



# *Irizar Group*

Brand, technology and  
sustainability  
2021

## One group, six **business areas**



**Founded in 1889**



**22 own companies**



**7 leading companies**  
in their sectors



**24 hours,  
365 days**  
service network



**13 centres  
of production**  
worldwide



**3,042  
people**



**1 R&D centre**



**766 million  
euros**



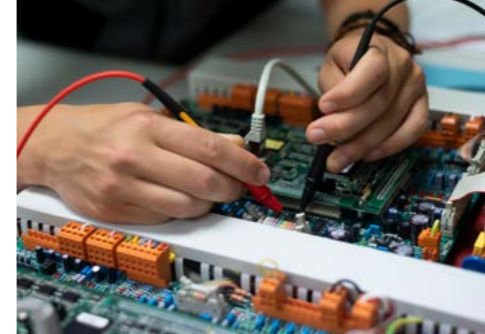
**Present  
worldwide**



**Financial  
stability**



Passenger transport



Electronics



Motors and generators



Electromobility



Energy

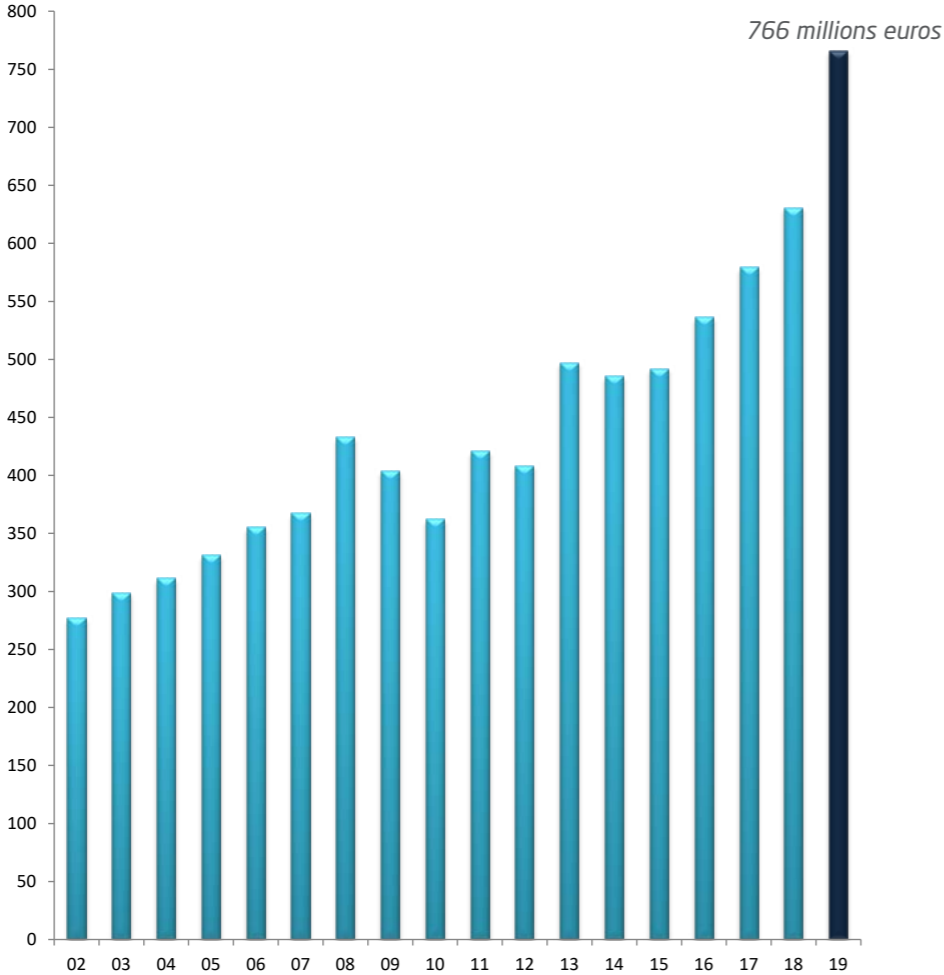


Connectivity

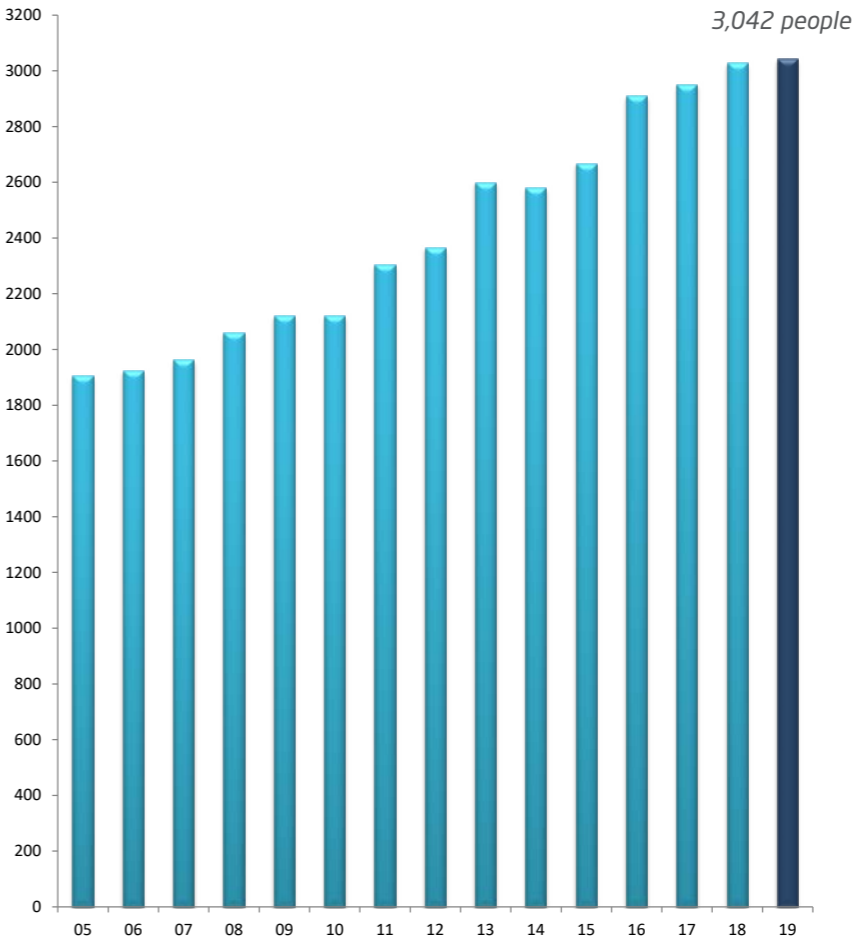


# Sustainable growth

Consolidated turnover (millions of euros)



Job Creation



# Irizar Group

One group, **seven great brands**



-  **13 centres of production**  
worldwide
-  **1 R&D Centre**
-  **22 own companies**



# Group companies



## Irizar

Integral, hybrid and conventional coaches.



## Irizar e-mobility

Vehicles, systems and elements for the electromobility of the cities.



## Hispacold

Air conditioning systems for the road and rail transport sector.



## Masats

Pneumatic and electric door components and systems, platform doors and elevators for persons with reduced mobility for the road and rail transport sector.



## Alconza

Permanent magnet electric motors and generators for the marine, hydraulic and industrial generation and electromobility sectors.



## Jema

Power electronics, smart grids, photovoltaic and solar power plants, multiplexing, electronic R&D and HMI projects.



## Datik

ITS solutions for fleet management of connected vehicles.



## Creatio

The Group's Research and Development Centre created to enhance its capacities for applied research and technological development.



# Our production plants



**Irizar HQ** - Founded in 1889. Parent company of the Irizar Group, (Ormaiztegi)

**Irizar México**  
*1999, Querétaro*

**Irizar Maroc**  
*1996, Sale*

**Irizar Brasil**  
*1998, Botucatu*

**Irizar Southern Africa**  
*2004 Centurion*





Birth of Irizar

1898



1928



Irizar becomes a cooperative

1963



The Century. A symbol of design

1970  
1980

Strong growth and start of the internationalization process. Irizar Mexico, Irizar Brasil, Irizar Maroc, Irizar Asia Pacific and Irizar Southern Africa are created.

1995

2009

Industrial and technological diversification strategy. Jema Energy, Datik and Alconza join the Group.



First vehicle with mechanical traction, 22-seater bodied from a chassis acquired by a customer in France.



Constant innovation and is positioned as one of the best companies in the sector in the State.



In the midst of the crisis, a strategic revolution was carried out at Irizar and it became an integral coach manufacturer with a sustainable vision.



Creatio founded The Group's Research and Development Centre

2011



Launch of the full range of Irizar brand integral coaches and creation of the electromobility division

2012

First 100% electric zero emission bus



2014



125th anniversary



New facilities

2017



The full range of sustainable mobility solutions is presented. International award for Best Coach of the year. Named coach manufacturer of the year in Europe. Bus of the Year and Environmentally Friendly Industrial Vehicle of the Year

2018



Irizar e-mobility was inaugurated, the first factory entirely dedicated to electromobility solutions in Europe.

2019



Moving forward

2020

A year marked by the Covid 19 health and economic crisis

2021



Together for a safer and more sustainable future

# Brand, technology and sustainability

The **brand** is our main asset and our objective is to reinforce it, and enhance it with a good communication strategy

Own high-tech  
Premium  
products and brand



Customer loyalty  
strategy



Innovation, our  
hallmark



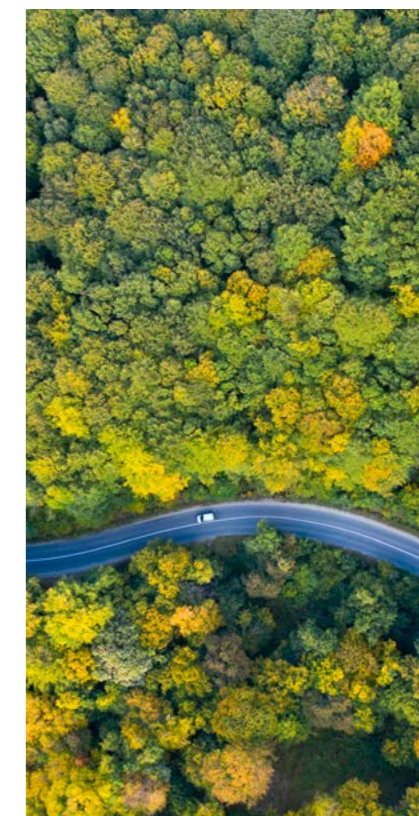
Industrial  
diversification strategy



Strength and growth



Corporate Social  
Responsibility CSR





# Irizar range of coaches and buses

- Integral
- Conventional
- Hybrid
- Natural Gas (CNG and LNG soon)
- Electric



## Integral Coaches

*The integral coaches are the maximum representation of our brand.*

We have the latest generation of coaches with a combustion engine (diesel, biodiesel, HVO). They comply with all current legislation.

Parallel hybrids with combustion engine (Diesel, HVO (biodiesel) with electric motor and i-Lithium batteries.

*We offer a very **competitive TCO** (consumption, predictive maintenance and residual value)*

**Manoeuvrability and optimal weight distribution** *and reduction*

**Maximum passenger comfort, noise and vibration** *reduction*

**Maximum driver ergonomics**

**Minimum repair and maintenance costs:**

*Improved access to components*

*Long service intervals*

**Smart technology** *for predictive driving*

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*Products created and developed based on the knowledge of the entire Group, which provide an advantage in safety, reliability, sustainability, technology, service and profitability*

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 *Latest generation video*



## Irizar range of coaches and buses

# Coaches on chassis

of all brands available on the market

With combustion engines (Diesel, HVO, biodiesel), CNG (gas and biogas) -LNG).

Parallel hybrids (Scania) with combustion, Diesel, HVO (biodiesel) with electric motor and i-Lithium batteries.

We continue to collaborate closely with chassis manufacturers with the aim of continuing to increase our presence both in European markets and worldwide.



Irizar range of coaches and buses

## Hybrid Buses

### *Parallel hybrid technology*

Parallel hybrids with combustion, (Diesel, HVO, biodiesel) with electric motor and i-Lithium batteries.

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*The first European company  
to launch a class II hybrid  
commuter coach*

---

20% reduction in consumption detected compared to conventional diesel.

Saving of 6,400 litres/year.

20% reduction in CO2 emissions equivalent to 236,830 Kg in its service life (100,000 km / year, 15 years).

We monitor all hybrid vehicles to continue minimizing emissions.



*Hybrid vehicles catalogue*



## Coaches with natural gas

Irizar i4 and Irizar i3le models from 12 to 15 metres in the CNG version and Irizar i4, Irizar i6 and Irizar i6S from 12 to 15 metres in the LNG version (coming soon).

The vehicles have a range of up to 500 km in the CNG version and double that in the LNG version.

### Environmental benefits

**They reduce CO2 emissions** by 20 to 25%, NOx emissions by up to 60% and particulate emissions by over 98%.

**Higher thermal efficiency** than diesel and also minimises vibrations and noise emissions by 4-5 Db.

**TCO:** it is estimated that its reduction can reach up to 35%, depending on the differential between the cost of gas and diesel.

**The maintenance cost** remains similar to that of a conventional diesel vehicle.

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*Compliance with Regulation R66.02 even with 700 kg extra weight on the roof and with the thermal and mechanical safety protocols according to Regulation 110*

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## Electric Buses

With Irizar e-mobility, we provide turnkey mobility solutions to cities and citizens; 100% zero emissions electric short-haul buses and trucks and charging systems, all with our own technology.

### **The vehicle range includes:**

Irizar ie bus  
Irizar ie tram  
Irizar ie truck



### **Carbon footprint**

8.45 gr CO2 eq / km.p (kilometre and passenger).

The emission of 800 tn of CO2 is avoided throughout service life 86% reduction compared to a conventional bus.



### **Recyclability**

Recyclability and recoverability rates are above 90% according to ISO 22628. The bus has a longer service life and lower maintenance needs.



### **Noise pollution**

Eliminates combustion engine noise, which means there are no exterior sound emissions when stopped and starting (0 dBA). When driving, noise emission is reduced by 20%.



### **Passenger and driver comfort**



# Buses and coaches

Irizar Range



Irizar i8



Irizar i6S



Irizar i6



Irizar i4



Irizar i3le



Zero emissions electric city buses and short haul trucks

 [Irizar Range Catalogue](#)

 [Gallery](#)

 [New Generation Video](#)



# Coaches

## Irizar i8

### *A technological masterpiece*

Our flagship. Long distance coach, occasional TOP, VIP vehicles  
Maximum comfort, elegance and a unique state of well-being and luxury.

### *Integral and conventional versions*


Lengths: 12,4m, 13,22m, 14,07m y 14,98m



*Coach of the year 2016 in Spain*

*Coach of the year 2018*

 [Irizar range catalogue](#)

 [Integral vehicle technical catalogue](#)

 [Gallery](#)

 [Latest generation video](#)

 [Coach of the Year video](#)





# Coaches

## Irizar i6S

*The combination of technology and design*

Coach designed for medium and long-distance and occasional lines

Quality, robustness and reliability  
of a model with its own personality

*Integral and conventional versions*


Lengths: From 10.8m to 15m

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*Coach of the year 2017 in Spain*

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 [Irizar range catalogue](#)

 [Latest generation video](#)

 [Integral vehicle technical catalogue](#)

 [Gallery](#)



# Coaches

Irizar i6

*Versatile, top of the range coach*  
Mid and long distance occasional coach  
safe, reliable and efficient.

*Integral and conventional versions*  
Lengths: From 10.8m to 14m


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*Coach of the year 2010 in Spain*

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 [Irizar range catalogue](#)

 [Integral vehicle technical catalogue](#)

 [Gallery](#)



# Coaches

## Irizar i4

### *The power of versatility*

An urban vehicle, an ideal bus for metropolitan, suburban, school or company transportation.

### *Integral, conventional and hybrid version*

First commuter vehicle with hybrid and class II technology for short and medium-haul lines.

### *Options*


**L** for short-distance lines with frequent stops and many standing passengers and has a low floor for better accessibility.

**M** with smooth floor without corridor or steps allows different configurations for people with reduced mobility

**H** with central aisle, for medium distance.

Lengths: From 9.4m to 15m

 [Irizar range catalogue](#)

 [Integral vehicle technical catalogue](#)

 [Gallery](#)

We are the first company in the sector worldwide to achieve the **First Environmental Product Declaration**



# Buses

## Irizar i3le

### *Low-Entry suburban coach*

Its attributes are accessibility and functionality.  
Different door configurations and possibilities of reduced mobility ramps (manual or automatic).

### *Integral, conventional and hybrid version*


20% reduction in consumption detected compared to conventional diesel.

Saving of 6,400 litres/year.

20% reduction in CO2 emissions equivalent to 236,830 kg in its service life (100,000 km / year, 15 years).

We monitor all hybrid vehicles to continue minimizing emissions.

 [Irizar range catalogue](#)

 [Integral vehicle technical catalogue](#)

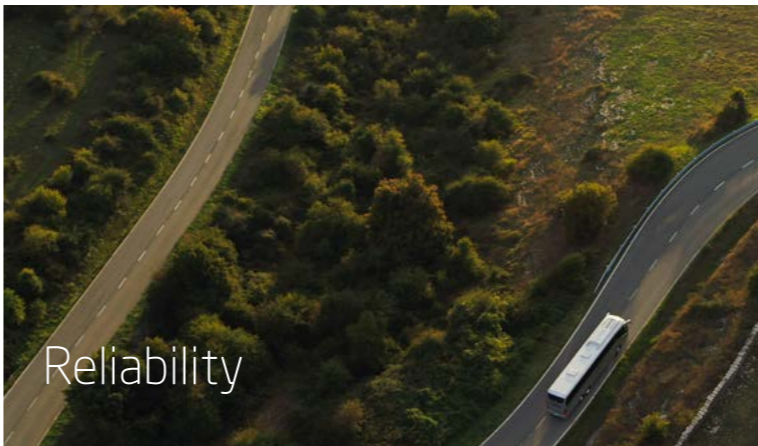
 [Gallery](#)



# An Irizar is...



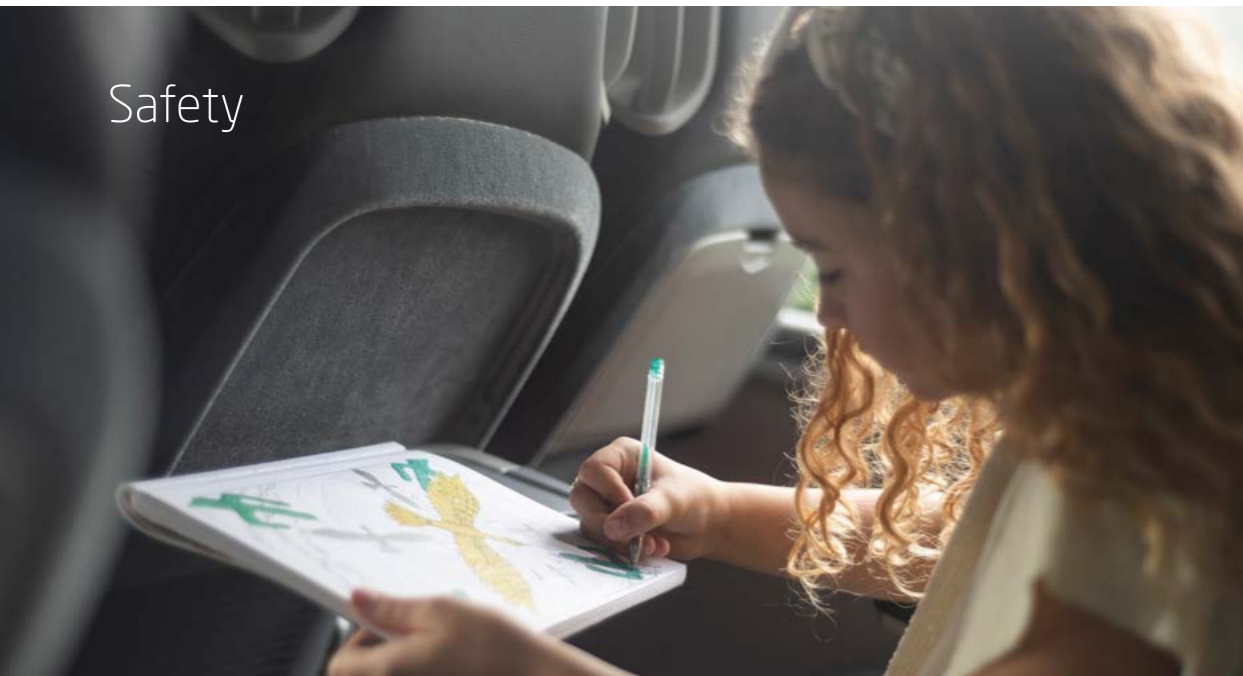
**TCO**  
Efficiency, Fuel and CO2 emissions



Reliability



Design



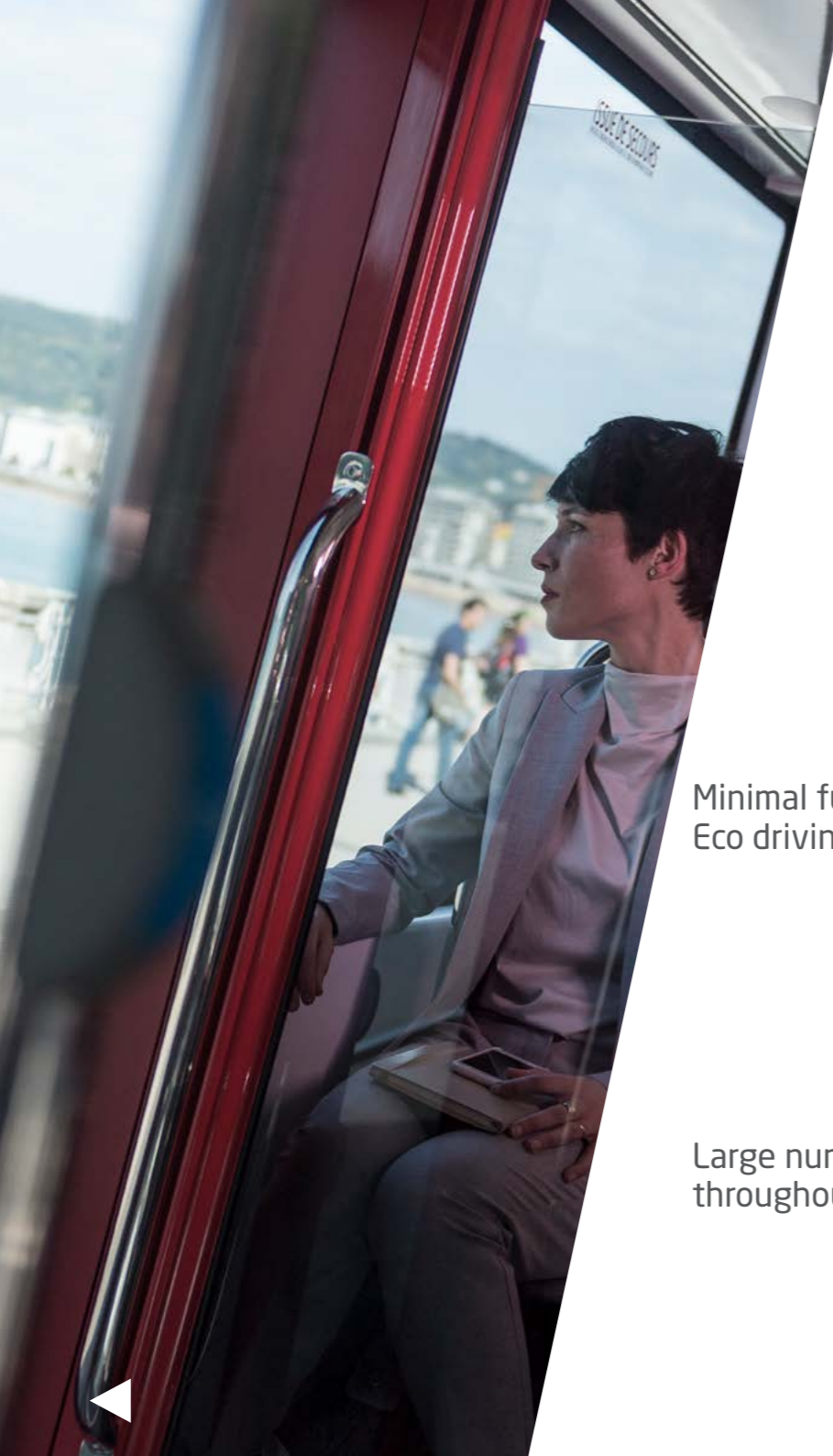
Safety



Customisation



Accessibility



# Competitive TCO

*Efficiency, Fuel, emissions and maintenance costs by predictive systems*

## We offer a very competitive TCO

(Consumption, predictive maintenance and residual value)



Minimal fuel consumption  
Eco driving training option



Minimum R&M cost



Particulate filter with automatic regeneration and long maintenance intervals.

Long oil and filter change intervals (up to 150,000 km)



Large number of service points throughout Europe.



Highly competitive spare parts prices



Residual value of vehicles remains high over time



# Safety

*A priority*

## Active safety

Advanced technology in driver assistance systems: Adaptive and predictive stability and cruise control, advanced emergency braking systems, tyre pressure monitoring, full-Led headlights, driver fatigue detector, predictive shifting, as well as:


 [More on active safety](#)


 [Safety video](#)




 **UFCW** Urban forward collision warning


 **LDW** Lane departure warning

 **FCW** Forward collision warning

 **HMW** Headway monitoring warning  
2.5

**Blind spot safety**  
Warns of possible collision with elements in the vehicle's blind spot area

 **PCW** Pedestrian collision warning

 **TSR** Traffic sign recognition

## Passive safety

Our buses and coaches have been designed to withstand rollovers and head-on collisions by optimising weight distribution.

## Rescue safety

Constant training and relationship with firefighter associations that result in optimal release manoeuvres.



# Reliability

*Vehicle reliability and availability*

Our coaches operate on **worldwide** in extreme conditions.

They are subjected to demanding **reliability tests**, in one of the most prestigious applied research institutes in the world, with excellent results.

Optimal internal processes and **quality seals**.

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*More demanding quality parameters and providing the most advanced technologies*

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 Reliability video





# Design

*Irizar design, icon of the brand*

## Exterior design

Our buses and coaches are a perfect, harmonious and seamless combination of surfaces and sharp lines that generate attractive details and create an image that stands out.

## Interior design

Travelling in an Irizar is to let yourself get lost in a unique sensory experience. Even the smallest details are taken care of to offer maximum comfort to occupants.



Irizar



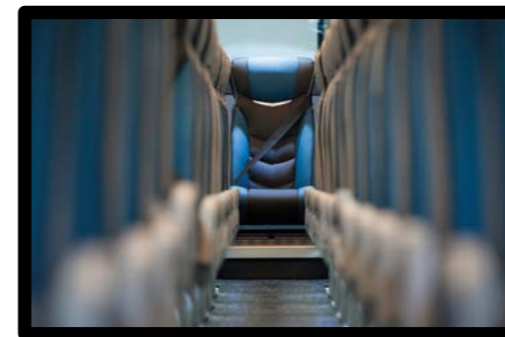


# Customization and flexibility

*Your coach is unique*

## Maximum adaptability and customization capacity

Our showroom offers the option to choose your own configuration options, coatings, colours, so you can create a unique coach. We want your visit to Irizar to become an experience.



# Accessibility

*Passenger accessibility and spaciousness, key aspects*

## *Solutions of all kinds*

*Optimal front door access via ramp or elevator for people with mobility problems*

*Vertical platform **behind the rear axle***

*Cassette-type platform **on the rear axle***

*Cassette-type platform **on the central running board***

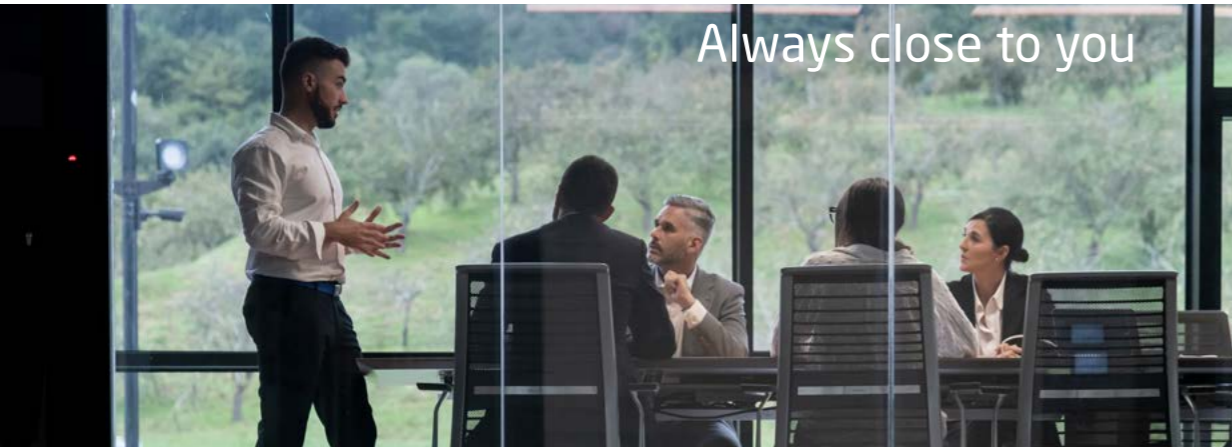
*Cassette-type platform **in the central boot***

*Various options for the **wheelchair area***

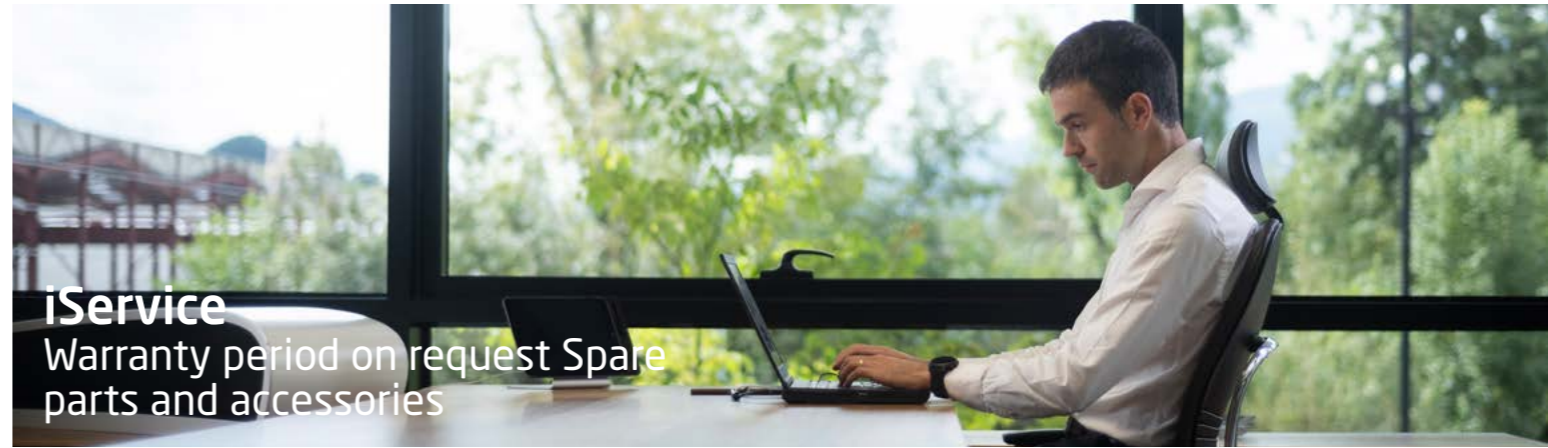
*Braille*

*Audible alerts for pedestrians*



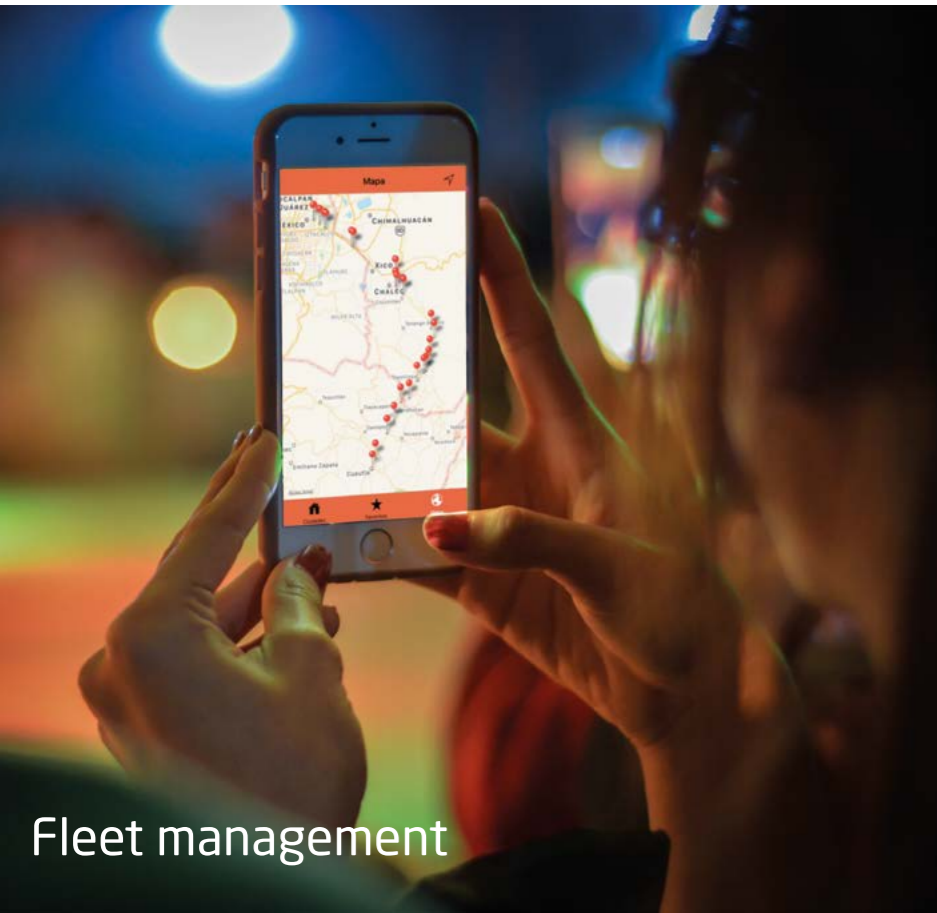


Always close to you



**iService**

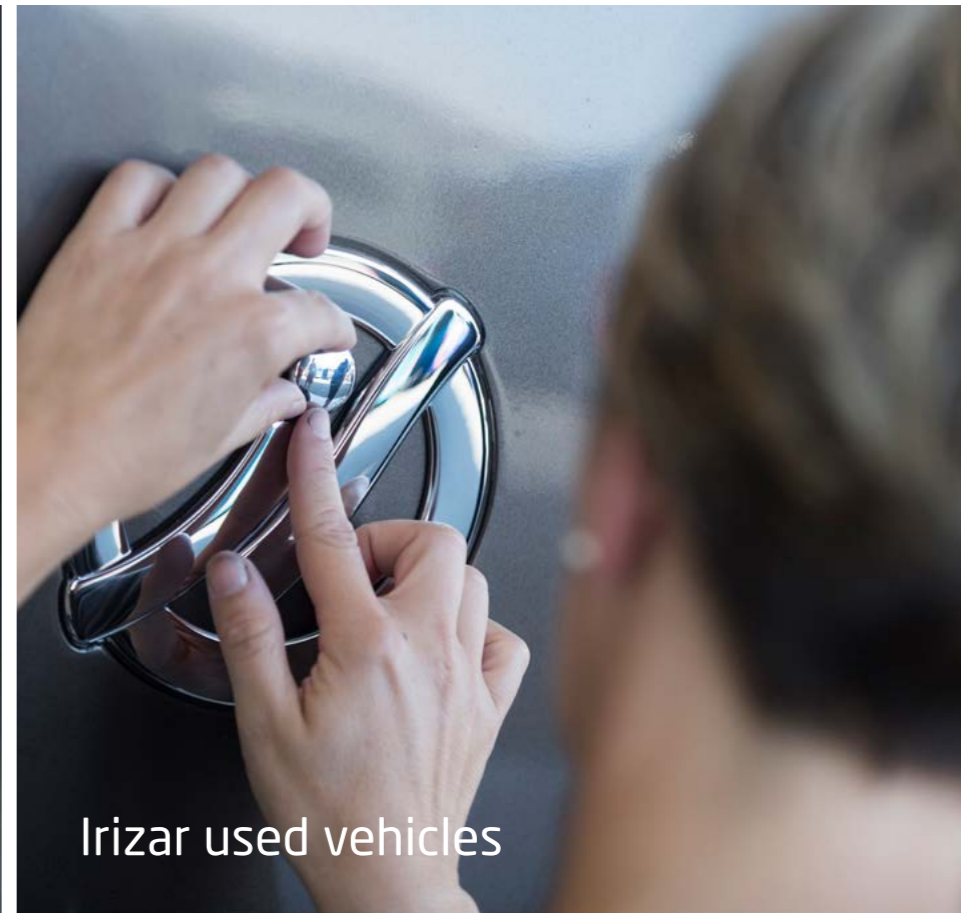
Warranty period on request Spare parts and accessories



Fleet management



i-training



Irizar used vehicles



## Always close to you

*Turnkey projects and services customized and created to meet customer needs*

Personalized attention and optimal service.

- Personal advice
- Financing solutions
- Repair and maintenance contracts
- Used vehicles management
- Comprehensive electronic management, monitoring solutions
- Wide network of mobile workshops and units
- An assistance service always close to you.
- Warranty period on demand



**24 hours,  
365 days a year**  
service network



# iService

## *Web platform for vehicle service management*

Includes technical documentation of your coach, pneumatic and electrical information, service manual, workshop manual and assistance network



## **Used vehicles network**

Management of the different phases of acquisition and sale of used vehicles.



## **Parts and accessories**

Individualized spare parts catalogue and management of spare parts orders, their monitoring and delivery through the Eshop.



## **Warranty and repair management**

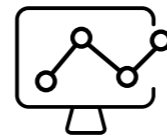
It allows the storage and access to information for each vehicle and the history of the work carried out and its monitoring.



# Fleet management (FMS)

iPanel

We offer the most advanced technology to provide customizable solutions. IPanel services are tailored for integration into our customers' processes.

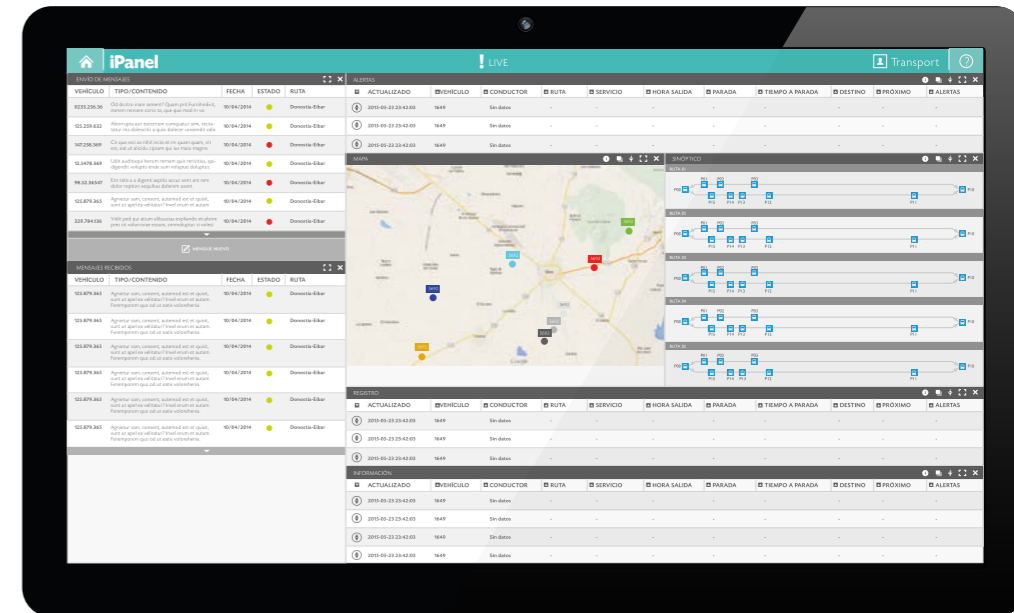


*Predictive maintenance*

*Fully customizable*

*Performance and profitability optimization*

*Comprehensive cost and efficiency monitoring*





# Training

*Training and iTraining courses*



### **Training courses**

Suitable for keeping workshop network technicians up to date with the innovations that are being incorporated so that their performance in the field of safety or in repair and maintenance is of top quality.



### **iTraining**

Irizar's online platform for training and vehicle repair. Intended for Irizar dealers and distributors and offers the possibility of carrying out online tests and training and to make contact with other dealers via forums



### **ECO driving courses**





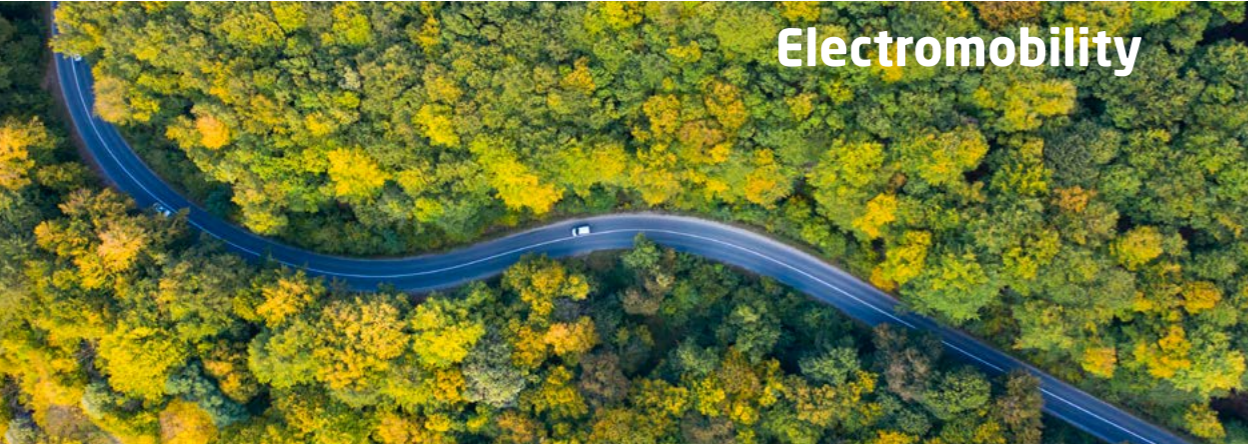
# Innovation and technology



Product innovation



Sustainable technologies



Electromobility



Connectivity



Autonomous vehicles



Digitalization



## Product Innovation

*Innovation is one of the signs of our corporate identity*

It is part of our culture and extends to all levels, in terms of management, product and service, as well as sustainability, technology and image. This means that we can be flexible and anticipate the challenges of the future.

Irizar Trainee Program, to attract talent and knowledge. This is how we increase our capacity to create innovative products with cutting-edge technology.

Product innovation, **one of the priorities** of our global strategy.



# Sustainable technologies

We are always alert to opportunities for identifying the needs of the world of transport of the future that involve the minimum level of emissions in addition to guaranteeing operating costs for our customers.

We are currently developing:

Hybrid alternatives with electric range

Combustion engines powered by HVO and natural, compressed or liquefied gas.

Hydrogen cell



# Electromobility

## *Greater range and shorter battery recharging time*

With Irizar e-mobility, we provide comprehensive mobility solutions to cities and citizens, both 100% electric zero emissions buses and the main infrastructure systems needed for charging, traction and energy storage.



Zero direct emissions



Less noise pollution



Eco design



Consumption



Green energy factory



Recyclability



Eco innovation

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*Our sustainable mobility solutions are transforming our cities and our planet.  
With no polluting emissions and no noise, efficient and accessible*

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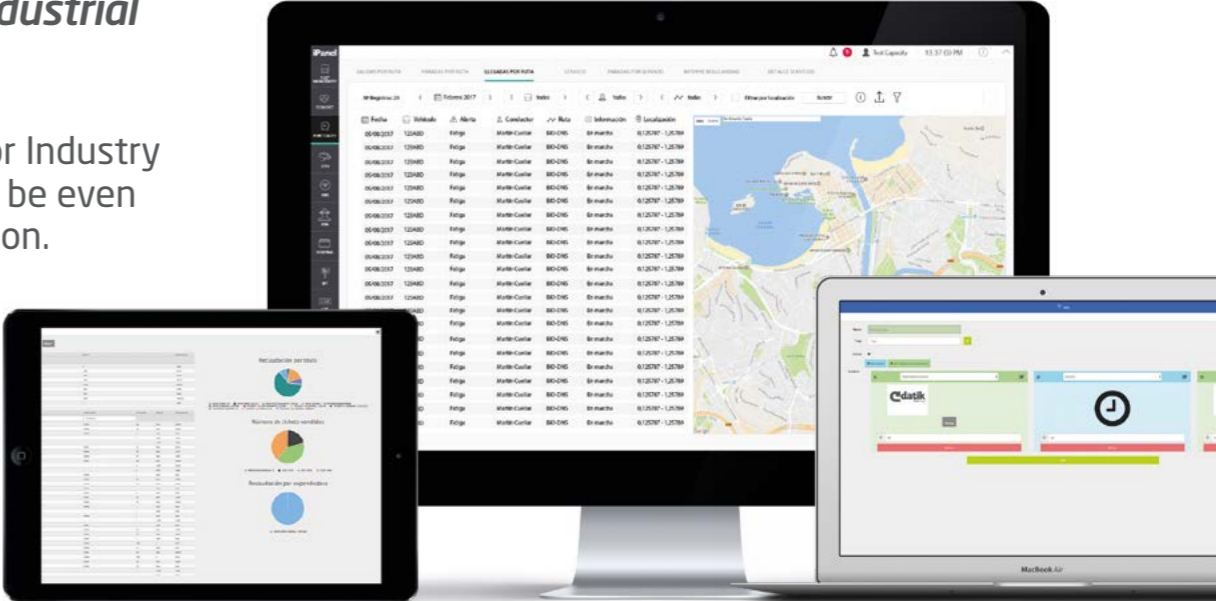
# Connectivity and Digitalization

*We follow a consistent path towards smart connectivity for our coaches, autonomous driving and new mobility concepts*

We are involved in projects to develop technologies and strategies to create modular, flexible and scalable eMobility solutions.

## **Digital transformation, a new stage in industrial development**

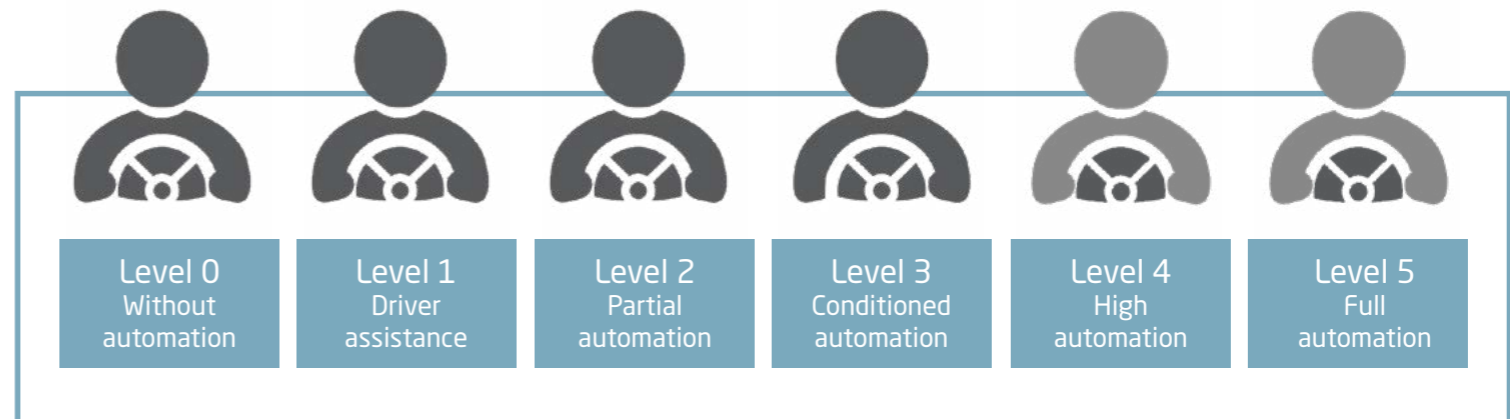
We are moving towards digital transformation or Industry 4.0, further developing our corporate culture to be even faster, more flexible, and more open to innovation.



# Autonomous driving

*We are already working on the introduction of different levels of automation, in both coaches and buses*

We are currently actively participating in European projects with the aim of reaching level 5.



# Sustainability



# For a more sustainable world

## Reference frameworks

### Ratified the United Nations Global Compact since 2013

The 10 principles proclaimed by the Global Compact (referring to Human Rights, Labour Rights, the Environment and the fight against Corruption) inspire us to advance in our responsible actions and help us to better manage risks.

### The Sustainable Development Goals (SDGs) our goals

In 2018 we began our approach to the United Nations 2030 Agenda and the 17 Sustainable Development Goals (SDGs), integrating them into our strategy and management.

## **OBJETIVOS DE DESARROLLO SOSTENIBLE**







# Sustainable Competitiveness

*Corporate responsibility*

## **Integration of Sustainability**

We are making progress in integrating Sustainability in the strategy and daily management of each company in the Group.

## **Permanent dialogue**

We remain committed to a permanent dialogue with all of our stakeholders.

## **Sustainable growth**

We grow sustainably in the areas in which we are present, as well as in the opening of new markets.

## **Stakeholders**

We work from our corporate bodies to ensure that this commitment and sustainable action is extended to customers, suppliers, other partners and stakeholders.

## **Transparency and Good Governance**

Only business activities that respect corporate sustainability are the sole foundation for success.

## **Integrity**

We have an Ethical Code as a vital tool of our action.

## **Alliances and collaboration**

Double link with the United Nations Global Compact: globally and in Spain to advance sustainability.





# Customers, passengers and citizens

*The customer, at the heart of the strategy*

We seek to ensure day-to-day satisfaction and the loyalty of our customers, passengers, and citizens; we stay near them and offer them the best products and services taking account of aspects of sustainability.

We develop cutting-edge products and services that provide a competitive advantage in safety, reliability, sustainability, technology and profitability.

Our lines of work are focused on providing:

- o Turnkey solutions, from start to finish
- o Increasingly efficient vehicles (lower TCO)
- o Vehicles with reduced pollutant emissions, noise reductions
- o With higher levels of safety for the driver and passengers
- o Autonomous Driving
- o Connectivity - Big data
- o LCA (Life Cycle Analysis)

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*We have started to lead the change transition by developing comprehensive solutions for pioneering sustainable mobility, without polluting emissions, without noise, efficient, accessible and totally safe.*

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## Our personnel

*We are committed to the people who make up the Irizar Group, we are key players in Sustainable Competitiveness*

### People:

- o Job creation
- o Quality employment
- o Gender equality, diversity and social inclusion
- o Work-life balance
- o Participation in the management and economic results
- o Communication, transparency and participation
- o Strengthening talent: Education and training

### Health and Safety

- o Occupational Hazard Prevention System
- o Ergonomics-Comfort Programs
- o Health and wellbeing services
- o Shared leisure activities



### Occupational Risk Prevention

We continue to prioritize and dedicate resources to Occupational Risk Prevention systems integrated into the daily management of each company, prioritizing occupational health and safety versus other aspects.



# Environment



We continue to make progress in all aspects that refer to the improvements in the environment, in both waste treatment and reduction, as well as emissions, etc.



We make efficient cutting-edge environmental products and technologies applied to the entire product life cycle available to all.



We work in partnership with society, the environment, and institutions in the design of positive socially and environmentally sustainable development.



CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM

## Sustainable Products + Eco-innovation (Ecodesign) Environmentally Sustainable Production

- Resource consumption efficiency
- Reducing the production of waste and discharges
- Minimizing soil contamination
- Circular economy

Management of sustainable suppliers  
Fight against Climate Change  
Generation and use of renewable energies in facilities  
Promotion and awareness (people, clients and suppliers)



# External partners, supply chain, and alliances

*We pursue integrated sustainability strategy at the Irizar Group level throughout the entire value chain*

We establish stable relationships with external partners capable of offering products and services that help us improve our brand and sustainable competitiveness.

## Our priority

- o Sustainable purchasing and supply chain
- o Logistics optimization
- o Alliances for future projects
- o Commitment to the environment



R & D



Sales network



Incoming supply chain



Operations in Irizar



Distribution and after-sales network. Use of vehicle



End of life of vehicle



# Society

*Commitment to growth and creation of wealth and employment*

The best reflection is our commitment to growth and the creation of wealth and employment, offering quality jobs for people in the environments and countries where we operate



Activities related to our sector



Cultural Activities



Development cooperation  
Activities



Educational Activities



Sports Activities

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*Our relationship with society is based on respect, is open and participative while collaborating with culture, sports and education in our immediate area, as well as charity actions.*

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## Social networks



*Youtube Irizar*



*Vimeo Irizar*



*Flickr Irizar*



*LinkedIn Irizar*

## Catalogues



*Range catalogue*



*Irizar i8 technical catalogue*



*Irizar i6S technical catalogue*



*Irizar i6 technical catalogue*



*Irizar i4 technical catalogue*



*Irizar i3le technical catalogue*



*Hybrid catalogue*

## Magazine and Reports



*IG Magazine*



*Sustainability Report*



*Annual Report*

