



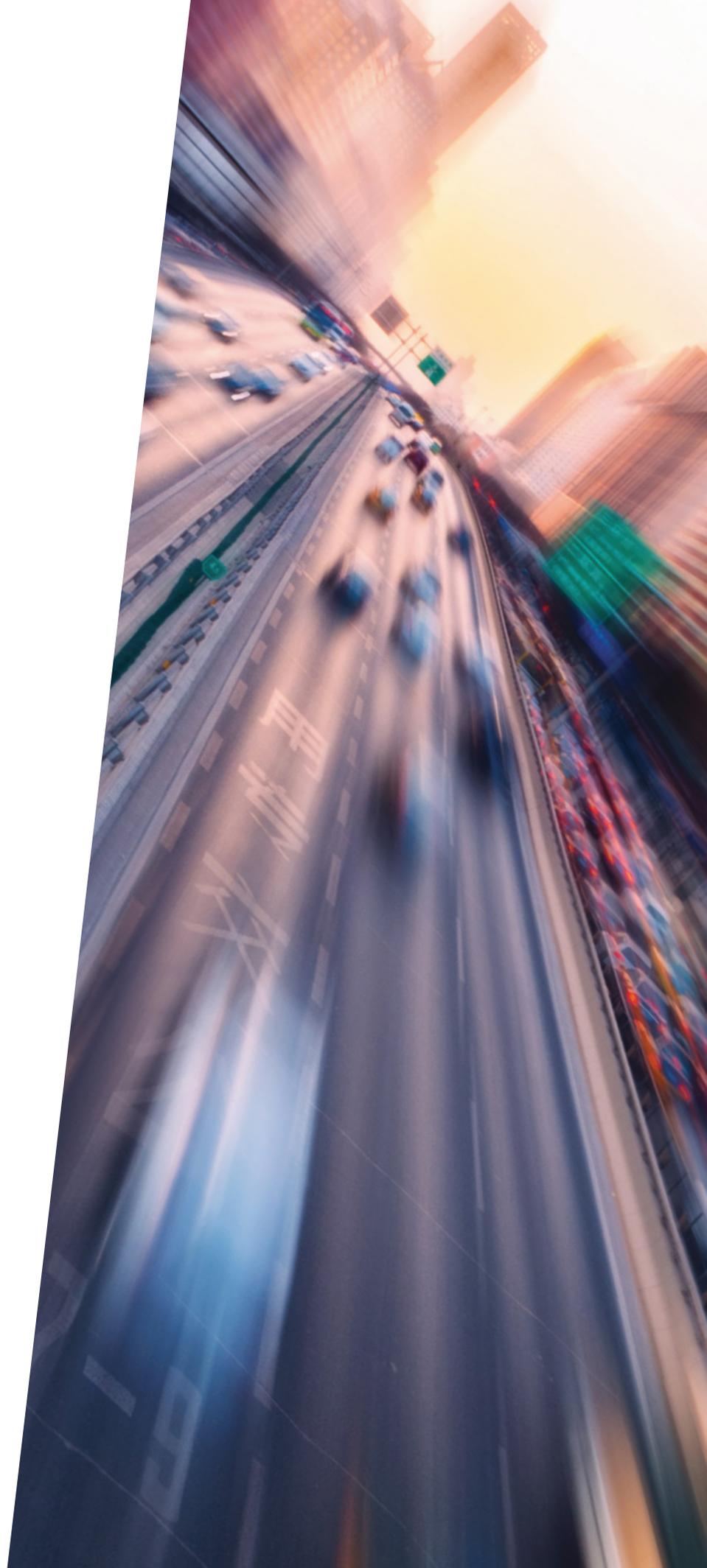
# REINVENTING INVENTING

PLASTIC OMNIUM ACCELERATES  
MOBILITY INNOVATIONS



PLASTIC OMNIUM

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# **REINVENTING OURSELVES EVERY DAY**

Innovating to help our customers, without any barriers or limits, is deeply embedded in our business-oriented culture and part of our DNA. Driven by a determination to excel in everything we do, our aim is to find innovative solutions for clean mobility. Our lightweight, intelligent and eye-catching exterior parts make aerodynamic and connected cars. We support energy transition by providing solutions for a variety of engine types, including systems for energy storage, emission reduction and new energy sources. Together with our partners, we are extending our horizons to include mobility in all its forms. We never stop progressing because our energy comes from constant motion, endlessly challenging ourselves to find ways to deliver what society demands. A society that is ever more vigilant, responsible and engaged. We dedicate this energy to mobility in all its forms, and to our planet. We dedicate this energy to future generations.

## **IS HOW WE INVENT TOMORROW.**

# INNOVATION, NOW MORE THAN EVER

**Mobility is undergoing a uniquely rapid and far-reaching transformation. Plastic Omnium is inspired by these changing realities, leveraging them to transform itself and influence its entire ecosystem. A pioneer of automotive transformation for 75 years, the Group has never been more determined to be at the forefront of the emerging landscape of new mobility.**

The automotive revolution, with its unprecedented scope and speed, encourages us to reach the new heights of inventiveness that the accelerating pace of transformation demands. Innovation has been central to Plastic Omnium for 75 years, a focus that makes these transformations possible, enabling it to develop solutions that deliver greener forms of mobility and place the environment at the heart of its innovation strategy and operations. Successive waves of technologies are arriving with ever greater speed, frequency and intensity, reshaping a market undergoing far-reaching changes that are driven by clean mobility. Plastic Omnium has the ability to predict these trends and adopt them when the timing is right. From lighter vehicles to hydrogen fuel cells, these developments are the source of outstanding opportunities for Plastic Omnium, especially in a market experiencing a period of consolidation. Although our innovations are very much centered on cars, other forms of mobility are now benefitting from them: trucks, buses, trains and, in the near future, airplanes. The Group owes its flair for agility and foresight above all to the financial solidity and stability that comes from family ownership. Plastic Omnium is independent, free to commit itself to long-term projects, decide which technologies to back, and strike out in new directions. It is, in other words, an intrepid business in control of its own destiny. Bolstered by the professionalism and expertise of its teams around the world, and the guidance of its executive management, Plastic Omnium has what it takes to reinvent itself today and invent the disruptive innovations that are shaping the mobility of tomorrow.

**LAURENT BURELLE**



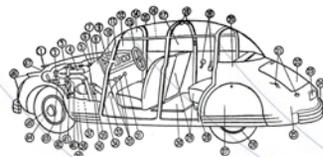
**“Innovation  
has been central  
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forms of mobility.”**

**LAURENT BURELLE,**  
*CHAIRMAN OF THE BOARD OF DIRECTORS*



# A LONG-STANDING COMMITMENT TO SUSTAINABLE MOBILITY

Plastic Omnium has been innovating to make mobility safer and cleaner for over 75 years, reducing the weight of vehicle components, optimizing their aerodynamics, and developing solutions to reduce their emissions. The past two decades have seen Plastic Omnium ramp up its environmental commitment, with an ambitious innovation roadmap that has delivered its solutions for zero-emission hydrogen-powered electric mobility and a focus on achieving carbon neutrality.



**Pierre Burelle comes up with 47 separate vehicle components that could be replaced by plastic**

**1950**



**First automobile customers**

**1986**



**First lightweight high-performance fuel systems**



**First lightweight injection-molded plastic bumpers**

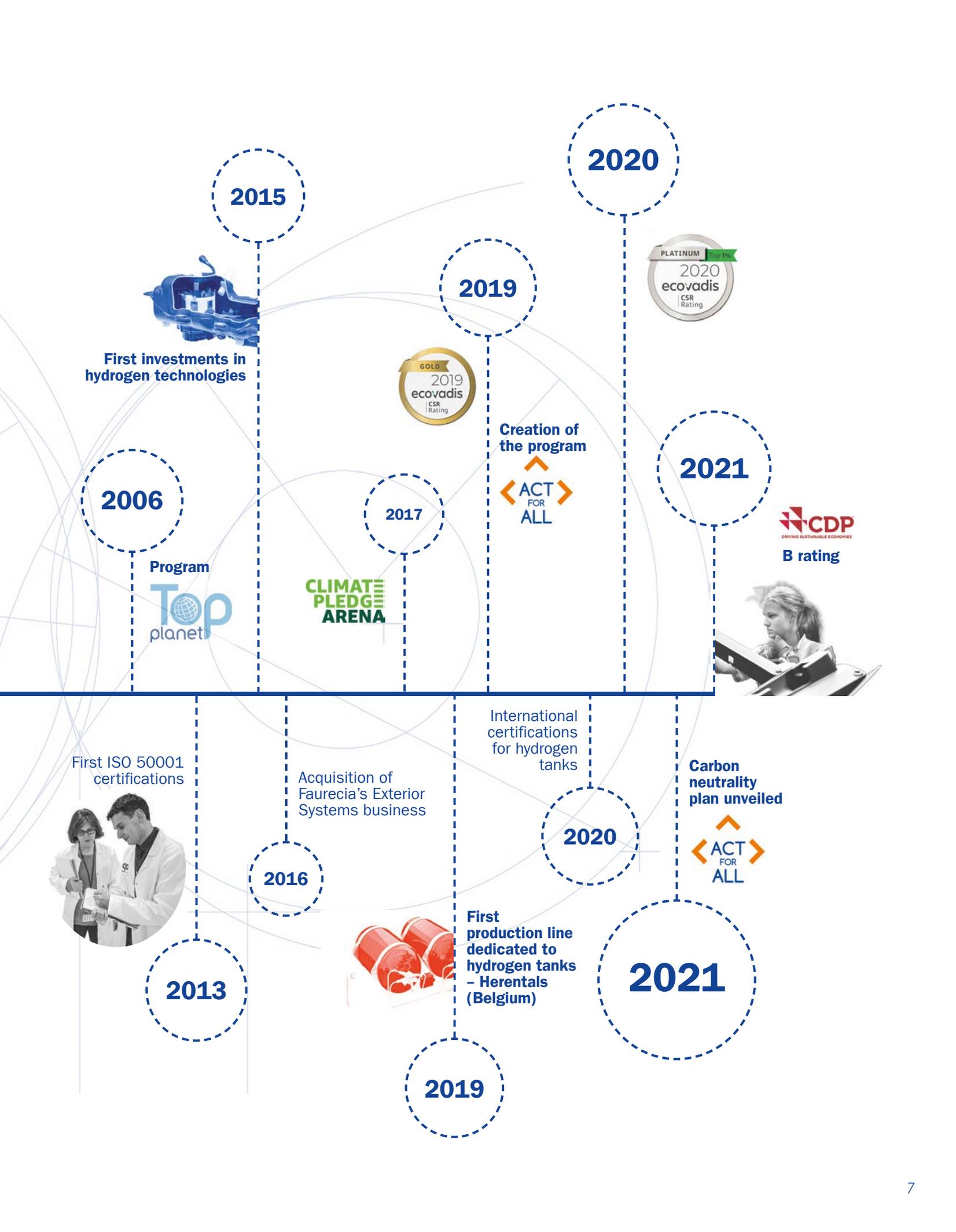
**1980**

**First ISO 14001 certifications**



**1947**

**2001**



2015

First investments in hydrogen technologies



2020



2019



Creation of the program



2021



2006



2017



First ISO 50001 certifications



Acquisition of Faurecia's Exterior Systems business

2016

International certifications for hydrogen tanks

2020

Carbon neutrality plan unveiled



2013

First production line dedicated to hydrogen tanks - Herentals (Belgium)



2021

2019

A photograph of a person in a white lab coat working on a car engine in a workshop. The person is seen from the side, looking down at the engine. The background shows a blue metal frame and other workshop equipment. The word "INSPIRING" is written in large, bold, white letters across the middle of the image, and "INSPIRED" is written in large, bold, black letters above it.

# INSPIRED INSPIRING

**Plastic Omnium adapts to the changing face of the automotive industry by combining the best of its expertise in plastics with the latest advanced technologies. The leader in sustainable and connected mobility, Plastic Omnium creates disruptive innovations and establishes key partnerships that are redrawing the lines and inventing the mobility of tomorrow.**



# TOMORROW'S MOBILITY WILL BE SUSTAINABLE

**In 2021, Plastic Omnium operated in a market characterized by a shortage of semiconductors, rising commodity prices and a fast-changing health crisis. The Group showed its agility as it continued to service its customers, and its determination as it forged ahead with its strategy for transformation and innovation.**

## **How do you view the changes in the automotive market?**

Epidemic waves and semiconductor shortages occasionally made market conditions more difficult. But the underlying trends – the shift to electric vehicles, greater connectivity and self-driving – all picked up pace, driven by policymakers and the general public's increasing demand for mobility that takes better care of the environment. Plastic Omnium's historical positioning as a supplier to the automotive industry of components that cut vehicle weights and reduce emissions mean that it is now ideally placed as its customers' preferred partner for clean mobility solutions. We made significant advances in electrification during 2021, with electric vehicles accounting for 8% of revenue – above the market average – as well as in connectivity thanks to a partnership with a startup called Greenerwave to develop a highly innovative 4D radar. This performance is underpinned by our products and our international locations, particularly in the high-potential Indian and Chinese markets. Hydrogen, a promising future energy Plastic Omnium has invested over €300 million in since 2015, is a market where our activities are taking shape, encouraged by initial experiences at scale in Asia and Europe and boosted by economic stimulus packages in Europe that position hydrogen as a lever for European sovereignty and competitiveness.

## **How did Plastic Omnium navigate the difficulties the industry had to face in 2021?**

We relied on increased flexibility, a series of cost-cutting measures, and the unfailing commitment of each and every one of our employees. And our efforts paid off. We performed above the market average in every part of the world. Plastic Omnium has reached key milestones in its strategic roadmap. We rolled out our OMEGA transformation program to make us more responsive and more agile. Our three strategic pillars – operational excellence, innovation and sustainability – have never been more important, helping us weather the crisis and write the story of our future and the future of mobility.

## **What were the standout advances in 2021?**

It was a very busy year, involving a combination of actions that paid off instantly and others laying the ground for the years ahead. Our order book is at record levels, reflecting our growing market share across our three business lines. For example, we provided new modules for electric vehicles made by established automakers as well as pure players in electric mobility, and worked with Lucid, the US manufacturer based in Silicon Valley, designing multiple exterior parts for its high-end electric vehicle project. Our robust order book strengthens our financial solidity and gives us the visibility we need

to invest for the future. Our investments in hydrogen are beginning to pay dividends in the form of our first automotive contracts and good prospects in rail and aviation. In January 2022, we established a separate division focused solely on hydrogen, a further sign of our determination to expand our industrial and commercial reach.

#### **Can growth be compatible with carbon neutrality?**

We are convinced that our financial and non-financial performance drive each other. Now more than ever, we are taking an optimized, global approach to managing our performance. This is the mindset behind our carbon neutrality commitment, with the first major milestone for the impact of our activities in 2025. All our products and innovations meet targets for aerodynamic performance, weight saving, emission reduction, materials recycling and electrification. Our environmental goals serve as our engine of growth and a lever that further boosts the performance and commitment of the Group and all its teams. Above all, we do all this for the benefit of future generations, keeping a close eye on new trends in mobility and the likely consolidation in the market.

#### **How is 2022 shaping up for Plastic Omnium?**

Customer disruption owing to the semiconductor situation and uncertainties surrounding inflation will continue into the first half of the year. In the short term, we are doubling down on our cost control and flexibility efforts, while continuing to follow our strategy for long-term growth. We are shaping our future by providing ever more content per vehicle, by winning market share in expanding market segments, by diversifying our product portfolio to reach targets beyond the Group's traditional customers, and by investing massively in innovation. We are also ramping up our partnership strategy, teaming up with TotalEnergies to grow the portion of recycled materials used in exterior parts, with Greenerwave to perfect a highly innovative 4D imaging radar, and with Alstom to develop onboard hydrogen solutions for regional rail services. At the same time, our teams around the world are hard at work putting into action our commitment to achieve carbon neutrality by 2050. So it is clear that Plastic Omnium is redoubling its efforts to improve the present and shape the future.

**“We are convinced  
that our financial and  
non-financial performance  
drive each other.  
Now more than ever,  
we are taking  
an optimized, global  
approach to managing  
our performance.”**

**LAURENT FAVRE,  
CHIEF EXECUTIVE OFFICER  
DIRECTOR**



# 2021, A YEAR OF INSPIRING AND COMMITTED DEVELOPMENTS

2021 was a very busy year for Plastic Omnium. The Group achieved strategic milestones, won promising new contracts and struck major partnerships to ramp up the pace of innovations in energy transition. A look back at the highlights of 2021.



DESIGN BY PLASTIC OMNIUM,  
4D IMAGING RADAR TECHNOLOGY BY GREENERWAVE



# 2021 HIGHLIGHTS



**INSPIRING**

## **IMAGINING THE MATERIALS OF THE FUTURE.**

Plastic Omnium and TotalEnergies are partnering to design exterior body parts made from recycled materials that meet the stringent standards of the automotive industry.

## **SEEING SURROUNDINGS IN 4D.**

Plastic Omnium and Greenerwave, a startup specializing in electromagnetic wave technology, are pooling their expertise to perfect a next-generation 4D imaging radar to improve the safety of self-driving vehicles and accelerate their development.

**DEVELOPING**

## **MANUFACTURING HYDROGEN TANKS AT SCALE.**

Hyundai has chosen Plastic Omnium to provide storage systems for its new hydrogen-fueled vehicle. The 700-bar high-pressure tanks will be produced as of 2023 at the Group's plant in Gyeongju, South Korea (30,000 tanks a year).

## **CONSOLIDATING OUR POSITIONS.**

The Group has built its new YFPO plant near Shanghai, China, which will produce over 1 million bumpers annually for an all-electric customer. In Austria, Plastic Omnium has opened a plant dedicated to integrated hydrogen systems.

**COMMITTED**

## **WORKING FOR THE ENVIRONMENT.**

The carbon neutrality roadmap is now in place. Formalizing a long-held commitment, the first milestones are set for 2025 and 2030.

## **WELCOMING THE MOBILITY EXPERTS OF TOMORROW.**

Offering opportunities to young people is a priority for Plastic Omnium, which hired 875 interns and work-study students during 2021. An active participant in VIE, France's international work experience program, the Group has provided internships to 400 young people over the past decade, winning it a VIE Grand Prix award in the large business category.

### LEADING FROM THE FRONT.

Plastic Omnium is helping to create a prototype hydrogen-electric car for the 24 Hours of Le Mans race in 2024. This rolling testbed will help perfect the Type 4 tanks that will be subject to extreme operating conditions when fitted to racing cars in 2024.

### OPENING NEW HORIZONS.

Creation of EKPO, a joint venture that will develop and produce fuel cells.

Signature of a memorandum of understanding with Alstom for hydrogen storage systems for trains.

### ENTERING A FAST-GROWING MARKET.

In India, the Group has started producing its first tailgates made from plastic instead of metal, which is generally used on the Indian market.

### REMAINING AT THE FOREFRONT.

Plastic Omnium supplies exterior body parts for Lucid Air, the new luxury electric vehicle from Lucid Motors and voted Car of the Year 2022 by MotorTrend. It is also a partner in the Hopium Mächina, set to be the first French high-end hydrogen car.

### DEMONSTRATING OUR GOAL.

Creation of the New Energies division, specializing in hydrogen mobility, with 300 employees including 200 engineers and researchers. Its goal is to become the global leader in hydrogen mobility by 2030.

### TAKING ACTION ALL OVER THE WORLD.

Plastic Omnium marked its commitment to sustainability on November 9, 2021 with its annual ACT FOR ALL™ day.

### ACCELERATING CARBON-FREE MOBILITY.

Plastic Omnium and McPhy, a specialist in hydrogen production and distribution equipment, have teamed up to provide an integrated range of hydrogen mobility services.

### DEVELOPING FUEL CELL SYSTEMS.

Plastic Omnium and AVL, an independent specialist in engineering, simulation and testing, are partnering to develop hydrogen systems with capacities from 10 to 200 kW. The future complete systems will use fuel cells from EKPO, a joint venture set up by ElringKlinger and Plastic Omnium.



# OUTPERFORMING THE MARKET

In a market heavily impacted by a shortage of microprocessors, with economic revenue at €8,017 million (up 4.6% like-for-like), Plastic Omnium outperformed the market in its key regions, +5.3 points in Europe, +2.9 points in North America and +4.1 points in China compared to a 2.6% rise in automotive production worldwide. The Group continued to strengthen its position in high-potential markets during 2021. The fast-growing electric vehicle segment accounted for 8% of the Group's economic revenue, compared to 5% in 2020 (like-for-like), outperforming the total market by +2 points. Hydrogen activities accelerated significantly in 2021, helping the Group to expand its commercial footprint to service all forms of mobility: car, truck, bus, train and plane. By creating a complete product line-up of high-pressure tanks, fuel cells and integrated systems and establishing a world-beating production capacity, Plastic Omnium is ensuring that these activities, carried out under the New Energies name since January 1, 2022, have every chance of giving it a worldwide leadership position in hydrogen by 2030.



## DESIGN & INTERACTIVITY

Solutions for complex exterior systems: function integration, connectivity, design and aerodynamics



## SUSTAINABLE MOBILITY

Onboard energy storage and emission reduction systems for all engine types



## MODULARITY AND CUSTOMIZATION

Development, assembly and logistics for custom and complex modules



## NEW ENERGIES

Energy storage and production solutions for all forms of hydrogen mobility

# AN ECOSYSTEM SERVING CLEAN MOBILITY

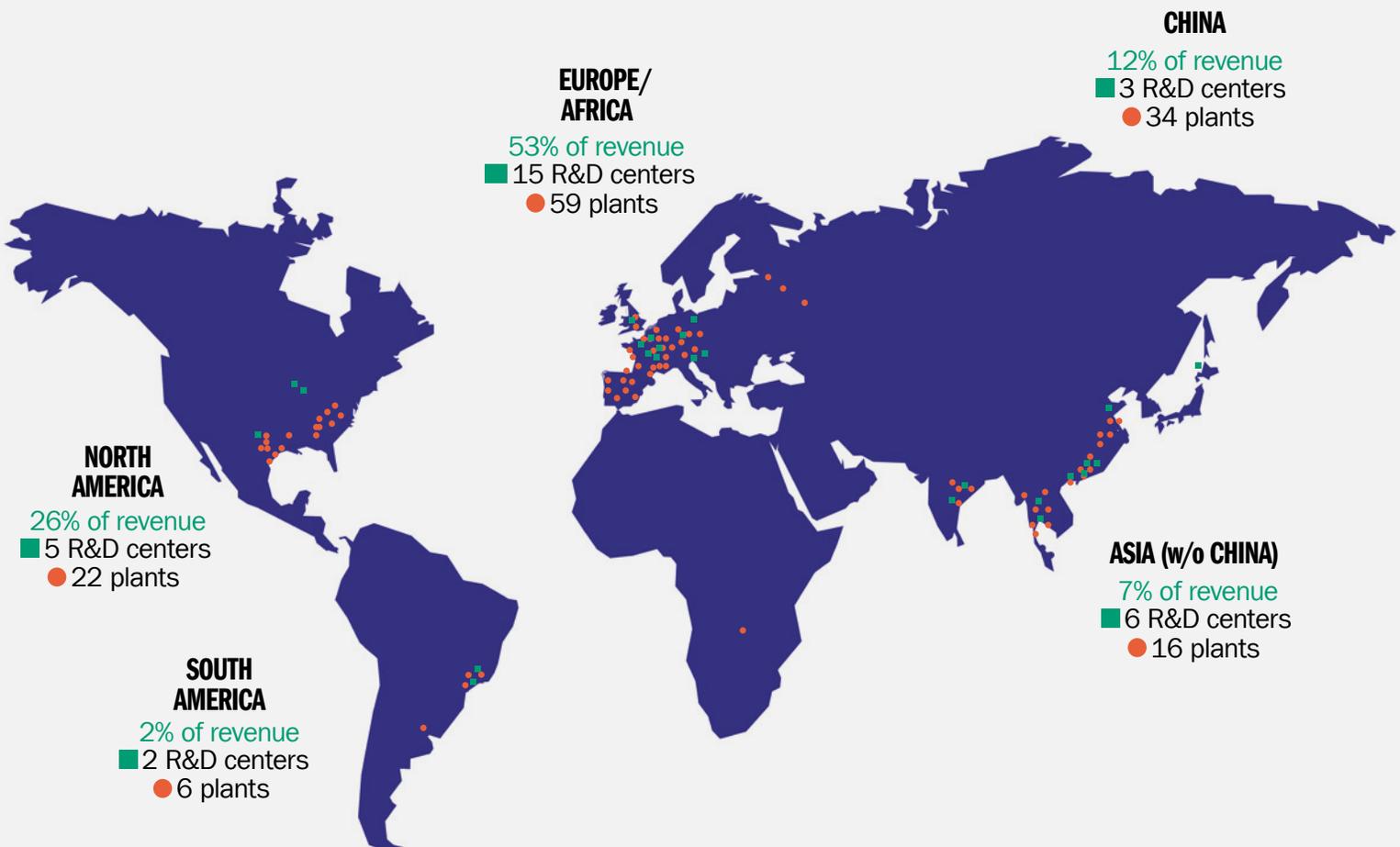
**30,000** EMPLOYEES

**31** R&D CENTERS

**137** PLANTS

**93** AUTOMOTIVE CUSTOMER BRANDS

**25** COUNTRIES



# NON-FINANCIAL PERFORMANCE AT THE HEART OF OUR STRATEGY

**FR2 ACCIDENT FREQUENCY RATE: 0.69\***

Halved since 2019

**DIVERSITY =**

22% women engineers and managers  
16% women senior executives

**NON-FINANCIAL RATING:**

CDP: B

EcoVadis: Platinum status

**YOUTH TRAINING:**

875 interns, VIE and work-study trainees

**2,750 SUPPLIERS**  
audited for CSR commitment

**SITES FITTED WITH SOLAR PANELS: x5\*\***

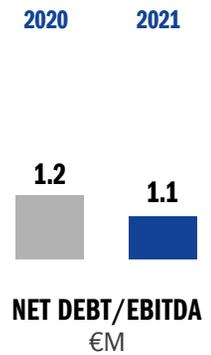
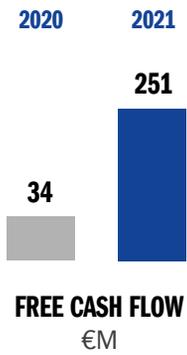
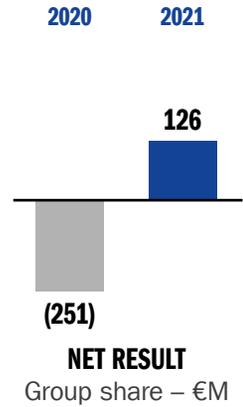
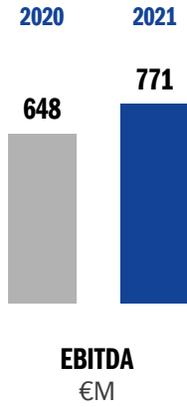
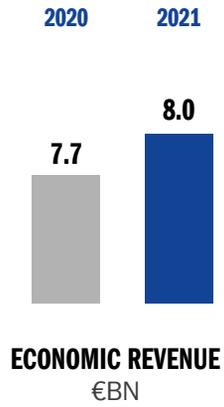
**86% OF WASTE RECYCLED OR RECOVERED**

\* Group's scope, including minority joint ventures – IFRS scope = 0.88

\*\* Fitted in 2021 and 2022



# FINANCIAL INDICATORS



Views of the α-Alphatech R&D center



**8**

WOMEN  
(54%)

**60**

AVERAGE AGE

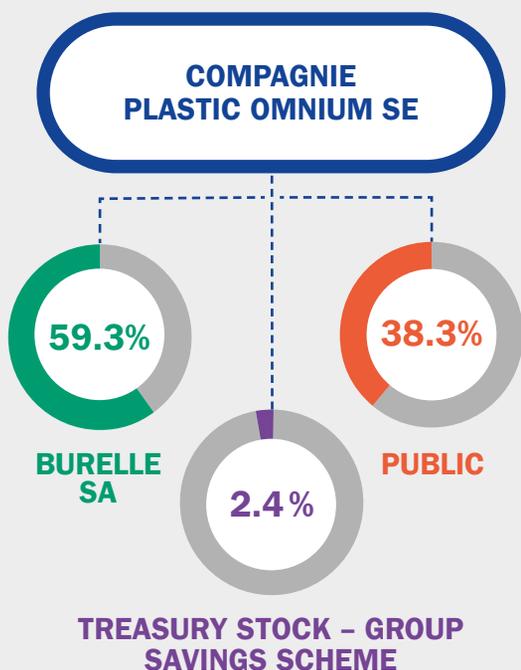
**5**

**INDEPENDENT  
DIRECTORS**  
(38%)

# EXPERT, AGILE GOVERNANCE

Plastic Omnium is an independent family-owned business whose strategy is guided by a Board of Directors comprising members of the Burelle family and independent directors with complementary skills. The board oversees the pace of changes needed to consolidate Plastic Omnium's leading position as well as supervising risk management and the Group's transformation.

Answering to the Board, the Executive Committee manages the transformation process and implements the strategy. In January 2022, the Appointments Committee was renamed the Corporate Sustainability and Appointments Committee to help ensure that environmental and societal issues remain central to the Group's strategy.



# BOARD OF DIRECTORS

AS AT DECEMBER 31, 2021



**LAURENT BURELLE**  
CHAIRMAN OF THE BOARD OF DIRECTORS  
OF COMPAGNIE PLASTIC OMNIUM SE  
DIRECTOR SINCE 1981



**LAURENT FAVRE**  
CHIEF EXECUTIVE OFFICER  
OF COMPAGNIE PLASTIC OMNIUM SE  
DIRECTOR SINCE 2020



**FÉLICIE BURELLE**  
MANAGING DIRECTOR OF COMPAGNIE  
PLASTIC OMNIUM SE  
DIRECTOR SINCE 2017



**ANNE ASENSIO\***  
MEMBER OF THE COMPENSATION  
COMMITTEE  
DIRECTOR SINCE 2011



**AMANDINE CHAFFOIS**  
DIRECTOR REPRESENTING EMPLOYEES  
SINCE 2019



**ANNE-MARIE COUDERC\***  
CHAIRWOMAN OF THE COMPENSATION  
COMMITTEE AND APPOINTMENTS  
COMMITTEE  
DIRECTOR SINCE 2010



**PROF. DR. BERND GOTTSCHALK**  
DIRECTOR SINCE 2009



**IRENEUSZ KAROLAK**  
DIRECTOR REPRESENTING EMPLOYEES  
SINCE 2019



**VINCENT LABRUYÈRE**  
CHAIRMAN OF THE AUDIT COMMITTEE  
DIRECTOR SINCE 2002



**ÉLIANE LEMARIÉ**  
PERMANENT REPRESENTATIVE  
OF BURELLE SA  
MEMBER OF THE APPOINTMENTS  
COMMITTEE  
DIRECTOR SINCE 2009



**PAUL HENRY LEMARIÉ**  
MANAGING DIRECTOR OF BURELLE  
PARTICIPATIONS  
DIRECTOR SINCE 1987



**LUCIE MAUREL AUBERT\***  
MEMBER OF THE AUDIT COMMITTEE  
AND APPOINTMENTS COMMITTEE  
DIRECTOR SINCE 2015



**ALEXANDRE MÉRIEUX\***  
MEMBER OF THE COMPENSATION  
COMMITTEE  
DIRECTOR SINCE 2018



**CÉCILE MOUTET**  
DIRECTOR SINCE 2017



**AMÉLIE OUDÉA-CASTÉRA\***  
MEMBER OF THE AUDIT COMMITTEE  
DIRECTOR SINCE 2014



**JEAN BURELLE**  
NON-VOTING BOARD MEMBER SINCE  
FEBRUARY 17, 2021  
HONORARY CHAIRMAN OF COMPAGNIE  
PLASTIC OMNIUM SE

\* Independent director

# PREVENTING AND MANAGING RISKS

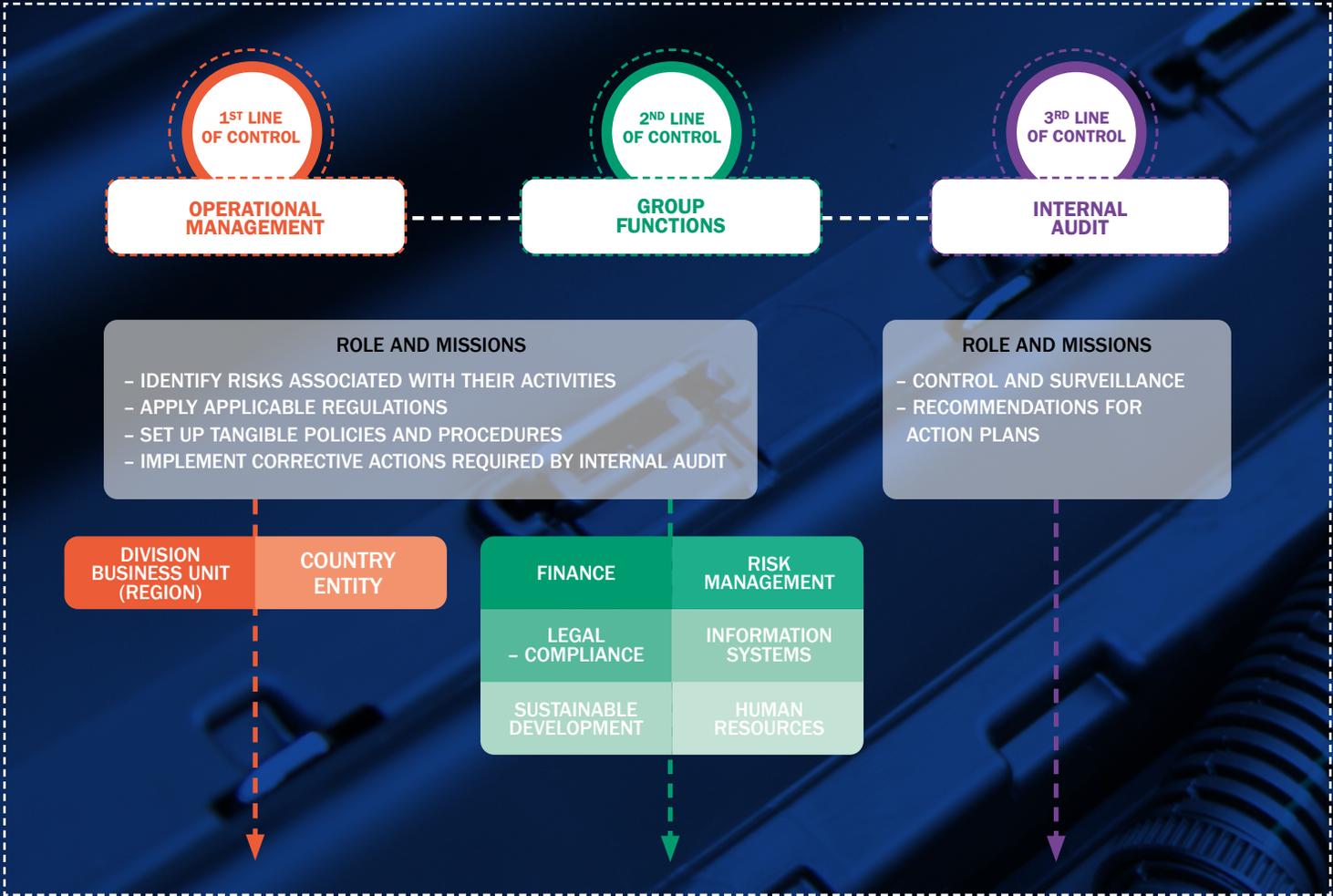
As a global manufacturing group, Plastic Omnium faces risks that may impact its business activities, financial situation and results. Risk control guides all the Group's actors, minimizing risk events and optimizing the Group's resilience thanks to an analytical framework and roadmap shared by executive management and all operational departments.

**PLASTIC OMNIUM COMBINES RESPONSIBILITY AND INDEPENDENT JUDGEMENT WITH THREE LEVELS OF ACTORS OVERSEEING RISK CONTROL PROCESSES:**

- OPERATIONAL DEPARTMENTS
- GROUP FUNCTIONAL DEPARTMENTS
- INTERNAL AUDIT

**INTERNAL CONTROL  
AND COMPLIANCE  
COMMITTEE**

**ROLE**  
COORDINATES  
THE OPERATION  
OF INTERNAL CONTROL  
PROCESSES



**EXECUTIVE MANAGEMENT**



# AN EXPANDED EXECUTIVE COMMITTEE WITH GREATER DIVERSITY

Sustainability, Innovation, Human Resources, Communications, Finance and IT: the Executive Committee has welcomed new members with expertise in a wide variety of fields. This major shake-up reflects the transformation taking place at every level, seeking to make Plastic Omnium the supplier that writes the story of tomorrow's mobility by placing social and environmental responsibility at the heart of its strategy.

**AS AT DECEMBER 31, 2021**

FROM LEFT TO RIGHT, TOP TO BOTTOM:

**RODOLPHE LAPILLONNE:** SENIOR EXECUTIVE VICE-PRESIDENT

- EXECUTIVE VICE-PRESIDENT PURCHASING PERFORMANCE

**STÉPHANE NOËL:** PRESIDENT AND CEO - INTELLIGENT EXTERIOR

SYSTEMS **CHRISTIAN KOPP:** PRESIDENT AND CEO - CLEAN ENERGY

SYSTEMS **MARTIN SCHÜLER:** PRESIDENT AND CEO - HBPO

**JANA KLEY:** EXECUTIVE VICE-PRESIDENT HUMAN RESOURCES

**DAVID MENESES:** EXECUTIVE VICE-PRESIDENT SUSTAINABLE

DEVELOPMENT **ALEXANDRE CORJON:** EXECUTIVE VICE-PRESIDENT

INNOVATION **CÉCILE CANET-TEIL\*:** VICE-PRESIDENT COMMUNICATIONS

**DAMIEN DEGOS\*:** EXECUTIVE VICE-PRESIDENT PURCHASING

PERFORMANCE **VALÉRIE BROS:** CORPORATE SECRETARY AND

EXECUTIVE VICE-PRESIDENT LEGAL AFFAIRS **LAURENT FAVRE:** CHIEF

EXECUTIVE OFFICER **FÉLICIE BURELLE:** MANAGING DIRECTOR

**KATHLEEN WANTZ-O'ROURKE:** GROUP CHIEF FINANCIAL OFFICER

AND CHIEF INFORMATION OFFICER

\* ASSOCIATE MEMBER.





# PROMOTER OF CARBON-FREE MOBILITY

Plastic Omnium designs and produces interactive exterior body systems and modules, energy storage and emission reduction systems for all conventional engine types and zero-emission hydrogen engines. The Group transforms and innovates to create value that is social (People), environmental (Planet) and economic (Profit) for the benefit of all. The Group's strategy is built on three pillars: Operational Excellence, Innovation and Sustainability.

93 global customers

165 launches in 2021,  
21% for electric vehicles

8% of economic revenue  
from electric vehicle solutions,  
+3 points compared to 2020  
(like-for-like)

12% of economic revenue in China,  
+1 point compared to 2020

OMEGA transformation program

Competitiveness and digitalization  
at plants for Industry 4.0

## OPERATIONAL EXCELLENCE

Strategic partnerships

€294 m invested in 2021,  
4.1% of economic revenue

Complete hydrogen  
product line-up at scale

€300 m invested since 2015  
in hydrogen, with forecasted  
€100 m annual investment  
in the coming years

A portfolio of 2,534  
patents in 2021

## INNOVATION

Sustainable Development  
department established  
in January 2021

Climate targets:  
Carbon neutrality  
ACT FOR ALL™ program  
Top Planet program

## SUSTAINABLE DEVELOPMENT

# RESOURCES

# SUPPORTING CLEAN MOBILITY FOR FUTURE GENERATIONS

## VALUE CREATED

### PEOPLE

FR2 accident frequency rate: **0.69\***  
– halved in 2 years

**85%** of sites covered by an annual health campaign

**875** trainees and VIE in 2021

Ergonomics: **98%** of work stations audited by IES and CES

**60%** of sites committed to local community outreach in 2021

\* Group scope, including minority joint ventures  
– IFRS scope = 0.88

### PLANET

**16.2%** of sales are eligible for the EU green taxonomy

**94%** of sites awarded **ISO 14001 certification**

**32%** of electricity purchased by plants in 2021 from renewable sources

**86%** of waste recycled or recovered

**5 plants** produce renewable energy, with **20 additional plants** starting in 2022

### PROFIT

Economic revenue **€8 Bn**, +4.6% compared to 2020 (like-for-like)

EBITDA **€771 m**, compared to €648 m in 2020

Net result Group share **€126 m** compared to –€251 m in 2020

Free cash flow **€251 m**, x7.4 compared to 2020

Proposed dividend of **€0.28** per share

# COMMITTED

**A family-run independent group, Plastic Omnium is committed to perfecting its operational excellence, as illustrated by its OMEGA program, investing in new technologies for the future, such as hydrogen, and asserting its local roots and dedication to sustainable manufacturing. It is now entering a further phase of its transformation, greenlighting new investments and partnerships to promote clean mobility and launching its roadmap for carbon neutrality by 2050.**



PLASTIC OMNIUM

Plastic Omnium plant, Shenyang, China.

# TRANSFORMING OURSELVES TO REMAIN LEADER, TRANSFORMING THE MARKET TO ACHIEVE MARKET-LEADING POSITIONS

As the transformation of mobility intensifies and the automotive market is at a cyclical low, Plastic Omnium is transforming itself by sharpening up its organization and innovation strategy and diversifying its business activities.

## **How is Plastic Omnium adapting to the automotive market's new realities?**

In the face of a constant stream of disruptive technologies and a market slowdown after 10 years of growth, the Group needed to take a hard look at itself to prepare for the years ahead. We are using two levers simultaneously: internal transformation via our OMEGA program, and diversifying our activities. The Group is determined to diversify so it can meet demands for mobility that is clean, connected and offering new services. For example, in an effort to accelerate the development of safer self-driving vehicles, Plastic Omnium has teamed up with Greenerwave, an expert in electromagnetic waves, to develop the first 4D radar on the market. Plastic Omnium is a pioneer in hydrogen mobility and, with the creation of its New Energies division, is moving into new territory and clearly signposting its determination to achieve growth. This effort to accelerate our diversification means we need additional skillsets in fields such as data processing, software and materials.

## **How would you sum up the aims of the OMEGA transformation program?**

OMEGA is an overarching project designed to completely change how we work. It's a program that pushes us to maximize synergies, boost efficiency and deliver economies of scale. We're taking a fresh look at our processes, tools and organizational structure to identify how we can improve our working methods and become more efficient at every level. We have set out a sequence of win-win targets for the Group and each business line to manage our efforts and achieve quick results. We're also launching FIT, a finance and IT project designed to ensure we are running the best-in-class finance and IT systems so that we can prepare for the future, unleash the full power of data and digital, help our teams to concentrate on value-added activities, roll out rapid solutions and reap benefits over the longer term. OMEGA works for the collective good, harnessing energies and opening minds.



**“Our OMEGA program pushes us to challenge our working habits so we can maximize synergies, boost efficiency and deliver economies of scale.”**

FÉLICIE BURELLE,  
MANAGING DIRECTOR  
DIRECTOR



#### **What are the ingredients behind its success?**

Our process is open, empirical and results-oriented. We're using an agile method that relies on the digitalization of our business lines to make sure we achieve fast, tangible results. And the chances of everybody taking ownership of the program are maximized because it has backing from the very top levels of the business. We've also set up a Sustainable Development department that is represented on the Executive Committee. Tasked with making the Group's sustainability goals a reality, it encourages all areas of the business to shift to lower carbon and circular economy models.

#### **What are OMEGA's first results?**

We've already hit several key stages in purchasing, design, development and carbon neutrality. Digital is a decisive factor driving transformation and efficiency in each of these areas. For purchasing, we set up a shared platform that can be accessed by purchasers and suppliers. For product design and development, we launched an improved tool for product lifecycle management that is shared across all our divisions. In 2022, we will be rolling out a market intelligence and strategic planning tool that will optimize the availability and consistency of commercial and financial data so that we can improve how we analyze and prepare for the future.

#### **How does diversity help to drive transformation and efficiency?**

As an innovative business with an international footprint, diversity is critically important to Plastic Omnium. The diversity of our employees' profiles and backgrounds, the mixture of generations and ideas, is one of the keys to our transformation and success. It forces us to take a look at different perspectives, and makes our interactions even more fruitful. It is also essential as we look to diversify our activities and attract new skillsets that can be fairly rare. And although Plastic Omnium has set itself targets for increasing the international profile of its executive team and the number of women in its workforce, diversity remains primarily a state of mind, the sum of countless local actions. It will make us more attractive as an employer, boost our performance and enrich our interactions. It's something we all benefit from.

# COMMITTED EVERY DAY, EVERYWHERE

**Sustainability, which is both a strategic pillar and a central component of the Group's performance, is an operational reality at every level. The ACT FOR ALL™ program accelerates, guides and leverages this process. Plastic Omnium has always demonstrated its commitment to sustainable mobility. It is now accelerating its climate strategy and aims to set the standard for the automotive industry.**



The climate emergency and preserving the environment are two of the most critical challenges facing humanity today. Now is the time to move beyond ecological transition, the time for action and disruptive innovations capable of changing consumption and production habits. Central to the Group's performance, the worldwide ACT FOR ALL™ program is a tool for guiding its sustainability strategy and encouraging its stakeholders to act.

ACT FOR ALL™ helps shape the Group's goals and indicates the direction to take to achieve them. Based on the continuous improvement principle, it has three areas of focus: Responsible Business, Care for People, and Sustainable Production. Plastic Omnium is undergoing far-reaching transformation to optimize its production methods and support its customers' energy transition with solutions that emit less CO<sub>2</sub>. This is the idea underpinning its carbon neutrality roadmap, which sets out detailed quantifiable targets: in 2025 for its direct operations

(Scopes 1 and 2) and 2030 for its entire value chain (Scope 3). Energized by the signature of a number of strategic partnerships, innovation is the engine driving the transformation process. The program is designed to deliver ambitious results and is steered by a dedicated committee representing the Group's various business units and via regular reporting updates. The ACT FOR ALL™ committee meets two or three times a year and is attended by members of the executive committee and directors of business lines and support functions (human resources, sustainability, innovation, and compliance). With indicators used to track progress, the program is steered by an ACT FOR ALL™ committee comprising members of the executive committee and directors of business lines and support functions. In 2022, the board of directors created a Corporate Sustainability and Appointments Committee to further embed the central place of these issues at the highest levels in the Group.

# PILLARS OF THE ACT FOR ALL™ PROGRAM

## PILLAR 1

### RESPONSIBLE BUSINESS

#### PLASTIC OMNIUM PROMOTES ITS CODES OF CONDUCT

- Business ethics
- Responsible purchasing
- Cybersecurity

## PILLAR 2

### CARE FOR PEOPLE

#### PLASTIC OMNIUM SHARES ITS CORPORATE VALUES IN ALL PARTS OF THE WORLD

- Occupational health and safety
- Career path and skills management
- Diversity and inclusion
- Local initiatives and sponsorship

## PILLAR 3

### SUSTAINABLE PRODUCTION

#### PLASTIC OMNIUM WORKS TO PRESERVE THE PLANET FOR FUTURE GENERATIONS

- Waste management
- Ecodesign and recyclability
- Value chain carbon footprint (Top Planet and renewables)
- Biodiversity

### Multiplier effect

ACT FOR ALL™ has already proved its worth, with thousands of suppliers having already signed the responsible procurement charter. Safety is constantly improving. Progress continues in areas that include gender equality and using 30% recycled material content. Plastic Omnium is also driving the rate of progress at its plants, for example, by optimizing energy use and producing or buying renewable power. Thanks to its lighter weight exterior parts and modules, storage systems for hybrid vehicles and hydrogen solutions, Plastic Omnium is helping redraw the lines in the mobility sector with vehicles that are intelligent, stylish, aerodynamic and have a small environmental footprint.

## WORLD ACT FOR ALL™ DAY

Workplace safety and the climate emergency were the twin themes of the annual ACT FOR ALL™ day, held on November 9, 2021. A digital serious game on the climate emergency and carbon neutrality was well received by our 30,000-strong workforce. The day also featured a photo and video competition, first aid training, a hunt for risks, litter clean-ups and tree plantings.



# REINVENTING TO HELP PEOPLE AND THE PLANET

Since it was first founded, Plastic Omnium has been committed to sustainable mobility. Faced with the urgency of the climate emergency, the Group is strongly committed to energy transition. Central to its strategy, Plastic Omnium's new carbon neutrality roadmap increases the pace, gets its stakeholders involved, and defines milestones for the short, medium and long terms.

## **Game-changing innovations**

From the beginning, Plastic Omnium has always innovated for cleaner mobility by reducing the weight of vehicle components, optimizing their aerodynamics, and developing solutions to reduce emissions. Thanks to its innovations and ability to redraw the boundaries, the Group is contributing to major advances in the automotive industry. At a time when the transportation sector is responsible for 25% of global CO<sub>2</sub> emissions, 45% of which are from light vehicles, Plastic Omnium is re-emphasizing its commitment by getting its suppliers and customers involved. Specifically, it is perfecting innovative solutions, such as in hydrogen with over €300 million invested since 2015, and is increasing the portion of recycled materials in the parts it produces, thanks to a partnership signed with a major supplier.

## **Working together for overall performance**

Plastic Omnium is ramping up its commitment to the environment. In 2021, it was granted Platinum status by EcoVadis and awarded a B rating for its response to the Climate Change questionnaire from CDP, a body recognized for its environmental ratings. As part of its ongoing drive for a step change, Plastic Omnium is aiming for carbon neutrality in 2050, with the first key milestones coming in 2025 and 2030. In line with the Business Ambition for 1.5 °C from the Science-Based Targets initiative, the Group's strategy involves all its teams around the world by giving non-financial performance a more important role in overall performance.

# 1 GOAL

carbon neutrality

## 3

### MILESTONES

2025

#### SCOPES 1 & 2

#### CARBON NEUTRALITY

for operational activities (sites & vehicle fleet) and energy purchases

#### SCOPE 3

-30%

across the value chain – associated with uses of products sold (weight, aerodynamics, and electrification), raw material purchases, transport and product end-of-life

2030

2050

#### SCOPES 1, 2 & 3

#### CARBON NEUTRALITY

## 4 LEVERS

DEVELOPING SOLUTIONS AND PRODUCTS TO SUPPORT OUR CUSTOMERS IN THEIR ENERGY TRANSITION

REDUCING THE CARBON IMPACT OF PLANTS BY 2025

GROWING THE PROPORTION OF RECYCLED MATERIALS USED IN FINISHED PRODUCTS

INCREASED COMMITMENTS FROM SUPPLIERS AND PARTNERS

### Accelerating the rate of transformation

To combine speed of delivery with regular monitoring, the timeframe for the roadmap is divided into three stages:

- in 2025, the Group is targeting carbon neutrality for emissions relating to its operational activities (Scopes 1 and 2);
- in 2030, it is aiming for a 30% reduction on CO<sub>2</sub> emission across its value chain, including those associated with uses of products sold (Scope 3: raw materials, transport and product end-of-life);
- in 2050, the goal is for complete carbon neutrality across Scopes 1-3.

This roadmap will be constantly monitored using relevant key performance indicators and cross-referenced against financial indicators to ensure nothing is overlooked.

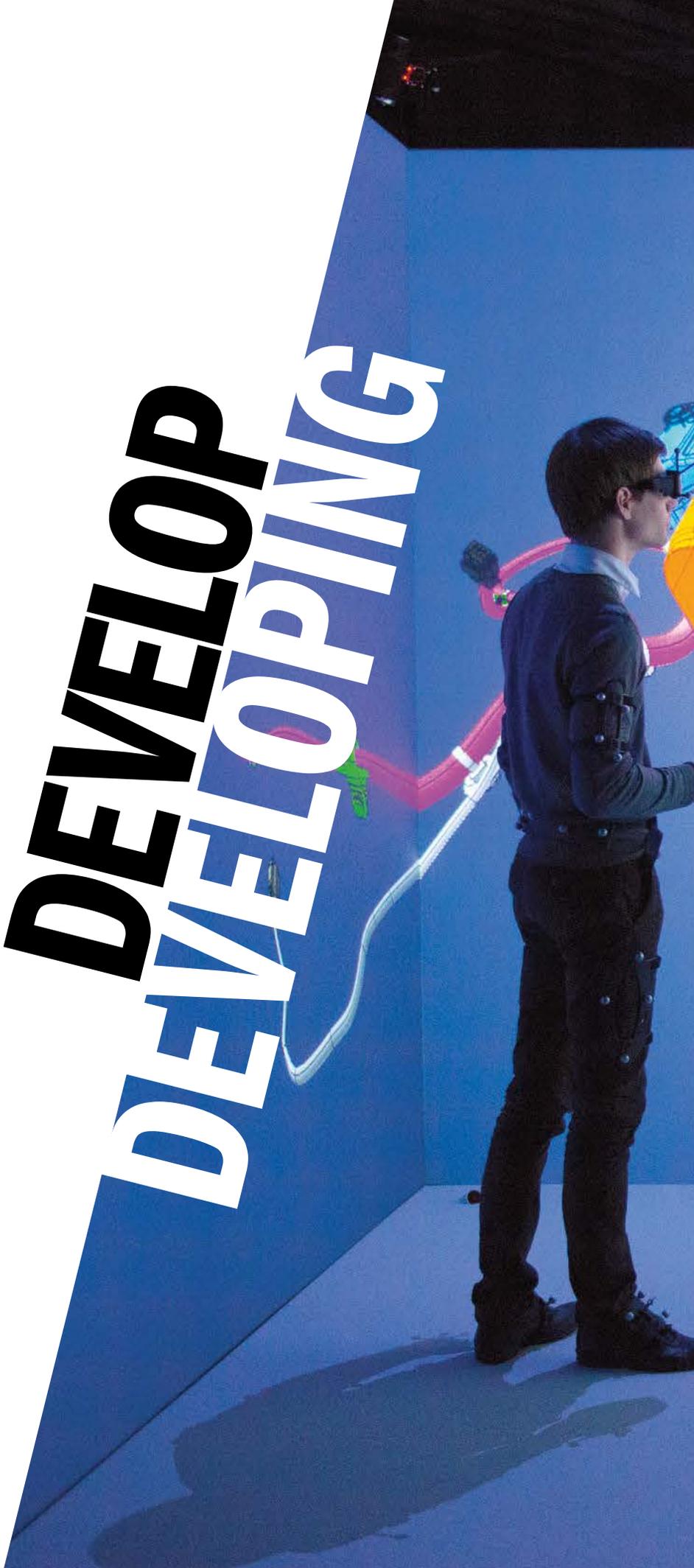
### Stepping up efforts to go further, faster

Action is already underway at our sites, including a new program to cut power use 12% by 2025, increase the portion of renewable electricity purchases and install solar photovoltaic panels and wind turbines. In a wider sense, Plastic Omnium is working to grow the portion of its zero-emission hydrogen electric mobility solutions for automotive, rail, trucks, buses and aviation applications. It is also running a program to reduce the impact of its raw materials by using recycled materials in proportions of 20% to 100%, including for exterior body panels. As part of its drive to increase the pace of change and anticipate its customers' demands, it has already developed a bumper concept using 50% recycled materials.



# DEVELOP DEVELOPING

Working at the heart of an automotive industry experiencing a major technology shift, Plastic Omnium develops through a combination of external growth, acquisitions and setting up in new locations. Backed by world-class R&D and working in partnership with other market leaders and disruptive newcomers, it is developing innovative technologies that respond to emerging social trends and deliver positive impacts for the mobility ecosystem.





# WHEN INNOVATION AND SUSTAINABILITY COMBINE

In today's world, sustainable development and innovation are two sides of the same coin, acting in tandem to open new horizons and invent the mobility of the future. A discussion between David Meneses, Executive Vice-President for Sustainable Development, and Alexandre Corjon, Executive Vice-President for Innovation.

## **How do innovation and sustainability create growth for tomorrow?**

**Alexandre Corjon:** A good example is hydrogen. The Group forecasts it will generate €3 billion in revenue in 2030. The role of innovation, as exemplified by the new division New Energies, is to develop new projects and systems. In 2021, it was aligned to increase its exploratory focus, as a natural complement to more business-focused innovations in other areas. Hydrogen-related innovations cover two distinct timeframes. They produce immediate applications and also look to the longer term, such as research into using recyclable carbon fiber in pressure vessels.

**David Meneses:** The recyclability of materials is a great illustration of how innovation and sustainability intersect. Our partnership with TotalEnergies aims to speed up the development of plastics that meet the automotive industry's stringent safety standards. With a carbon footprint six times smaller, this is one solution to the challenges that the lifecycle of plastics poses. These advances make our products more attractive and create new drivers for growth.

## **How do innovation and sustainable development interact with each other?**

**D. M.:** Which comes first? As two of the Group's strategic priorities, they strengthen our resilience. Today, sustainable development exerts a major influence on innovation and the drive to deliver greener forms of mobility. And innovation provides actionable responses, in the form of solutions at scale, to demands from policymakers and society as a whole.

**A. C.:** Turning to the future 4D radar, this is an upstream innovation with a technology that makes driving safer and helps pave the way for self-driving vehicles. And for recycled materials, it's clearly the sustainable development agenda that is driving change. No matter the specifics, there will always be this crossover between sustainability and innovation.



ALEXANDRE CORJON,  
EXECUTIVE VICE-PRESIDENT INNOVATION



DAVID MENESES,  
EXECUTIVE VICE-PRESIDENT  
SUSTAINABLE DEVELOPMENT

## 4 TRENDS ACCELERATING TRANSITION IN THE AUTOMOTIVE INDUSTRY

### ELECTRIFICATION

BY 2030, 30% OF LIGHT VEHICLES  
WILL BE ZERO EMISSION

### ACTIVE SELF-DRIVING

80% OF VEHICLES ON THE ROAD IN 2030 WILL  
HAVE LEVELS 1 TO 3 SELF-DRIVING AUTOMATION

### CONNECTIVITY AND DIGITALIZATION

90% OF VEHICLES WILL BE CONNECTED BY 2035

### CUSTOMER EXPERIENCE

DESIGN: THE CENTRAL ELEMENT OF A BRAND'S  
IDENTITY AND ATTRACTIVENESS

### And how do innovation and sustainable development help drive progress?

**A.C.:** We set out to increase the value of our products. As well as hydrogen, we're also exploring new avenues such as battery power for decarbonizing mobility and ensuring growth for the future. And we are opening up to new forms of transportation, such as trucks, buses, and trains. We offer an integrated solution to transport operators, covering the entire value chain from design to services.

**D.M.:** Plastic Omnium deliberately acts ahead of changing regulations and public expectations. The first milestone on our path to carbon neutrality will come as early as 2025. It includes our suppliers and helps our customers to make progress with their own roadmaps. The Group prefers innovation to be disruptive rather than incremental, demonstrated by our bumpers made from 50% recycled material.

### What levers are you using to achieve carbon neutrality?

**D.M.:** We're automating and modernizing our industrial processes to make new products and to save on the amount of raw materials we use. We're stepping up our strategy focused on partnerships, such as the one with Schneider Electric to help us optimize our energy use. Working side-by-side with our suppliers, we're acting with full transparency by sharing our roadmap to carbon neutrality as well as our tools and best practices.

**A.C.:** Innovation is clearly the solution for tackling the climate emergency. Faced with ever-growing technological complexity, Plastic Omnium prefers to focus on collective intelligence by cooperating with startups to help harness innovation and shorten time-to-market. In terms of new spheres for innovation, we're hiring specialists in software development, electronics and thermal management.

# DESIGN AND INTERACTIVITY MAKING EVERY CAR SMARTER AND MORE STYLISH

Exterior body parts with advanced designs and embedded intelligent functions are central to current automotive trends. Packed with electronics, connected vehicles have a distinctive style unlike anything else on the road.

## 2021 KEY FIGURES

### WORLD LEADER

43% OF GROUP ECONOMIC REVENUE

65 PLANTS IN 15 COUNTRIES

21 MILLION BUMPERS PRODUCED EACH YEAR

15% MARKET SHARE

1 IN EVERY 6 VEHICLES MADE IS EQUIPPED  
BY PLASTIC OMNIUM

1 MILLION TAILGATES PRODUCED

29% MARKET SHARE

1 IN EVERY 3 VEHICLES MADE IS EQUIPPED  
BY PLASTIC OMNIUM





“The car’s center of gravity is shifting, with the focus partly moving to software and design. We used to be assemblers but our role has evolved toward integrating innovative functions and giving free rein to each vehicle’s design.”

STÉPHANE NOËL,  
PRESIDENT AND CEO – INTELLIGENT EXTERIOR SYSTEMS

**What are the market trends shaping your business?**

The car’s center of gravity is shifting, with the focus partly moving to software and design. We used to be assemblers but our role has evolved toward integrating innovative functions and giving free rein to each vehicle’s design. We are systems specialists integrating radar, lidar and lighting into high added-value exterior components. To help us manage this increasingly complex task, we work with partners to put together the technological building blocks. One example is Greenerwave, a startup with expertise in electromagnetic waves. We are working with them to perfect a next-generation 4D radar. Lighting, a key element of vehicle design, offers another opportunity for growth, with automakers keen on dynamic lighting signatures that make their products stand out.

**What impact has the shift to electric vehicles had on your business?**

Electric vehicles currently account for 30% of our activity, with a number of outstanding successes among newcomers such as China’s Nio and American’s Lucid, voted Car of the Year in the USA. We’ve been closely involved with designing this new vehicle’s look. Newcomers, pure players in the electric vehicle market, have tremendous freedom in terms of design, particularly for vehicle lighting. We turn to our in-house design office at the Σ-Sigmatech R&D center when dealing with our customers’ questions about design and the use of recycled materials.

**How does your activity help promote cleaner mobility?**

We create plastic parts that make vehicles lighter and optimize their aerodynamic performance. A vehicle’s weight is the determining factor in its CO<sub>2</sub> emissions. Our massive use of plastic in bumpers means the Group is helping to reduce fuel consumption. We are currently seeing a move from metal to plastic that is further boosting this trend. We also use plastic in other parts of the vehicle. One example is the tailgates we manufacture for Ford’s electric Mustang. Using plastic can reduce the weight of a tailgate by 30%, which in turn helps to increase the range of electric vehicles.

**How do the solutions developed by the Group contribute to carbon neutrality?**

Plastic is perfectly suited to the transformation underway in the automotive industry because it lets light and electromagnetic waves through. To make these materials more environmentally friendly, we’re running research projects so that we can increase the proportion of recycled materials used, particularly in bumpers. As a demonstrator, we’ve designed a concept bumper made from 50% recycled materials. To take these ideas to the next level, Plastic Omnium and TotalEnergies have teamed up to develop recycled polypropylene materials that will meet the demanding standards required for automotive bodywork. The future of the automotive industry necessarily involves recycled plastic, driven by ever tighter regulatory standards.

# MODULES & CUSTOMIZATION

# MASS PRODUCTION

# FOR UNIQUE CARS

**HPBO, the world leader in complex modules, produces one in five of all front-end modules worldwide. Its growth is driven by innovations, working in close collaboration with its customers. Growth that has had an extra boost from electric vehicles.**

#### **How is HBPO helping transform mobility?**

We are at the crossroads of key trends shaping the market: electrification, connectivity, customization, and clean mobility. Electrification is one step along the road toward cleaner mobility in the future. The shift to electric vehicles and the increase in vehicle connectivity are seeing a big increase in the number of module variations, with very strong demand for custom modules. This complexity requires the exceptional technical and logistical skills that lie at the heart of everything we do. We integrate an ever increasing number of components and functions into front-end modules that are compact and aerodynamic, which helps increase the range available to electric vehicles. I'd like to add that we also apply our know-how to other vehicle modules, such as cockpit and center console modules, both of them core elements in a vehicle's design.

#### **What were your outstanding innovations in 2021?**

Our most important innovation was in working methods. The health crisis forced us to do things differently, and we turned extensively to digital tools. We adopted a creative and interactive approach that meant we could rapidly explore emerging possibilities, specifically for electric vehicles and their future needs in terms of modules. We also set up what we call our innovation room. It's fitted with an audio system and high-definition cameras so that our customers enjoy an interactive experience during meetings and presentations. This specially equipped room provides a new and more

immersive way to discover our latest modules and custom solutions. We are innovating to create integrated modules, working very closely with our customers, and we currently have several customer projects in development. In terms of products, we unveiled the second generation of Rollo, active grille shutters, and won a number of major new contracts. Our integrated plastic shock absorber was incorporated into the front-end module of a high-end all-electric vehicle and is fast becoming the new benchmark in this field. We have also launched our innovative solution for electric charging ports, a new type of module that has already been chosen by a customer for a new all-electric vehicle.

#### **What opportunities does the shift to electric vehicles offer HBPO?**

HBPO has delivered excellent results, winning a number of key new customers, including General Motors and a major US electric vehicle manufacturer. The shift to electric vehicles is a major boost to our business, with an ever growing number of high added-value components to integrate into front-end modules. Electrification leads to new opportunities and new modules for us to develop, such as for charging port lids. HBPO recently won the first contract to supply a US electric vehicle maker with our new LID module, a multi-function charging port that offers features including remote closing and a charge indicator. We are seeing an increase in interest from our international customers, which will certainly contribute to our growth in the years to come.



“HBPO has delivered excellent results, winning a number of key new customers, including General Motors and a major US electric vehicle manufacturer.”

MARTIN SCHÜLER,  
PRESIDENT AND CEO - HBPO



### How does the modules business contribute to the Group's overall carbon neutrality goal?

We have a detailed understanding of our CO<sub>2</sub> footprint and are well aware of our corporate social responsibility. Our direct CO<sub>2</sub> emissions are generally very low, particularly in terms of production. Our air-flow management systems (active fascia grilles and active grille shutters) considerably improve the aerodynamic performance of vehicles. This helps increase the range of electric vehicles and reduce tailpipe CO<sub>2</sub> emission of internal combustion vehicles. The portion of recycled materials used in our modules, 20% at present, is also rising significantly. This in turn directly impacts the products offered by our customers and, as a consequence, the Group's overall carbon footprint.

### 2021 KEY FIGURES

#### WORLD LEADER

27% OF GROUP ECONOMIC REVENUE

31 PLANTS IN 11 COUNTRIES

5 MILLION FRONT-END MODULES  
PRODUCED EVERY YEAR

18% MARKET SHARE

1 IN EVERY 5 VEHICLES MADE  
IS EQUIPPED BY PLASTIC OMNIUM

EXPERTISE

# CLEAN ENERGY SYSTEMS SUPPORTING AUTOMOTIVE ENERGY TRANSITION

Plastic Omnium optimizes storage solutions for every engine type, from internal combustion to hydrogen. The Group develops emission reduction systems and creates new technologies that are compatible with the electrified vehicles that represent the future of clean mobility.

## 2021 KEY FIGURES

**WORLD LEADER**

**30%** OF GROUP ECONOMIC REVENUE

**39** PLANTS IN **18** COUNTRIES

**18** MILLION FUEL TANKS PRODUCED EVERY YEAR

**21%** MARKET SHARE

**1** IN EVERY **5** VEHICLES MADE IS EQUIPPED  
BY PLASTIC OMNIUM





“Our mission is to anticipate changing regulations and social attitudes, to provide automotive manufacturers with innovative solutions and help support the emergence of clean vehicles.”

CHRISTIAN KOPP,  
PRESIDENT AND CEO – CLEAN ENERGY SYSTEMS



#### **How is Plastic Omnium supporting energy transition?**

Our mission is to anticipate changing regulations and social attitudes, to provide automotive manufacturers with innovative solutions and help support the emergence of clean vehicles. The changing powertrain mix is leading to an unparalleled situation: never in the history of the automotive industry have so many technologies cohabited alongside each other. This mixture of engine types will continue for some years to come, with vehicles powered by conventional internal combustion engines alongside those using hybrid or electric propulsion systems. By designing energy storage systems for all engine types, paired with emission reduction systems for diesel vehicles, Plastic Omnium is positioned as a major actor in energy transition.

#### **How do you explain Plastic Omnium's strong positioning on this market?**

Faced with this mixed engine fleet – gasoline, diesel, hybrid and plug-in hybrid – we have what it takes to develop a range of advanced technologies. We already do this for internal combustion engines, where we have been the leader for a number of years, with one vehicle in five equipped with a fuel tank from Plastic Omnium. Internal combustion will remain in service in some parts of the world over the medium term, and our mission is to make it more environmentally friendly while continuing to invest in the new technologies that will replace it. We are also a leading actor in emission reduction systems thanks to our selective catalytic reduction systems that cut emission of nitrogen oxides (NOx) from diesel vehicles by up to 95%. And we're also

present on the booming market for hybrid vehicles with our high-performance INWIN and Tanktronic® fuel systems. We were the first OEM to develop a solution tailored specifically to the requirements for plug-in hybrid vehicles, with a high-technology gasoline tank capable of withstanding high pressures.

#### **Why is Plastic Omnium backing hydrogen?**

Hydrogen opens the door to zero-emission electric mobility, making it a fuel for the future that ticks every box when it comes to sustainable mobility. Using hydrogen propulsion means fuel tanks can be refilled quickly and vehicles have the extended range that offers a client experience very similar to internal combustion. By 2030, governmental plans will have led to the creation of what will be a hydrogen industry in its own right, with global production projected to exceed two million vehicles a year. Our goal is perfectly clear, underpinned by our technical and industrial expertise in energy storage solutions: to become the leader in onboard hydrogen. For the past five years, and more, we have been investing to develop comprehensive hydrogen solutions – from high-pressure tanks to integrated systems – that will position us as a key actor in decarbonized mobility. With hydrogen we are significantly ramping up the value of our content per vehicle and are opening up to new forms of transportation, such as trucks, buses and trains: the newly created New Energies division won its first commercial contracts from these different customer segments during 2021. The hydrogen sector, buoyed by economic stimulus plans, has never had a more promising future for all forms of transportation.

# NEW ENERGIES BECOMING THE INDUSTRIAL LEADER IN HYDROGEN MOBILITY

**A pioneer in hydrogen mobility, Plastic Omnium has established itself as a key actor in decarbonized mobility with New Energies. The Group is now ready to service new types of mobility and move to production at scale of hydrogen tanks fuel cells.**

## **What makes hydrogen the future for mobility?**

Hydrogen offers zero-emission energy when combined with renewables and fuel cells. This means it can play a key role in decarbonizing the world's economies. Over 30 countries already have hydrogen roadmaps in place and more than US\$70 billion in public funding has been earmarked to develop the industry. There are currently some 200 separate industrial projects and investment plans, 85% of them in Europe, Asia and Australia. With a projected two million fuel cell vehicles on the road by 2030, hydrogen mobility is a strategically important emerging market from the social and financial perspectives. Plastic Omnium has invested €300 million since 2015 to become a major actor in this market, which will initially involve heavy transportation – trucks, buses, trains and planes – then cars. By 2030, we want to be achieving annual revenue of €3 billion in this highly promising decarbonized mobility market.

## **What led the Group to set up the New Energies division?**

For the past five years, New Energies was taking shape as part of the Clean Energy Systems division. With the arrival of the first commercial successes and the growing maturity of our teams, it was the right time to set up on our own. During 2021 we won contracts across all mobility segments: car, bus, truck, utility vehicle and rail. One of our standout contracts is with Hyundai, producing 30,000 hydrogen tanks a year for its new hydrogen model. Hydrogen is no longer a future goal, it is becoming an industrial reality. In 2022, we will be opening a high-pressure tank production line in South Korea. We are planning to expand our industrial footprint to other parts of the world and open a fuel cell production line in Austria. This switch to production at scale meant we needed a dedicated structure and specific skills to service this form of mobility and increase our understanding



**“In 2021,  
we won contracts  
across all mobility  
segments:  
car, bus, truck,  
utility vehicle and rail.”**

**MARC PERRAUDIN,  
CHIEF EXECUTIVE OFFICER – NEW ENERGIES**

of technologies such as fuel cells. And that's what we've done by setting up New Energies.

**What are the strategic milestones New Energies has already achieved?**

2021 was a year of technological transformation, founded on a €100-million investment in a joint venture called EKPO, the future world leader in fuel cells. We have ramped up our partnership strategy with the goal of covering the entire market, from upstream to downstream, and sealing our place as an influential actor in the hydrogen ecosystem. We have established a technology partnership for a filling station product with McPhy, the specialist in hydrogen production and distribution equipment. Upstream, we are supporting a startup called Hopium, a pure player in hydrogen vehicles. The Group is positioned as a key actor in decarbonized mobility with a comprehensive offer that covers the entire hydrogen value chain, from high-pressure tanks to integrated systems, including fuel cells. Our greatest asset lies in our culture and an industrial base that allows us to produce these technologies at scale with a high level of quality.

**2030 TARGETS**

**€3 BN ECONOMIC REVENUE**

**WORLD LEADER IN HYDROGEN MOBILITY**

**2021 KEY FIGURES**

**2 DEDICATED HYDROGEN R&D CENTERS  
IN FRANCE AND CHINA**

**2 PLANTS: BELGIUM AND SOUTH KOREA**





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