

e.City Gold

the 100% electric bus for your city



CAETANO

With your city, with your vision



WE DREAM ABOUT THE FUTURE

Our will is to improve city transportation and to ensure a better future for urban populations.

City networks require cleaner, safer and economically sustainable public passenger transport. We continuously work to combine our growth with urban sustainability and to build the future of cities with our partners.

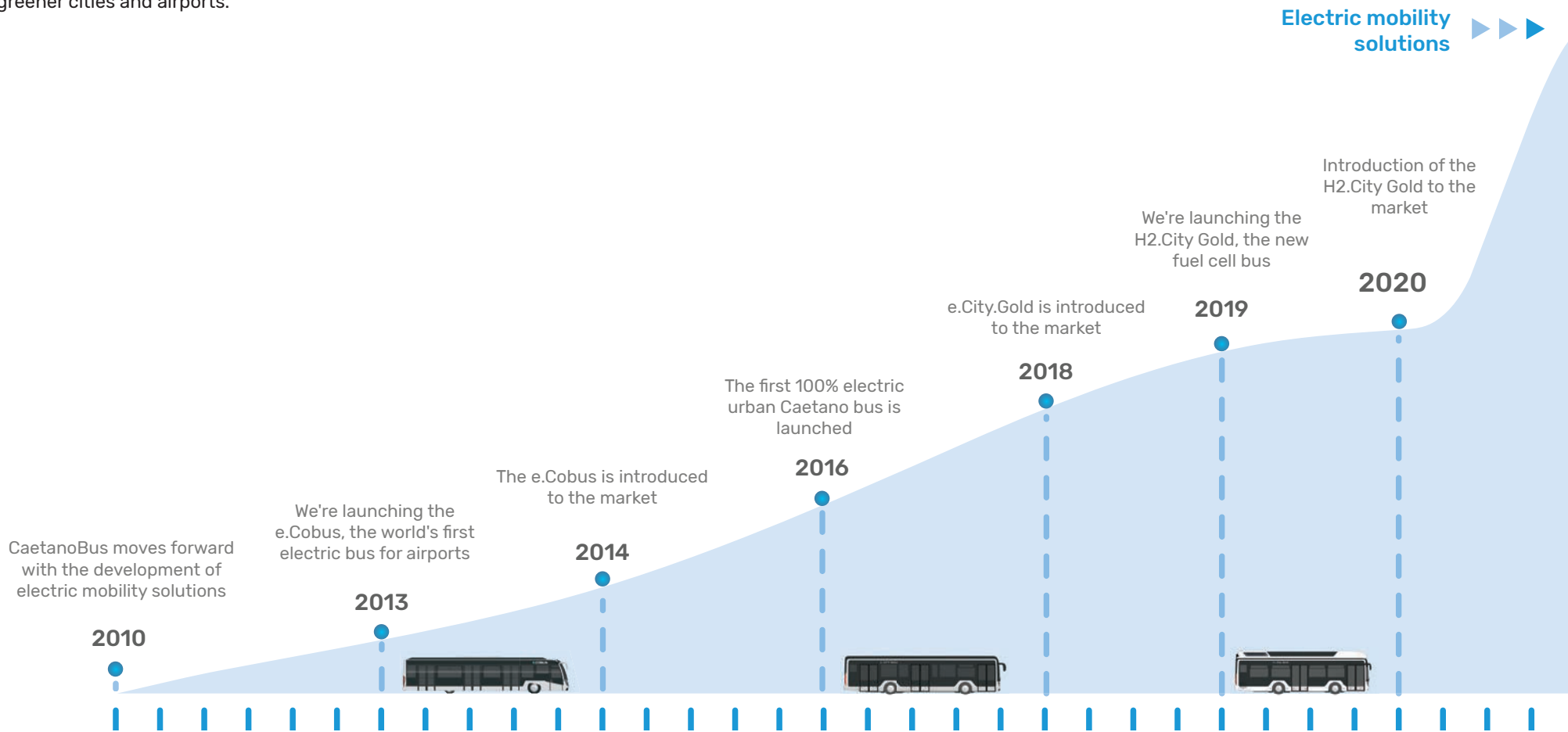
This is our best contribution to a future shaped by green mobility solutions worldwide.

WITH SUSTAINABLE MOBILITY SOLUTIONS

We began taking the first steps in the development of electric mobility solutions over 40 years ago. Our acquired know-how means we are able to offer a wide range of integrated solutions for greener cities and airports.

With over 70 years in the industry, we combine our experience with our passion everyday to develop innovative and more sustainable solutions.

We'll continue dreaming and creating a future in which we want to live.



e.CITY GOLD

It's more than a bus, it's a complete mobility solution.

The Caetano e.City Gold is a 100% electric low-floor, modular bus that meets the mobility and sustainability needs of cities.

As a result of CaetanoBus reputable experience in the development of buses with aluminium bodies, the e.City Gold stands out due to its enhanced modularity, capacity, accessibility, comfort, safety and its easy use and maintenance. Available in LHD and RHD versions with 2 or 3 doors, it easily adapts to any urban environment.

We do more than produce a high quality electric bus. We offer a complete solution that helps to build an efficient urban mobility network, from the operational needs assessment to the after sales service.

**SILENT
SMOOTH
SAFE**



Siemens electric motor



regenerative braking system



aluminium body



high resistance steel chassis





OUR CHASSIS TECHNOLOGY

The modular system of the Caetano chassis means the e.City Gold can have different configurations according to specific needs, maximising the functionalities of the platform.



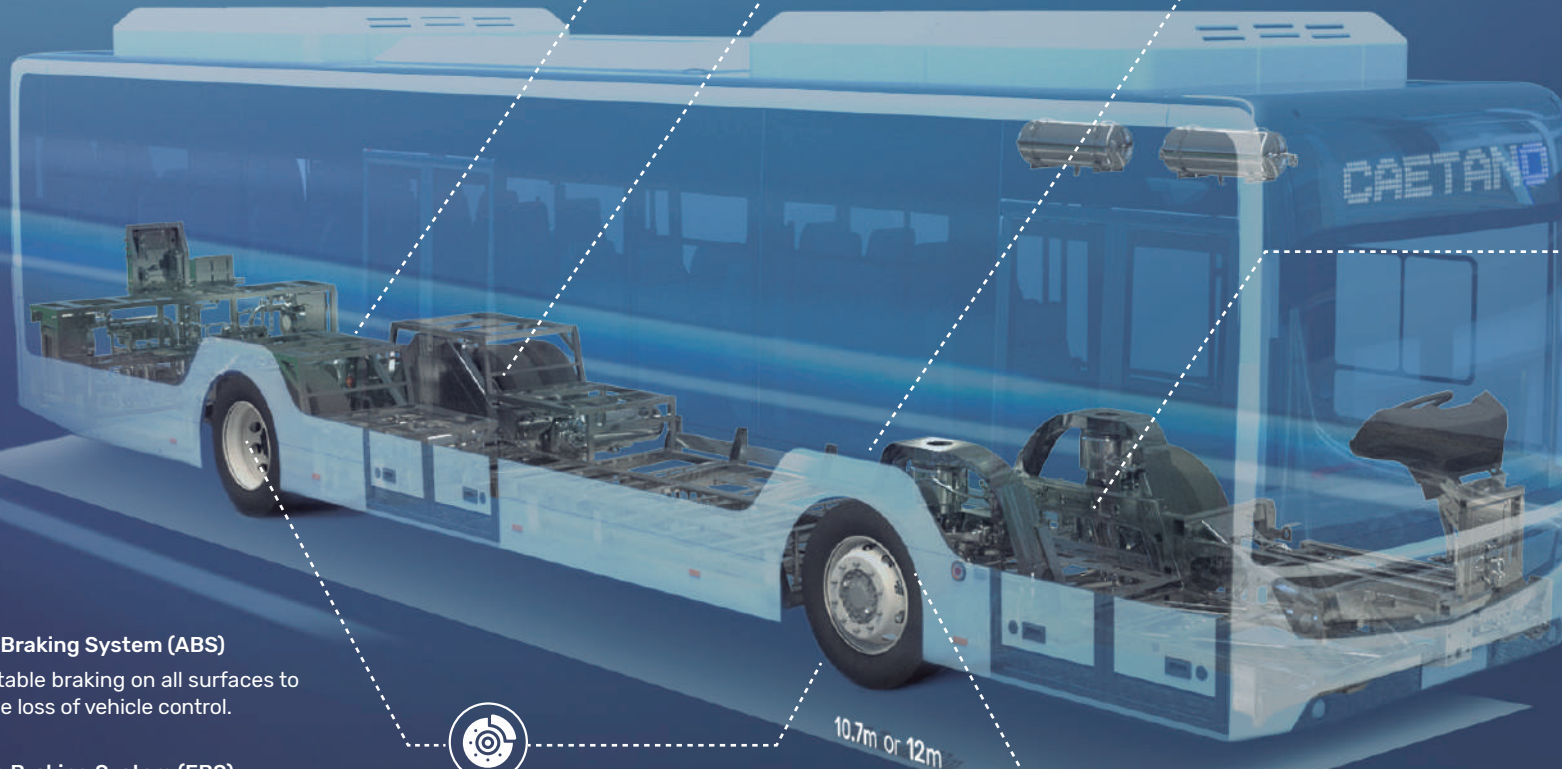
Low-floor modular design



2 or 3 doors



LHD or RHD



Fire detection and extinction

A fire detection and extinction system in the motor and battery compartments.



Anti-Slip Regulation (ASR)

Controls the traction system to stop wheels from slipping when the road is slippery or when the vehicle acceleration is exceeded.



Electronic stability control (ESC)

Is a computerized technology that improves a vehicle's stability by detecting and reducing loss of traction.



Hill holder

Helps the start-up on slopes keeping the vehicle stationary for a few seconds, even when the brake pedal is not pressed.

Anti-lock Braking System (ABS)

Ensures stable braking on all surfaces to prevent the loss of vehicle control.



Electronic Braking System (EBS)

Reads the information of all braking sensors and activates the ABS or the ASR when necessary.



Electronically Controlled Air Suspension (ECAS)

Ensures greater stability and weight distribution, providing greater safety and saving time and running costs, as it makes the entry and exit of passengers easier.



Modular battery system

Every journey is different. We therefore equip our buses with customizable battery packs, for different autonomy needs.

- Battery packs of up to 420 kWh
 - NMC or LTO
- Different types of battery technology
- Potential lifespan of up to 15 years depending on the usage profile



Flexible charging

The e.City Gold can be adapted to different types of charging. This flexibility makes it possible to combine different charging times ensuring an efficient operation.

- Different types of charge (ultrafast, intermediate or overnight charging)
 - CCS Type 2
- Onboard charger (optional)
- Pantograph (optional)



Always connected

The vehicle is equipped with a system that sends detailed information in real time to a dedicated platform. It's possible to receive planned diversion alerts, get vehicle performance statistics and range estimate, manage charging processes and see energy consumption details.

Thus, a complete view of the operation is always available, so that it is as effective as possible.



Safety above all

We meet different safety requirements so that the driver as well as the passengers can travel safely. In addition to the standard safety systems, it is possible to equip the vehicles with a wide range of options according to each of our customers' requirements.

Safety features:

- Driver Fatigue Warning (DFW)
- Lane Departure Warning (LDW)
- Blind spot detection
- Collision Warning (FXW and PCW)
- Tyre Pressure Monitoring System (TPMS)
- Headway Monitoring Warning (HMW)
- Speed Limit Indication (SLI)
- Reversing alarm (white sound)
- Intelligent Speed Assistance (ISA)
- Pedal acoustic feedback system
- Foot pedal camera
- Pedal use indicator lights system
- Camera monitoring systems with night vision to replace mirrors (CMS)
- Breathalyser with vehicle immobiliser
- CCTV
- Parking sensor



Comfort and accessibility for everyone

The e.City Gold gives its passengers a greater level of comfort and accessibility. The batteries are located on the roof to optimise the interior space, making it wider. Thus, the e.City Gold may have different interior layouts, offering a large passenger capacity. It is also possible to choose the location of the ramp in any of the frontal and central doors, reinforcing inclusiveness for all passengers. The low-floor chassis, wide entry and kneeling system ensure an easy and safe entry for all passengers. The independent front suspension system gives passengers a greater level of comfort. No one will want to get off at the next stop!

It's a pleasure to drive

The driver's seat has been designed in accordance with the latest ergonomic standards (VDV 234 and ISO 16121) taking into account the driver who will use it every day, maximising comfort and minimising fatigue. The adjustable dashboard and the information showed in the central display can be adapted to different usage needs.

Easy and intuitive

The e.City Gold is definitely a user-friendly vehicle, designed to provide a straightforward user experience from the beginning.



The similarities to conventional vehicles allows an easy adaptation, so driving the e.City Gold can be a pleasant experience. Maintenance teams also have their work simplified. Maintenance accesses are strategically located to ensure easy access to key components.

best products for increased reliability and safety. Every detail deserves undivided attention, from design to manufacturing, carried out by highly qualified teams that enable the construction of to quality buses.

Quality and reliability

We know that the effectiveness of a vehicle depends not only on the quality of the service provided but also on its performance. Our vast experience, technical skills and use of state-of-the-art components means we are able to provide durable and long-lasting products. The e.City Gold is no exception. Each unit is designed with the guaranteed use of the



Environmentally-friendly in every way

We have a commitment to the planet. In fact, the e.City Gold is made with environmentally-friendly and recyclable materials. We are constantly striving to use new materials and skills that make our buses increasingly more sustainable.

Silence also makes itself heard

The noise in city centres is often deafening. This noise is not only unpleasant, but also entails health problems. Creating quieter urban areas is also a common goal on the horizon for future cities. With its low noise level, the e.City Gold contributes for peaceful and more pleasant cities.

Quieter and better cities.

e.MOBILITY SOLUTIONS

Partner in the definition of the product and service model

CaetanoBus is an integrated mobility solutions provider. We back every operation from start to finish, designing solutions tailored to each Customer according to their requirements and offering a wide variety of services that create, manage and optimise environmentally-friendly transport solutions.

CONSULTING IN e.MOBILITY

- Line energy analysis
- Charging and infrastructure solutions
- Study of energy consumption and operation costs
- Funding solutions

DESIGN AND CUSTOMIZATION

- Prediction of operational scenarios
- Presentation of mobility projects in accordance with operational specifications

AFTER SALES

- Technical assistance
- Customer support service

IMPLEMENTATION AND OPERATION

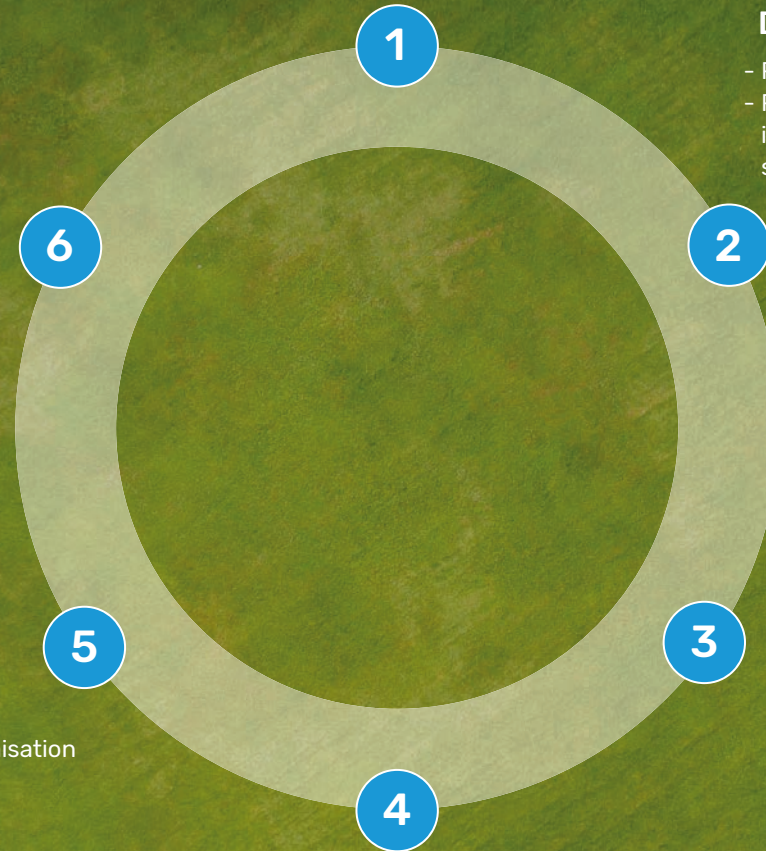
- Training
- Fleet management
- Real-time information
- Vehicle performance optimisation

PRODUCTION

- Product materialisation combining industrial capacity and vast know-how

TECHNOLOGICAL DEVELOPMENT

- Solutions designed based on the latest technological innovations, and development of new features, if necessary

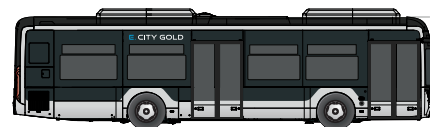


RHD 10.7m



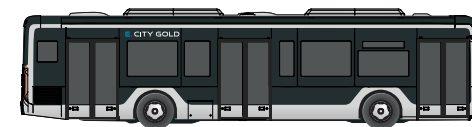
2.500 mm

Intermediate charging batteries: 3.224 mm
Overnight charging batteries: 3.320 mm



10.740 mm

LHD 12m



11.995 mm

Powertrain	Motor - 180 kW - Siemens (permanent-magnet synchronous) Transmission - direct drive transmission (no gearbox)	
Batteries	NMC (lithium manganese cobalt oxide) - up to 420 kWh LTO (lithium titanate oxide) - up to 100 kWh (pantograph application)	
Battery charger (optionals)	CCS Type 2 - up to 150 kW Onboard Charger - up to 22 kW Pantograph (up-down or bottom-up)	
Range	Up to 350 km (depending upon configuration and operation profile)	
Breaking system	Electro-pneumatic brake system WABCO EBS 3, incl. ABS ASR with regenerative braking ESC (Electronic Stability Control) - optional	
Chassis	Low-floor chassis, ladder type, in high strength steel Front and rear towing hook with air plug on the front	
Axles	Front axle - independent suspension, ZF RL 82 EC Rear axle - lowered portal axle, ZF AV 133, for low-floor buses	
Suspension	ECAS 2 - Electronically controlled air suspension with kneeling Automatic level control and manual height adjustment	
Body	Lightweight aluminium body	
Passenger capacity	Up to 64 passengers	Up to 87 passengers
Doors	2 or 3 doors	

* Manufacturer reserves the right to change product specifications.



CaetanoBus

IMAGINE YOUR CITY WITH US.

At CaetanoBus, we develop innovative and more sustainable solutions to transform cities and improve quality of life within them.

CONTACT US!

CAETANOBUS HEADQUARTERS

Av. Vasco da Gama, 1410
4430-247 - Vila Nova de Gaia
PORTUGAL
GPS: 41°06'52.78"N 8°35'31.62"W

Tel.: +351 22 786 70 00
Fax: +351 22 786 71 71

E-mail: caetanobus@caetanobus.pt www.caetanobus.pt

Prepared for:

