FICOSA

Corporate Social Responsibility

2019

Index

Letter from the president

Dear Sirs,

I am pleased to share with you our annual report on corporate social responsibility, which attempts to offer an overview of Ficosa's performance to face the challenges of the automobile sector and describes our actions to integrate the United Nations Global Compact and its principles into our business strategy, culture and daily operations.

This past year 2019, we have celebrated a very important milestone for the company, our 70th anniversary with a determined commitment towards new technologies.

At our company, we continually strive to ensure excellence in our products, and therefore we continue to work to provide the most innovative solutions, develop and manufacture products with high added value and high quality standards.

Ficosa's history began in 1949 with the foundation of a small workshop in Barcelona that was dedicated to the manufacture of mechanical cables for the spare parts market. Over seven decades, the firm commitment for innovation and internationalization has consolidated Ficosa as a global benchmark group in the automotive and mobility sector with nearly 10,000 workers and a presence in 18 countries in Europe, America, Asia and Africa.

One of the keys to our success lies in our ability over the years to anticipate future changes, in conjunction with our clear commitment to innovation. This has led us to a continuous process of transformation to move us forward to change, being pioneers in going beyond Spanish borders in the 1970s or diversifying our line of products to meet market needs. Likewise, the secret of our success can also be found in our philosophy of doing a lot with very little, our solid human values of humility, hard work and entrepreneurship, and the great team that has made up this company at the various points throughout its history.

The automotive industry is undergoing an amazing technological transformation. Traditional mechanical systems incorporate new integrations of more automated mechatronic systems. ADAS (Advanced

Driving Assistance Systems) systems progressively increase driver assistance features. The rear view mirrors coexist with intelligent systems that incorporate cameras and displays to have a better vision, greater safety and a more comfortable driving experience such as the surround view, the parking cameras or the CMS (Camera Monitoring System) of Ficosa. Vehicles are telematically connected, becoming the most powerful multiplatform communication source in which the interconnection between people, objects and infrastructure has no limits. At the same time, the challenge of better energy efficiency and less pollution is establishing with hybrid, electric and fuel cell vehicles.

All these new technological products intended for more assisted driving, the autonomous vehicle, the connected car and less polluting have become the pillars of Ficosa's growth.

In this sense, at Ficosa, we have undergone a profound technological transformation in recent years, focusing on three areas of growth: connectivity, safety and efficiency. This year 2019, we have achieved the following achievements in technological products:

- 9 new models of electric vehicles from a German OEM have been launched to the market incorporating Ficosa BMSs (Battery Management Systems).
- Ficosa developed and manufactures since late 2018 the Audi e-tron CMS (Camera Monitoring System) digital rear view system, the first car to be marketed with this new technology. In 2019, a new model was presented from a Japanese OEM in which Ficosa also developed and manufactures the external modules of the CMS that incorporate two cameras - one for the 'surround view' -, the turn signals and are painted the same colour of the body and integrated into the chassis.
- Ficosa has reached the historical sales figure of 4 million rear view cameras (parking cameras) in the period of the last 5 years and plans to triple sales until 2028.
- Ficosa has continued to expand its portfolio of state-of-the-art products in gear shifters in different regions, launching in the American market a new Shift by Wire change for an exclusive large-format pick-up, as well as a complete Shift by Wire system which includes the user interface, control electronics and actuator that allows robotizing the transmission of the new generation of vehicles for a reputable Chinese OEM.

The mentioned technological changes, the new consumer habits, the rapid advances towards electric mobility, connected and autonomous, pose a series of legislative, technological, cultural and economic changes that are causing disruptive effects in the value chain of the automotive sector and that in this year 2019 they have been very visible. We can verify this with new alliances, the entry of new competitors from other sectors such as consumer electronics, mergers and acquisitions between car manufacturers and between the suppliers themselves.

On the other hand, 2019 has been a difficult year for sales. The most relevant cause in the decrease in sales is found in the trend of the world's leading automobile market. Car sales in China closed the year 2019 with a significant decrease of 8.2%. There are several factors why car sales have decreased. The trade war between the United States and China has been a determining factor. The possibility of another economic crisis happening again in the short term is also negatively affecting the purchase of new cars, many drivers are reluctant to change vehicles and prefer to wait to see if their doubts may be clarified. The registrations of vehicles powered by alternative energies have also registered a very significant decrease due to the withdrawal of subsidies and aid for the purchase of hybrid, electric and / or hydrogen cars.

During the last five years, Ficosa has reinforced its worldwide presence with the opening of new plants in Jandira (Brazil), Shenyang (China), Cookeville (United States) and Rabat (Morocco), this last centre opened in the past year meant the landing of the company on the African continent. In addition, the company has recently strengthened its presence in Portugal with new facilities in Maia.

At the end of 2018, Ficosa also strengthened its commitment to electro-mobility with the opening of its new e-Mobility Hub, a pioneering centre at a national and international level in technology for electric mobility. Located in Viladecavalls, it employs more than 120 engineers and has become a benchmark laboratory worldwide in the development of electro-mobility systems for hybrid and electric vehicles.

We have to be alert and prudent, the coming years will be characterized by great opportunities and in turn by great risks. Ficosa will work to manage and mitigate risks, taking advantage of the opportunities that arise from this transformation situation.

I encourage you to explore all the details of our activities through this report that firmly reflects the commitment and dedication of Ficosa.

Sincerely yours,

Josep Maria Pujol
President

About our report

This Report aims to offer readers a transparent and balanced overview of Ficosa's performance in relation to the sustainability challenges that the company has faced in 2019.

Objective of the Report

In this report, Ficosa aims to explain how non-financial and diversity risk and CSR challenges are approached, and Ficosa's performance in 2019, for the purpose of offering stakeholders complete and reliable information. The company has centred this report on explaining how it takes environmental, ethical, labour, social, and human rights aspects into consideration during the daily operation of the company. Likewise, it describes the annual progress made by the company in implementing the Ten Principles of the United Nations Global Compact in terms of human and labour rights, the environment and the fight against corruption. Furthermore, this report describes how our company is progressing in each of the Sustainable Development Goals (SDGs). Our core business determines which of the global sustainability goals Ficosa supports first and foremost. In particular, our activities focus on health and safety (SDG3) and combating climate change (SDG 13). In addition to this, our commitment to sustainable practices includes decent work and economic growth (SDG 8), responsible consumption and production (SDG 12), and promoting peace and justice (SDG 16).

This report has been prepared in accordance with the provisions of the Sustainability Reporting Guidelines belonging to the Global Reporting Initiative (GRI Standards). Therefore, in determining the content to be included in this report, we consider the pertinent developments, initiatives and the materiality analysis carried out in 2018. The materiality analysis took the Ficosa CSR diagnosis (gap analysis) as the starting point and the action plan prepared in 2015 involving the CEO, the members of the Executive Committees and our key Management subsidiaries. It was complemented with external sources such as the GRI Pilot version of the Automotive Sector Supplement and the Auto Parts Sustainability Accounting Standard prepared by the SASB (Sustainability Accounting Standards Board).

Other key drivers included the Drive Sustainability (biggest world automaker partnership to promote sustainability) guidelines set out in the Automotive Sustainability Guiding Principles which outline expectations for suppliers on key responsibility issues including human rights, environment, working conditions and business ethics.

In addition, the EcoVadis CSR assessments requested by several of our OEMs (Original Equipment Manufacturer) have also been taken into consideration. EcoVadis provides an entire Corporate Social Responsibility (CSR) ratings service for companies.

To summarize, the key points to highlight in this report are:

- Customer satisfaction through quality
- Sustainable innovation and technology
- Diversity and Integration
- Development, training and knowledge management
- Occupational Health and Safety
- Healthy lives and well-being promotion
- Climate change mitigation
- Commitment to society
- Responsible Sourcing, Consumption and Production

Scope and boundary

This report covers the period from 1 January 2019 to 31 December 2019. Unless indicated otherwise, the quantitative information reported in this document shows the performance of the company at global level and includes 100% of the facilities and sites where Ficosa holds a majority stake and, is consequently, responsible for their operation and control. Thus, the report includes information from our operations in Asia, Africa, Europe, North America and South America.

To provide a better understanding of the company's performance, previous years' data - if available - has also been included.

The report focuses on the company's main business lines: research, development, production and sales of high-technology vision, safety, energy efficiency and connectivity solutions (connected cars, driverless vehicles, assisted driving and e-mobility).

Biodiversity is not included in the scope of this report, as Ficosa operational sites are not located in protected areas or areas of high biodiversity value. Additionally, the impact of our activities, products, and services on biodiversity are not significant.

There are no IUCN Red List species or national conservation listed species with habitats in areas affected by the operations of our organization.

On the other hand, this report does not include the company Tata Ficosa Automotive Systems Ltd as it is a 50% - 50% Joint Venture.

In addition, the indicators regarding occupational Health, Safety and Environment only cover the Ficosa sites where there are vehicle parts manufacturing plants due to their materiality. So, the following sites have not been considered in the OHSE indicators: Le Neubourg (France), Rüsselsheim (Germany), Köln (Germany), Lindau (Germany), Hyderabad (India), Venaria Reale (Italy), Kuala Lumpur (Malaysia), Detroit (USA) and Tokyo (Japan).

Ficosa at a glance

Group Highlights

The company, with headquarters in Barcelona (Spain), generated sales of €1,135 million in 2019 and has a team of about 10,000 employees, with manufacturing plants, technological centres and commercial offices located throughout 18 countries in Europe, North America, South America, Africa and Asia. Ficosa has been expanding its international presence based on its strategy to be located near the decision and production centres of the majors OEMs in order to be able to offer a more competitive and global service. The alliance with Panasonic, signed in 2015, has boosted regional synergies and the international activity of the company. Ficosa has gained new customers and initiated new programs in all regions, mainly in Asia. In addition to boosting its global presence, Panasonic and Ficosa are combining their respective technologies to jointly develop products such as electronic mirror systems, next-generation cockpit systems and Advanced Driver Assistance Systems (ADAS), which will facilitate business expansion in fields where future growth is anticipated. With this transaction, Ficosa will accelerate the commercialization of products jointly developed by both companies.

— €1,135 million sales

— Production plants, technical centres or sales offices in 18 countries, over 4 continents.

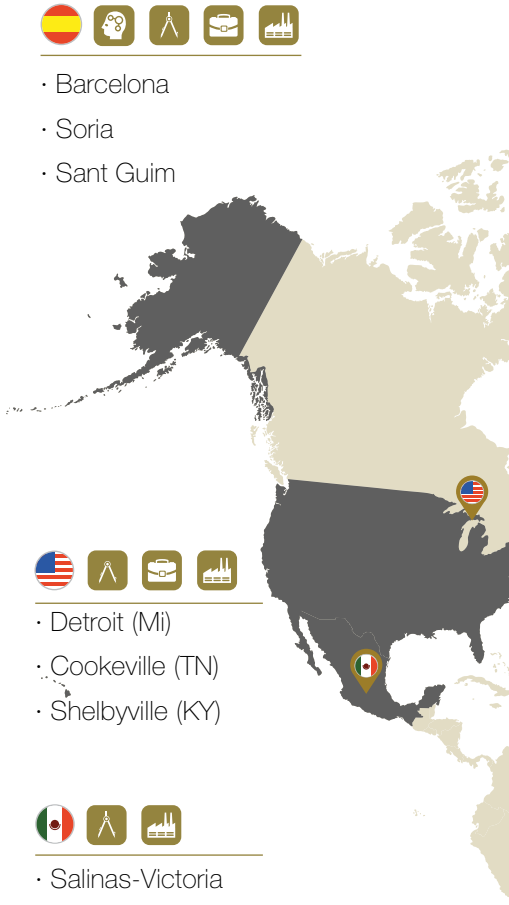
— Established in 1949 in Barcelona (Spain)

— 9,978 employees

— Pioneers in high-technology vision, safety, connectivity and efficiency systems for the automotive and mobility sectors

— 21 manufacturing plants

— 14 R&D and technical centres



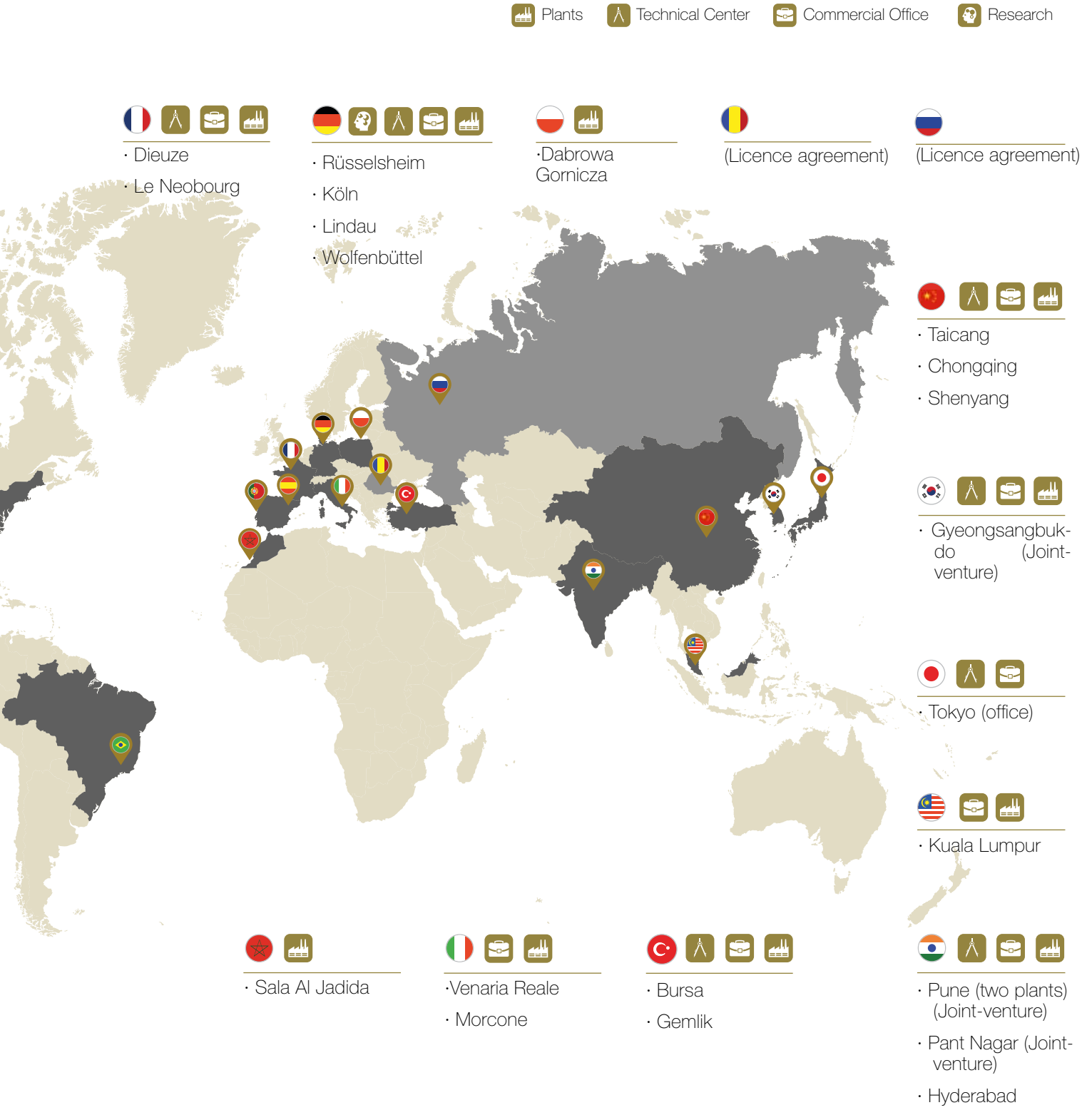
· Barcelona
· Soria
· Sant Guim

· Detroit (Mi)
· Cookeville (TN)
· Shelbyville (KY)

· Salinas-Victoria
· Escobedo

· Sao Paulo

· Porto


Plants
Technical Center
Commercial Office
Research
· Dieuze
· Le Neobourg
· Rüsselsheim
· Köln
· Lindau
· Wolfenbüttel
·Dabrowa Gornicza
(Licence agreement)
(Licence agreement)
· Taicang
· Chongqing
· Shenyang
· Gyeongsangbuk-do (Joint-venture)
· Tokyo (office)
· Kuala Lumpur
· Sala Al Jadida
·Venaria Reale
· Morcone
· Bursa
· Gemlik
· Pune (two plants) (Joint-venture)
· Pant Nagar (Joint-venture)
· Hyderabad

Ficosa is now one of the top-tier global providers operating in the research, development, manufacturing and marketing of high-technology vision, safety, connectivity and efficiency systems for the automotive and mobility sectors.

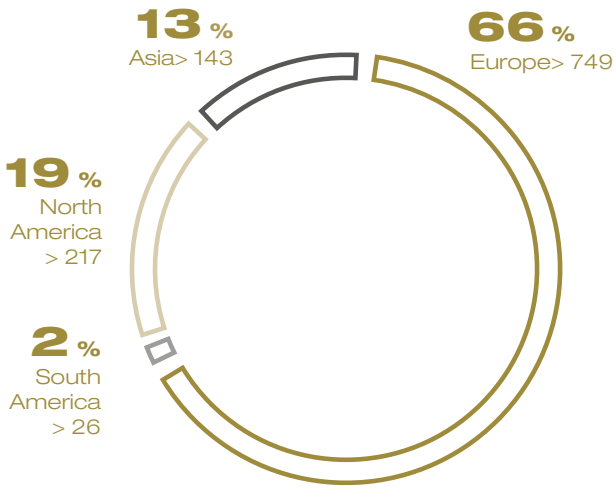
Ficosa ended 2019 with sales in considerable excess of 1 billion euros for the year. The solid growth experienced by the company since 2012 is due to a clear commitment to globalization, operational efficiency, innovation and activity diversification.

The year 2019, in the automotive sector, has been a change in trend compared to the trend of sustained growth in the last decade. Global automobile production has decreased by 5.8% or 5.5 million units[1]. Although all the main markets have experienced reductions, these have been concentrated in China (-8.2%) and South Asia (-8.3%).

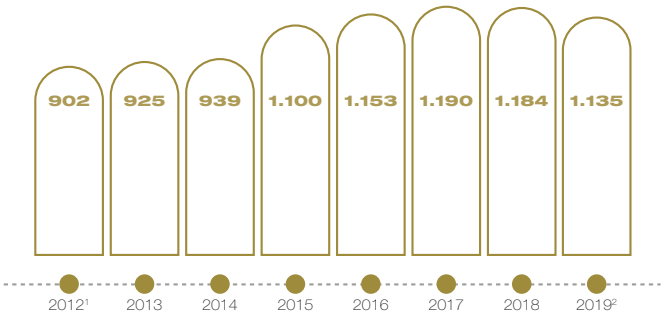
The contraction of the Chinese market, started in 2018, was generated due to, in part, the scenario of increasing trade confrontation between China and the United States, as well as the withdrawal of aids for the purchase and renovation of automobiles. In this context, Ficosa has experienced a further decrease in its sales there. This is attributable to the mix of customers and products with greater weight in high-end Chinese and mid-range European OEMs that have suffered more than the average.

[1] According to IHS Auto production data from February 2020

Sales per region 2019 (€ million, %)



Sales (€ million)



[1] €828 million in sales, excluding the temporary contracts with Sony
[2] The decline in sales in 2019 is due to a certain slowdown in the car industry worldwide, although the main reason is the severe downturn witnessed in China, which had already started in the last quarter of 2018. Also, customers have delayed launches of new technology products because of problems in ensuring a good integration of all suppliers into complete ADAS systems and also launches of new electric vehicles.

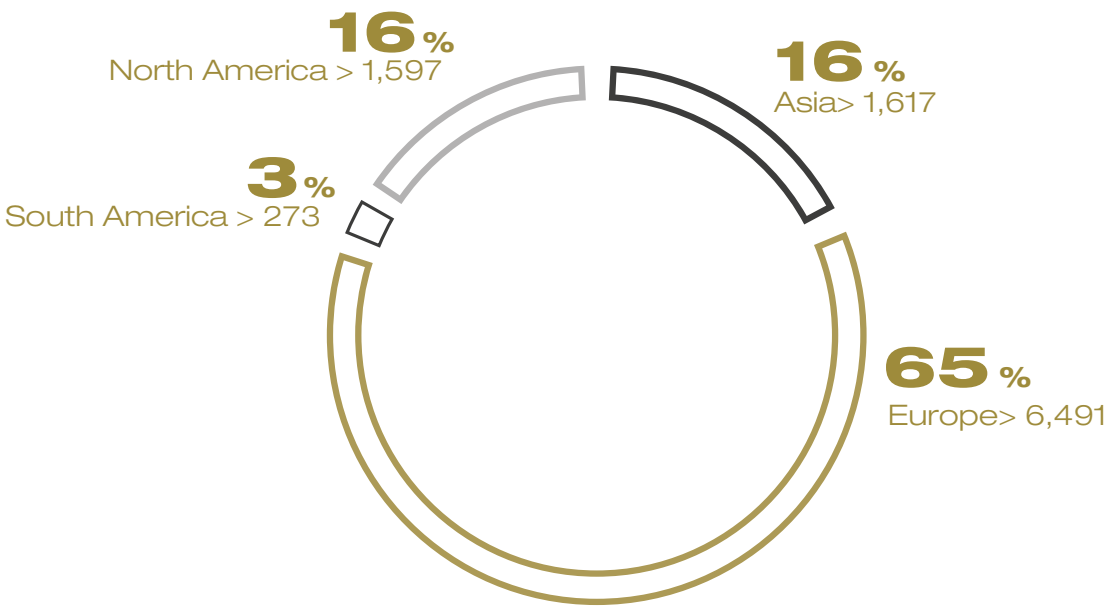
To a lesser extent, Ficosa has experienced a reduction in sales in Europe. This is explained by the market situation (-4.4% compared to the previous year), boosted by the lack of clarity in the transition to the electric vehicle and by the end of several advanced communications projects. To this we must add the delay to 2020 in the launch by customers of projects in the field of new technologies, due to the problems the customer is having to ensure a good integration of all concurrent suppliers into complete ADAS systems and also launches of the new electric vehicles.

A new technology project that started in 2018, and has been increasing sales throughout this year is the Audi e-tron WING. This CMS (Camera Monitoring System) system of cameras and displays represents a paradigm shift when digitizing Ficosa's core product, the rear-view mirror.

In North America, the market has decreased by 4.0%, but Ficosa has managed to increase sales by starting an important rear vision project with a high level of integration, since Ficosa produces several value-added subcomponents that were traditionally outsourced.

The South American market has dropped 4.4% due to the combined effect of the economic situation in Argentina and the drop in raw material prices, which are very important in the regional economy. Ficosa has experienced a reduction in line with the market.

Distribution of employees per region 2019 (N. employee, %)



Structure of Ficosa International

At present, Ficosa is a conglomerate of companies formed by engineering centres, manufacturing plants and commercial offices, distributed all over the world. The group is organized into different Business Units, most of which are detailed below.

01

Rear-view systems:

Develops, produces and commercializes rear-view mirrors and vision systems - forward, backward and lateral - for vehicles.

02

Command and control systems:

Develops, produces and commercializes systems which interact between the driver and the vehicle, such as shifters, parking brakes, and drive cables.

03

Under hood systems:

Develops, produces and commercializes fluid and ventilation systems installed in the vehicles' underhood.

04

Advanced communications:

Develops, produces and commercializes antenna systems for vehicles, communication modules and antennas for navigation systems.

05

Commercial vehicle:

Develops, produces and commercializes all Ficosa's product portfolio for buses, trucks and industrial and commercial vehicles.

06

Advanced Driver Assistance systems:

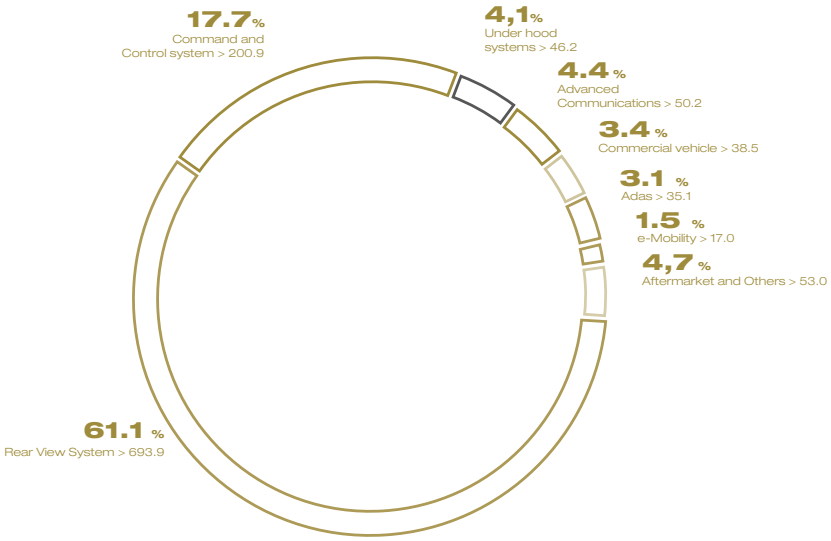
Develops, produces and commercializes systems that assist drivers during the driving process.

07

E-mobility:

Develops, produces and commercializes electric powertrain technologies and connected infrastructures to enable the electric propulsion of vehicles and fleets.

Sales by division – 2019 (% of sales, € million)



Ficosa is composed of two business groups: Traditional products and New Tech products. Within the traditional products category, the most significant is the rear-view systems which represent around 61% of total sales. Ficosa is one of three global leading companies in this area.

In terms of product, the major increase in sales has occurred in new technological products focused on safety and comfort systems (ADAS) and e-Mobility.

Ficosa sells 4 million rear-view cameras

In 2019, Ficosa has reached this historical figure in sales in the period of the last 5 years thanks to its firm commitment to lead technological innovation in the automotive sector, and plans to double sales until 2028.

The growth of technological innovations incorporated in vehicles has led the multinational corporation to reach this milestone in its business, a record that will in turn be improved in the coming years, as Ficosa expects to manufacture more than 8 million parking cameras by 2028, based on orders already received from top-tier OEMs (automakers).

This figure is a huge achievement because it means that 4 million drivers are benefiting from our cutting-edge technology, which makes driving safer and easier, on roads all over the world. The fact that drivers are more comfortable and protected against accidents encourages us to continue innovating and to play an active role in transforming the automotive sector.

Rear-view cameras, which help drivers park, are part of the Advanced Driver-Assistance Systems (ADAS). When the driver starts the car, the camera in the back is activated and the rear-view images are shown on the central monitor. The system uses mobile overlays to control the turn of the steering wheel, allowing for more precise manoeuvring.

At the beginning of 2018 Ficosa reached 3 million rear view cameras as we see in the commemorative photograph, closing the year with a new milestone of 4 million.

How do we work?

Mission

In particular, our mission is to innovate, develop and create high added value products that contribute towards improving mobility in key aspects of progress such as safety, comfort, communications and the environment, exceeding market and customer expectations.

Vision

Our strength comes from our commitment. For us, success is not measured by size, but by flexibility, speed and creativity, and in understanding that being the best means meeting the needs of our employees, customers, community and shareholders alike.

Values

At Ficosa, we believe that success depends on how we live our Vision and the Values on which it is based. Our Values reflect the spirit of our company, the way we think and how we believe we should act, and have become the mainstay of our Code of Ethics. We are convinced that if we act in accordance with our values, we can achieve our Vision. The company values are on display at the different company sites and every new employee receives an explanatory leaflet informing them about our values when joining the company.

The values that guide our conduct and identify us as a company are as follows:

Caring for People:

People are a key part of our corporate project. Learning and training, respect, diversity, concern, friendly and informal relationships should reflect the very essence of us as a company.

Teamwork /Learning together

Sharing knowledge, openly communicating, learning from mistakes, cooperating, and understanding that personal success is the company's overall success.

Commitment & Passion for Work

Enthusiasm for the corporate project, knowing how to live our values. Feeling part of the fulfilment of our vision, persevering with hard work, enjoying work and a job well-done. Everybody's work is equally important.

Innovation & Creativity

All our employees have the capacity to exhibit and create; therefore, we have to enable their ideas to emerge through our leadership. Brave the market by being bold and assuming risks, but always with sound judgement.

Customer Focus

Helping our customers achieve success is key to us achieving ours. We should be able to build relationships based on trust with them, understanding and anticipating their needs.

Honesty & Integrity

Being honest and acting with integrity in all our actions and behaviors. Ethical principles and our values should guide us in our day-to-day decisions.

Leadership

Modesty, not taking center stage, understanding that everybody's work is equally important, is essential in Ficosa's leadership style. Lead by example and showing appreciation for people. Delegate, decentralize, and trust in the ability of people. Live the values that constitute the essence of the company.

FICOSA and the Sustainable Development Goals

The company's strengths come from its commitment and its understanding that being the best means being able to respond to the needs of our employees, customers, community and shareholders in equal manner. In this regard, Ficosa continues its efforts to generate shared value among its stakeholders and add sustainability practices in its business strategy and culture. As a member of the United Nations Global Compact since 2002, we have adopted the Sustainable Development Goals (SDGs).

Sustainable Development Goals (SDGs), introduced in 2016, are an ambitious plan of action defining sustainable development priorities at a global level for 2030, with the aim of eradicating poverty and promoting decent lives with opportunities for all. There are 17 goals and 169 universal targets that are inter-connected, applicable to all nations and people, and that represent a call to action for governments, civil society and the private sector. The company reviews all the SDGs to identify areas where we can maximize our positive contributions. We focus our activities related to sustainability on those SDGs that greatly influence our business model and value chain and help us bring about real change.

This mainly affects the following SDGs and associated sustainability activities:

SDG 3 —

Ensure healthy lives and promote well-being for all at all ages

According to the World Health Organization (WHO), traffic accidents kill approximately 1.35 million people worldwide every year, which means that every day around 3,500 people die on the roads. Tens of millions of people suffer injuries or disabilities each year. Children, pedestrians, cyclists and the elderly are the most vulnerable users of public roads. Additionally, about 50 million people are injured in traffic accidents. If preventive measures are not taken, death from a car accident is likely to become a top five cause of death in 2020 from ninth place in 1990. By collaborating with national and international programs to accelerate the development and standardization of connected cars and autonomous vehicles and by developing new emergency systems or new tools and products to improve the vision of the driver, help prevent collision or estimate the degree of attentiveness of the driver, Ficosa is contributing to the Health Goal to reduce road traffic fatalities by 50% by 2020.

Learn more: Innovation in our products.

SDG 13 –

Take urgent action to combat climate change and its impacts

The transportation sector is responsible for 20% of global greenhouse gas emissions. Reducing emissions from transport is therefore an important part of any strategy to combat climate change and its impacts, in line with Sustainable Development Goal 13. The widespread electrification of transport through the adoption of electric vehicles (EVs) is one strategy to reduce GHG emissions. If EVs are charged with electricity from emission-free sources, their use can also increase the share of renewables in the global energy mix (Target 7.2 – Affordable and clean energy), and contribute to reducing air pollution and related health impacts (Target 3.9 - Ensure healthy lives and promote well-being for all at all ages and Target 11.6 - Reduce the adverse per capita environmental impact of cities). By investing in research and development to improve efficiency, reducing the complexity of electric vehicles and developing new generations of Battery Management Systems or On-Board Chargers (OBC), Ficosa is contributing to combating climate change and its impact. Furthermore, the company is using less-carbon intensive manufacturing processes to mitigate the effects of climate change.

Learn more: Innovation in our products; Commitment to environment.

SDG 12 –

Responsible Consumption and Production

Ficosa is designing and manufacturing products through the responsible use of raw materials and natural resources. The company is working to reduce its waste generation throughout the companies' life cycle. For example, Ficosa is working in all its operational facilities to increase the recovery of cleaning solvents and other chemicals and to reduce the amounts of these substances emitted from its plants. Furthermore, one of the main objectives of the company is the continuous improvement of quality, reducing the number of defective parts and improving both its processes and the skills of its employees with the aim of achieving zero defects.

Learn more: Commitment to environment; Commitment to quality.

SDG 16 –

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Ficosa is working to ensure that conflict-free minerals are used in the manufacture of its automotive components. Ficosa implemented an annual supplier inquiry to collect the Standard Survey (EICC/Gesi template) on conflict minerals from all its suppliers. The information collected is internally processed and provides useful information to ensure procurement that is free from conflict minerals originating in the Democratic Republic of the Congo or adjoining countries.

Learn more: Conflict minerals.

SDG 8 –

Promote inclusive and sustainable economic growth, employment and decent work for all

The company has a team of about 10,000 employees, with manufacturing plants, technological centres and commercial offices located throughout 18 countries in Europe, North America, South America, Africa and Asia. In all the countries where Ficosa operates, the company is building a safe and secure workplace where employees feel valued, where their rights are respected, and where they can do meaningful work.

Learn more: Commitment to our people; Commitment to health and safety.

Compliance and business ethics

At Ficosa, we are committed to meeting high ethical standards and complying with all applicable local, national, and international laws wherever we do business. Behaving ethically is fundamental to establishing and sustaining legitimate and productive relationships between organizations.

In this direction, a new release of the Ficosa's Code of Ethics was approved by the Board of Directors in 2017. Our Code of Ethics is an extension of our values and defines the standards and responsible behaviour expected of all those related to the company, and which is of obligatory compliance. We are all responsible for complying with these benchmark standards, which are essential guidelines in order to guarantee our management model. The Code is available for all employees in the Ficosa intranet and it is included in the welcome package given to new employees, to be signed the first working day together with the contract.

Our Code is available in all FICOSA languages (English, Spanish, French, German, Italian, Portuguese, Polish, Turkish, Chinese and Arabic).

Since 2018, Ficosa organized training sessions and awareness campaigns to ensure that employees are aware of Ficosa's new commitments and confirm their compliance with the Code of Ethics. The Code of Ethics was provided to all indirect employees (job positions with mail address) and to all FICOSA countries through a database system requiring acknowledgement by employees. At the end of December 2018, the Code's employee acknowledgement was 97% (2,551 employees, 10 countries out of 11 showed 100% ratio).

In October 2019, the e-learning of our Code of Ethics was launched to a target of 2,580 indirect employees, available in the 9 languages of Ficosa. This training is interactive and uses graphics, text and sound, making the training easy to understand and very easy to manage. Upon completion, employees must pass a 15-question exam (randomly generated from a sample of 45 questions) following corporate training guidelines. The completion rate at the end of 2019 was over 75%, with the 2020 target of reaching 100%.

At Ficosa, we have a body called the Compliance Committee responsible for distributing and ensuring compliance of the Code of Ethics among all the company's employees. In order to guarantee the effective application of the regulations and the guidelines of this Code, the company has established a whistleblowing channel to notify any breach of the Code of Ethics.

Furthermore, Ficosa's policies and procedures, available worldwide, ensure compliance with J-SOX in all activities performed in the day-to-day operation of Ficosa. Controls have been implemented to monitor compliance with these procedures and are evaluated regularly to ensure its effectiveness. Periodical audits are carried out.

At Ficosa, we are convinced that emphasizing the compliance culture makes a significant contribution to securing the sustainable success of our company. In this regard, the company has decided to define a Crime Prevention Mode, which was introduced in 2016. The goal was to adopt and effectively implement the appropriate measures to prevent and detect criminal risks and ensure ethical practices within the company. This compliance is integrated as part of a corporate culture, which has always been centred on the promotion of ethical values at all levels.

Under this framework, several regulations, procedures and protocols were implemented to support crime prevention in areas such as money laundering, antitrust, corruption in business, treasury and social security and subsidy fraud, fraudulent and unfair behaviour, gifts and hospitality, intellectual and industrial property, the transportation of persons, goods and other related activities. All the different regulations, procedures and protocols focus on company and sector-specific risks and priorities and cover the facilities and sites where Ficosa holds a majority stake and is consequently responsible for their operation and control.

In 2018, a Compliance Information and Training Programme was launched in order to raise awareness in our organization. In addition, in 2019 a specific workshop on competition law was prepared and launched, covering the most sensitive positions in our commercial (41 employees), purchasing (19 employees) and R&D teams (6 employees), including examples of real situations. In 2020, it is planned to increase awareness with a workshop focused on Export Control.

In 2019, an anonymous Compliance awareness survey was carried out with the aim of detecting opportunities for improvement. The questions, available in all Company languages, were raised to 2,690 employees in 12 countries.

The survey covered various areas such as the level of knowledge of the Company's values, the Code of Ethics, the Whistle-blower Channel, the awareness of Compliance at different levels of Management, etc. The overall result on a weighted score of 10, was 8.1.

The results of the survey were shared with the management teams of each country to promote internal forums in all the Group's subsidiaries where to debate and increase awareness of Compliance and to be able to establish the related improvement actions.

Living by the values at Ficosa

Ficosa's values underpin everything we do and must be reflected in our day-to-day behaviour. To ensure every employee understands and truly experiences the corporate values of Ficosa, the company turned them into specific operating principles and communicates them often.

At all sites, the values are displayed inside the factories and offices to make it clear what matters to us.

Global Campaign of Ficosa Values and Ficosophy

In 2019 we have launched a global campaign to reinforce the concept of Ficosophy and the values of Ficosa, which constitute the DNA of our employees, what identifies us in any of our centres and plants in the world, as well as being the mainstay of our code of conduct.

Ficosophy is the values that unite all the people who are part of Ficosa. A unique way of doing things that helps us move forward into the future together.

Having values is important, but we need to apply them. That is why, we always put our Ficosophy at the centre of everything we do and we encourage our employees to live them in their day to day.

This campaign has reached the nearly 10,000 Ficosa employees as different tools and formats have been used to be able to work, during the 18 weeks that the campaign lasted, with all levels of the organization. Emails, pop-ups, social networks, posters, murals, tablecloths with messages have been used also in the centres that have a canteen, activities connected with each value, etc.

In addition, a Ficosa 2020 Values Calendar was created to keep this campaign alive for the next year. This calendar is the result of a photography contest in which the employees participated by contributing with their own photographs that represent the values of Ficosa.

FICOSA PEOPLE

FICOSOPHY

Our way of doing things

INTEREST IN PEOPLE

People are at the core of our business. Training, learning, respect, diversity and friendly relationships are part of who we are.

LEADERSHIP

Humility, not taking sole credit, and understanding all persons are equally important is essential to Ficosa's leadership style. Lead by example and with high regard for people's abilities. Delegate, decentralize, have faith in people's abilities. Integrate the company's values in the workplace.

INNOVATION & CREATIVITY

All our employees have the ability to innovate and create, therefore we must encourage the expression of these ideas through our leadership.

TEAMWORK

Knowledge-sharing, open communication, learning from mistakes, cooperation and understanding that personal success contributes to overall success.

COMMITMENT & PASSION FOR ONE'S WORK

Enthusiasm for doing a good job and knowing how to live the values. Participating in achieving our vision through perseverance, work enjoyment and a job well done.

CUSTOMER FOCUS

Helping our customers succeed is key to achieving our success. Being able to build trusting realtionships with our customers; understanding and anticipating their needs.

HONESTY & INTEGRITY

Honesty and integrity in our actions and behaviors. Ethical principles and values should guide our daily decisions.

Human Rights

Ficosa is responsible not only for its own decisions and activities, but it also wants to ensure its suppliers and business partners operate in line with the company's sustainability principles and respect the Universal Declaration of Human Rights and environmental protection.

In addition to following the General Purchasing Conditions, and all laws and regulations applicable to the supplier. It is also their obligation to respect social responsibility duties and especially the requirements based on the Universal Declaration of Human Rights (UDHR) and the International Labour Organizations (ILO) conventions to respect employees' rights, age and working-hours limits, etc. The purchase orders sent by any Ficosa company or any of its subsidiaries must include the terms and clauses of the General Purchasing Conditions.

Learn more: Responsible sourcing.

Furthermore, the company performs a yearly control through the central employee database by calculating the age of their employees to ensure all Ficosa staff are above the legal age to work and assure no child labour is permitted.

Information security

In 2017, Ficosa strengthened its Information Security Management System (ISMS onwards) based on ISO/IEC 27001:2013 standard. A Security Committee was formally appointed and is authorized by the Board of Directors to govern the ISMS. The Committee is responsible for defining and establishing the information security strategy and management system. The current scope of the ISMS includes engineering, prototypes and testing business functions.

Currently the scope of the ISMS covers the areas dealing with most highly sensitive information, shared sensitive information with customers and contract, intellectual and industrial property law, and protected information. ISMS aims, among other internal goals, to increase the confidence of stakeholders regarding information management and the security of its information systems.

The ISMS includes the implementation of risk assessment and management scenarios based on the MAGERIT methodology (Version 3).

Ficosa has also implemented zoning (S1-S2-S3) where S3 zones correspond to those related to confidential and secret classified projects. Each zone has been provided with its own security criteria, controls, alarms, cameras, procedures, training, etc.

As part of the ISMS project, Ficosa has developed and enhanced a training and awareness program. More than 880 employees have already attended the training sessions, 209 in 2019, including the Management.

Furthermore, the company has implemented an incident management procedure to enable any employees and stakeholders to report security concerns regarding information in order to prevent recurrences.

In 2019, an e-learning was also launched to increase the awareness of all employees on the correct use of Software licenses, including intellectual property, the purchase and use of software, examples of cases of illegal use, false beliefs on software licenses and the potential impacts of illegal use. The completion rate at the end of 2019 was over 40% (out of a target of 2,580 employees), with the 2020 target of reaching 100%.

Commitment to quality

Policies

The rating given to a car and the value of an automotive manufacturer's brand are dependent on the customer's appraisal of quality. In this context, Ficosa believes that the automotive part and equipment industry has an important responsibility to constantly provide top-level quality to customers at every stage, from the planning of new products, through to development, manufacturing, distribution and sales to after-sales service.

In 2009, Ficosa implemented the Corporate Quality 3Q3 program, which aimed to improve quality threefold within three years' time, thus propelling the business to the top of the automotive sector. The 3Q3 program is annually updated, accompanied by a specific roadmap and quality targets to make sure that all the regions are following the best practices in this area. Through the 3Q3 program, the company performs more than 100 audits per year to ensure that all the sites comply with the company's quality requirements.

In 2015, the company implemented stricter rules in the 3Q3 audits for supplier management, project management and technical centres, using the same criteria as for Ficosa manufacturing plants. In 2016, the company implemented a new internal 3Q3 Process Design Audit to certify the design of the production process at Ficosa sites (plastic & metal injection, injection tooling, paint shop). The new internal audit is applicable to all the Company's technical centres and manufacturing plants.

Additionally, in 2016, the company added three new checklists in the 3Q3 Plant Audit to make sure that each site adheres to Ficosa standards for the proactive management of warranties. More demanding rules were added in the 3Q3 audits for technical centres. The main goals of the new checklist is to certify that any software developed by Ficosa is aligned with the ISO/IEC 15504 guidelines. Furthermore, these stricter rules have been implemented to guarantee that the design and production of safety products comply with the highest standards of the automotive industry.

In 2018, the notice period for the communication of a 3Q3 Plant Audit was reduced from ten to two days. The objective is to obtain a true picture of the Ficosa site and avoid any ad hoc preparations being made in advance.

During 2019, the 3Q3 program was carried out, auditing all the company's support centres and manufacturing plants.

Quality Managemennt

IATF 16949:2016 (replaces ISO/TS 16949:2009) defines the quality management system requirements for the design and development, production and, when relevant, installation and service of automotive-related products. It is a specific standard to the automotive industry and is based on the ISO 9001 standard.

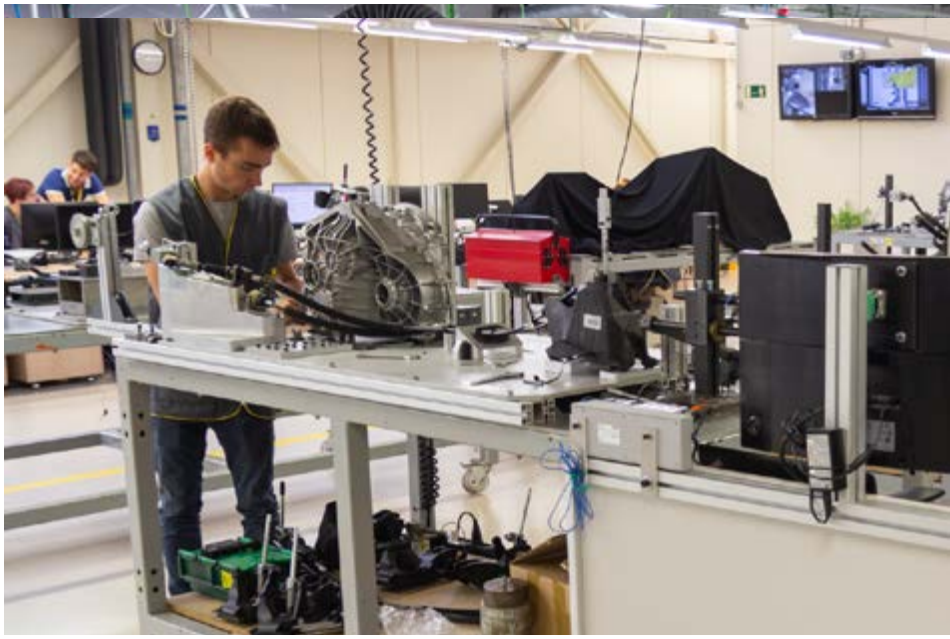
Operational Ficosa facilities certified IATF 16949 and ISO 9001 (%)

100%

Governance

The mission of the quality function is to improve the performance of Ficosa, thereby ensuring customer satisfaction. To do this, it is endowed with a corporate structure and local quality control organizations in the production plants and support centres (technical centres, purchasing, project management, etc.).

The main tool to ensuring the mission of the quality function is achieved, is the quality system, which is deployed on a corporate level in order to comply with international, national and local standards, and those of our customers.



Main Risks and Challenges

Customer warranties are a significant part of our quality management system. In 2018, a new warranty reporting system was launched in all Ficosa manufacturing sites. This system continuously monitors our OEMs B2B warranty applications to obtain a better picture of the current and future scenario, helping us to react quickly to any possible incident before an official warranty analysis request is issued.

In 2019 the system has been consolidated, having a global guarantee indicator, by plant, customer and product, which through standardized analysis, allows the control and reduction of guarantees.

Parallel to this, the collaboration between Design and Manufacturing has been strengthened in order to analyse the “No Fault Found cases” (NFF) to provide faster support to our customer in the resolution of problems.

The company remains focused on improving both our processes and our employees’ skills, using problem solving, analysis tools and techniques in an aim to reach zero defects.

We monitor the customer portals to reduce response times, since we do not have to wait to receive the official notification of defective parts in order to take action. We continuously monitor any possible warranty incidents thanks to the improved monitoring of our customer portals. Furthermore, we will use statistical tools to predict any future trends and contrast the effectiveness of our actions. In addition, the company is focused on implementing the Lean Six Sigma methodology in all the manufacturing plants and technical centres and improving the communication between operation and product design. Finally, the company continuously improve its development system to ensure top-level quality in the design and development of new technology products.

Key results

Company quality is managed through the monitoring of KPIs. The company has defined a balanced scorecard system that displays the site's monthly values versus target figures. This monthly reporting enables the company to pinpoint areas where improvement is needed. In 2019, the scope of some indicators has been revised to increase their rigor, so the historical data is not comparable.

	2019	Target 2019	Target 2020
Customer satisfaction (%)	95%	93%	95%
Number of Customer claims due to Suppliers	113	130	122
Warranty cost vs sales (%)	0.32%	0.27%	0.26%
Number of Customer claims	791	672	720
Number of defective parts per million delivered to Customer (ppm)	21.5	6.5	6.5
Number of defective parts per million delivered to Ficosa due to Suppliers responsibility (ppm)	12	29	24
Non-Quality Costs over sales (NQC) (%)	0.59%	0.48%	0.47%

Quality management goes beyond Ficosa activities. The company wants to ensure that its suppliers also operate in line with the company's commitment to excellence. All our suppliers must have a quality certification (ISO 9001, VDA, EAQF, and IATF) and must provide Ficosa with written evidence of the most recent certification renewal.

Ficosa conducts periodic supplier assessments to ensure that the suppliers' quality meets the standards established. Since 2015, the supplier's audits have been following the same criteria as the ones used for Ficosa's manufacturing plants. Furthermore, Ficosa reviewed and made the criteria used to select suppliers for its Purchasing Optimum Panel (POP) more restrictive. From 2017 on, the company has implemented a strict program to reduce the impact of suppliers on customers by enforcing stringent rules and consolidating supplier audits in all the countries where the company operates.

The Ficosa plant in Cookeville, Tennessee, has been awarded with the Ford Q1 distinction, a recognition by Ford for its high-quality products and capacity for continuous improvement.

Awards and recognition

During 2019, GM and Nissan manufacturers have awarded three Ficosa plants with the best supplier awards.

General Motors awarded the Ficocables Ltda plant, in Maia, Portugal, the 2018 Supplier Quality Excellence Award, in recognition of the quality results, deliveries and services of this plant, which manufactures and supplies cables and comfort systems. The ceremony took place in October 2019, in Torino, Italy.

For its part, Nissan Europe awarded Fico Transpar SA, located in Viladecavalls, Spain, the Regional Quality Award Winner trophy, which accredits it as the best European supplier of its commodity, for its quality results, deliveries and service. The ceremony was held in September 2019 in Crandfield, UK.

FICOSA Mexico, has been recognized by our client Nissan North America, among the best suppliers of the year in quality, service, and deliveries; related to the rear-view mirror products that FICOSA supplies to the different plants of Nissan North America. On August 27, 2019, said recognition was delivered.

Continuous improvement (FIT Program)

Within the aim of consolidating its market positions as an automotive manufacturer and strengthening its presence in all markets, Ficosa bases its strategy on continuous improvement in terms of both products and all the processes involved in them.

Ficosa understands that continuous improvement is any change of direction to improve processes by eliminating inefficiencies and maintaining consistent quality. All Ficosa employees are responsible for continuous improvement, from the first operator to the last manager of the company. Continuous improvement affects all departments related to production as well as the financial-administrative, purchasing, commercial and R&D departments.

To ensure there is structured support in continuous improvement, the Ficosa Improvement Transformation (FIT) Program was launched at the end of 2016. This Continuous Improvement (CI) program is supported by top management and has been implemented in all of Ficosa's operational facilities. The project is supported by an action plan aimed at implementing self-sufficient CI teams in all the countries where Ficosa operates. The program has been divided into 4 main pillars:

	MAIN GOALS	WHAT DID WE DO IN 2017-2019?
CI Structures	Making sure any site has responsible for implementing the FIT program	Continuous improvement structure in every Plant: - CI Managers and experts (YB, GB, BB) in all the facilities, - Regional CI Directors and Corporate CI Director - Local CI Steering Committees held every month Over 750 employees trained as Yellow, Green or Black Belts. Using self-developed Ficosa training materials for YB and GB sessions.
Fighting waste and variation	Implementing and running projects and CI activities	Over 5.000 improvement activities in 3 first years of the FIT Program - including Six Sigma projects, Lean workshops and kaizens. Hundreds of certified Yellow, Green and Black Belts.
Ideas and opportunities	Gathering suggestion and sharing best practices	e-Suggestion system developed and implemented to collect, analyze and track any suggestion. Spreading a Yokoten culture to share best practices within plants. The company achieved over 0,54 suggestions per employee.
Transparency and Focus	Gathering data to detect any issues	Standardization of a new 5S system to make sure that all the plants are following the same standards and criteria. Implementation of diagnosis tools to find opportunities (ie. VSM, yamazumi) - used already over 1.000 times! Leaders and Managers directly involved in CI activities (ie. Ohno Circles, 5s audits and Lean Six Sigma projects)

The program involves the use of continuous improvement methodologies, such as Lean Six Sigma, as well as soft skills that support employees in their everyday quest for better products and processes. Ficosa allows for the development of human resources in its broadest sense, by adapting organizational structures to globalization process needs. We have active experts (called Belts) with different levels: White, Yellow, Green and Black Belts, sharing a common goal of everyday improvements. The company's new FIT program is not only about optimizing the manufacturing process, but also changing the culture of the company and training people to give them greater capacity to make the right decisions every day.

Commitment to our people

Ficosa's commitment to people is at the foundation of the company's culture.

Policies

For Ficosa, being a responsible employer involves a number of challenges: training employees, promoting them, providing them with fair salaries, looking after their well-being at work, combining operational excellence and personal development and encouraging a fluid social dialogue. Ficosa has numerous internal guidelines, policies and procedures to ensure that all their sites are following the best practices in recruitment, career management and talent development. The main ones are: Management of Personnel Database, Management of Short Term Benefits, Management of Other Employee Benefits, Procedure for Recruitment and Hiring, Procedure for Performance Evaluation, International Assignments Management Procedure, Procedure for the Planning and Follow-up of the Training and New Employees Welcome Procedure.

Furthermore, the company has defined an employee handbook available for all employees. The handbook includes information about fair business practices at work, our code of ethics, health & safety, training, performance development, prevention of discrimination and promotion of diversity, etc.

Governance

The Chief Human Resources Officer, member of the Executive Committee, is the highest responsible person for labour practices in the workplace. The Corporate Human Resource department is responsible for defining the above guidelines, policies and procedures. Every site has a Human Resources Manager, who is responsible for implementing the policies defined at corporate level in every country where the company operates.

Main risks and Challanges

Ficosa develops its activity in a very competitive and demanding industry. Since 2008, the company has tapped into new business areas and international markets and integrated them into the corporation. In this regard, Ficosa has become committed to creating high value jobs. Evidence of this is the fact that between 2014 to 2019, the number of engineers working at the headquarters in Viladecavalls (Spain) has doubled. The need to hire new staff is posing new challenges for the company as competition for specialist and managerial staff is increasing in some areas of the global labour markets. We are therefore implementing all the necessary mechanisms to get the best out of our teams and recruit the best professionals in order to maintain our competitive advantage in the long term. The following areas have been identified as the most significant areas of our impact on the workforce:

- Diversity and integration
- Development, training and knowledge management
- Dialogue and communication
- Health promotion and well-being
- Safe and healthy working conditions (see "Commitment to Health and Safety")
- Absenteeism management

Key results

	2017	2018	2019	Variance from previous year
Average number of employees (FTE)	10,239	10,243	9,978	-2.6%
Number of employees at year end	9,157	9,279	9,049	-2.5%
Non-production Indirect Turnover (%)	9.3%	7.0%	8.6%	22.7%
Female staff in total (%)*	42.0%	44.3%	45.4%	2.5%
Female staff in executive positions (%)*	14.0%	15.2%	16.0%	5.3%
Employees with a disability	125	133	127	-4.5%
Dismissals	299	277	495	78.7%

*.- To measure these indicators, the company uses the workforce at the end of the year (9,049 employees).

Workforce by country

	2018 (FTE)	2019 (FTE)	2019 (at year end)
Brazil	316	273	247
China	1,804	1,493	1,050
France	352	295	277
Germany	275	262	243
India	18	64	59
Italy	287	275	224
Japan	7	5	4
Malaysia	29	55	53
México	700	661	582
Morocco	76	263	467
Poland	873	965	777
Portugal	1,303	1,244	1,104
Spain	2,195	2,183	2,151
Turkey	1,082	1,004	916
USA	926	936	895
Total general	**10,243**	**9,978**	**9,049**

Group Workforce - job category*

	2018	2019
Employees < 30 years	1,893	1,806
30 < Employees < 50 years	5,944	5,695
Employees > 50 years	1,442	1,548

Group Workforce - job category*

	2018	2019
Senior executives	158	162
Area managers	472	463
Engineers and technicians	1,864	1,766
Administrative personnel	302	195
Direct Production staff	4,992	4,944
Indirect Production staff	1,491	1,519

Contract types (2019)*

	Full time	Part time	Total
Permanent	7,919	288	8,207
Temporary	805	37	842
Total	8,724	325	9,049

Diversity and Integration

At Ficosa, the criteria and procedures for the recruitment of human resources embraces the principle of equality and non-discrimination based on the grounds of gender, race, national or social origin, social class, birth, religion, disability, sexual orientation, union association, political opinion, age or any other condition.

Additionally, our Code of Ethics states that Ficosa Management will take all appropriate measures to prevent acts of harassment, discrimination or violence within the company. At the same time, its employees undertake not to promote or allow situations of abuse, harassment, violence or discrimination in the workplace. These prevention actions are enhanced locally with specific equality and anti-harassment plans, like those at the Cookeville, Detroit, Soria and Viladecavalls sites.

Furthermore, all job agencies that work with us must guarantee equality in gender, origin, ethnicity, political affiliation and religious beliefs for all candidates pre-selected for our company. All managers and middle management are responsible for ensuring non-discriminatory treatment to employees and collaborators.

Since 2018, we started a specific corporate training plan focused on increasing the cultural intelligence among different cultures and nationalities. In 2019, the Viladecavalls (Spain) and Maia (Portugal) plants underwent a training program related to communication, leadership and how to act in the event of discrimination. All the operations team leaders of these centres have participated.

In Soria (Spain), all managers have already received training on equality and harassment in the workplace. In Turkey, the manufacturing plants have defined local gender equality training for their employees. All employees at US plants carry out specific diversity and harassment prevention training every three years; new hires have mandatory diversity, harassment and proper communication training in the workplace, being instructed on how to report any non-compliance.

Soria (Spain) collaborates with correctional institutions to foster the rehabilitation of former prisoners. In 2015, the company received a special prize “Empresa Socialmente Responsable” (Socially Responsible Company) from FADESS (“Fundación de Ayuda al Discapacitado y Enfermo Psíquico de Soria” – The Soria Foundation for Physical and Intellectual Disabilities) that recognizes the commitment towards this group. The company collaborates with FADESS and ASOVICA (“Asociación Virgen del Camino de Familiares de Personas con Enfermedad Mental” – Association for Families of the Mentally Ill) to promote the social inclusion of physically and intellectually disabled people.

The plants in Mexico have a program called “total well-being” where awareness sessions are done by psychologists on issues of sexual harassment, discrimination, emotional intelligence, conflict resolution and stress management. In turn, Ficosa México belongs to the local Automotive Cluster, participating in the conference “Forward for Gender Equality”.

In 2015, Dabrowa Gornicza (Poland) received a special prize “Icebreaker” for its commitment to promoting the inclusion of people with disabilities,

awarded by the Foundation for Vocational Activation of People with Disabilities and the Polish Organization of Employers of Disabled Persons. One of the main goals of the site is to reach six percent of employees with disabilities (in 2019, 4% was achieved). Since 2010, the site has been using a specific programme defined to promote the employment of disabled people. Every disabled employee at the site receives special treatment with external doctors. Furthermore, the company regularly checks workplaces or job positions to make sure that working conditions are adapted to disabled people's needs.

In Taicang (China), the company defined an action plan to improve the employment of people with disabilities. The action plan included interviews and on-site visits to various local manufacturing plants to share best practices and review different examples of infrastructure adaptation to accommodate employees with disabilities with the collaboration of the Rotary Club of Shanghai. Furthermore, employees from the Human Resources, Quality and Operating departments participated in an awareness training course conducted by the Social Inclusion Academy (SIA) and Inclusion Advisory Group. The Social Inclusion Academy training programme is the result of a cooperation between the Inclusion Factory and the German Chamber of Commerce to promote the successful integration of people with disabilities in a variety of positions in a cross-sectoral environment. The plant defined a new action plan in 2018 to hire 20 new employees with disabilities over the coming years.

Brazil has made workplace adjustments and provided new infrastructure on the assembly line to accommodate deaf or hard of hearing (HOH) employees. Furthermore, the company has updated its emergency procedure and visual aids to effectively alert its deaf or HOH employees in an emergency situation. The company has staff trained in sign language to support these employees.

All Ficosa employees are covered by local labour collective bargaining agreements except in those countries where these collective bargaining negotiations do not exist as the collective labour rights are protected and guaranteed by national laws. This is the case for Ficosa sites located in USA, China, India and Morocco.

Employee development

Employee development is a priority for Ficosa. Since 2011, Ficosa has adopted system-wide performance, which focuses on setting performance goals for employees according to their responsibilities and departmental objectives. A supplementary mid-year review has been also implemented to update the existing objectives with new information that may have arisen during the first half of the year. Every site sets the performance goals at the beginning of the year, taking into account process implementation and local conditions and shares this decision with corporate development.

The technical and soft skills associated to each position are also assessed, generating development opportunities for each person. Finally, it is important to highlight the informal mutual feedback generated between employees and managers throughout the year, which forms the basis of the main dynamics for people development in Ficosa.

	2018	2019	Variance from previous year
No. of employees with access to performance and career development review (target)	2,173	2,300	5.8%
Employees receiving regular performance and career development reviews (%)*	84.0%	95.0%	11.0%

*.- according to the target

The 2019 increase in the number of employees with access to the performance review is mainly due to the opening of new centres such as Morocco and India.

Growing @Ficosa

In 2014, Ficosa launched a Competency Development Programme with the aim of identifying and maximizing the potential of key employees. This programme starts with an external assessment that enables each one of the participants to gain in self-awareness and to map their strengths and development areas. This analysis forms the foundation of Growing@Ficosa, a programme that provides the resources and support for accelerated development adapted to the needs and motivation of each of the participants.

Ficosa is committed to increase the number of participants, becoming an ongoing process to develop key people in the organization. Growing @Ficosa is a long-term global program lasting two years and each year a new group joins it. In the last four years, a total of 136 participants have joined this initiative. In 2019, we had more than 87 graduates on staff from Growing @Ficosa.

This program is helping to create a homogeneous people development culture across the organization. It involves participants with different backgrounds working together with Human Resources, managers and top lines of the Company worldwide.

The programme is based on a 3-tier commitment (manager, human resources and the participant) and is structured around:

01 An Individual Development Plan (IDP):

an ad-hoc plan resulting from one-to-one interviews with the participants and their managers to better understand and define their main expectations and development. This is a blended programme based on the 70-20-10 model with a strong focus on learning on-the-job and social learning.

02 A Corporate Program:

with training in areas such as Leadership, Teamwork, People Development, Impact and Influence, and supported by coaching, mentoring and specific metrics, as 360º or other behavioural KPIs.

70 Experimental learning

Work-related collaboration
On-the-job performance support

20 Social learning

Peer learning and coaching Mentoring

10 Formal learning

Learning program support
High potential development

Successfactors

Until 2015, the company used different Human Resources systems and tools that supported personnel administration processes and that needed a global and integrated solution. To improve the efficiency, Ficosa has implemented a new Human Resources Information System called SuccessFactors. This new tool is an employee-centred system and enables each employee to complete HR tasks more quickly and perform strategic HR activities more frequently such as their annual goals, performance, development plans, training programmes, etc. Since 2019, SuccessFactors includes the company's development module and training program, facilitating the creation and monitoring of development plans for each of the employees. By 2020, work is underway to integrate the succession module.

Training and knowledge management

	2017	2018	2019	Variance from previous year
Total number of training hours provided to employees	194,787	168,090	152,514	-9.3%
Training investment (€)	1,924,471	1,830,673	864,877	-52.8%
Average cost training per employee*	214	197	96	-51.3%
Average training hours per employee*	22	18	17	-5.6%

The reduction in hours in training in 2019 is due to the fact that in 2018/2017 there was a massive implementation of continuous improvement programs in quality and manufacturing areas with external trainers. In 2019, this training began to be given with internal teams, considerably reducing the amount of training expenditure.

Total number of training hours provided to employees*	2018	2019
Direct employees	61,430	84,268
Indirect employees	106,660	68,246
Total general	**168,090**	**152,514**

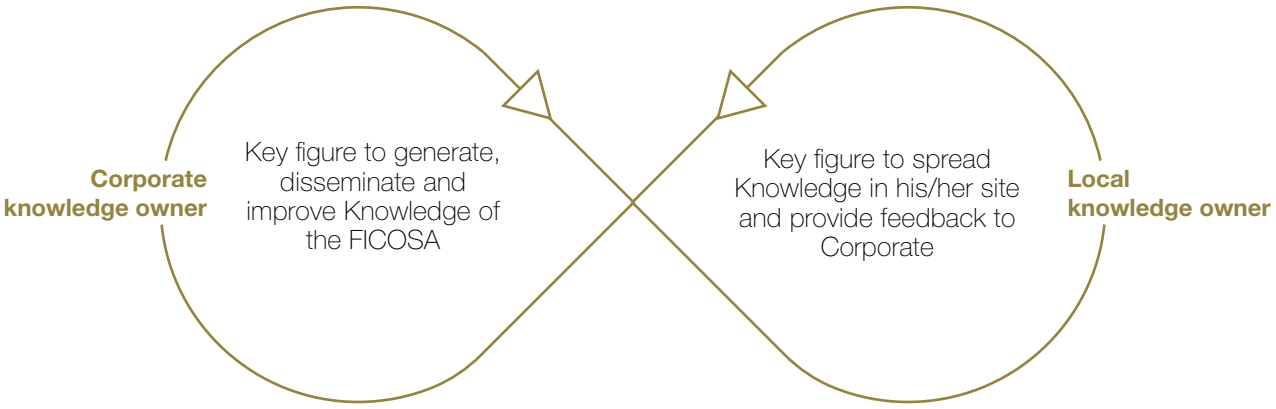
At Ficosa, we understand that the best way to learn is to build on previous knowledge and experience, and to put into practice what our employees learn in their job positions. Thus, working along with some of our best professionals is the most valuable and direct way to improve our employees' knowledge. This hands-on experience is supplemented in each case with specific training programs given by professionals in our company, as well as business and training institutes and universities.

Each year, each site defines a quantified and budgeted annual training plan and submits it for formal approval by the corresponding Plant Manager, Country General Manager or Region/Business Unit Director. The company records the annual training data from each site to detect areas for improvement in the training activities implemented worldwide. More than 50% of the training sessions are related to manufacturing, quality, health & safety or engineering contents.

In order to ensure that all employees have the technical knowledge required to perform their duties successfully and are familiar with Ficosa's tools and methodologies, Ficosa implemented a robust learning system for plant positions that includes diverse training modules related to assembly and injection process, OHSE, quality, supply chain, painting process, lean manufacturing, etc.

First of all, the company prioritizes the technical knowledge required for the job position in new business and technologies. Secondly, Ficosa selects the Corporate Knowledge Owners and Local Knowledge Owners to generate, distribute and improve knowledge in the plants, technical & development centres. Ficosa has 25 Corporate Knowledge Owners who meet regularly to work on specific training materials & content adapted to Ficosa standards and processes (e.g. case studies, practical exercises & evaluation). The training materials focus on error prevention, practical cases & activities that ensure learning through close-to-reality situations and assessment tools. The Local Knowledge Owner is responsible for adapting the corporate training materials to train employees at their site. This learning system has already been implemented in the new manufacturing plants of Morocco, so in 2019, this new learning system was implemented in all the plants where the company operates.

In 2019, the offer of technical e-learning was expanded, accessible to the entire organization, improving agility and efficiency in accessing such training. In 2019 more than 20 online training courses were available to employees.



In October 2019, the e-learning of our Code of Ethics was launched to a target of 2,580 employees, available in the 9 Ficosa languages. This training is interactive and uses graphics, text, and sound, making the training easy to understand and very easy to use. Upon completion, employees must pass a 15-question exam (randomly generated from a sample of 45 questions) following corporate training guidelines. The completion rate at the end of Dec'19 was over 75%, with the 2020 goal of reaching 100%.

Furthermore, in-house training is still one of our pillars when developing our people skills and abilities.

Employee communication and satisfaction

Ficosa strives to foster strong and effective communication with its employees to make sure they understand where the organization is heading and are up-to-date with key information about the company. To do this, the company has developed different channels to communicate with its employees, such as intranet, suggestion box, employee newsletter, round table meetings with plant managers, one-on-one interviews, town hall meetings, etc.

At a local level, some sites, such as Cookeville (USA), Shelbyville (USA), Dabrowa Gornicza (Poland), Dieuze (France), Taicang (China), Salinas and Escobedo (Mexico), Porto (Portugal), Bursa and Gemlik (Turkey), Morcone (Italy) have introduced an employee survey in the past four years. The results are presented to the top management, including an action plan. In 2018, the Viladecavalls site has implemented a new employee satisfaction survey and we expect to deploy the same one in all sites worldwide in 2019-2020. The sites that already carried it out in 2019 are: Jandira (Brazil), Wolfenbüttel (Germany), Morcone (Italy) and Soria (Spain). The result will be not only a specific action plan adapted to each site, but also a global analysis to deploy certain corporate actions to be implemented worldwide if needed.

Furthermore, all our company sites promote and facilitate structured labour relations through the local employee representatives bodies and/or trade unions with periodical meetings to discuss and follow-up different labour topics.

International assignments

One of our objectives as a company consists of promoting the development of our people through the creation of a dynamic and attractive environment with opportunities for lateral, vertical, functional and geographical movements. In this sense, international assignments are a key part of people development at Ficosa. Employees benefit by gaining international experience, growing personally and developing professionally; Ficosa also benefits by expanding the distribution of knowledge and skills, increasing technical expertise and promoting a consistent global culture.

Ficosa has defined a specific International Assignments Management procedure to guarantee the application of homogeneous practices within all the sites of the company. In all cases, the company guarantees that employees returning to their home country will have a job position with the same level as that which they had before the international assignment and a salary level in the home country equivalent to the level of the last position held in the destination they are posted.

Workplace health promotion & work-life balance

Ficosa is working to ensure that the entire workforce receives an annual medical examination in all their countries of operation. The majority of sites have a specific healthcare program for employees. The workplace health promotion and work-life balance initiatives depend on each site and are led by the Human Resources department.

The company is defining a specific programme to make sure that all sites implement measures related to workplace health promotion, including specific objectives for stress prevention. In Dieuze (France), the members of the Health & Safety Committee and the HR department have received specific training on psychosocial risks. Every year, the site conducts a survey to identify and assess psychosocial risks. The results are presented to the top management and are followed by an action plan. In Morcone (Italy), the company has conducted a specific study to identify improvements in its company's workplace ergonomics scheme.

Employee absences have a large impact on revenue and productivity. Knowing the driving factors behind employee absenteeism and performing employee tracking is key for Ficosa in order to prevent absenteeism. All Ficosa sites monitor the factors using an integrated system to follow-up the absences by corporate managers.

The main actions for its prevention are focused on improving employee habits through wellness programmes to promote healthier lifestyles. The local health and safety committees periodically evaluate absenteeism records to implement countermeasures.

Furthermore, although Ficosa has not developed an in-house policy setting out the right of employees to disconnect from work, at a local level, many initiatives have been launched in an aim to respect rest time for employees and their families.

Main local "Commitment to our people" actions:

- Official measures to promote work-life balance
- Telecommuting (remote work) policy for R&D collective
- Full acceptation for part-time working requests for parents with children under 12 years old and shift choice
- Time flexibility for employees and subcontractors
- Bus shuttle to connect with public transport
- Flexible payment options
- Medical and nursing service in the main centres
- Physiotherapy service for employees
- Same holiday periods for couples working in Ficosa

- Welfare campaigns (2 weeks of health: vaccinations, health talks, visits by optometrists and dentists, etc.)
- Wellbeing total programme (program offered to our employees through psychologists specialized in emotional intelligence, stress management, etc.)

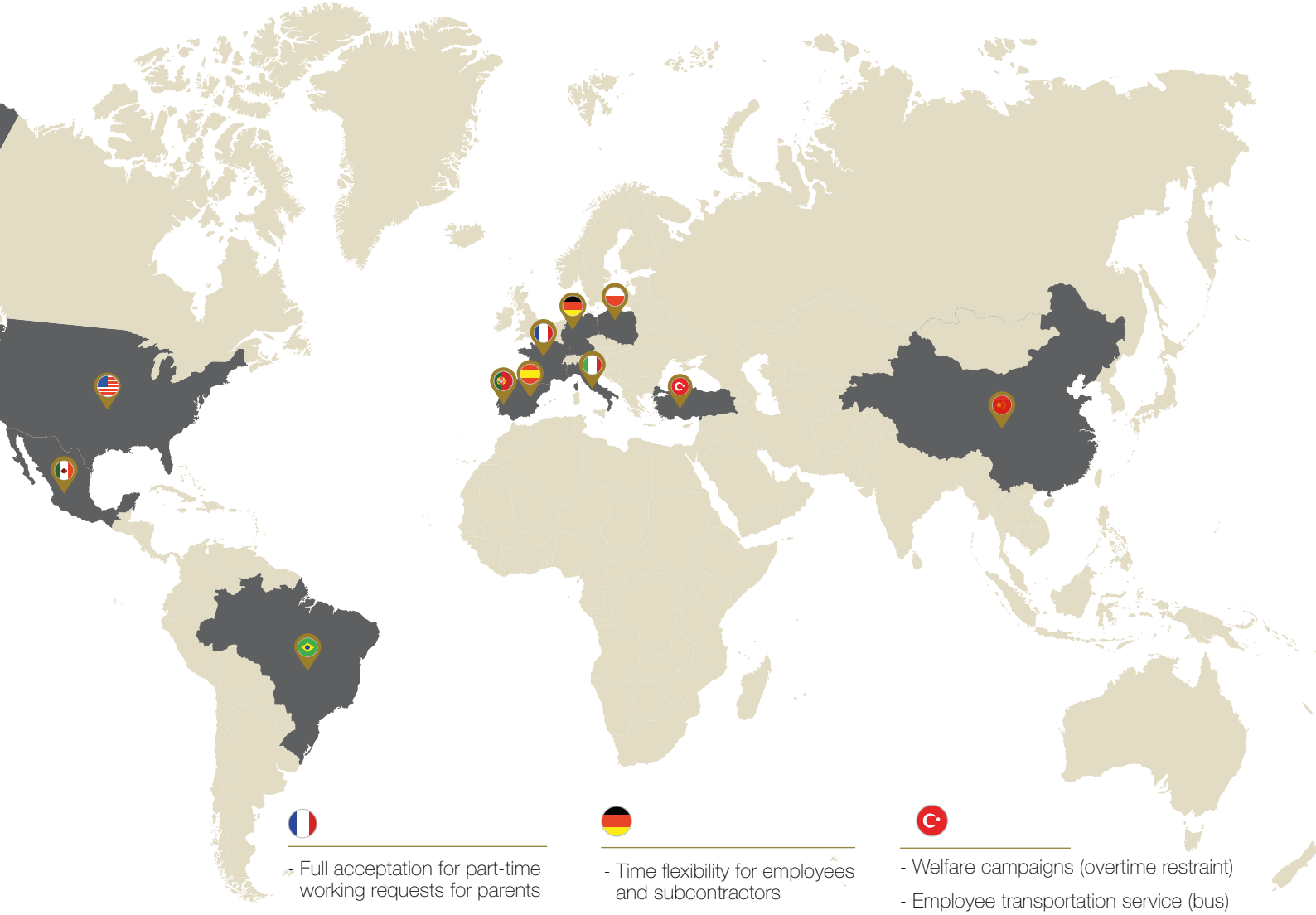
- Employee health program with wellbeing campaigns (health surveys to promote a healthy lifestyle, eating habits and sports practices)

- Psychology service for all employees
- Welfare campaigns (healthy lifestyle promotion)
- Sport promotion

- Time flexibility for employees

- Welfare campaigns (influenza vaccination, first aid kits)
- Sport promotion

- Welfare campaigns (yoga promotion)
- Women's day celebration
- Sport promotion



- Full acceptation for part-time working requests for parents
- Teleworking
- Time flexibility for white collar employees

- Time flexibility for employees and subcontractors
- Sport promotion

- Welfare campaigns (overtime restraint)
- Employee transportation service (bus)

- Wellness and health promotion campaigns

Commitment to health and safety

Policies

At Ficosa, we believe that all injuries, occupational illnesses and incidents can be prevented, and we strive for zero harm by:

- Complying with the laws, regulations and Ficosa operational policies and standards
- Establishing measurable OHS objectives and targets, recognizing and celebrating their achievement
- Identifying, assessing and controlling hazards and impacts, and adopting an approach that will strive to eliminate or reduce the risk to a residual level
- Informing employees, contractors, visitors and the public of these hazards and impacts
- Identifying, implementing, monitoring and reinforcing the safe behaviour we expect in our business to eliminate unsafe acts and practices
- Providing appropriate OHS training to employees and contractors
- Investigating incidents and sharing the experiences learnt to prevent them
- Guarantee participation and consultation among our employees, in aspects related to health and safety.

Operational facilities certified OHSAS 18001 - ISO 45001* (%)

92%

(*) .- OHSAS 18001: 2007 certification in the process of migration to ISO 45001: 2018 certification

We adopted a common approach across the company to manage health & safety. In addition to strict compliance with legal regulations, we implement our own Occupational Health, Safety and Environment (OHSE) policy and stringent OHS procedures that include hazard identification and risk assessment, employee health control, risk control planning, chemical products management, PPE management for employees as well as contractors, etc.

Annually we review all the Policies and procedures including the improvement options identified during the internal and external audit processes, new requirements from our clients, as well as the best practices identified within the group. In this way, we guarantee continuous improvement in the performance of all our activities.

In 2019, 92% of our operational facilities were certified in accordance with OHSAS 18001:2007 or ISO 45001:2018 (only the site of Morocco), the international standards for Occupational Health and Safety (OHS). In 2019, the manufacturing plants of Chongqing (China) and Shenyang (China) were not OHSAS 18001 certified. Nevertheless, all operational facilities have conducted an employee health & safety risk assessment and carry out internal OHS audits on a regular basis to guarantee the highest safety standards in all our operations.

Since 2016, the corporate quality audit "3Q3" questionnaire has included OHS issues regarding safe behaviour and equipment safety.

Furthermore, the corporate OHS department is leading the 18001:2007 and ISO 45001:2018 internal audits in Europe. These audits are carried out in all production sites and constitute the tool to ensure compliance with homogeneous standards in the field of safety, health and the environment. For this, an internal audit checklist with more than 500 questions has been implemented, which provides an overall rating of the status of the OHSAS 18001: 2007 and ISO 45001: 2018 implementation system for each site. The goal in 2020 is to improve the checklist:

- Including criteria related to working conditions that measure the level of implementation of operational control requirements, through the creation of a specific checklist.
- Simplifying the existing verification of documentary aspects compliance.
- Establishing a new scoring system by weighing the two previous points.

During 2019, 2 centres (Viladecavalls and Maia) were able to join the initiative to carry out internal audits at other plants in the group (Gemlik and Dieuze respectively). This experience enriches the technical knowledge of the participating OHS teams as well as the exchange of lessons learned between plants.

In 2020, the company has planned to migrate the certifications of all its plants to the ISO 45001: 2018 standard.

Governance

The corporate OHSE team is responsible for developing any new OHS standards and procedures. Furthermore, the department is responsible for establishing a global system to collect the main OHS data from all countries, and ensuring that each subsidiary complies with the internal standards and procedures. Each plant has specialists in charge of implementing the company's health & safety standards and procedures.

Plant managers are held accountable for the OHS performance of each plant, and all employees are expected to take personal responsibility for their actions, and to get involved in improvement initiatives and developing and setting standards. Creating the right safety culture at our sites is important. It takes strong leadership and an active commitment to safe operating from our workforce.

In 2019, the company held a global forum on OHSE in Viladecavalls that brought together all the OHSE managers from each Ficosa manufacturing plant to share experiences and explore common issues focusing principally on the environmental, health and safety dimension. The forum recognized the efforts in OHSE management made by overseas Group companies and was a platform to share best practices in health and safety management. In addition, a dynamics based on the concept of "escape room" applied to safety and health was organized, in which the participants experienced the importance of conducting a detailed incident investigation through "learning by playing" through a game that challenged the resolution of some unknowns using a story and different characters.

All the Ficosa manufacturing plants have local health and safety committees or employee representatives aimed at promoting safety activities and sharing with management the responsibilities for implementing and monitoring Ficosa's safety programme.

Main Risks and Challenges

The main incidents that our employees may face are related with ergonomics, cuts and entrapments occurring mainly during the injection and assembly process.

Key Results

	2017	2018	2019	Target 2019	Target 2020
Group - ORIR	1.17	1.07	1.05	1.10	1.00
ORIR - South Europe	1.87	1.64	1.47	1.56	1.40
ORIR - North Europe	1.02	0.89	0.98	0.97	1.33
ORIR - Asia	0.12	0.44	0.44	0.48	0.50
ORIR - NAFTA	0.72	0.76	0.86	0.82	0.70
ORIR - South America	2.15	0.86	0.49	1.20	0.50

The accident indicator used by Ficosa at the corporate level is ORIR (OSHA Recordable Incidents Rate) and each production centre has its own annual objective, in addition to establishing objectives by country, region and group level. ORIR is a widely used measure in the US industry to track on-the-job injuries. The ORIR in the tables represents the number of Ficosa employee injuries per 200,000 hours worked. The lower the number, the closer we are to the objective of our Policy.

Each Plant Manager is responsible for successfully achieving the annual goals. Our corporate ORIR has been reduced year after year. Although this is encouraging, we continue to focus our efforts on safety to reduce incidents, mostly due to ergonomic issues, possible bumps, cuts and burns in the injection or assembly process. Every month, we analyse the ORIR of each site to track not only what types of injuries tend to be recurring, but also in which production process they occur. This monitoring helped us to target our OHS training and action plans. In 2020, the challenging goal will be to maintain a corporate ORIR below 1.00.

	2018	2019	Variance from previous year
Group - Injury severity rate[1]	0.14	0.11	-21.4%
Group – Injury frequency rate[2]	5.33	5.26	-1.3%
Number of fatalities	0	0	-
OHSA training (hours)	29,901	18,677	-37.5%
Nº OHSA improvement actions	2,737	2,258	-17.5%

[1] No. of days lost due to injuries*1,000/total number of hours worked. [2] Incidence of accidents with more than one day of sick leave for every 1,000,000 hours worked

	2018		2019	
	Men	Women	Men	Women
Group - Lost time severity rate[1]	0.17	0.10	0.11	0.10
Group - Injury frequency rate[2]	6.63	3.67	5.90	4.48
Number of accidentes[1]	62	27	49	31
Number of professional illness	1	14	1	14

[1] Not including accidents in itinere.

The company is investing in training to make employees more aware of the safety and health risks associated with operations. In the last year, the OHSE corporate department has provided training to the local OHSE teams on the "Analysis of the five whys", "Tools to improve training in Health and Safety" and "Preventive Culture in Ficosa" with the objective to give local teams with innovative tools and / or techniques that facilitate proper performance in health and safety. In addition, each production centre launches an annual OHS awareness campaign aimed at promoting safety in the workplace. During 2020, corporate training materials based on the e-learning methodology will be developed, mainly focused on the equipments and facilities handing over procedure.

In 2020, the launch of the Ficosa CARE program is planned. It is a five-year plan that aims to consolidate the company's safety culture. The plan pivots in four aspects:

- Commitment: of the entire command line with safety and health. Leading by example, participation and communication is key to achieve excellence in safety.
- Attitude: improving the attitude of all our workers towards aspects related to safety is the basis for achieving safe behaviour.
- Recognition: work well done and efforts to contribute to company safety must be recognized. With the recognition, we are able to motivate employees and guarantee continuous improvement towards safety excellence.
- Empowerment: the ultimate goal is to ensure that our employees are able to identify and self-correct unsafe behaviours or conducts.

Local initiatives to strengthen the commitment towards health and safety

Interest in people is one of the values of our company and guaranteeing their safety and health is our priority. All our plants work to strengthen a culture of safety in all our activities.

World Day for Health and Safety at Work

On the occasion of the celebration of World Day for Health and Safety at Work, on April 28th, Ficosa organized awareness-raising activities in most of its work centers in 12 different countries. Some of the most relevant activities are summarized as follows:

- France: a mailbox for health and safety suggestions was set up where workers could deliver their proposals. These suggestions were then discussed during a workshop session in which different managers, workers, as well as those local safety responsible participated.
- Turkey: The plant organized a contest to choose the best safety slogan among all workers. The winner of the selected slogan received a small prize.
- Poland: An awareness session was held for all workers whose main topic was unsafe behavior and how to avoid it.
- Spain (Viladecavalls): this site organized a competition using the Kahoot tool. Workers competed to answer as many questions correctly and in the shortest possible time. All questions were related to workplace safety procedures and rules. In this way, the basic knowledge of worker safety was reinforced through gaming. The winner received a detail in recognition.

All these actions promoted the participation of workers and their involvement in the different fields of occupational safety and well-being at work. With activities such as Safety Day we contribute to SDG 3, Promotion of the health and well-being of our team.

Germany - OHS One Pager

A One pager document is “a summary of the executive summary” in this case of the lessons learned in health and safety in the last month. You can only use one page and look for employees’ attention to highlight a specific message, arousing their interest.

The Wilke plant (Germany) has implemented monthly OHS One Pager to share with the center employees the most relevant OHS information.

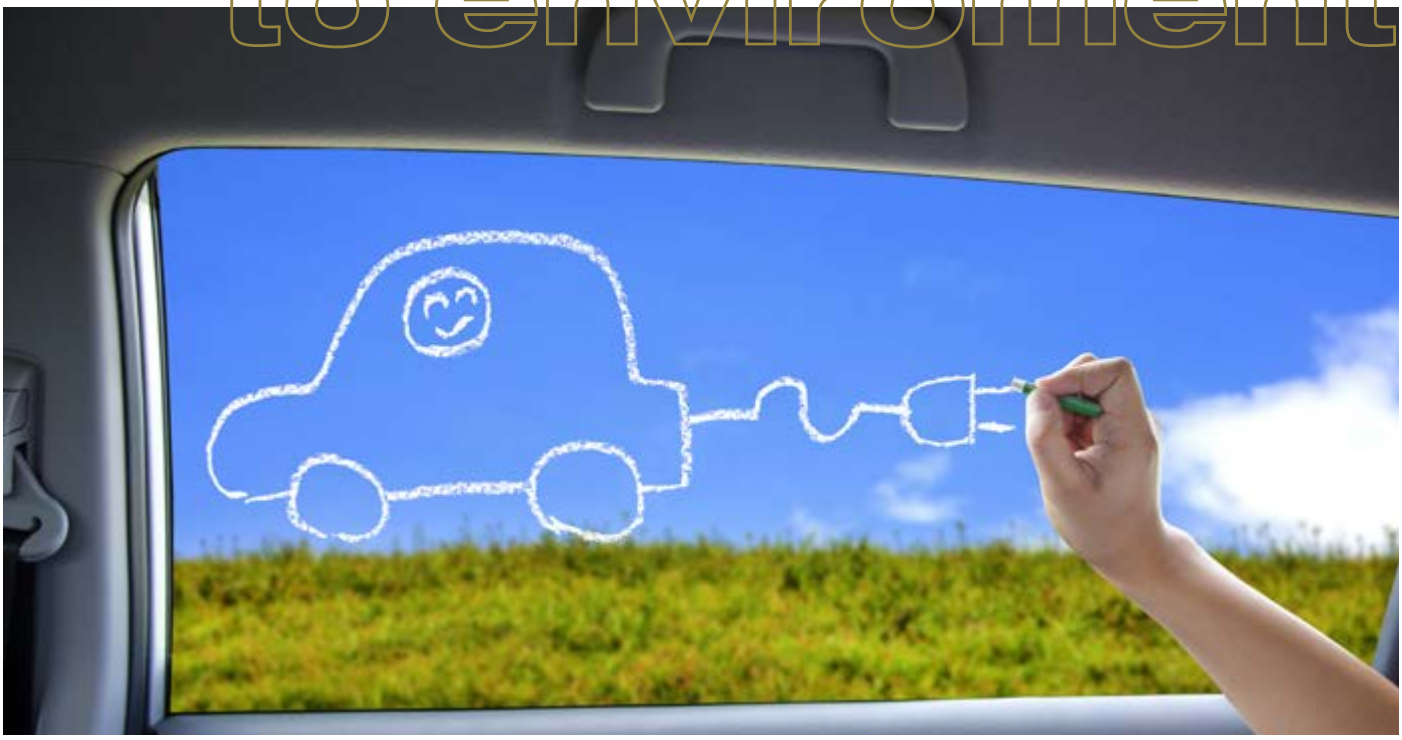
Poland - OHS Visual Information System

The Dąbrowa Górnicza (Poland) plant has created an electronic information system on security risks, emergency situations and ergonomic risks to replace traditional paper labels that are not easy to manage or fall or could become lost. The new system is using a software that automatically informs the safety department about problems or incidents (by email). The system is based on visual information and allows a very easy identification of the jobs where the problems have been identified.

Portugal - OHS awareness campaigns

Two awareness campaigns have been launched, one on the risk of exposure to noise and the other on general safety regulations. Special posters were designed for these two campaigns.

Commitment to enviroment



Policies

The increasing global population and the rapid growth of the world economy have complex and diverse connections with the global environment. They also affect the environment in numerous ways. At Ficosa, we are committed to bringing and offering safer, more connected and efficient systems for the automotive and mobility sectors, and to reducing our environmental impact as we do so. Our commitment to the environment extends to our whole activity cycle from R&D product design to acquiring raw materials and manufacturing, and the use and disposal of our products.

In addition to strict compliance with legal regulations, we implement our own OHSEQ[1] policy, which ensures environment protection, energy efficiency, the mitigation and adaptation to climate change, and a responsible resources and waste management.

(1) Please see Appendix 1

100% Operational facilities certified ISO 14001 (%)

The Group's commitment to environmental protection remains clearly demonstrated in our activities through the implementation of an integrated management system in the different sites where the company operates. Ficosa's environmental management model is based on the international ISO 14001:2015 standard. In 2019, the manufacturing plants in Shenyang (China) and Rabat (Morocco) obtained this certification.

Since 2016, the corporate quality audit "3Q3" questionnaire has included environmental questions regarding waste disposal, waste storage, environmental emergency means, prevention of spills, industrial hygienic protection of equipment and machines, etc. In 2017, the corporate OHSE department implemented a new methodology for all plants in order to identify the main environmental risks and opportunities related to Ficosa's environmental aspects, compliance with obligations and other issues. In 2019, the corporate environmental department reinforced the OHSE internal audit governance and procedure by making sure that all operational facilities are following the same standard for ISO 14001, OHSAS 18001 and ISO 45001:2018. The corporate department leads and performs the ISO 14001 internal audits in Europe. Accordingly, an internal audit checklist has been introduced to perform the internal environmental audits. The checklist has more than 500 scored questions (245 related to Environment) and gives a global scoring of the ISO 14001 implementation system status for each site. The goal in 2020 is to improve the checklist:

- Including criteria related to working conditions that measure the level of implementation of operational control requirements, through the creation of a specific checklist.
- Simplifying the existing verification of compliance with documentary aspects.
- Establishing a new scoring system by weighing the two above points.

During 2019, 2 centres (Viladecavalls and Maia) were able to join the initiative to carry out internal audits at other plants in the group (Gemlik and Dieuze respectively). This experience enriches the technical knowledge of the participating environmental teams, as well as the exchange of lessons learned between plants.

Ficosa applies the precautionary approach introduced by the United Nations in Principle 15 of 'The Rio Declaration on Environment and Development' in order to prevent environmental degradation. Applying the Precautionary Principle help us to reduce or avoid negative impacts on the environment. In order to avoid environmental damage that could be caused by the acquisition of new products and / or processes, and in order to determine effective actions to counter any damage, Ficosa has established different internal procedures in relation to the purchase of chemical products, purchase of productive and non-productive equipment, and the purchase of new industrial facilities. All the company investments include the corporate OHSE department verification and approval.

These procedures are aimed at evaluating, in advance, any environmental impacts that may occur due to the purchases mentioned above in order to be able to authorize or reject acquisitions. In the case of authorization, a series of preventive measures are determined, implemented and monitored, ensuring a final effectiveness check.

Governance

The corporate OHSE team is responsible for developing any new environmental standards and procedures. Furthermore, the department is responsible for establishing a global system for collecting the main environmental data from all the countries and ensuring that each subsidiary complies with the internal standards and procedures. Each plant has managers or technicians in charge of implementing the company's environmental instructions and systems.

In January 2019, the company held the second OHSE worldwide meeting organized at the Viladecavalls (Spain) facilities, attended by all the technicians from all company sites. This meeting served to present the strategic lines and objectives for the year as well as providing the opportunity for the plants to present their best practices implemented and share their concerns with the aim of benchmarking and improving. In addition, it had the participation of an external company specialized in energy efficiency projects that made proposals to achieve a reduction in energy consumption in plants.

In compliance with current Spanish legislation, it is reported that the costs incurred in the acquisition of systems, equipment and facilities whose purpose is the elimination, limitation or control of the possible impacts that the normal development of the company's activity could cause on the environment, these amounts are considered investments in fixed assets. In 2019, investments amounting up to 0.5 million euros have been made. In the previous year, the Group made investments amounting to 0.9 million euros.

The rest of the expenses related to the environment, other than those incurred for the acquisition of fixed assets, have been recorded in the consolidated income statement. In 2019, expenses of 1,630 thousand euros were incurred. In the previous year, expenses amounted 1,622 thousand euros for this concept.

Main Risks and Main Challenges

At Ficosa, our activities are carried out paying special attention to protect the environment and to ensure the efficient use of natural resources. Each manufacturing plant evaluates and maps its environmental impacts every year. The painting and injection processes account for the largest share of environmental impact during the manufacture of Ficosa products in terms of air pollution, energy consumption and waste generation. The paint shop is a manufacturing area that raises concern because of its Volatile Organic Compounds (VOC) emissions. Furthermore, the injection process is a large energy consumer and contributes actively to carbon dioxide emissions (CO2).

In this context, the technology used in the paint application and injection machines must meet high quality standards, remain cost efficient, and also be environmentally responsible. In 2019, our main activities were centred on reducing our CO2 emissions in our value chain, particularly by improving our energy efficiency activities and waste management. At the same time, we are working on reducing our volatile organic compound emissions.

Since 2016, all manufacturing plants have implemented individual reduction targets to reduce their greenhouse gas (GHG) emissions, electric and water consumption and waste generation, and specific action plans to achieve them. These targets follow the corporate guidelines and from 2018 (base year), under the strategic line "Climate Change Mitigation", a midterm goal have been set: to Reduce Ficosa CFP and Energy consumption (target year 2023) based on the historical annual reduction goal trend.

Furthermore, each plant establishes its own objectives based on the significant environmental aspects detected in the environmental impact assessment.

Key results

Reducing local pollution

A current challenge is to reduce volatile organic compounds (VOCs), which readily evaporate and produce gas in the atmosphere. VOCs are carbon-based materials that can be toxic and create adverse health and environmental impacts. The company has implemented different systems and control standards in its manufacturing plants with painting process to monitor and reduce the amount of air pollutants emitted during their operation.

In Taicang (China), Cookeville (USA), Soria (Spain) and Dabrowa Gornicza (Poland), the company installed a catalytic burner (RTO – Regenerative Thermal Oxidizer) to reduce the volatile organic compounds (VOC) present in the paint shops. The RTO destroys VOC emissions by creating a chemical reaction within the air pollutant and oxygen at elevated temperatures. This reaction destroys VOC emissions in the airstream by converting them to gas, water and heat. The heat is recycled and used in processes carried out at the

plant. This enables the plant to reduce its consumption of natural gas needed for heating. Thanks to the RTOs, VOC emissions have dropped by 92-95%.

From 2018, the CFP analysis has included the air conditioning and emissions from climatic chamber refrigerants in order to monitor and prevent any leakage. Ficosa advocates the use of refrigerant gases with zero ozone depletion potential and fully supports the use of refrigerants with lower Global Warming Potential (GWP). These refrigerants are mandatory in all related investments.

Furthermore, the company is working on several initiatives to optimize the transportation and distribution of purchased products or products sold by the company:

01 Consolidation of shipping containers: Shipments to the USA from Barcelona are consolidated in the port and no shipment is made until the container is full. Ficosa has a similar initiative in Mexico and China. In China containers also have to be full before sending them to the manufacturing plants of Viladecavalls and Soria (Spain).

02 The manufacturing plants of Dabrowa Gornicza (Poland) and Rabat (Morocco), import their moulds from Asian suppliers through containers by train.

03 Most Ficosa manufacturing plants have implemented a milk run delivery method. Instead of each supplier sending a vehicle every week to meet Ficosa's needs, one vehicle visits each supplier on a weekly basis and picks up the purchased products for Ficosa. This way, each vehicle load delivers Ficosa's full weekly requirements from each supplier, minimizing the kilometres and the associated logistics.

04 The Group's inter-company sales seek to optimize routes between production plants, delivering at an agreed point where the other Ficosa plant has a regular route.

05 From 2018, the freight transportation emissions have been monitored to be included in the scope 3 of CFP.

Addressing Climate Change

Since 2016, we have defined guidelines to reduce our greenhouse gas (GHG) emissions annually at site levels. Each site has to reduce its GHG emission intensity by 3%. Each plant manager is responsible for successfully achieving this goal. In 2018, the company worked to improve the gathering and consolidation of carbon footprint data, by implementing a more robust internal tool to ensure that each operational facility reports the data in accordance with the Ficosa standards and criteria. The tool has enabled the company to increase its reporting on GHG emissions throughout its value chain and products.

Additionally, Ficosa has worked on reducing GHG emissions based on the SBTi methodology. The SBTi (Science Based Targets initiative) has developed a publicly available Excel tool to calculate science-based corporate scope 1 and 2 emission targets. This tool uses the Sectoral De-carbonization Approach (SDA). The SDA tool calculates emission reduction targets based on the relative contribution of the company to the total sector activity and their carbon intensity in relation to the sector's intensity in the base year. This is in line with IPCC (Intergovernmental Panel on Climate Change) recommendations and provides companies a benchmark from which to develop long-term climate targets up to 2050.

Greenhouse gas (GHG) emissions by type of source

Since 2014, we have been conducting an inventory of our GHG emissions, using the Greenhouse Gas Protocol. Since 2018, we completed our GHG inventory with the relevant categories for our company (through size, influence and reporting availability assessment).

(In t of CO_2e)	2018	2019	Variance from previous year
Scope 1, direct GHG emissions	12,033	12,070	0.3%
From refrigerant and other	1,019	1,662	63.1%
From fossil fuels	11,005	10,365	-5.8%
From owned vehicles	10	43	330.0%
Scope 2, indirect GHG emissions			
Location-based emissions from electricity consumption[2]	61,081	53,769	-12.0%
Market-based emissions from electricity consumption[2]	51,168	44,468	-13.1%
Scope 3, other indirect GHG emissions			
Waste generated in operation[3]	1,117	1,038	-7.1%
Total GHG emissions[1]			
Total market-based GHG emissions	63,201	56,538	-10.5%
Total location-based GHG emissions	73,114	65,839	-10.0%
Total location-based GHG emissions per sales (tCO_2e/MEUR)	61.8	58	-6.1%

[1] Total emissions are based on actual data. The most appropriate emission factors have been used for each type of activity data, from internationally recognized sources (GHG protocol, IPPC AR5) and regional or, if more relevant, from country-specific sources (MAGRAMA, US EPA, DEFRA).

[2] For the location-base emissions of electricity consumption, the emission factors of the International Energy Agency 2017 were used for the countries where Ficosa operates. For the emissions of electricity consumption market-based, the emission factors of the International Energy Agency 2017 were used, with the exception of the data reported for the plants in Spain, since they have guarantees of origin (GDO), which prove that all the energy used comes from renewable sources.

[3] This category includes emission from disposal treatment of the following solid waste that goes to the landfill: Asbestos, wood, glass, clothing, mixed municipal waste, organic waste, waste electrical / electronic equipment, batteries, metals, plastics and paper. This category also includes the emissions from the disposal of wastewater.

Greenhouse gas (GHG) emissions by region

(In t of CO_2e)	South Europe	North Europe	Nafta	Asia	South America
Total location-based GHG emissions (Scope 1&2)	21,584.8	16,628.2	18,163.1	9,095.7	367.0
Total market-based GHG emissions (Scope 1&2)	12,283.6	16,628.2	18,163.1	9,095.7	367.0
Scope 1, direct GHG emissions	3,933.8	2,561.5	4,568.9	878.3	127.1
From refrigerant and other	337.9	251.8	590.1	367.2	114.9
From fossil fuels	3,583.7	2,307.7	3,950.9	510.5	12.2
From owned vehicles	12.2	2.0	27.9	0.6	0.0
Scope 2, indirect GHG emissions					
Location-based emissions from electricity consumption	17,651.0	14,066.7	13,594.2	8,217.4	239.9
Market-based emissions from electricity consumption	8,349.8	14,066.7	13,594.2	8,217.4	239.9
Scope 3, other indirect GHG emissions					
From waste management	492.4	135.8	331.7	28.7	49.4

Each site has to reduce its location-based GHG emission per sales by 3% annually.

Reporting CDP

CDP Global is an international non-profit organization made up of CDP Worldwide Group and CDP North America, Inc. CDP has regional offices and local partners in more than 50 countries. Currently, companies, cities, states, and regions in more than 90 countries report through CDP annually.

CDP Global's vision and mission is to aspire to see a prosperous economy that works for people and the planet in the long term. CDP Global focuses investors, companies and cities in taking steps to build a truly sustainable economy by measuring and understanding its environmental impact.

The CDP valuation report enables companies to understand their scoreboard and indicate which categories require attention to reach higher levels. This enables companies to move towards environmental management through benchmarking and comparison with their peers, in order to continually improve their climate governance.

Ficosa subscribes to this initiative. During the 2019 evaluation, Ficosa received a B, which is in the Management band. This result is higher than the regional average for Europe, which is C, and the same as the average for the Powered Machinery sector, which is B.

Energy efficiency and renewable energy

Reducing greenhouse gas (GHG) emissions in Ficosa is mainly about reducing energy consumption. In this regard, the company is committed to mitigating its impact on climate change by defining a solid energy strategy based on energy efficiency, the increased use of renewable energy, and process optimization.

In 2017, the OHSE policy was updated to include each employee's responsibility for the company's energy saving strategy. To do this, the different sites organize regular employee meetings and energy awareness campaigns. In its manufacturing process, Ficosa engages in a variety of energy saving activities to reach the lowest energy consumption by introducing highly efficient equipment, improving manufacturing techniques and adopting energy saving lighting or sensors with presence detectors.

	2017	2018	2019	Variance from previous year
Electricity consumption (MWh)	129,503	133,491	127,299	-4.6%
Electricity from renewables in Spain (MWh)	33,851	33,997	32,296	-5.0%
Electricity consumption in kWh per sales (kWh/MEUR)	109.0	112.7	112.2	-0.4% [1]

[1] Total electricity consumption in absolute value has been reduced compared to last year, this reduction could be transferred to the sales indicator, but the reduction objective could not be achieved due to the inertias generated by a sudden drop in Sales mainly in China, the world's leading automobile market. The trade war between the USA and China, the new emission regulations, the possibility that another economic crisis will reoccur in the short term is also affecting, generating uncertainty among consumers and the withdrawal of subsidies and aids for the purchase of hybrid, electric and / or Hydrogen in this Asian country was a determining factor.

The increased use of renewable energy is critical to the transition to a low-carbon economy. The company is striving to reduce emissions by using renewable energy. From March 2016, 100% of the electricity in Spain sites (Viladecavalls, Soria and Sant Guim) has come from renewable sources or high-efficiency cogeneration. Furthermore, the manufacturing plant of Wolfenbüttel (Germany) and the plant of Dieuze (France) buy energy that comes from renewable sources. These initiatives make it possible to place electricity consumption from renewable sources across the Group at 31%.

At the end of 2017, the manufacturing plant in Taicang (China) set up 6,160 solar panels on its roof with an expected annual generation of 275Wh per panel. This action has helped the company to actively contribute to the mitigation of climate change in addition to reducing grid electricity consumption by 1.58 GWh during 2019.

Each plant had to reduce its energy intensity by 2.5% in 2019. The market situation, with sales drops, made it difficult for our plants to achieve their annual reduction targets. The overall assessment is positive given that a reduction in energy intensity was achieved.

The new reduction target for 2020 has been set individually for each plant, based on the trend observed in energy consumption in the last two years and the actions implemented in previous years. The reduction targets are in a range of -0.5% to -2.5%.

During 2020, a "White Paper" will be published with organizational measures aimed at improving energy efficiency in plants and periodic monitoring of the results obtained will be carried out.

Most of Ficosa's production processes run on electricity, in addition, various plants use natural gas for general uses not associated with production, with a consumption of 36,684.85 MWh in 2019.

ISO 50001 in Ficosa Brazil

Ficosa do Brasil is the first plant in the group to obtain the ISO 50001 – Energy Management certification. Using energy efficiently helps organizations save money as well as helping to preserve resources and tackle climate change. ISO 50001 supports Ficosa do Brasil to use energy more efficiently through the development of an energy management system.

By implementing the ISO 50001 requirements, the Brazilian plant mapped all their processes and obtained a diagnosis of their energy consumption. The Energy Management System (EMS) was able to recognise the global energy consumption and the main energy sources contributing to CO2 emissions.

Based on this mapping, the management team identified

significant energy uses and opportunities to improve the energy performance of the processes involved. After finalizing the energy consumption diagnosis, Ficosa do Brasil defined the objectives and targets to reduce energy consumption and improve its carbon footprint, gathering elements to identify opportunities and improvement actions to add into their integrated management system and strategic planning. Such actions contributed to their energy performance improvement.

Following these measures, the Brazilian plant expects to be able to calculate and report their work in terms of energy efficiency and implement specific actions to reduce energy consumption.

As a result, the main projects in 2018/2019 were:

- Utilities: Air compressor installation and high performance dehumidifiers;
- Lighting: Replacement of fluorescent lamps and mercury vapour with LEDs, providing up to 80% energy savings; Installation of presence detectors in the pedestrian corridors and in the car park.
- Air conditioning: Replacement of air conditioners by inverter system, and implementation of operational control to establish operating temperature limits;
- Plastic Injection: Replacement of four plastic injection machines with high-performance machines with embedded frequency inverters; new replacements under study.
- Awareness: Awareness campaigns and communication programs by Ficosa do Brasil for its employees.
- Installation of temperature thermostats in the climate systems to improve operational control.

Water management

Most Ficosa manufacturing plants do not use water for industrial processes. Nevertheless, all the plants have to reduce their water consumption intensity (m3/net sales) by 3%. Around 30% of the manufacturing plants use water in cooling towers or for the painting process. In most cases, the manufacturing plants are using closed cooling systems. The company is committed to employing new technology to reduce its water consumption and increase the amount of recycled water in the painting process. In Poland, the manufacturing plant implemented a new leakage monitoring water system that enables the plant to measure the water consumption in each section and identify any leak that may occur at the site. In Bursa (Turkey), the manufacturing plant decreased its water consumption in the paint shop by eliminating the water curtain and using a new dry filter painting system

The Ficosa plants in Soria (Spain), Taicang (China), Bursa (Turkey) and Salinas (Mexico) with painting installations are distilling used paint in order to obtain pure solvent, which can be used as a cleaning agent. In Viladecavalls (Spain), 38% of the water is reused. In Dieuze (France), the manufacturing plant implemented a new oil collector to reduce the treatment of wastewater coming from the compressor.

World Water Day is celebrated annually on March 22 as a means of drawing attention to the importance of fresh water and advocating for sustainable management of water resources. In this direction, the Turkish Gemlik plant carried out an awareness campaign that same day of 2019, stressing the importance of making good use of water.

	2017	2018	2019	Variance from previous year
Water consumption in m^3	237,838	245,632	229,217	-6.7%
Water consumption in m^3 per sales (m^3/MEUR)	200.0	207.5	202.0	-2.7%

These actions implemented in recent years, together with awareness campaigns on the good use of water, have allowed us to achieve a significant improvement, close to -3%, of the ratio of intensity of water consumption in 2019

Waste management

During 2018, the waste reporting systems have been improved to comply with the GHG Protocol. The plants report the tons of waste that go to landfill (waste that is not recycled or reused) and the total waste generated at the different sites, in this way, the waste recovery ratio is monitored, consisting of identifying the % of waste that does not go to the landfill and that receives other types of treatment, including recycling, reuse and energy recovery.

	2018	2019	Variance from previous year
Total waste generated in tonnes	11,741	11,031	-6.0%
Total waste generated in tonnes per sales (Tm/MEur)	9.9	9.7	-2.0%
Waste recovery ratio (%)	83.90%	84.50%	0.7%

Ficosa plants have different waste containers in all areas (production and otherwise) in order to collect waste by type and character, facilitating specific future treatment. Ficosa is working in all its operational facilities to increase the recovery of cleaning solvents and other chemicals and to reduce the amounts of these substances emitted from its plants. Furthermore, all the manufacturing plants organized awareness campaigns for workers aimed at reducing packaging waste and sorting at source. Ficosa considers that the involvement of its employees is essential to reducing waste generation.

Waste recovery ratio (%) by sites

	2018	2019	Variance from previous year
Morcone (Italy)	100%	100%	0.0%
Dabrowa (Poland)	100%	99%	-1.0%
Bursa (Turkey)	97%	96%	-1.0%
Gemlik (Turkey)	95%	95%	0.0%
Maia (Portugal)	97%	95%	-2.1%
Viladecavalls (Spain)	93%	94%	1.1%
Wofenbüttel (Germany)	90%	93%	3.3%
Taicang (China)	77%	90%	16.9%
Cookeville (USA)	81%	83%	2.5%
Rabat (Morocco)	0%	76%	-
Escobedo & Salinas (México)	76%	76%	0.0%
Sao Paulo (Brazil)	61%	76%	24.6%
Dieuze (France)	74%	74%	0.0%
Sant Guim (Spain)	79%	71%	-10.1%
Soria (Spain)	61%	63%	3.3%
Shelbyville (USA)	45%	51%	13.3%

In order to increase the percentage of Ficosa recyclability, a 2019 individual plant recyclability objective has been established based on the table below. The target depends on the previous year result.

2018 Result	Target 2019 (% of improvement)
0 - 50%	9.0%
50-90%	5.0%
90-99%	1.0%
>99%	0.01%

Local initiatives to protect the environment

The Group's subsidiaries have managed various initiatives in 2019 to raise awareness and promote the commitment of their employees towards the environment. The main initiatives are:

Turkey and Poland - World Environment Day

These two countries took advantage of the World Environment Day celebration (June 5th), promoted by the United Nations, to carry out a cleaning activity around the plant with volunteer employees. At the end of the activity, all participants received a cloth bag to avoid single-use plastic bags.

Viladecavalls - Let's Clean Up Europe!

Every year, millions of tons of garbage are dropped in the ocean, beaches, forests, nature in general. The main causes for this to occur are, on one hand, the unsustainable patterns of consumption and production present in society today, low-quality waste management strategies and the lack of awareness among the population. To reduce the amount of garbage in nature and give visibility to this issue, the EWWR annually coordinates a day of cleaning public spaces at European level.

Employees of the Viladecavalls centre (Spain) joined this annual initiative on May 11th, participating in a couple of modalities such as:

- Volunteers cleaning a section of our coast
- Cleaning volunteers + 5 km from the ULTRA CLEAN MARATHON

Dieuze - Installation of LED panels

The Dieuze plant in France replaced the luminaires in the Technical Centre area and the Blow production area with LED panels, improving the quality of employees' vision and consuming five times less KWh.

Viladecavalls - OH MY GOT! Campaign

Our headquarters, located in Viladecavalls (Spain), had almost 1,600 workers. The annual consumption of this workplace of plastic cups used in water sources and mainly in coffee machines, was more than 700,000 units in 2018.

Aware of the great problem posed by single-use plastic, Ficosa has implemented the following actions at its headquarters:

- All workers at the company's headquarters, including production personnel, have received a reusable cup made of bamboo fibre; a biodegradable and more environmentally friendly material. The slogan chosen for the glass is: Ficosa, committed to Environment.
- All available plastic cups next to the water fountains have been removed.
- The "no glass" option has been set up in all the coffee machines in the centre.
- A communication campaign on the use of the glass and its benefits has been carried out.

With these measures, we achieve a dual purpose: on the one hand, we eliminate unnecessary plastic consumption and, on the other, we reduce the waste generated by more than 1.7 tons each year, thus helping to reduce the company's carbon footprint. The investment made in the purchase of reusable cups is recovered in just over a year thanks to savings in the purchase of plastic cups and in the management of the waste generated.

This initiative was published in COMparte, the new platform of good practices in sustainability of the Spanish Network of the United Nations Global Compact.

Cookeville - Non Disposable Coffee Cups

Ficosa Cookeville (USA) staff and visitors used polystyrene foam cups for coffee in the offices. The disposal of these used vessels caused an increase in the amount of waste sent to the landfill and in the costs associated with its purchase.

To reduce this impact on the environment, in 2019 office staff have received non-disposable cups of coffee to eliminate this waste.

Jandira - Award for good environmental sustainability practices in industry

In June 2019, Ficosa do Brasil received a recognition award for adopting good environmental sustainability practices among the industries served by CIESP in the municipalities of Barueri, Carapicuiba, Itapevi, Jandira, Osasco, Pirapora do Bom Jesus and Santana de Parnaiba.

CIESP - Industry Centre of the State of São Paulo.

Responsible sourcing

Policies

Ficosa works with two types of suppliers:

- Productive Suppliers: suppliers that are essential to the performance of the company's operations. Ficosa's purchases are oriented towards a specialization in product families, which are divided into three large areas: Electrics and Electronics (Batteries, connectors, semiconductors, PCB, glass mirrors, pumps, etc.), Chemicals (painted parts, chromed parts, blow moulding, etc.) and Metals Commodity (zamak, aluminium parts, tubes, wire rope, etc.).
- Indirect Suppliers: Suppliers that supply products and services of a general nature, not directly related to the business, such as office materials, paper, computer consumables, maintenance, suppliers, travel, training, temporary employment agencies, consulting, legal services, insurance, investment, etc.

Our production processes demand the achievement of optimum quality and service levels, as well as competitive prices when buying the materials used to supply our production line. In this context, the company has developed its own standards and quality processed that regulate the company's purchasing activity.

The Ficosa Purchasing Policy and Procedures and the segregation of duties ensure compliance with J-SOX and with all applicable laws. Additionally, the General Purchasing Conditions establish the relationship between Ficosa and its suppliers. The purchase orders sent to suppliers by any Ficosa company or any of its subsidiaries or affiliates have to be accepted in accordance with these terms and conditions. The Supplier and any products or services supplied by them must comply with all laws and regulations applicable to the destination countries where the product is going to be produced and/or used, or related to the production, labelling, transportation, importation, exportation, approval and certification of products or services. This includes, but is not limited to, those related to the environmental issues directive set out in the ELV, REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), CLP/GHS (Classification, labelling and packaging of substances and mixtures) and the Dodd-Frank-Act relating to Conflict Minerals (gold, tin, tantalum and tungsten sourced from conflictive regions as the Democratic Republic of Congo and adjacent countries); labour laws in general, working hours and employment conditions, workers' rights, employment benefits, subcontractor selection, safety of vehicles and installations, etc.

In addition to all applicable laws and regulations to be observed by the suppliers, it is also their obligation to respect social responsibilities and duties, especially, but not limited to, the requirements based on the Universal Declaration of Human Rights and the International Labour Organization (ILO) conventions for the respect for employees' rights, age and working hour limits, etc.

At the beginning of 2019, the general purchasing conditions were updated to include a business ethics and anti-corruption provision requiring suppliers to act in accordance with the highest standards of integrity and ethical conduct, in compliance with current laws, and to follow all relevant regulations and standards, particularly with regards to local and international anti-corruption law, in addition to Ficosa's Code of Ethics.

Furthermore, the company has developed a Supplier Quality Manual that details the main procedures and systems used for supplier selection, business assignment, component approval, performance follow up and supplier development. The supplier quality manual specifies that all suppliers wishing to be included in the Ficosa Supplier Panel should base their code of conduct on the ten principles of the United Nations (Global Compact) in the areas of human rights, labour, environment and anticorruption. This manual is available on Ficosa's website.

Lastly, the company has developed other standards and procedures in order to improve the communication and simplify processes for better logistics.

Governance

The Corporate Team consists of the Purchasing Director, Commodities and Project Managers, as well as support and consultancy teams such as Quality, Human Resources, Logistics, and Control functions who coordinate all purchasing activities worldwide. Every country has a Local Purchasing team led by a LPD (Local Purchasing Director), who is managed by both the Purchasing and Regional Directors. The LPD coordinates the country's purchasing functions (Commodity Buyers, Purchasing Project Leaders, and STAs).

Main risks and challenges

Our production processes demand optimum quality and service levels, as well as competitive prices, and continuous assurance of the responsible sourcing of our supply chain.

The supplier selection process is key to guaranteeing the quality levels and the sustainability of our supply chain, and is focused on working together with our suppliers to attain the highest standards in business integrity and social and environmental performance.

Ensuring that Ficosa is using conflict-free minerals is also essential to our organization and our customers.

Key results

To become a Ficosa Supplier it is compulsory to have the ISO/TS IATF 16949 certification. All the suppliers must provide Ficosa with written evidence of the most recent certification renewal. Ficosa specially appreciates and promotes IATF 16949, OSHAS 18001 and ISO 14001 certifications from their suppliers.

	2017	2018	2019	Variance from previous year
Suppliers certified ISO 9001 (%)	100%	100%	100%	0%
Suppliers certified ISO/TS 16949 (%)	49%	61%	67%	9.8%

In addition, any new supplier must fulfil a specific company self-assessment and be approved by the Ficosa audit process. The aim here is to examine the supplier's suitability to provide throughout the term established by using specific indicators including financial and quality criteria as well as general corporate aspects.

Ficosa regularly monitors the performance of its suppliers and evaluates them to confirm its performance versus the defined targets. These assessments enable the company to track improvements in its suppliers and determine the potential support they may need from Ficosa. In 2019, the supplier audit (known as 3Q3) was revised with a new specific section on CSR, including questions on compliance with the REACH Authorization regulation, conflict minerals, reporting with the IMDS system, the commitment to compliance and adherence to the principles of the Ficosa's Code of Ethics and to good practices in the field of Occupational Health and Safety and respect for the Environment. This section of the audit ends with the identification of the degree of requirement of these same concepts to the sub-suppliers or value chain. This new section is part of the supplier's final score, a score that implies, depending on the value obtained, corrective action plans, proposals for specific improvements or recognition of the good work carried out by the supplier.

Ficosa has developed an internet platform for suppliers called FPSS (Ficosa Purchasing System Software) that is used for the different purchasing Processes: Supplier Registration, Offers, Assignments, Quality and Service incidents management and Suppliers Development.

The platform includes all the relevant documents from each supplier (REACH declaration, conflict minerals declaration, certifications, etc.). This platform is a quick, preferential, and clear communication channel linked to the Purchasing Department,

allowing Ficosa to manage the purchases of all materials. All the productive suppliers must be registered in the FPSS and the company expects to increase the scope and include the indirect suppliers too.

On the other hand, Ficosa customers (OEMs) encourage and support the use of sustainable, renewable natural resources while reducing waste and increasing reuse and recycling. Accordingly, the raw materials used by Ficosa, follows the customer technical requirements or belongs to their certified material list. To promote reuse, most automotive parts are shipped through returnable packing to our customers. These initiatives also come from Ficosa. As an example, our Morcone plant in Italy implemented a new packaging in 2018 to reduce CO2 emissions by more than 75% compared to the previous system. This initiative strengthens our commitment to sustainability and was launched by us thanks to our involvement in "CONAI" (private non-profit consortium which in Italy is the instrument through which producers and packaging users guarantee the recycling and recovery targets for packaging waste set by law).

Conflict Minerals

In recent years, there has been an increasing international focus on "conflict minerals" emanating from mining operations in the Democratic Republic of the Congo (DRC) and adjoining countries. Armed groups engaged in mining operations in this region are believed to subject workers and indigenous people to serious human rights abuses and are using proceeds from the sale of conflict minerals to finance regional conflicts.

On August 22, 2012, in response to these concerns, the US Securities and Exchange Commission (SEC) adopted a final rule to implement reporting and disclosure requirements related to "conflict minerals". The "conflict minerals" are cassiterite (tin), columbite-tantalite (coltan), gold and wolframite (tungsten), as well as their derivatives and other minerals that the US Secretary of State may designate in the future (Dodd–Frank Section 1502).

Tin, tungsten, tantalum and gold (3TG) are used in some vehicle parts and components made by Ficosa, such as circuit boards or heater terminals. We enforce due diligence to investigate the origin of the conflict minerals in our products. Our goal is to work with DRC conflict-free suppliers. Accordingly, Ficosa implemented an annual supplier's inquiry and collect, from all its suppliers, the Standard Survey (EICC/Gesi template) on conflict minerals. The collected information is internally processed and provides useful information to monitor suppliers and report to clients about the company's use of minerals for each plant.

In the last year 2019, there has been a growing international focus on another mineral called mica. Mainly from Madagascar and India, where a variety of factors contribute to poor working conditions, including the use of child labour.

Mica is used in various applications in the automotive supply chain. In paints and coatings, mica creates a pearly visual effect. Vehicle bumper plastics, mirror housings and insulating materials use mica as filler.

Ficosa launched a process to identify the processes or purchased parts or components that use mica. Natural mica was found only in paints, but it came from reliable sources that had already implemented a number of supervisory mechanisms in previous years (monitoring, audits, inspections, etc.). These providers confirm that they take these matters very seriously. Most of them are members of the "Responsible Mica Initiative" (RMI) that was formed in Paris on January 31, 2017 with the aim of sharing resources to implement responsible supply practices and eradicate child labour, improving the livelihood of communities within the supply chain in India in the next 5 years.

	2017	2018	2019	Variance from previous year
% of suppliers and materials for which conflict mineral information is available	100%	100%	100%	0%

Commitment to society

Visits to the factory

Every year, the manufacturing plants in Dieuze (France), Salinas and Escobedo (Mexico), Dabrowa (Poland), Cookeville (USA), Taicang (China), Gemlik and Bursa (Turkey), Maia (Portugal), Soria and Viladecavalls (Spain) organize factory visits for students, employee family members, and local businesses to explain the main characteristics of the production process. These visits enable the company to attract new members and demonstrate the strength of their manufacturing capabilities.

FICOSA/UPC Course on Automotive Embedded Systems

Ficosa and the Polytechnic University of Catalonia (UPC)

In collaboration with the Universitat Politècnica de Catalunya (UPC), Ficosa has designed the Automotive Embedded Systems course addressed to Master's students in Telecommunications Engineering.

After detecting the need to offer a specialization to all those engineers interested in the development of electronic communications systems for the automotive sector, Ficosa, the UPC and CARNET (academic-industrial consortium to support new mobility) created and launched the first pilot test of this training course at the beginning of 2018. Due to the great success of the first edition, the UPC has decided to include this course again in its new academic programme for 2019 and 2020.

Ficosa, whose specialists will teach part of this course, offers both the possibility of receiving a scholarship to study this course, as well as the opportunity to join the company once the course has finished. In this way, the company strengthens its links with the university and fulfils the objective of training and attracting new talent in electronics, communications and telematics for the automotive industry, a key field for the car and the mobility of the future.

Ficosa social initiatives worldwide

Each decentralized location is responsible for organizing its own charity projects, donations and other social initiatives. The social initiatives depend on the site-specific challenge and are led by the local Human Resources department.

Examples of Ficosa social initiatives in locations where the company operates:

- Volunteering programme with local community organizations (Habitat for Humanity)
- Food and cleaning supplies drive
- Farm and warehouse distribution centre collaboration for disadvantaged citizens
- Soup kitchen for the homeless
- Adopting a family for Christmas
- Walk for kidney disease
- Adopt a road Programme

- Donation of toys for children from low income families
- Collaboration with the Red Cross
- Visits to nursing homes
- Programme “Adopt a tree” to promote reforestation
- Small citizen programme (training programme for elementary students)
- Donation of school benches to local elementary school
- Blood donation campaigns

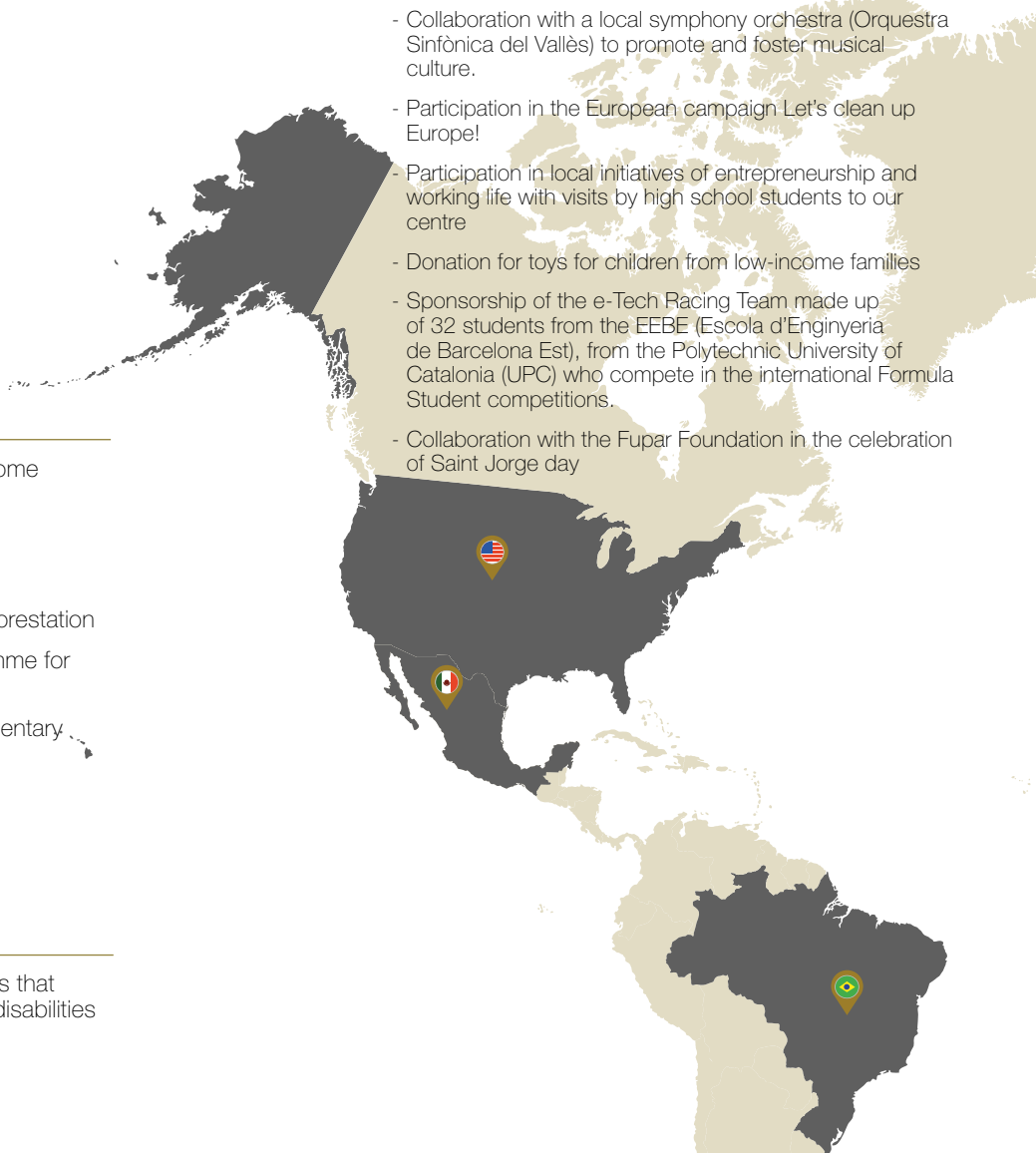
- Participation and collaboration with entities that promote the employment of people with disabilities

Soria:

- Partnership and collaborations with entities who promote employment for disabled people (Asamis, Ilunion), National Association against cancer (AECC)
- Sponsorship of sports activities
- Blood donation campaigns
- Collaboration with correctional institutions for fostering the rehabilitation of prisoners

Viladecavalls:

- Blood donation campaigns
- Partnership and collaborations with entities who promote the employment for disabled people (Friends Specialisterne)
- Collaboration with the Multiple Sclerosis Foundation (Mulla’t and cultural events)
- Financial donations to social entities (Jambakasala and Catalan Association of Fragile X Syndrome) through a profit sharing vending machines agreement
- Collaboration with a local symphony orchestra (Orquestra Sinfònica del Vallès) to promote and foster musical culture.
- Participation in the European campaign Let’s clean up Europe!
- Participation in local initiatives of entrepreneurship and working life with visits by high school students to our centre
- Donation for toys for children from low-income families
- Sponsorship of the e-Tech Racing Team made up of 32 students from the EEBE (Escola d’Enginyeria de Barcelona Est), from the Polytechnic University of Catalonia (UPC) who compete in the international Formula Student competitions.
- Collaboration with the Fupar Foundation in the celebration of Saint Jorge day



- In-kind and financial donations to several institutions, such as the Holy House of Mercy of Maia (delivery of basic food for families with few resources)

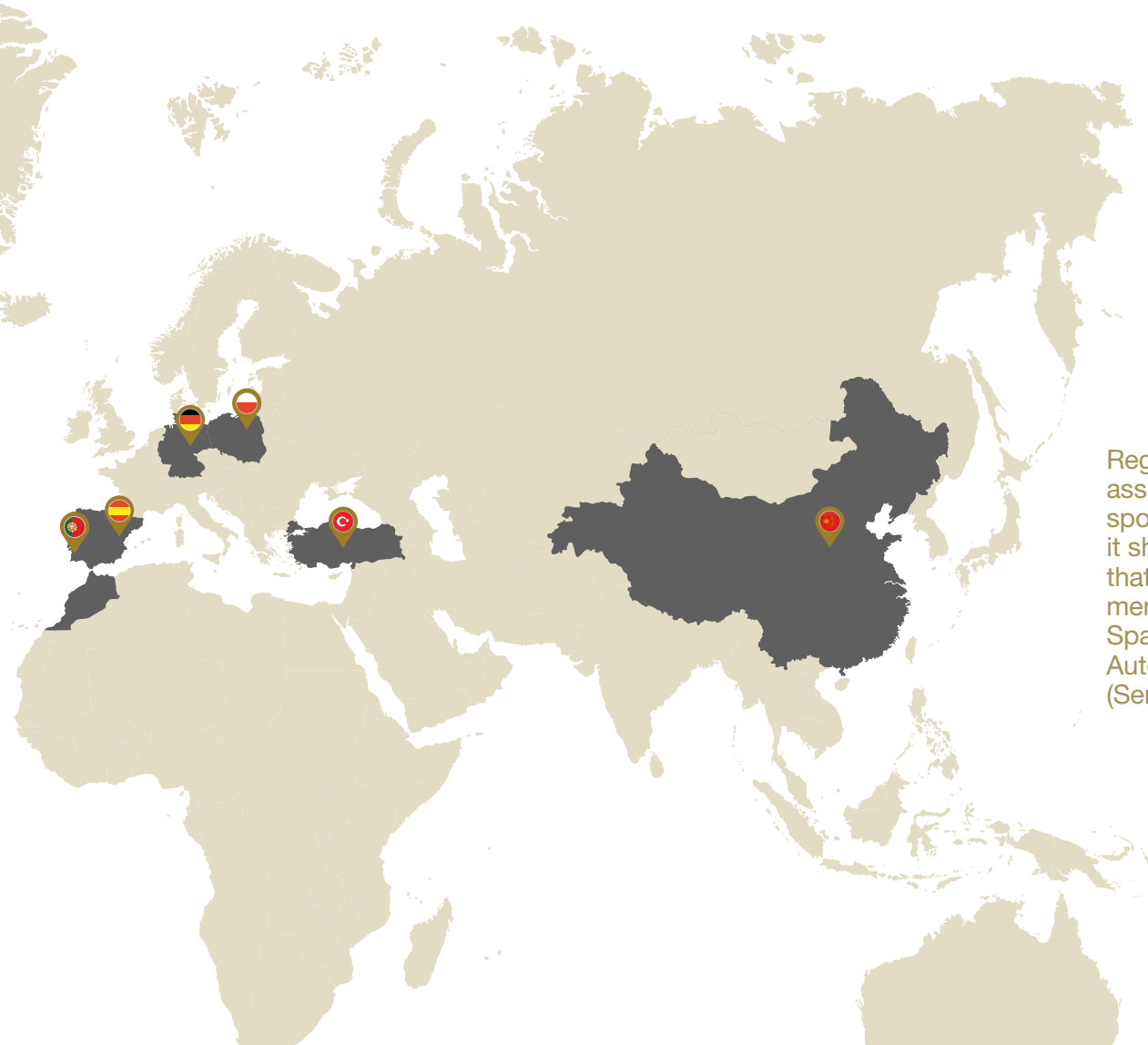
- Sponsorship of sports activities
- Donation to children's villages

- Collaborations with local universities and schools, attending employment forums and allowing various students to carry out their final end-of-studies practices in our company.

- In-kind and financial donations for several institutions and local events (Noble Parcel charity at Christmas, local elementary school, local special education centre and kindergarten
- Sponsorship of sports activities
- Collaboration with Silesia University of Technology in dual studies, annually several students carry out 6-month internships in our company

- Donations (books and toys) in collaboration with Kalder
- Various actions aimed at combating Soil Erosion and promoting Reforestation and Protection of Natural Habitats

- Sponsorship of sports activities



Regarding association or sponsorship actions, it should be noted that Ficosa is a member of the Spanish Association of Automotive Suppliers (Sernauto).

Innovation in our products

Ficosa's vision of innovation is based on our commitment to the most advanced technology. In this regard, the company invests in the research and development of products and solutions based on the fields of connectivity, safety and efficiency to maintain its position of leadership and anticipate the needs of the mobility industry.

The company is now a technological partner of a vast majority of automotive companies from all over the world and seeks new ways to bring about further optimization and contribute to sustainable mobility.

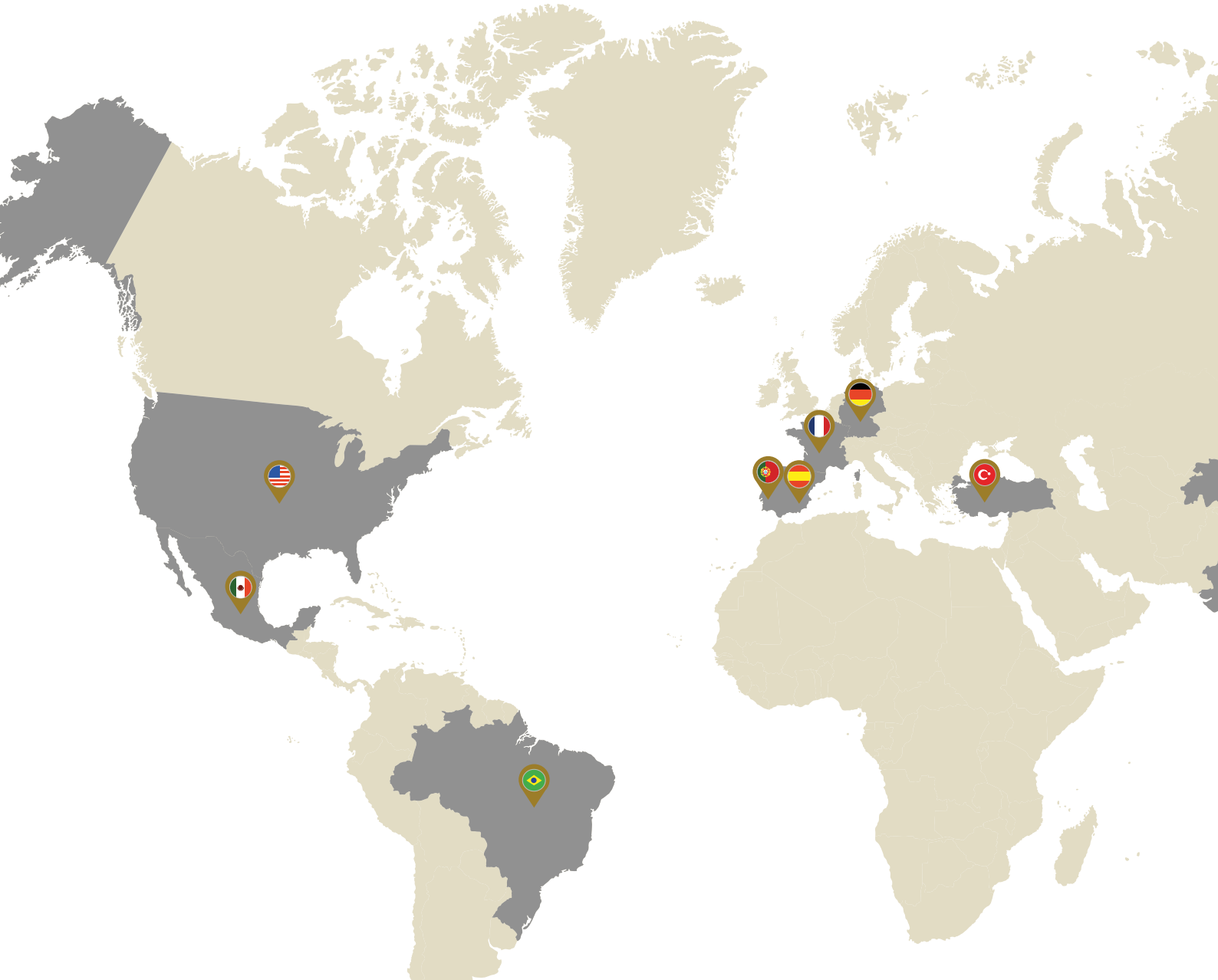
R&D Capabilities

Our great dedication to innovation and a clearly global focus, has enabled us to create a solid network of R&D centres in Europe, North America, South America and Asia. These are divided into centres of expertise focused on specific product families – technologies and local engineering centres closely located to our main customers' design centres.

The Technology Centre in Viladecavalls (Spain) acts as the driving force for the group's global research efforts and fuels the 14 development centres we have around the world. This facility is a benchmark in electronics, SW development and electro-mechanics technology for developing new solutions in safety, connectivity and energy efficiency as well as world class testing and prototyping laboratories.

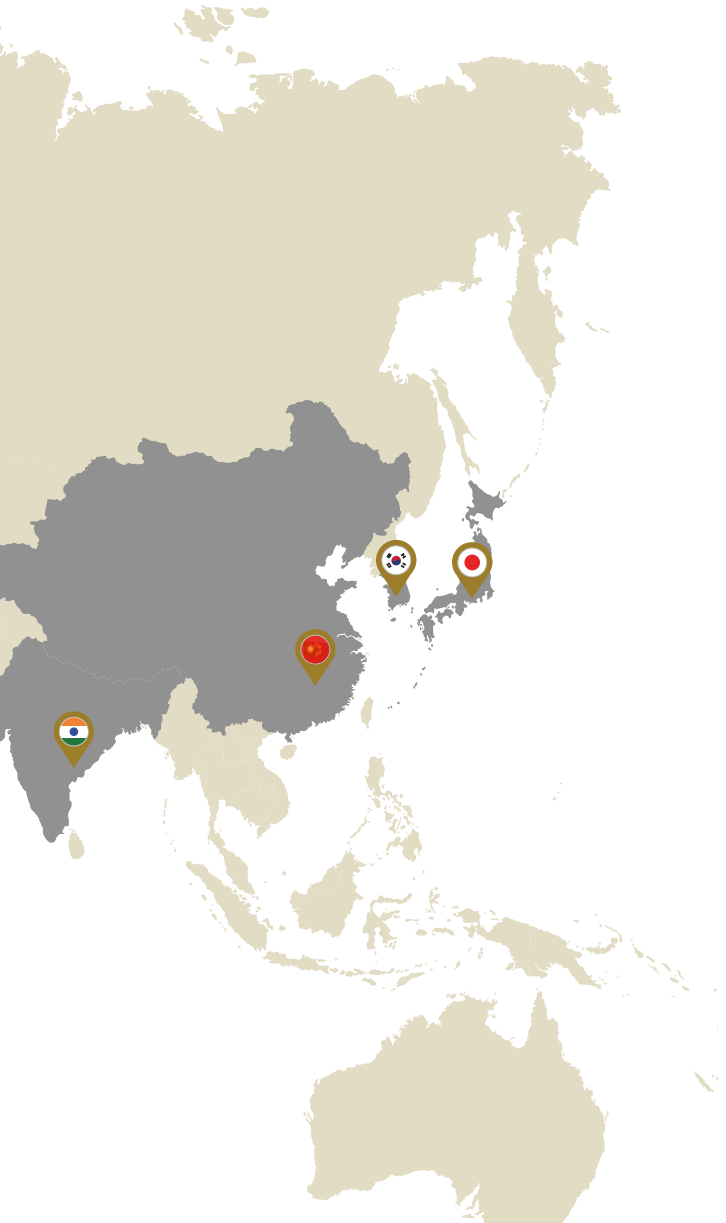
Capabilities

Our strong commitment to innovation has also resulted in high added value job creation. Ficosa has an excellent and experienced team of engineering talent on board to face the company's new challenges. The total number of engineers devoted to R&D was close to a thousand in 2019.



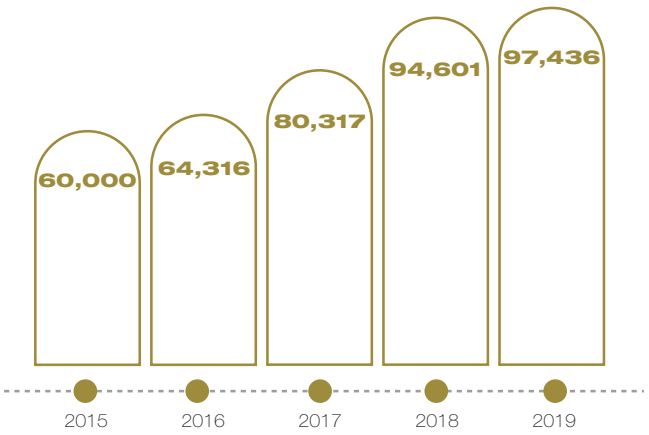
Partnerships

We also collaborate, both nationally and internationally, with other companies, engineering firms, universities and technical centres on studies, training, advisory services, technology transfer, validations, tests, etc., that allow us to meet more demanding time to market and complex system requirements. New technologies require a much higher level of open innovation and strategic partnerships than traditional electromechanical products.



R&D Expenditure (thousand €)

In 2019, Ficosa spent more than €97 million in R&D to provide its clients with the most innovative solutions that anticipate the challenges of a constantly changing industry.



This figure means that the company has invested more than 8% of its annual sales in R&D to offer its customers the most innovative solutions possible. Ficosa currently holds 840 active patents and it is one of the most active Spanish holding companies in Spain in terms of patenting.

- Research centers

- Viladecavalls
- Wolfenbüttel / Lindau
- Dieuze
- Porto
- Bursa

- Sao Paulo

- Detroit
- Salinas-Victoria

- Whaseong-Gun
- Tokyo
- Taicang
- Hyderabad / Pune

Innovation in high-value products

Ficosa is convinced that its success and future are founded on innovative products that benefit our society, providing safer, more efficient, sustainable and comfortable ways of mobility.

SAFETY

The Challenge

According to the World Health Organization (WHO), car accidents kill approximately 1.2 million people worldwide every year, representing a quarter of all deaths caused by injury. Additionally, about 50 million people are injured in traffic accidents. If preventive measures are not taken, road traffic death is likely to become the third-leading cause of death in 2020 from ninth place in 1990. A study from the American Automobile Association (AAA) revealed that car crashes cost the United States $300 billion per year.

There has been a significant rise in the use of electronics in vehicles. Vehicles today have shifted from being conventional vehicles to intelligent vehicles and are equipped with communication systems that alert or assist the driver in a potential accident. Nevertheless, there is still work to do to achieve the ambitious road safety target of halving the global number of deaths and injuries from road traffic crashes by 2020 (Source: 2030 Agenda for Sustainable Development).

Collaboration with national and international programmes

SUaaVE

SUaaVE proposes to enhance public acceptance of highly automated CAVs (Connected automated vehicle) by increasing trustworthiness via Human-Driven Design including the participation of all road users as well as stakeholders through:

- A social-psychological research on CAV acceptability.
- A cross-cultural framework for ethical and legal issues to facilitate CAV deployment.
- The conceptualisation and demonstration of a newly defined “Level of Automation Four+ Reliable Empathic Driver” (ALFRED), defined as a concept in CAV technology aimed to understand passengers’ state, and from this information, manage corrective actions in vehicle for enhancing trip experience.
- The generation of a set of tools and services to further implement the ALFRED concept, beyond SUaaVE.

The role of Ficosa in the project is to evaluate the “best in class” solutions of the emotions detection systems that are currently in the market.

The idea is to embark those systems in the tests and study which emotions are relevant to detect on board and which requirements does a camera should fulfil to detect that emotions.

SOMNOADAS (IBEROEKA)

This project develops a system of cameras integrated on the vehicle to detect the facial expressions of the driver in order to estimate their state of drowsiness.

The main objective of this project is to develop a camera-based system that analyses facial expressions related to pre-defined drowsy stages. The system consists of a mono IR camera integrated into the vehicle's interior aimed at the face and upper part of the thorax. Video recordings are analysed in real time in order to estimate the degree of drowsiness of the driver combining the drowsiness detection index from the extraction of the respiratory signal and the drowsiness detection index from the analysis of facial expressions, both from the video signal.

ESTIBA

ESTIBA's goal is to advance in the provision of strategic technologies that bring us closer to the port of the future (the Smart Port). We think that is the only way to satisfy the growing demand of efficiency, economy, security and environmental sustainability according to the "Industry 4.0" concept. Together with the highest levels of automation, as required in the scenarios that integrate different automated ground transport vehicles (GVs) in port operations.

Ficosa designs and validates in a real environment an interior camera adapted to the detection of laser patterns. Ficosa also develops a driving monitoring system (DMS) composed of camera and radar technology with the aim of monitoring the driver. This innovative technology will make possible in the future to have greater robustness in detecting driver states that are unsuitable for driving by means of non-contact sensors in critical environments.

VIZTA

VIZTA project, coordinated by ST Micrelectronics, aims at developing innovative technologies in the field of optical sensors and laser sources for short to long-range 3D-imaging and to demonstrate their value in several key applications, e.g., automotive.

The developed differentiating technologies allow the development and validation of innovative 3D imaging sensors products with the following highly integrated prototypes demonstrators:

- High resolution (>77 000 points) time-of-flight ranging sensor module with integrated VCSEL, drivers, filters and optics.
- Very High resolution (VGA min) depth camera sensor with integrated filters and optics.

Ficosa will use the developed technologies for In Cabin monitoring. Specifically, obtaining 3D face analysis and breathing using a single camera.

PRYSTINE

Ficosa is developing an interior camera for driver monitoring that comprises an IR mono camera integrated in pillar A and a laser integrated in the interior of the rear view mirror which aims a cloud of points at the driver's chest. The camera records these points and the algorithm processes the video data in order to extract the respiration signal using the distance between points. Once the respiration signal has been detected, the Thoracic Effort Drowsiness Detection algorithm (TEDD) analyses this data in order to estimate the degree of drowsiness of the driver.

V-RECON (EUREKA!)

This project consists of producing a CMS system (Camera Monitoring System) to replace vehicles' exterior mirrors (Class III-traditional). The system developed during this project will initially be for passenger vehicles but may extend to other types of vehicles (cargo, industrial, etc.). In order to achieve the final objective, research and development activities are required to design a demonstrator with the three main elements that make up the integrated system:

1. External wing or mechanical camera support to capture the rear view.
2. The camera itself.
3. An electronic control unit (ECU) that will also contains a display where the images are projected.

sAFE

The sAFE (Aftermarket eCall for Europe) project was funded by the Innovation and Networks Executive Agency (INEA) under the Connecting Europe Facility CEF program. The main goal of the project is to study and prepare specifications for eCall Aftermarket for vehicles of many categories.

The project started on January 2019 and comprises of 23 partners from many countries in Europe, such as Germany, Spain, Netherlands, Slovenia, Cyprus, Austria, Luxembourg or Italy.

Ficosa is contributing to the specification of eCall Aftermarket for M1 / N1 vehicles (passenger vehicles up to 7 seats and light vans), as well as specifying and performing the homologation process which will acknowledge an aftermarket eCall as valid for being used in the European market.

ESCAPE

The "European Safety Critical Applications Positioning Engine" (ESCAPE) is funded by the European GNSS Agency (GSA) under the European Union's Fundamental Elements research and development programme. Its aim was to exploit the services offered by Galileo, the European satellite navigation system, by designing a dedicated reliable and accurate engine natively targeted for the automotive safety-critical applications.

The project kicked-off in October 2016 and finished at the end of 2019, was led by Ficosa in collaboration with Groupe Renault, GMV, ST Microelectronics, IFSTTAR and ISMB.

The in-vehicle unit, produced by Ficosa during this project, was displayed during the Mobile World Congress 2018 and 2019 in Barcelona. This development is an electronic board able to precisely indicate the position of the car with an innovative GNSS receiver chip set developed by our partner STMicroelectronics. The unit was integrated as the positioning engine in a self-driven car made by a first level OEM, and was demoed in a circuit with presence of Spanish and European authorities.

5G Automotive Association

The 5G Automotive Association (5GAA) is a global, cross-industry organisation of companies from the automotive, technology, and telecommunications industries (ICT), working together to develop end-to-end solutions for future mobility and transportation services.

Created on September 2016, the 5GAA unites a large member base, including 8 founding members: AUDI AG, BMW Group, Daimler AG, Ericsson, Huawei, Intel, Nokia, and Qualcomm Incorporated. Ficosa has been

the first Spanish company to join the association.

Since its inception, 5GAA has rapidly expanded to include key players with a global footprint in the automotive, technology and telecommunications industries. This includes automotive manufacturers, tier-1 suppliers, chipset/communication system providers, mobile operators and infrastructure vendors. More than 130 companies have now joined 5GAA.

Diverse both in terms of geography and expertise, 5GAA's members are committed to helping define and develop the next generation of connected mobility and automated vehicle solutions.

The 5GAA supports the idea that 5G will be the ultimate platform to enable C-ITS and the provision of V2X. 5G will be able to better carry mission-critical communications for safer driving and further support enhanced V2X communications and connected mobility solutions.

SECREDAS

SECREDAS stands for "Product Security for Cross Domain Reliable Dependable Automated Systems. The SECREDAS consortium comprises 69 partners from 16 European countries. The goal of this project is to build a benchmark architecture for Secure and Safe Automated systems compliant with the new GDPR Regulation. The focus will be on automotive, rail and personal healthcare, all of which demand high security and safety, covering technologies such as radar, lidar, Vehicle-to-Infrastructure and in-vehicle networks.

Ficosa will contribute to the project with a full-fledged V2X HW platform with a secured storage and signing environment. These HW mechanisms will prevent cybersecurity attacks involving stealing private keys and damages caused by impersonating a legitimate vehicle. Ficosa's platform will be capable of integrating SW technologies from third parties, such as V2X Firewall and V2X misbehaviour detection. Ficosa will also provide DSRC High-performance antennas to achieve best platform performance.

As part of the same project, Ficosa ADAS will also provide an in-cabin driver monitoring system based on an IR camera plus laser for respiration signal detection and analysis. The main system objective is to continuously analyse the status of the driver and ensure that the driver is in a fit state to drive if the autonomous vehicle decides to return the command to the driver in the event of a cyber-security attack.

CARAMEL

CARAMEL brings together expertise from eight different European countries to solve cybersecurity issues for future mobility. In order to address cybersecurity for current autonomous and connected vehicles, well-established methodologies developed in the ICT sector will be adopted in order to assess vulnerabilities and potential cyber-attack impacts. Although past initiatives and cybersecurity projects related to the automotive industry have led to security assurance frameworks for networked vehicles, several newly introduced technologies like 5G, autopilots, and smart charging of Electric Vehicles (EVs) reveal gaps in cybersecurity, which have not yet been addressed satisfactorily. Considering the entire supply chain of automotive operations, CARAMEL aims to reach out to commercial anti-hacking IDS/IPS products for the European automotive cybersecurity and demonstrate their value in extensive attack and penetration scenarios.

Ficosa will provide to the project a full-fledged V2X (802.11p) HW platform designed for a very robust physical and logical security that will include enhancements still not found in other similar developments.

PREDICA

Cybersecurity is one of the main concerns for OEMs. PREDICA is a project in which an OEM, a security software provider and FICOSA as integrator have set the goal to develop a new cybersecurity mechanism to detect and prevent intruder entry to our telematics units. The cyber-security level achieved, evaluated by an independent company, reached a remarkable score without big penalties on memory or performance.

Thanks to this experience, OEMs are considering increasing their level of protection retrofitting already built products.

FLAME (Facility Large-Scale Adaptive Media Experimentation)

FLAME is an initiative designed to create a sustainable Future Media Internet (FMI) ecosystem through experimentation, collaboration and innovation. FLAME aims to optimize media content delivery by enabling deep interactions between media service providers and an underlying communications infrastructure using software defined networking and information centric networking techniques.

Within this project, FICOSA proposes an experiment to broadcast video content on the FLAME and C-V2X infrastructures. The experiment will merge Cellular V2X and FLAME networks to provide better and localized information to the driver in a safer way.

CarCom

The company also offers the CarCom platform, which integrates several connectivity solutions, in a modular way. This solution meets the goal of facilitating quick prototyping of new technology. The modular integration allows the reuse of common parts, introducing just hardware and software for the new technology at hand. This platform already implements hardware and software technologies to provide cellular, V2X, C-V2X, Wi-Fi, localization (GNSS) and HMI capabilities. Some of the future modules on pluggable technology are a high-precision positioning, digital tuning antenna, as well as cellular 5G modules. It covers the needs of the company to be able to exploit latest technologies in short time, improving development speed and reutilization. At the same time, CARCOM offers a platform that meets OEMs sample A requirements for a big number of applications and is able to be deployed worldwide.

COLORADO C-DOT

This project carried out in collaboration with Panasonic USA and The Colorado Department of Transportation (CDOT) has built a pilot program to test real-world deployment of the most advanced vehicle-to-everything (V2X) environment in USA. This collaboration represents the largest shared investment in V2X technology in the United States.

During the pilot deployment, V2X roadside units (RSU) and V2X vehicle on-board units (OBU Ficosa units) were successfully installed and tested, and established a Network Operations Center to manage the overall system. These efforts set the stage for deploying the V2X system in a real-world environment along a major Colorado highway.

By creating this connected system—an “internet of roads”—drivers and traffic managers will receive real-time information about road conditions such as traffic delays, icy conditions, and crashes through continuous and automatic communications between individual vehicles and roadside infrastructure.

Once deployed, this system should have an 81 percent decrease in unimpaired multi-vehicle crashes, as well as more reliable travel times and, eventually, the ability to communicate with self-driving cars.

What we are offering our customers

Vision systems

Most aggressive projections estimates that 10% of vehicles will be autonomous by 2030, vision will keep being one of the most significant pillars in our business, either through traditional mirrors systems with added functionality or through the emerging smart digital view systems where Ficosa is also taking a leading position (CMS, parking cameras, etc).

V2X (VEHICLE-TO-X) UNITS

The main purpose of incorporating these units into vehicles is for safety reasons. This technology will be able to reduce the number of accidents. Vehicle-to-everything (V2X) transmissions allow cars to communicate with each other as well as with the infrastructure, pedestrians and others. This communication path provides enough information in the vehicle regarding its surroundings. This fact enables drivers to be alerted on impending dangers in a first phase. In the future, the vehicle will be able to act in response to this knowledge. In addition to the safety aspects, there will also be convenient features such as easing vehicle parking, toll payment, weather, road conditions and information about surrounding commercial facilities. Ficosa has been granted a patent on a V2X high performance antenna for platooning. This fact increases Ficosa's interest in supplying OEMs with fully integrated system solutions instead of separate parts.

Intelligent Rearview Monitor System (IRMS)

The innovative Intelligent Rear-view Monitor System for LCV's and Vans developed by Ficosa, able to provide a full rear vision to the driver even if his vehicle lacks of rear windows, has now passed successfully all the homologation and validation tests after industrialization, and will be ready for mass production by end of 2020.

Several carlines from a major European LCV leader will be equipped in model year 2021, other OEM's are currently showing also a high interest in this safety device and are planning to introduce it in their next models.

Sensors and Camera Cleaning

After a successful launch and deployment of the LIDAR Cleaning System in the last two years, applied now in seven carlines of a premium German carmaker, Ficosa is achieving the development of a complete portfolio of Sensor Cleaning devices.

Those components applies for the cleaning of all sensors up to level 5 autonomous cars, ensuring that all detection systems function, quality and integrity are safe during driving.

A special focus is given to the water consumption reduction during cleaning sequence, as well as a low noise level, keeping at the same time the best system performance.

Driver Monitoring Systems

In 2017, the company developed a driver monitoring system in order to estimate the capability of the driver in adverse situations, such as fatigue. Today Ficosa has two different lines of products that detect any unsafe driver behaviour:

Somnoalert ® Driver Behaviour

The algorithm located in an ECU analyses existing data in CAN bus and data provided by a Lane Recognition System in order to identify inadequate driving states related with driving quality. The system studies the driver's gradual worsening over a predetermined time period.

Somnoalert ® Contactless

This system comprises a mono camera recording the upper body of the driver, a laptop, a breathing extraction from video algorithm and a drowsiness detection algorithm. The system analyses respiratory data in real time to estimate the driver's degree of awareness.in real time to estimate the driver's degree of awareness.

Camera Monitor System (CMS)

In 2015, the company developed an electronic mirror composed of cameras and displays which represents an alternative option to the exterior rear-view car mirrors. This pioneering system, also known as CMS, is a true revolution for the automotive industry as well as important progress towards the autonomous car. The electronic mirror offers a new, safer, and more comfortable driving experience through the inclusion in the vision systems of Advanced Systems Driver Assistance (ADAS), such as the traffic detection function, which provides information to the driver about the vehicles around it. Currently, Ficosa is working with an Original Equipment Manufacturer (OEM) on the integration of CMS, customizing it according to their requirements.

Vehicle cameras and expertise in vision systems and machine vision

Ficosa offers customers wide exterior and interior small size cameras for 360 degree vehicle vision, parking, mirror substitution and driver monitoring. Stand-alone or in-system cameras, with low power dissipation, EMC robustness and cost optimized, covering both entry level and high performance systems and offering state-of-the-art technology for next generation machine vision systems. These vision systems are also provided through exterior and interior mirror substitution, using high performance cameras optimizing video path and image quality, offering the most advanced display and ECU performance for machine vision integration with the most advanced 2D and 3D machine vision software developments.

ERA GLONASS SYSTEM

FICOSA is manufacturing telematics modules certified for ERA GLONASS. The ERA GLONASS system is the Russian equivalent of the European e-Call system. Safety systems and emergency services are fundamental to saving lives on the road. Getting an immediate alert in the event of an accident and knowing the exact location of the crash site cuts emergency services response times by 50% in rural areas and 40% in urban areas. The emergency system inside the vehicle consists of a telematics unit (In Vehicle Telematic Unit, iVTU) and a user interface module.

Shift-by-wire systems

In 2019, FICOSA expanded its product portfolio of Shift-by-Wire systems. FICOSA develops and produces not only e-SHIFTERs, but also Electronic Control Units and actuators, enabling the automation of traditional transmission or the integration of locking requirements to the new developed ones. Current customers are reputed Asian automotive manufacturers. In 2019, this product line was deployed for Internal Combustion Engine, Hybrid Electrical and pure Electrical Vehicles. Besides fuel efficiency enabled by the combination of engine nature and robotized transmissions, Shift-by-Wire technologies enables safety features to be implemented that control transmission to avoid risky conditions by human errors.

For this product line, FICOSA is researching and developing to offer a broad portfolio of next generation actuators, with reduced packaging and weight (actuator and electronic control unit below 750 gr), which can be implemented in any vehicle type, resulting in a reduction versus traditional automatic external shifters.

COMMUNICATION & CONNECTIVITY

The Challenge

The automotive industry is undergoing a series of transitions as the industry is moving towards digitalization and connected mobility. While automotive digital technology has traditionally focused on optimizing the vehicle's internal functions, attention is now focused on developing the car's ability to connect with the outside world and make the car experience safer, more comfortable and more informed. In this context, Ficosa is working to create a more interconnected world.

What we are offering our customers

Telematics units

These units connect the vehicle with the internet. Most used technology is cellular using 2G, 3G and 4G-LTE for data communications. Our units are capable of having embedded antennas, which facilitates the integration on many automobiles. These units incorporate services, as e-call, b-call, lights & horn and a myriad of other services customized by the OEM to their preferences. Some models also enable Wi-Fi communications inside or outside the car.

Emergency call Human Machine Interface

EMU is an Emergency call Multimedia Unit for vehicles, consisting of a button, some indicators, a microphone and a speaker. The button manually triggers the emergency call, speaker and microphone are used for voice communication with the 112 Services and the indicators show the state of cellular coverage and e-call status. A telematics control unit inside the vehicle manages all these elements in order to allow occupants to have full control of the system.

Integrated antennas

We design and develop antennas for different services such as radio broadcasting (AM/FM/DAB), telephony (2G , 3G, LTE and 5G), satellite positioning systems (GNSS) covering multiple satellite constellations (GPS, Galileo, Glonass, Beidou), satellite digital radio (SDARS) for the US Market as well as other services like RKE, Wi-Fi, Bluetooth and BLE. Antennas for new technologies such as V2X and C-V2X (omnidirectional or directive) and for the latest 5G technologies are also developed and ready to go to market. We also design antennas for microwave frequencies at 24, 70 or 84 GHz.

As the number of antennas inside a car is increasing considerably, the trend is to integrate them on non-visible locations of the vehicle. We have the expertise to integrate antennas for different services in different locations assuring optimal operation and performance with zero or minimal visual impact. Some examples of locations for antenna integration in the car are inside exterior rear-view mirrors, dashboard, windshield, embedded in the vehicle roof, inside plastic parts of the car such as spoilers, etc.

Rear-view mirror that incorporates electronic toll function

The interior rear-view mirror incorporating a Panasonic electronic toll function is deployed from 2019 in all the carlines of a major European manufacturer. This device allow the automatic payment of motorway & urban tolls without having to stop the vehicle, keeping driver attention to a safe and effective driving.

Efficiency

The Challenge

One of the toughest environmental challenges of our time is managing the mobility of people and goods. By 2030, passenger traffic will exceed 80,000 billion passenger-kilometres, a fifty percent increase, and freight volume will grow by 70 percent globally. The number of vehicles on the road is globally expected to double by 2050.

The reduction in greenhouse gas emissions, the progress in the decarbonisation economy and the expected growth in mobility in the upcoming years highlight the need for efficient and environmentally sustainable vehicle technologies. The widespread electrification of transport through the adoption of electric vehicles (EVs) is one strategy to reduce GHG emissions.

Collaboration with national and international programs

Electromobility Hub

In 2018, the company opened a Technological Electromobility Hub with 120 people and 1,200 square metres, dedicated to the company's different products in Hybrid and Electric vehicles (HEV/ BEV). During 2019 these facilities were extended with additional 300 m2. The e-Mobility Hub is set to become a global benchmark in the development of electric mobility technology, driving Ficosa's leadership forward in an area that is key for the mobility of the future. In this sense it plays a strategic role, as it will become a driving force in electromobility solutions for the whole group on an international level.

The deployment of all these HEV/BEV products form part of the company's long-term strategy. For this reason, it will be carried out in different phases. During the first phase, Ficosa will focus on three products:

- Battery Management Controllers: Devices to control the HV Battery and its energy flow.
- HV Junction Box: Safety device that disconnects the HV battery from the rest of the vehicle system.
- On board charger: Charger integrated into the vehicle that transforms the alternating current of the electrical grid into a direct current to charge the HV Battery.

ALISE Consortium

Ficosa participated in the ALISE consortium, presenting the final results and the prototyping in May 2019. ALISE is a pan European collaboration focused on the development and commercial scale-up of new materials and on the understanding of the electrochemical processes involved in the Lithium Sulphur technology. In this collaboration, Ficosa was working on the development of the full Battery Pack, using the LiS modules developed. The Battery included a Battery Management System (BMS) adapted to the new LiS chemistry developed during the project.

CAR-NET (Cooperative Automotive Research Network)

The Cooperative Automotive Research Network, initiated by SEAT, Volkswagen Group Research and Universitat Politècnica de Catalunya (UPC), is an open hub for industrial and academic partners from the areas of automotive and mobility research & innovation. Ficosa is a member of this knowledge hub for automotive science and technology, focused on urban mobility, and based in Barcelona. Its ambition is to become a benchmark in this area, in close alliance with European counterparts. CARNET is a cooperation platform for the mobility industry, local universities and institutional partners that has the following strategic goals:

- Organizing urban mobility activities in Barcelona
- Contributing to strengthening the automotive sector in Spain, and Catalonia in particular
- Recruiting proactively for the automotive industry
- Networking to seek international research funding (in cooperation with international partners)

What we are offering our customers

Battery Management System

Ficosa has been developing jointly with main OEMs the new generation of Battery Management System. The focus areas of the e-mobility lay mainly in efficient and reliable high-voltage energy control.

On-Board Charger System

The company is working on the development of a new integrated concept of On-Board Charger (OBC) together with Panasonic. The OBC is a system that is able to provide energy to charge Electric/Hybrid vehicles batteries, such as cars, buses or motorbikes. The technology under development fits on AC network as well as DC infrastructure.

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"N/A - Not applicable because is not material
(1) Internal framework: qualitative description"
(2) Internal framework: look at the used methodology in the corresponding pages

Appendix 1 - OHSEQ policy

The policy of integrated management of the company is based on the compromise of Upper Management and the participation and consultation of all the staff, and their representatives where they exist, in order to ensure the continuous improvement of their labour.

It must be communicated and understood by all the Company and reviewed periodically. It must be of interested parties domain. It must be appropriate to the nature of our Company (activities, products and services).

With this aim, the Direction affirms the compromise and responsibility with the implementation, maintenance and continuous improvement of an integrated system of management, based on:

1. The values and philosophy of operations of the organization, established clearly in the MISSION, are the guidelines for each member of FICOSA.
2. FICOSA permanently believes that each product and project developed for our customers shall fulfil and exceed their expectations of time, quality, safety and cost.
3. The company firmly believes that the excellence in each project and product are achieved with the participation of all the people that constitutes FICOSA. The maintenance of the daily enthusiasm and the imposition of challenges of permanent improvement are clues for this purpose and a responsibility for each leader.
4. Occupational health and safety is a fundamental part of our work; Our commitment in the prevention of accidents and occupational illnes, focuses our efforts on ensuring safe and healthy work environments, prioritizing the elimination of hazards and the minimization of risks.
5. The development of our Company must be guided toward the continual improvement of our work (in occupational health and safety, quality, environment and energy efficiency). It is our obligation to improve every day the effectiveness of our Integrated System.
6. The respect for nature and the observance of the universally declared principles of pollution prevention and control shall be kept as a frame of reference for the development of our activities. The development of our organization can and must walk alongside the preservation of the environment and the mitigation and adaptation to climate change, as well as towards energy management.
7. The environmental questions are a common problematic, therefore, each of the internal members (workers and collaborators) and external members (suppliers and subcontractors) have the right and the moral obligation to participate in their implantation and to collaborate in their maintenance.
8. FICOSA has a framework where the establishment of objectives and goals for occupational health and safety, quality and environment, as well as the availability of information, resources, acquisition of efficient products and services. The review of these objectives is a high priority function in the development of our Company. These objectives must be based on the requirements of the interested parts, established in the MISSION.
9. The fulfilment of the current legislation and regulation regarding occupational health and safety, quality, environment and energy for FICOSA. We include in this section any other requirement.

This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

FICOSA

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