and +10% for Eva EsseEsse9), **increased acceleration** (-7% sec. on 0-100km/h) and **+200% higher urban riding range** (400km)
- Record torque (215Nm) and power (107kW) levels for the EV market
- Thanks to FIM Enel MotoE World Cup, Energica can test and develop solutions in **extreme conditions** with the **best world riders**
- **All solutions under testing for system integration in other markets**

## PURSUE INTERNATIONAL GROWTH

### Over 80 dealers worldwide

- **88 delalers/importers as of June 30, 2021** (4 dealers in 2016)
- **16 new commercial agreement** in 1H 2021
- Present in **4 continents** and **29 countries**

## BRAND AWARENESS

### Single manufacturer for MotoE

- Energica is the **single manufacturer** chosen by Dorna (the company holding the rights of MotoGP and World Superbike) for **FIM Enel MotoE™ World Cup 2019/2022**
- **Worldwide visibility: 400 ml** people reached only on television; **700,000+ users** reached inside MotoGP website; **2,5 + milion** people engagement on social media; **24+ million** video views
- Participation in the **main world trade fairs for motorcycle** and the **electric mobility**
- **Over 330k followers** on the official Facebook and Instagram page



# Energica MY2021: Top class supersport electric motorcycles



ESSE ESSE  
EVA

200	200	2,8	80	21,5
Nm	km/h	0-100	kW	kWh

Ego

215	240	2,6	107	21,5
Nm	km/h	0-100	kW	kWh

EVA  
RIBELLE

215	200	2,6	107	21,5
Nm	km/h	0-100	kW	kWh



# State-of-the-art Core Technologies



## RIDE-BY-WIRE

Ensures perfect riding experience with 4 Engine maps, 4 Regenerative brake settings, 6 Traction control presets plus Cruise Control

## ENERGICA CONNECTED RIDE

New long-range connectivity developed with Octo Telematics

eABS **PATENTED**  
Energica e-ABS

## VEHICLE CONTROL UNIT **PATENTED**

Battery, inverter, charger, motor and controls constantly monitored and managed by VCU with 1.1 million total lines of code: completely designed/developed by Energica

## KEY FEATURES MY2021

Top Speed Limited: 240km/h Ego+, 200 km/h Eva Ribelle & Eva EsseEsse9+

Torque: 215 Nm Ego+ & Eva Ribelle / 200 Nm Eva EsseEsse9+

Horsepower: 145 HP Ego+ & Eva Ribelle / 109 HP Eva EsseEsse9+

Acceleration: < 3 sec.

Supply Unit: 21.5 kWh

## MOTOR **EXCLUSIVE**

Permanent Magnet AC Oil-Cooled, 3-Phase

Straight-cut gears generate distinctive jet-turbine sound

Oil-cooled motor means no overheating, so top speed and max torque can be fully sustained (unlike air-cooled motors)

## BATTERY PACK

Lithium-polymer

Capacity: Max 21.5 kWh / Nominal 18.9 kWh

Designed and engineered with strategically placed sensors, to insure not only optimal performance, but also provide maximum safety.

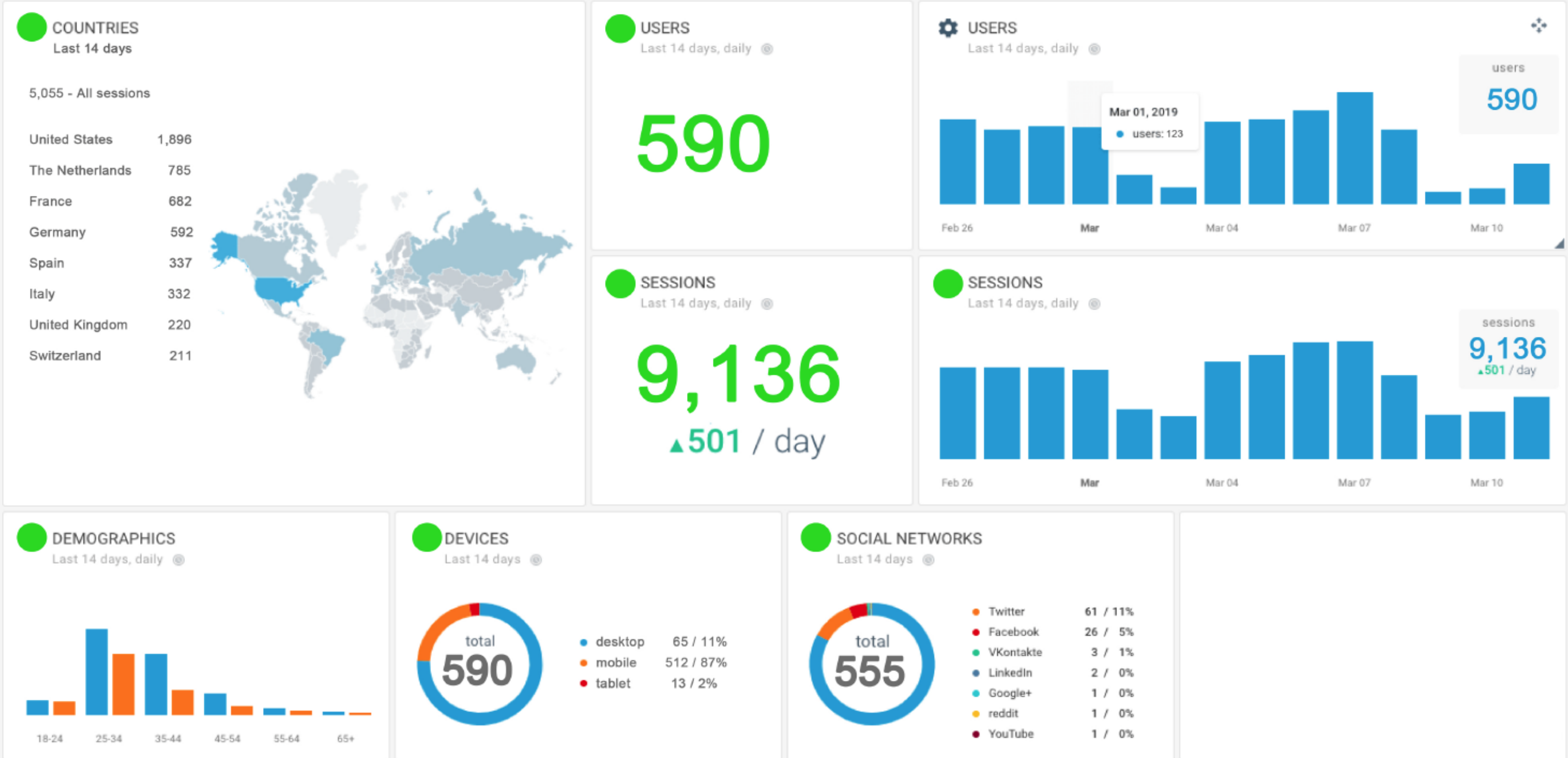
## DC FAST CHARGE **EXCLUSIVE**

400 km (249 miles) city range (40 min charging up 80% SOC);  
or Level 2 charging at 67 km (41.5 miles) per hour





In order to keeping the state-of-the-art innovation, our technical dept is working on big data technologies that will allow Energica engineers to be updated on vehicles status



June, 2021 - Energica presents EMCE, the new *powertrain* created in co-engineering with the Italian Mavel

## MAIN TECHNICAL ADVANTAGES:

- **Innovative rotor and stators' geometries** that minimize energy losses and maximize performance.
- **Innovative and patented cooling** of the rotor capable of generating an internal flow of air that laps the magnets and cools them. This allows the engine to exploit its potential even at high speeds;
- **Adaptive control algorithms** that ensure that the inverter is always able to operate the system as efficiently as possible;
- **Patented sensors capable**, in addition, of collecting and storing the operating data of the motor to predict the onset of any mechanical failure.

## VALUE CHAIN ADVANTAGES:

With the EMCE project, Energica enhance the ***"Made in Italy engineering"*** and generate a **positive effect on a supply chain**.

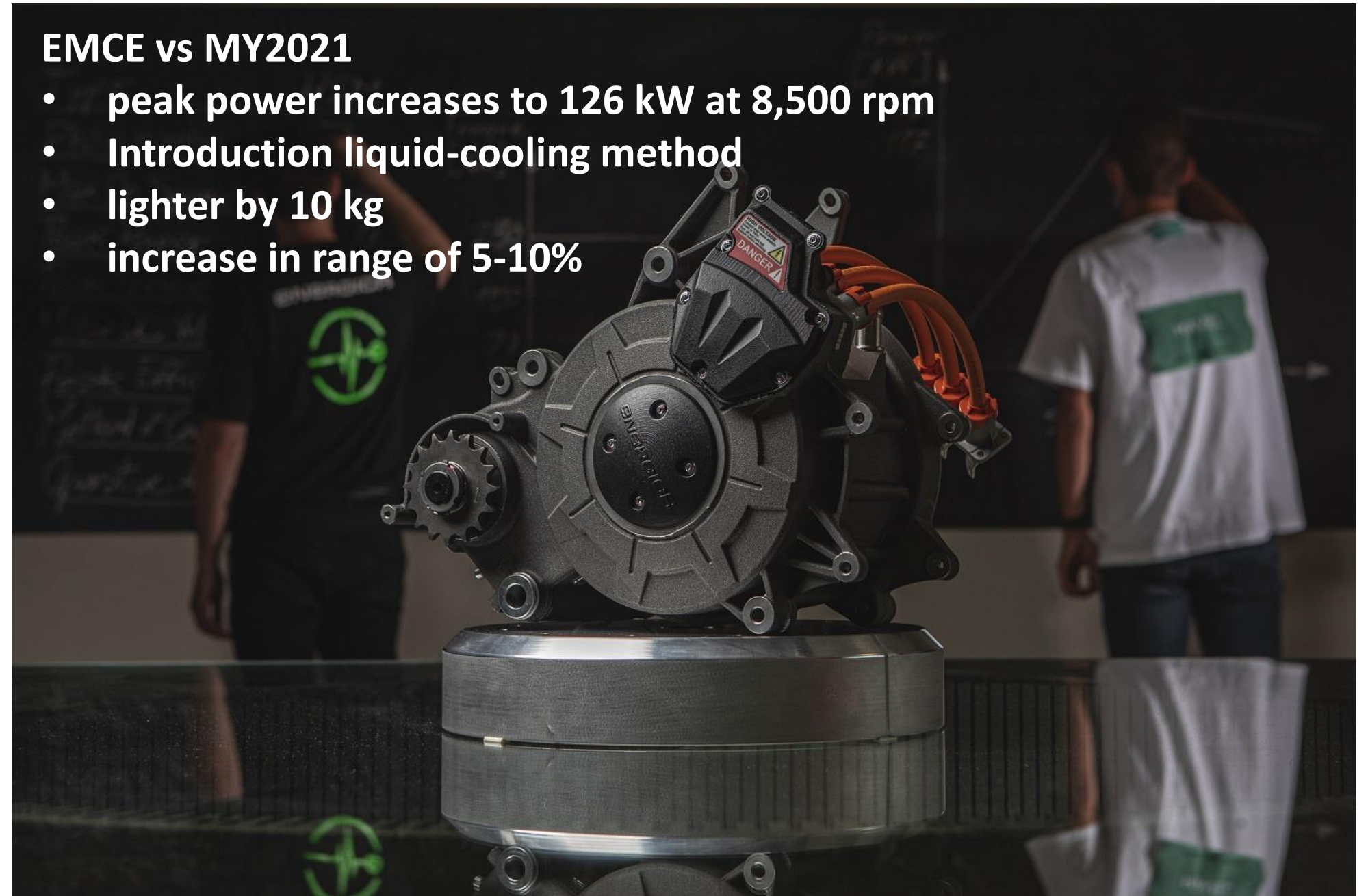
Thanks to local production in Italy, Energica shortens production times and **avoids delays in the supply chain** that are generating globally due to Covid.

By **anticipating the launch times of the new *powertrain*** (initially scheduled for the end of 2021), **Energica demonstrates the ability to respond promptly and proactively to external factors**.

The EMCE engine will be available first in Europe and the United States, while in the APAC market will be available from autumn.

## EMCE vs MY2021

- **peak power increases to 126 kW at 8,500 rpm**
- **Introduction liquid-cooling method**
- **lighter by 10 kg**
- **increase in range of 5-10%**

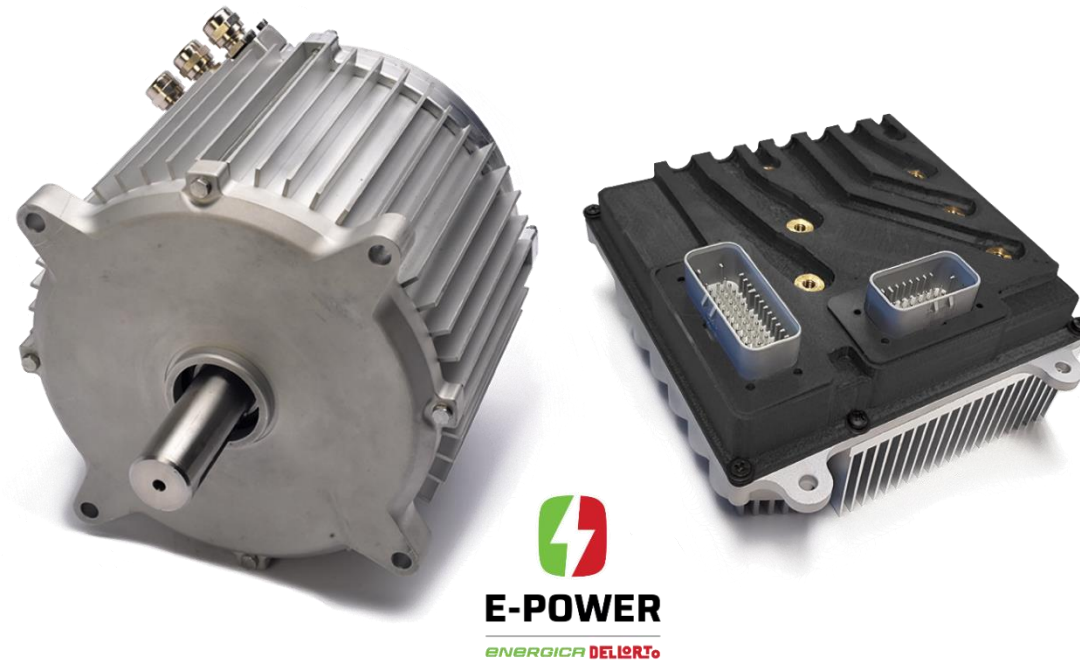






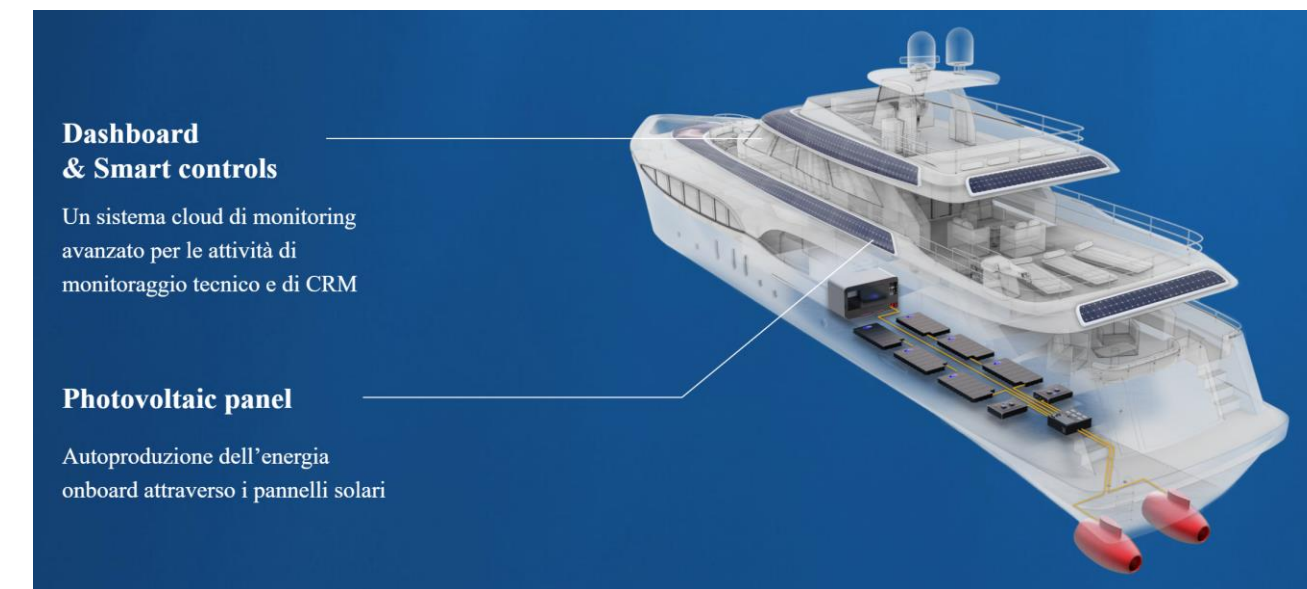
## Small size 2 wheelers mass production

- Dell'Orto partnership to develop and produce powertrains for scooters and mopeds with power range from 4kW to 12 kW.
- Systems will include Inverter, Vcu, DCDC converter and swappable battery.



## Boats

- Support to Sealence startup in system integration for boats.
- Sealence is developing the electric jet DeepSpeed, the most advanced and efficient propulsion in the naval sector
- Energica experience will boost up the development also in the marine field.
- In cooperation with University of Padova, University of Parma, University of Modena and University of Milano.



## Other applications (under analysis)

- Helicopters and aircrafts with italian leading company
- Second life battery charging system for sharing scooters
- Vehicle to grid/to appliance for emergency recovery plans (easy video for easy understading of complex events)
- Support to customize small productions (customization of petrol motorbikes, trikes, sidecars, dune buggies, karts...)



# E-Power small 2 wheelers more in depth



Development and production of mechatronic solutions applied to propulsion systems on industrial scale. Product portfolio includes automotive components and engine management systems for motorcycles.

## VCU – Vehicle Control Unit

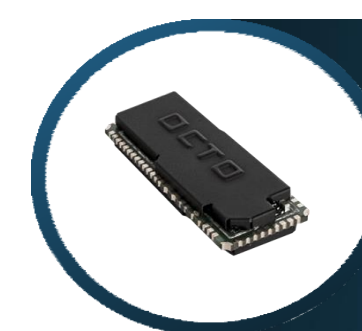
- 2 riding modes
- Ride-by-wire management
- Coasting engine brake setting
- Extra engine brake setting
- Reverse mode
- Traction control
- Speed limiter option



Leader in connected vehicle solutions for the Insurance, Fleet, Car Sharing, Automotive market. Operates worldwide as a Telematics Service Provider with end-to-end smart mobility solutions based on IoT technologies and Advanced analytics.

## Telematics on Chip

- Bluetooth and NFC connectivity
- Sharing app (vehicle lock/unlock, positioning, driving data)
- Diagnosis app (powertrain and battery status)

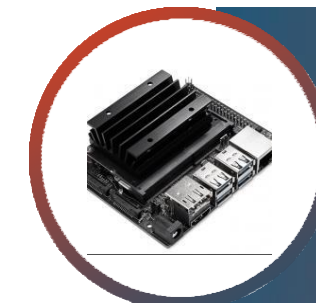


Video ADAS Front: <https://youtu.be/9mFGLWkQu7E>

Video ADAS Rear: [https://youtu.be/hBv5-5\\_BYkU](https://youtu.be/hBv5-5_BYkU)

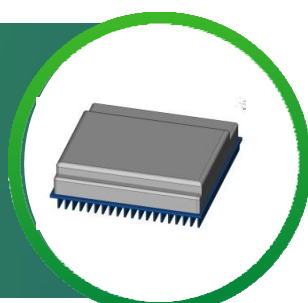
## ADAS – Advanced Driver Assistance System

- Intelligent speed limiter
- Forward collision warning
- Blind spot detection

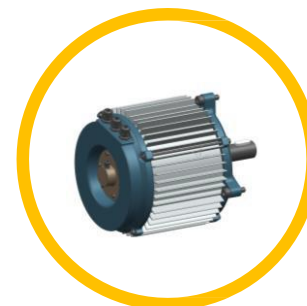


## Inverter unit

Conversion from battery DC to motor AC current 48V system Light and compact Eventual integration with the electric motor



For over 10 years engaged in electric propulsion on 2-wheel high performance vehicles (competition and road). In 2019-2021 Energica will be the exclusive supplier for the new FIM Enel World Cup, providing 18 motorcycles



- Scalable from 3kW to 6kW
- 48V system
- Light and compact

Proactive in technology transfer projects to national and international automotive companies, industrial automation and high-performance embedded systems.





## Energica is working with Cellularline and Alascom on an innovative project that can be easily adapted to any electric vehicle

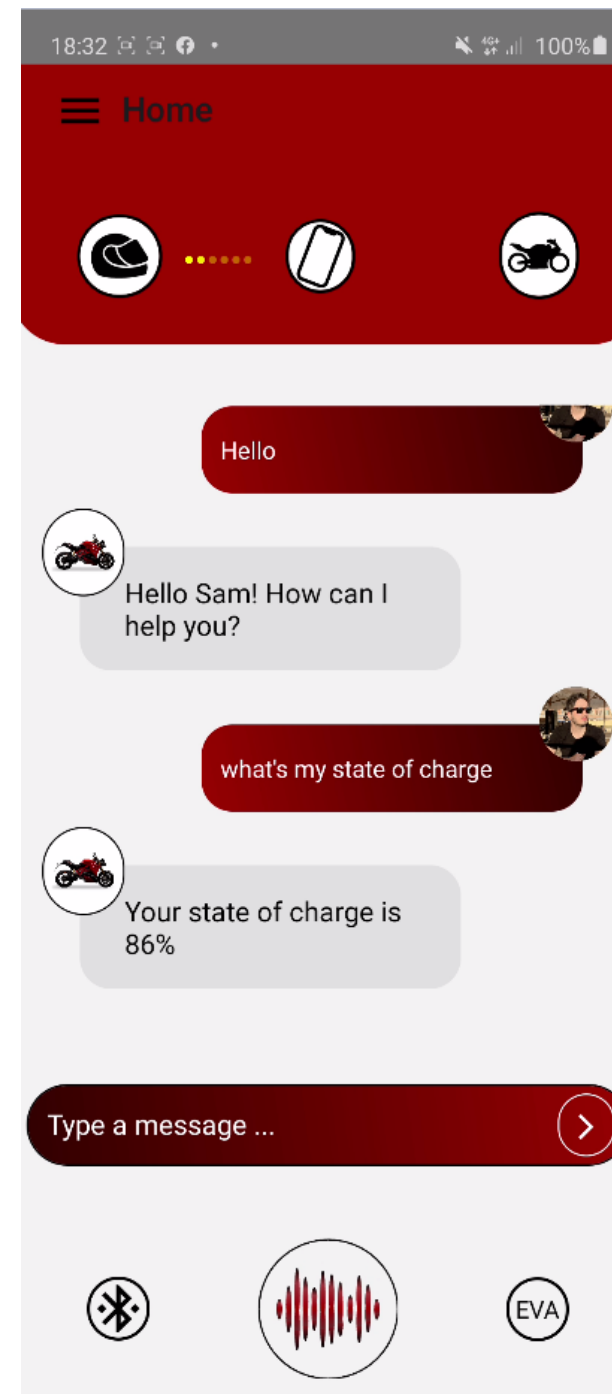


Cellularline is currently the leading European brand in the smartphone and tablet accessories market. Among its brands, Interphone, a communication device for motorcyclists.



Alascom has been operating for over 20 years in the ICT sector, with particular focus on telecommunication networks and IP technologies.

[video](#)



### GOAL:

The project is aimed at developing a communication protocol between the Energica riders and Interphone products through the mobile phone.

The rider, through the Ok Google or Hey Siri function of his/her phone, can interact with the bike by asking for some information using the interphone.

The bike will reply by bluetooth and the rider will be able to hear it through the interphone.

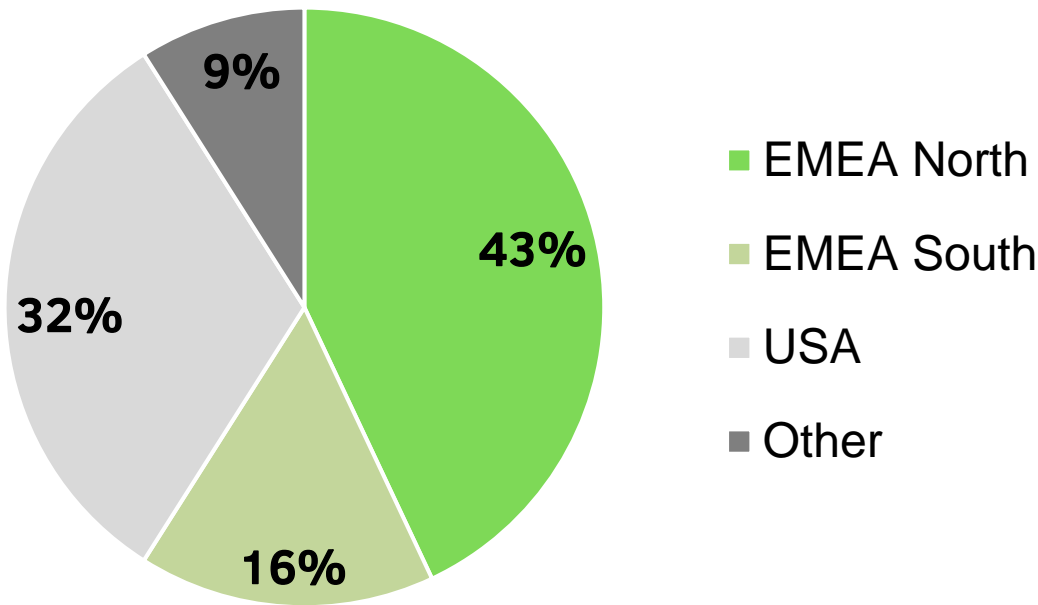




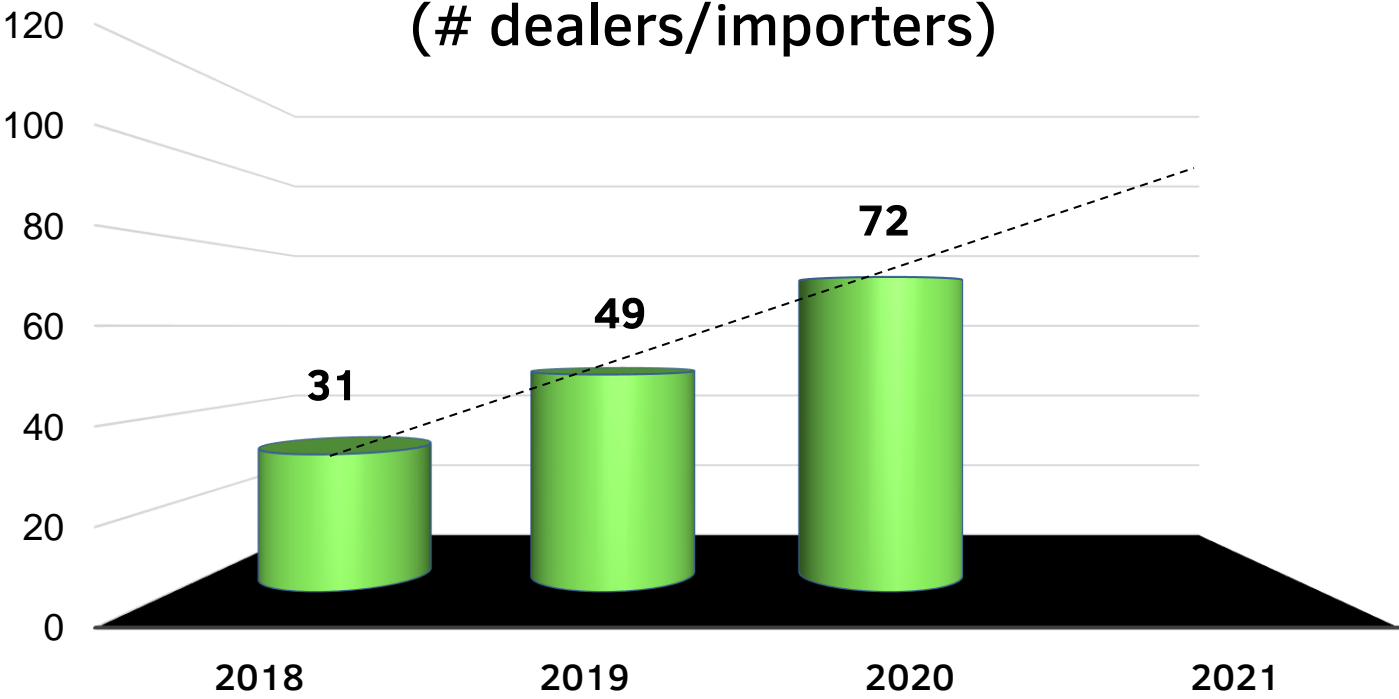
## 88 DEALERS AND IMPORTERS AROUND THE GLOBE

- 88 dealers/importers as of June, 2021
- 16 new commercial agreement in 1H 2021
- Energica Motor Company Inc., U.S. subsidiary for Energica Motor Company S.p.A. goal is to further grow U.S. and Canadian dealers according to actual growth trend.
- Asian Expansion: new agreements signed with Hong Kong and Japan
- China market entry strategy: 3 years road-map when Chaoji protocol - the next-gen ultra-high-power DC charging - will be operational

2020 Sales breakdown by geographic area



Sales Network Evolution  
(# dealers/importers)







FIRST SUSTAINABILITY REPORT

Through the first **Sustainability Report 2019**, **Energica** illustrate not only its business model and financial results, but also to highlight how business management aims to **create a lasting sustainable value in favor of its stakeholders**.

The Report thus presented confirms the **continuous research for innovation** that distinguishes the Company and the willingness to offer **answers on ESG (Environmental, Social, Governance) issues**.



Environmental

Focus on eco-sustainability with the creation of electric vehicles - a product that in itself limits gases emissions - with a fundamental role in fighting climate change.



Social

Energica aims to ensure the development of people, equal opportunities, diversity, health and safety. Business model based on a network of suppliers, mostly Italian and local (42% less than 100 km away from the Energica HQ thanks to position within Italian Motor Valley), with approximately 80% of the volume of national origin components.



Governance

Focus on experience, transparency, values and procedures to guarantee the spread of values inside the company.



# Environmental impact: Electric vs Traditional Motorcycle



Ducati Panigale 1299

Horsepower = 175 HP @ 10,400 rpm  
Torque = 94 lb. ft. @ 8,500 rpm\*\*  
MSRP = \$19,995  
Range: 110 – 170 miles\*\*\*

VS.



Energica EGO/EGO+

Horsepower = 150 HP @ 4,900–10,500 rpm  
Torque = 148 lb. ft. @ 0–4,700 rpm  
EGO MSRP = \$19,540 - EGO+ MSRP = \$23,870  
Range: 112 – 250 miles

## A Summary of ZEM Savings

\$297 in annual savings  
\$1,486 in five years

\$675 in annual savings  
\$3,375 in five years

12 metric tons of CO<sub>2</sub> prevented annually  
60 metric tons prevented in five years

\$972 in annual fuel/service savings  
\$4,861 in five years fuel/service savings

60 metric tons of CO<sub>2</sub> prevented  
\$961 Overall annual Savings w/MSRP Included (EGO+)  
\$5,301 Overall 5 years Savings w/MSRP Included (EGO+)

### Ducati Panigale 1299

.11 cents per mile

\$339 = Cost/Leisure  
\$1,178 = Cost/Commuting

\$1,696 = Leisure/Five Years  
\$5,890 = Commuting/Five Years

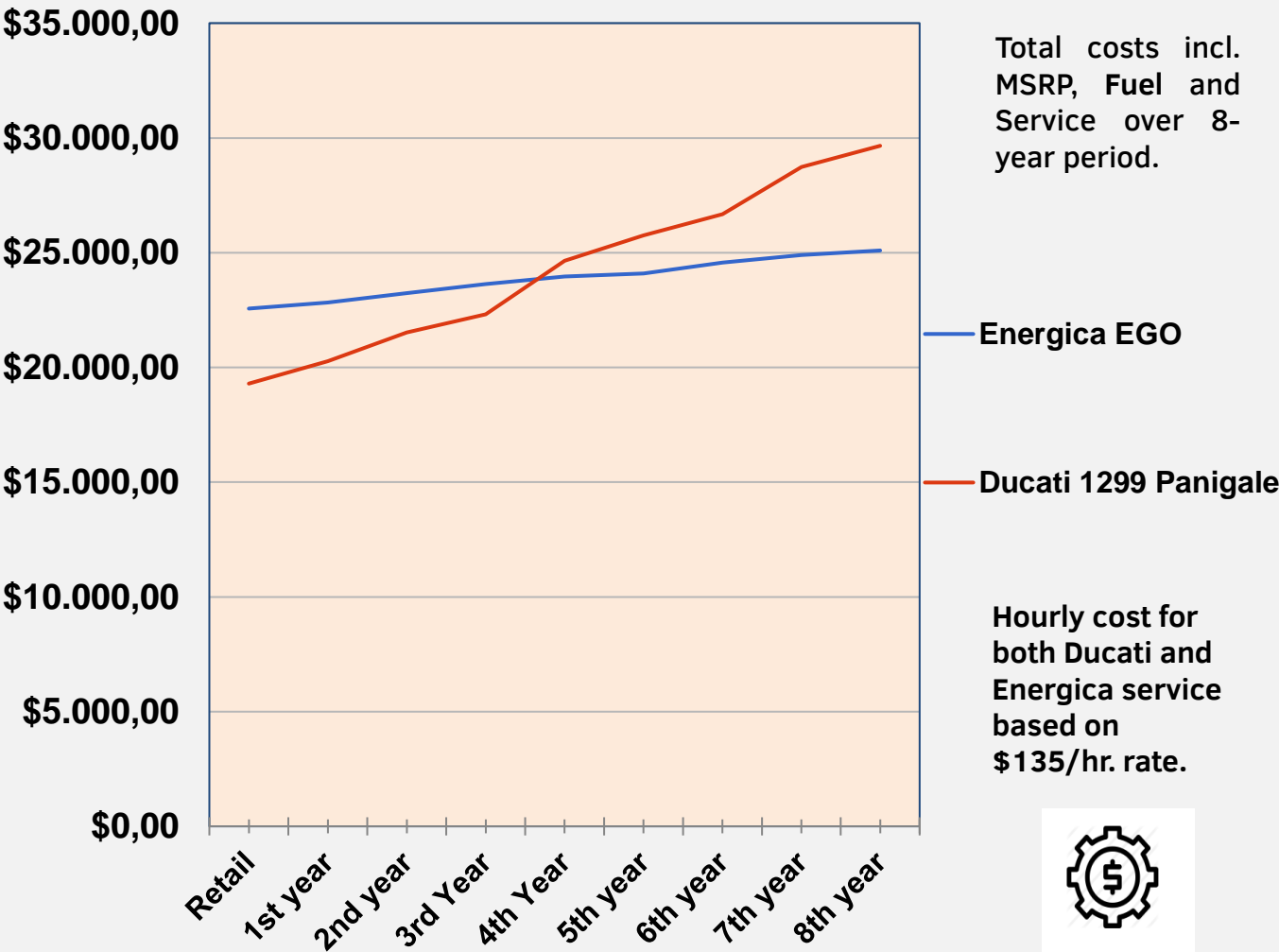
### Energica EGO/EGO+

0.015 cents per mile

\$45 = Cost/Leisure  
\$156 = Cost/Commuting

\$225 = Leisure/Five Years  
\$780 = Commuting/Five Years

## Energica EGO+ vs. Ducati 1299 Panigale



\* Two-year motorcycle warranty for motorcycles both brands; three year Energica warranty for battery.

\*\*\* Source: insella.it (Unibeta srl)

Source: Company analysis





## Growing brand awareness Energica is the single manufacturer for Fim Enel MotoE World Cup

### Unique competitive advantage

Thanks to the **innovation and reliability** of its motorbike, Energica was chosen by Dorna as **single manufacturer for the FIM Enel MotoE™ World Cup**.

Energica bring their **know-how** on the stage of MotoGP, relishing the electric power of their state-of-the-art **Ego Corsa**. The R&D department was committed on this bike, working on driveability on the track, and track specifications.

With MotoE, Energica is **the only one** who can test solutions and innovations in **extreme conditions** with the **best world riders**.

### Brand Visibility Boost, a huge Impact

- **400 ml people** reached only on television (MotoGP streaming, Sky Italia, BeIn Sport, Canal+)
- **700.000+** users reached on MotoE section inside MotoGP website
- **2,5+ million** people engagement on social media
- **24+ million** video views

### Confirmed single manufacturer until 2022

08 October 2020: Dorna Sports announce that Energica will remain the single motorcycle supplier to the FIM Enel MotoE™ World Cup until 2022, with a contract extension ensuring the Italian marque's cutting

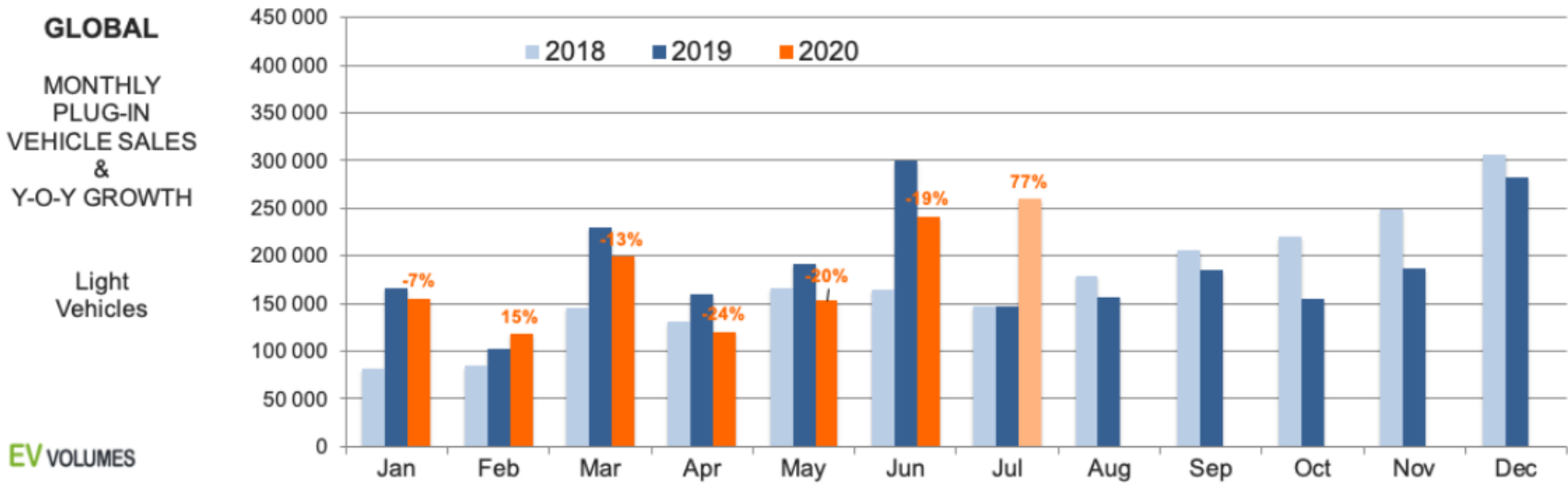






# Global passenger electric vehicle sales to rise to 6.2 million units by 2024, almost 3 times higher than 2019

Source: S&P Global Market Intelligence, July 2020



Source: EV Volumes, July 2020

Europe is the beacon of EV sales in 2020 with **57 % growth for H1, in a vehicle market which declined by 37%**. The rapid increases of EV sales started in September 2019 and gained further momentum this year.

In USA, the sales of EVs followed the overall market trend.

EV Volumes, July 2020

In contrast with EV rise, “traditional” 2/4 wheels global brands continue to report a significant drop in sales worldwide for the first half of 2020.



Electric car sales are expected to run better than the overall passenger car market, with EV sales this year to broadly match the 2.1 million sold in 2019.

Source: International Energy Agency



**Investors are growing excited about the possibilities of EVs exploding over the next decade.** Shares of Tesla nearly quadrupled this year. Smaller EV makers have done even better, seeing their stock prices rise fivefold.

Source: Fortune



Tesla is "back on track" to deliver 500,000 cars this year despite the COVID-19 pandemic, and it could ultimately deliver 1 million units per year by 2023.

In 2019, Tesla delivered approximately 367,500 vehicles, 50% more than the previous year.

Source: Business Insider, July 2020





A booming market  
+35% CAGR during 2019-2024

## Global High-Performance Electric Motorcycle Market



## Trends



Batteries weight decline key to sales pick-up. Energica MY2021 5% lighter



E-scooters and e-bikes key part of the micro-mobility rise.



7,084 electric motorcycles and 24.691 moped registered in EU in 1H2020, +47% increase (ACEM reports)

Source: Technavio, May 2020





## OIL GIANT TOTAL ACQUIRES LONDON CHARGING NETWORK

Total acquired Source London from the French Bolloré Group,  
which also operates electric car-sharing services

GOAL: to build a network of 150,000 charging stations in Europe by 2025



## IONITY

Increasing number of charge station across Europe  
+60 fast charging station only in Italy 2019-2020

## IONITY

a joint venture between BMW, Ford, Mercedes and Volkswagen with Audi and Porsche  
aims to build a network across the continent.



CHARGE  
STATION

high power  
350 KW



CREDIT CARD  
PAYMENT

Easier to pay  
without  
subscription



LESS TIME

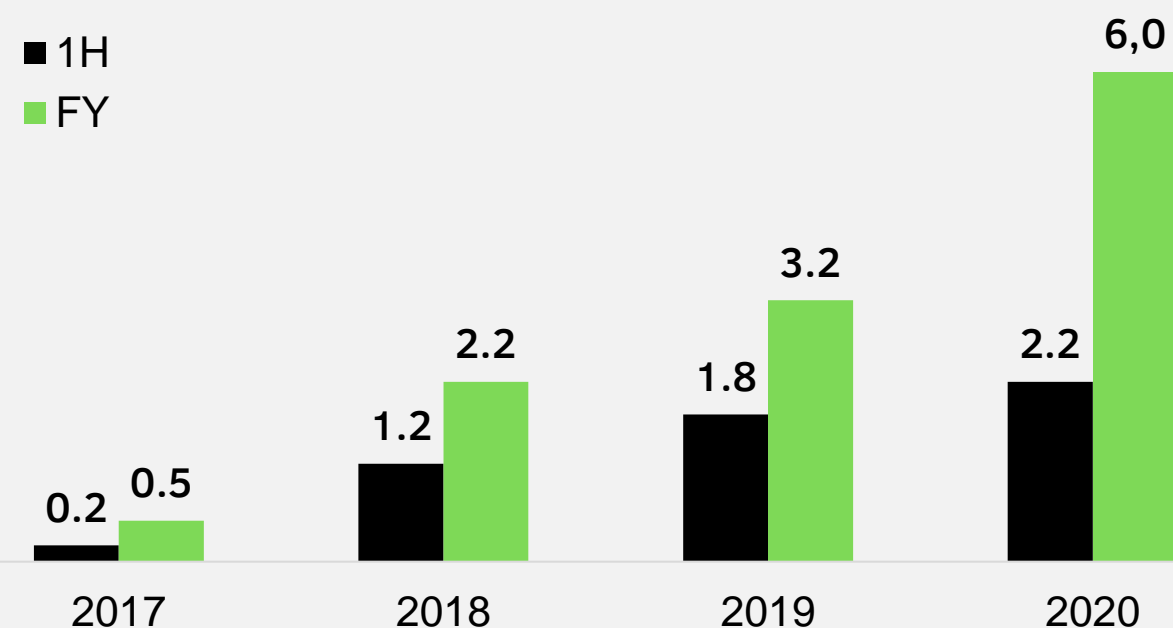
Less time  
for full charging



# Financials, Business Plan 2020-2022 and recent events



## SALES (€M) 2017-2020



In FY2020 sales increased to €6 m, +91% vs FY2019 (€0.5 m in 2017)

## ORDER BOOK

Order book: as of 31 May 2021 equal to 67% of the total motorcycle sales in FY2020

## CAPITAL INCREASE

On 5<sup>th</sup> March, Capital increase successfully concluded with a raising of Euro 15 m, whose Euro 11 m from Ideanomics, global company driving mobile energy transformation and the green fintech revolution, listed on Nasdaq, as a strategic investor

## RECENT EVENTS

- Registered the trademark in Japan
- The VCU (Vehicle Control Unit) exceeds the technical examination for obtaining the patent in China
- Factoring agreement with General Finance to finance the dealer network
- Commercial agreement with Cooltra Motos Italia for the short and long term rental service
- Investment plan for production cost saving thanks to significant growth of the portfolio -2% saving from first 6 months of 2021 to more than 19% by the end of 2021
- Energica presents EMCE, the new electric powertrain created in co-engineering with the Italian company Mavel

## BUSINESS PLAN 2020-2022 GUIDELINES

On January 16th, 2020 (before the COVID-19 pandemic period) Energica approved the 2020-2022 Business Plan:

### 2020 Sales

+100% only bike revenues vs FY2019

### 2022 Sales

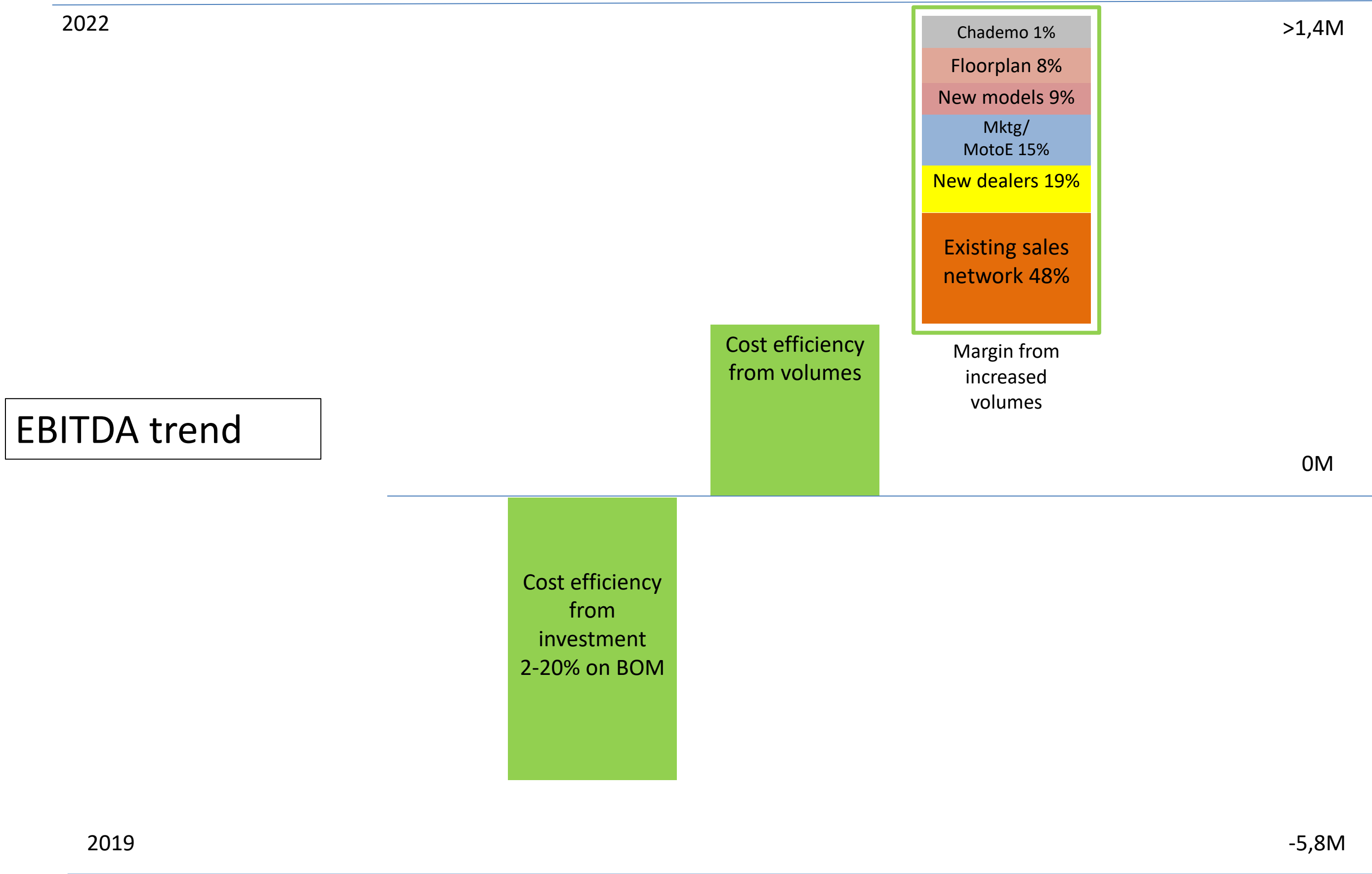
> €20 m

### 2022 EBITDA

Achievement positive EBITDA



# EBITDA Trend: 2019 – 2022 motorcycles only





# Clear Strategy to Unlock the Next Phase of Growth



## Sales Network

for motorcycles



- Selective extension of sales network
- Financial schemes to support dealers and distributors
- E-commerce

## Operations



- Automation of production lines to support sales and drive cost efficiencies for battery assembly, to be sold to third parties also
- IT and tooling investments for logistics and supply chain to reduce BOM and grow margin
- New warehouse
- Investment plan of €2.2m (€1.9m to the R&D Dept.) to optimize production, technology and vehicles performances.

## R&D



- Competitive advantage through R&D on core technology to keep leading the way across various markets
- MotoE as driver for product innovation
- Continuous improvement of manufacturing technology to decrease bill of materials cost and grow margins

## Ecosystem

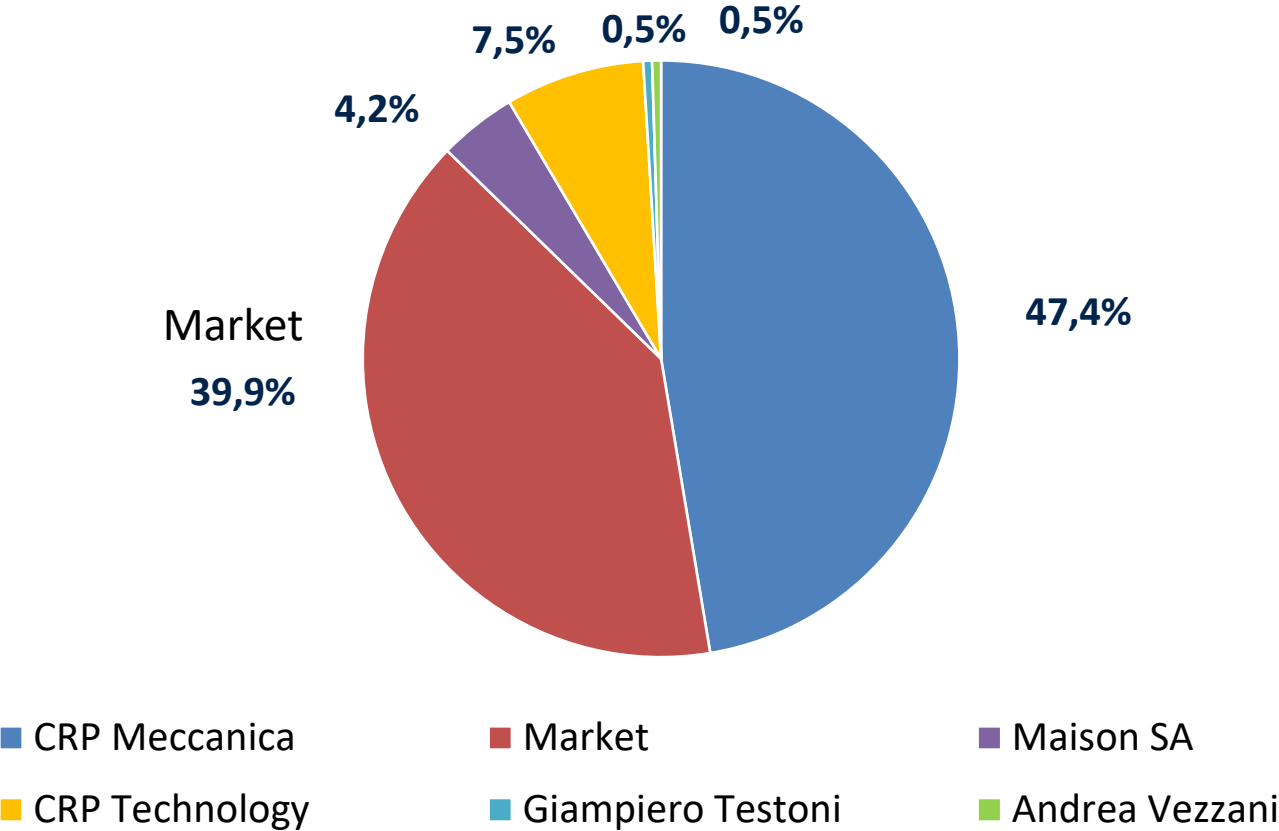


- CRM, customers engagement, social media
- Strategic partnerships with companies engaged in the developments of smart and green technology for electric vehicles





## Shareholding Structure



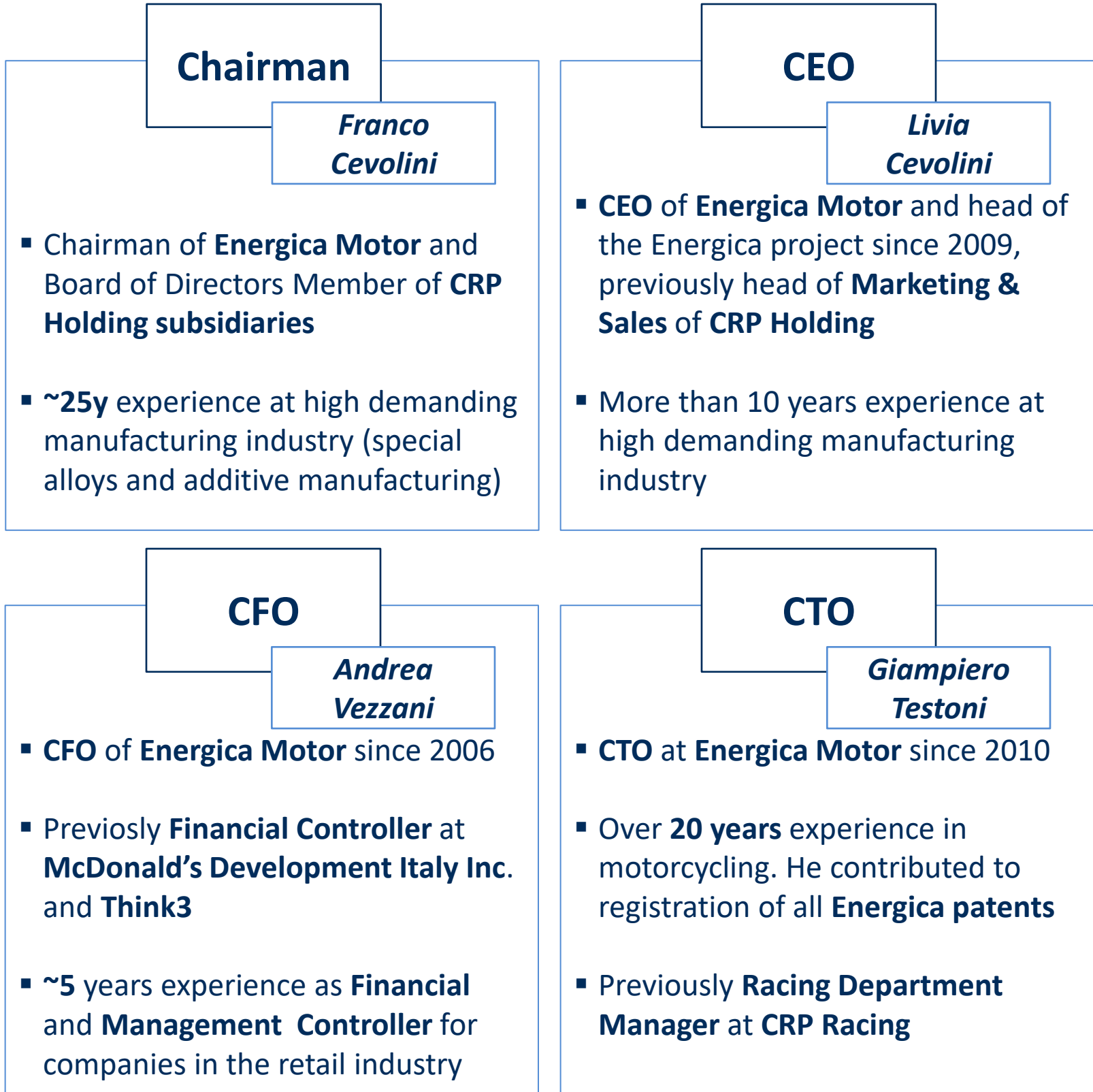
## Board of Directors

- Ing. Franco Cevoli**  
*Chairman*

**Dott. Andrea Vezzani**  
*Executive Director*
- Ing. Livia Cevoli**  
*CEO*

**Dott. Gian Carlo Minardi**  
*Independent Director*
- Dott. Giampiero Testoni**  
*Executive Director*

## Management Team





FIM Enel MotoE™ World Cup



**ENERGICA**

SINGLE  
MANUFACTURER



# *Lead the Charge*

