smart city

VITORIA-GASTEIZ
SMART MOBILITY

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Gerente de TUVISA , 14th June 2022

TOWARDS SMART ZERO CO_2 CITIES ACROSS EUROPE

VITORIA-GASTEIZ + TARTU + SONDERBORG

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 691883

Smart Mobility

✣ New mobility actions (included in new amendment):

1.- Substitution of partners´ fleet vehicles to EV:
- ✓2 in AVG/CEA, 2 in Visesa and 1 in Giroa
- ✓Implemented in 2020

2.- Charging points:
- ✓2 in Visesa
- ✓Implemented at the end of 2019

3.- E-bike sharing station at AVG/CEA
- ✓to foster sustainable and active mobility among the CEA and AVG workers
- ✓Implemented in 2020

By 1 June 2022, **11000 km** have already been covered with the electric bicycles of the Vitoria-Gasteiz City Council.

In December 2021 the equivalent of saving **1 tonne** of CO2 emissions was achieved!

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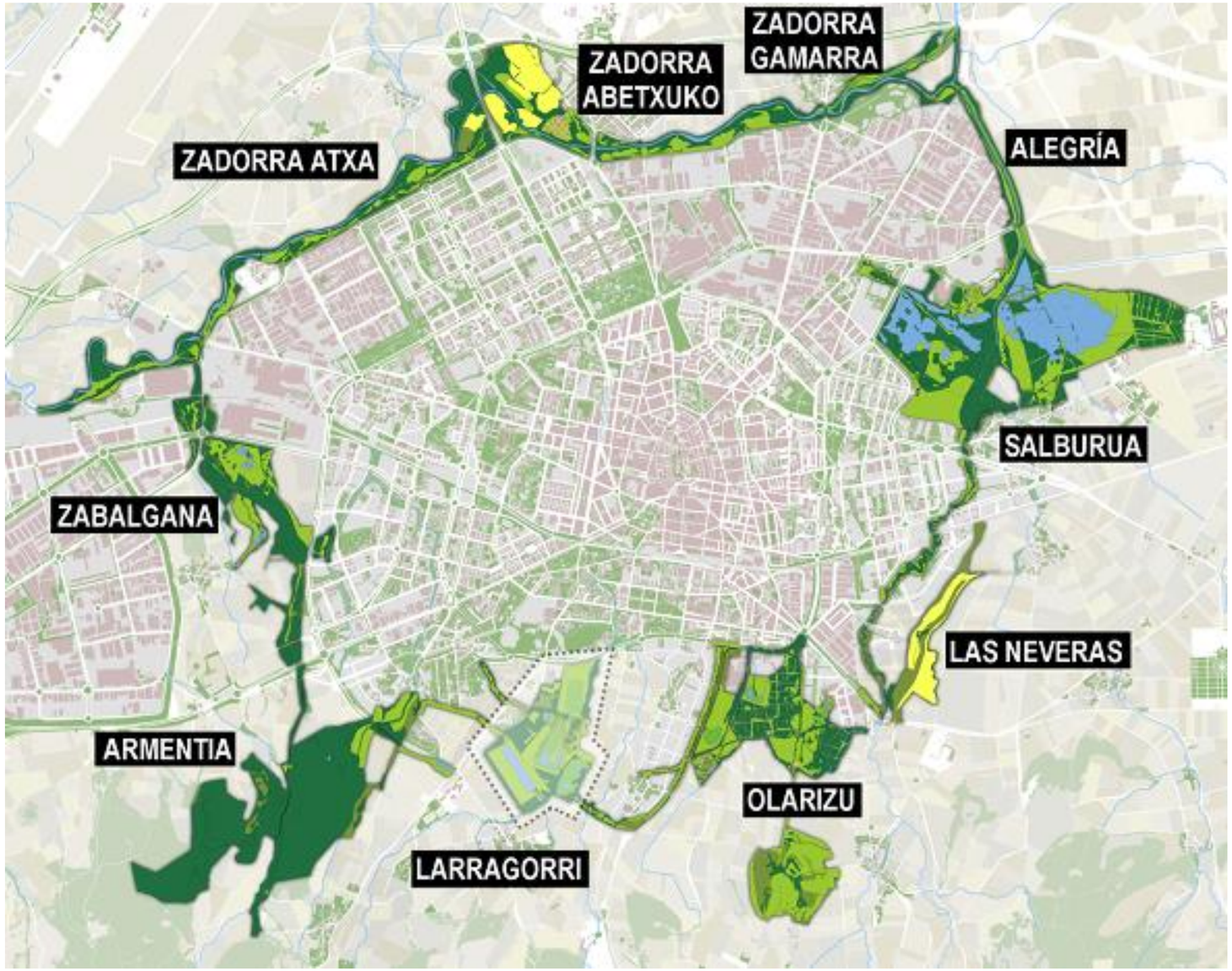
VITORIA GASTEIZ
green capital

The Electric Intelligent Bus (EIB), a new mobility model

(BRT VITORIA-GASTEIZ)

Transportes Urbanos Vitoria-Gasteiz, S.A

TUVISA



Vitoria-Gasteiz

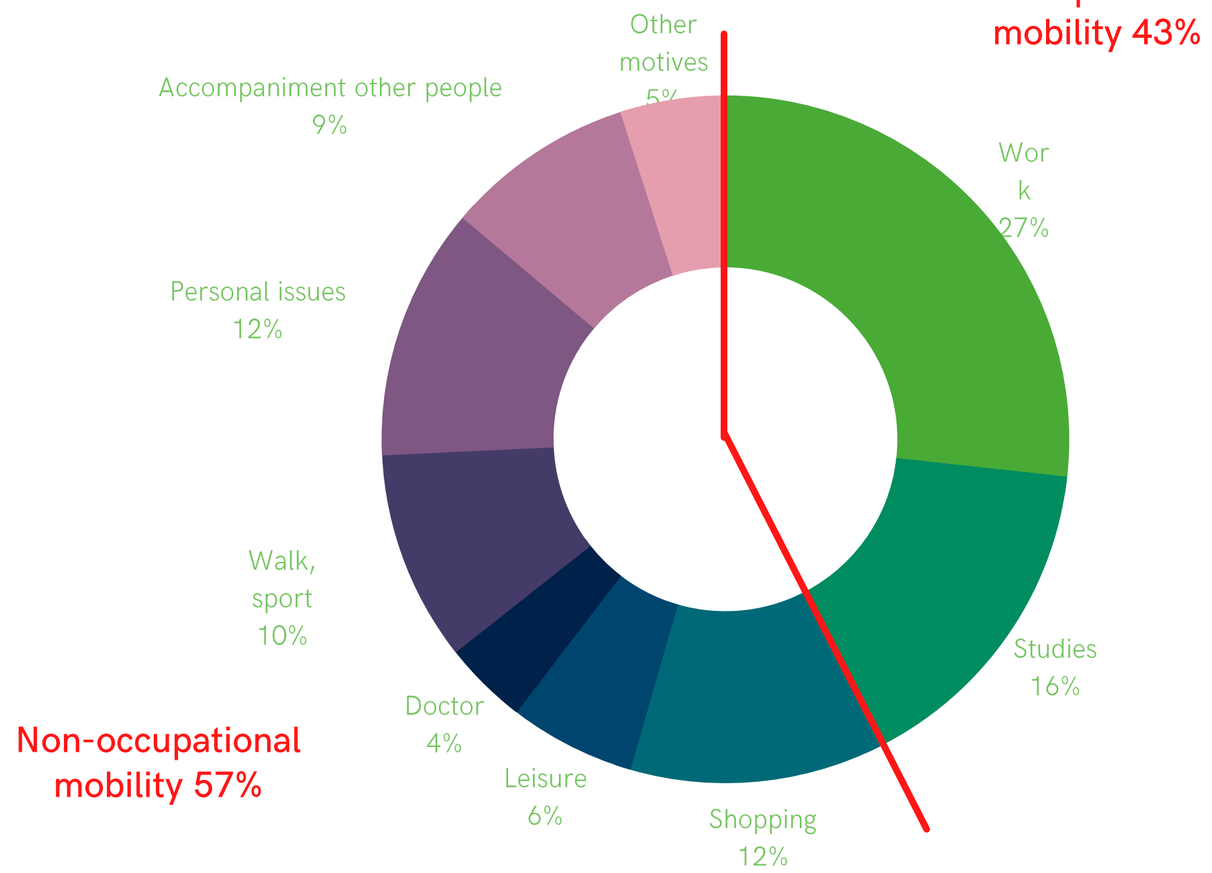
(The capital of the Basque Country)

250.000 inhabitants

30%

Of the carbon dioxide pollution released into the air is a consequence of transport, both of people and goods

Living habits / Policies and Laws



11.2: MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE:

By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

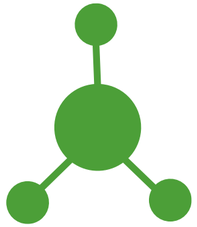
Mobility: Next Steps

SAFE

Social right

SUSTAINABLE

Tthrough investment in management and alternative vehicles



CONNECTED

Between the different modes of transport through a digital and innovative system.

CHANGE of SCENARIO

Implement the bases for a modal shift in mobility:

1. Widening corridors for walking and getting to places on foot, defining pedestrian-friendly spaces.

2. Defining corridors for active mobility, bicycles, scooters, etc

3. Provide public transport with intelligence, because this is what will guarantee equality, inclusion, improvement in equal opportunities, justice and mobile sustainability.

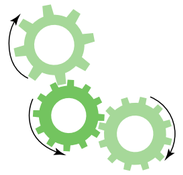
Efficient transport:

Intelligemt

Affordable

Accesible

Safe



Intelligent managment systems

Mobilty plans

Information systems accessible to everyone

Applications

Integrated systems

Clean and efficient vehícles

Optimisation and plurality of modes of transport

Sustainable Mobility and Public Space Plan

2008

New public transport offer:

1- The entire bus network was replaced by a new orthogonal network design
2- A new, previously inexistent tram system was implemented
3- A BRT system was planned to replace a bus line in a second phase

EIB VITORIA-GASTEIZ

ELECTRIC BUSES

ROUTE

STOPS

EIB system characteristics:

100% electric buses

System made up of 13 vehicles (7 of 18m and 6 of 12m) and electric charging (fast charging by pantographs + slow night charging). Electrical maintenance 15 years.

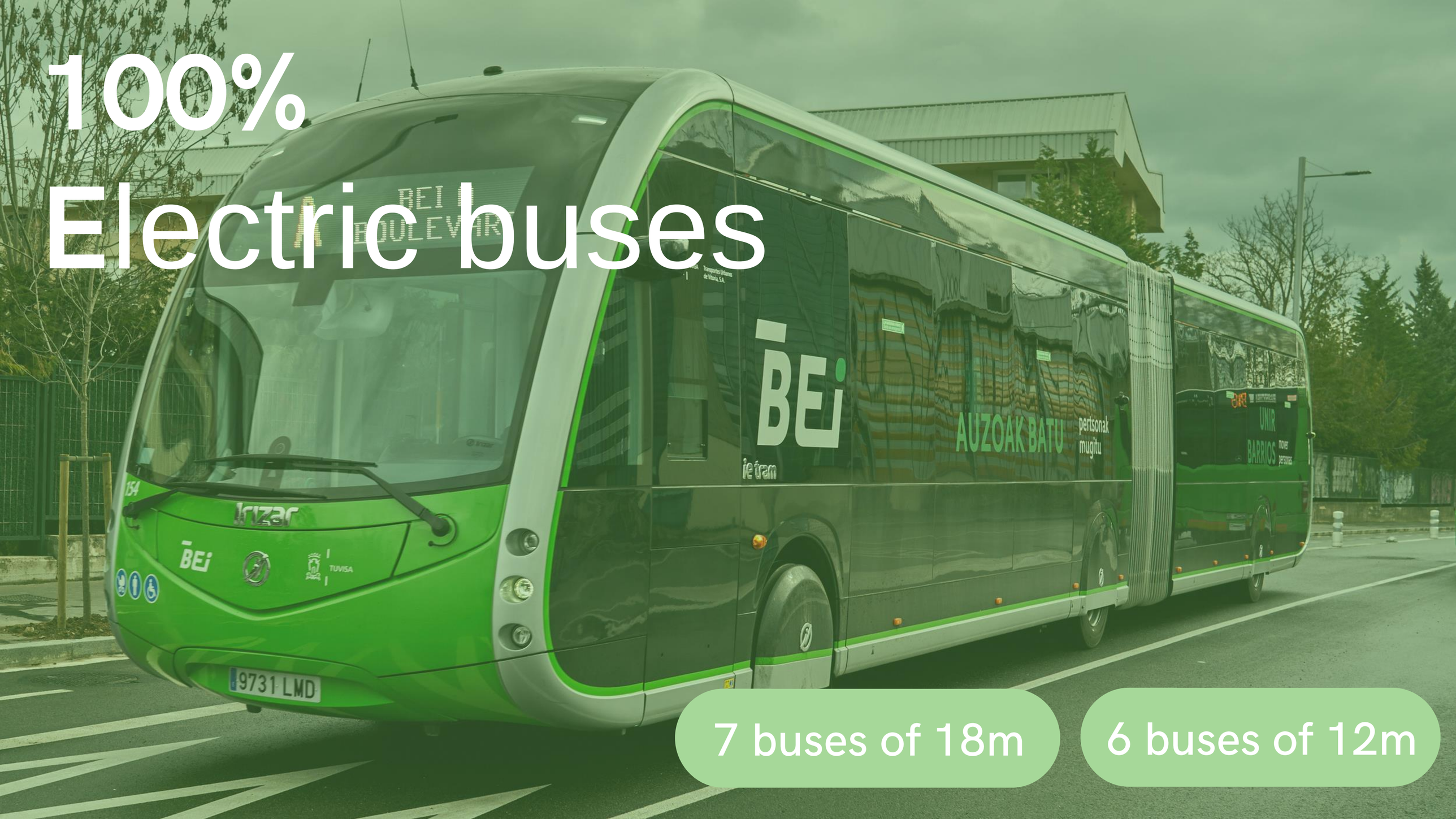
Routes

Segregated lanes, rectilinear itinerary, traffic light priority, automatic guidance, 25% reduction in travel time (better commercial speed), faster transfers

Stops

More accessible platforms (29cm), GAP 4 or 5cm vertical/horizontal, external payment (passenger charge + agile), buy tickets and buy/recharge your own transport card. Intercom (continuous attention).

100% Electric buses



7 buses of 18m

6 buses of 12m

ELECTRIC BUSES

Electrical charge

1- Pantographs (Fast charge)

- 2 points with pantographs in the city to ensure that buses provide service for 16 hours
- Batteries up to 85%

2- Slow charging (at night)

Driving assistance systems

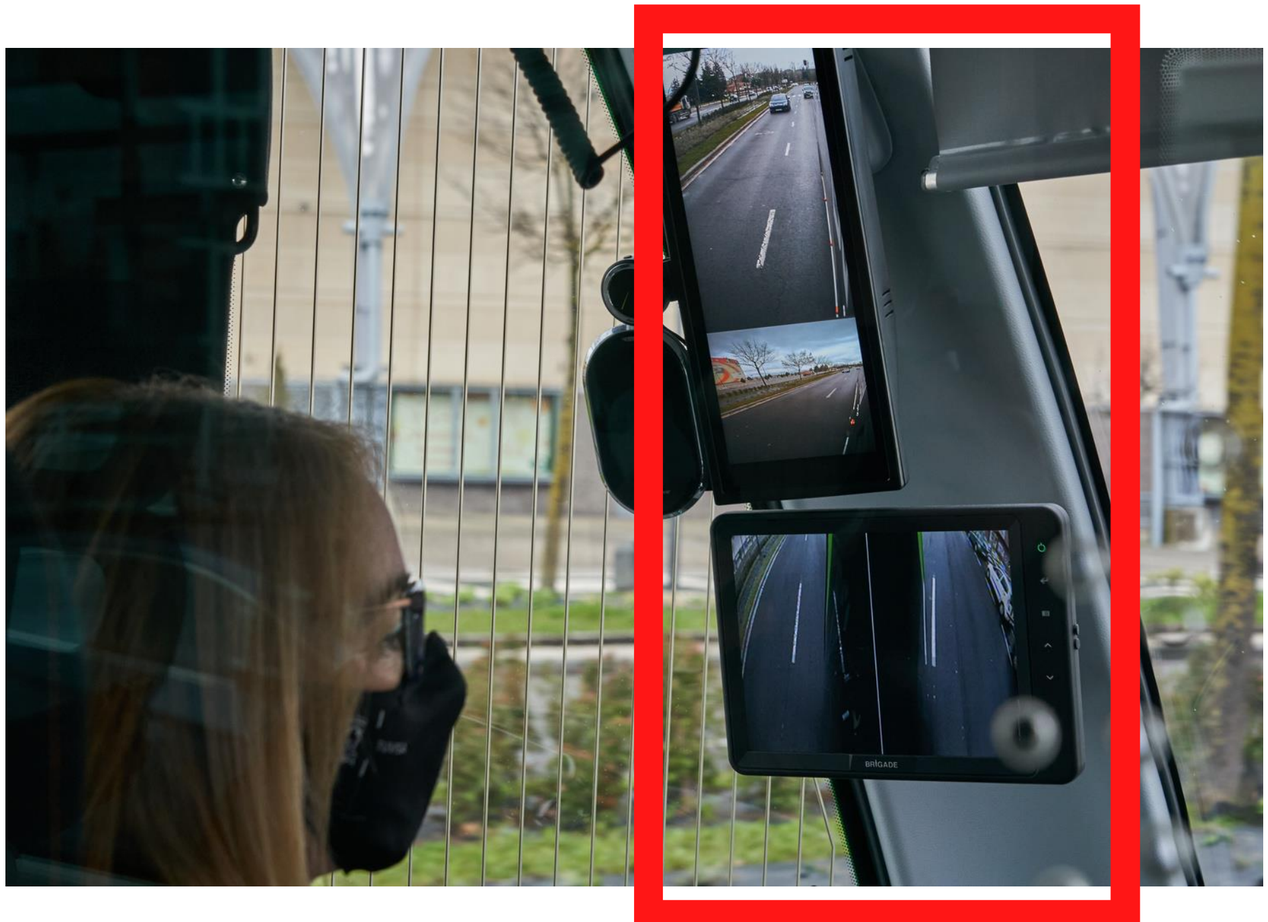
Mobileye - Intelligent multi vision cameras

Driving assistance systems

MOBILEYE

Driving assistance systems

INTELLIGENT MULTI-VISION CAMERAS

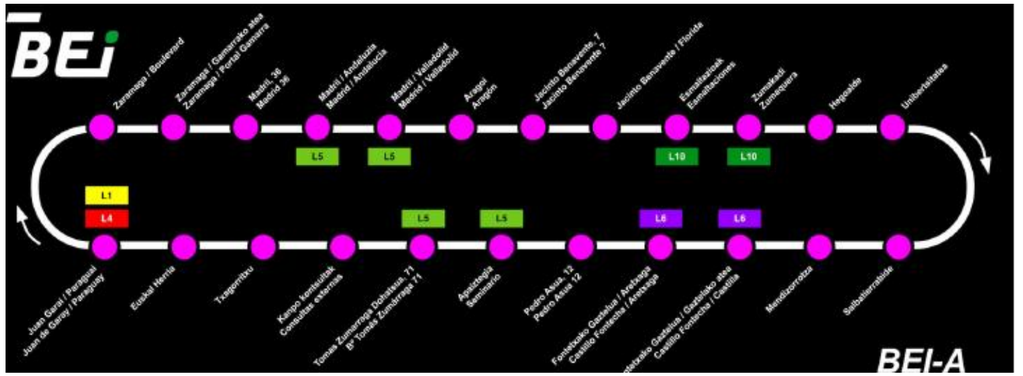


ACCESSIBILITY

100% accessible

Seats are arranged from a gender perspective, safer, three spaces for wheelchairs or baby carriages, USB of course, braille systems, systems compatible with hearing aids, audio systems by IP and also by radio stations, specific systems for greater interior and exterior visibility

INNOVATION AND TECHNOLOGY



Vehicle aesthetics

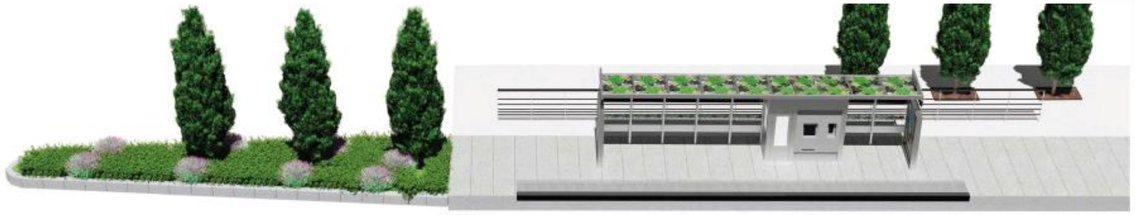
The aesthetics of the vehicle and the placement of all the interior elements have been carefully studied, replacing the underbody with glass, the seats and the bellows of articulated vehicles are translucent

Routes

Acoustic and audible signals

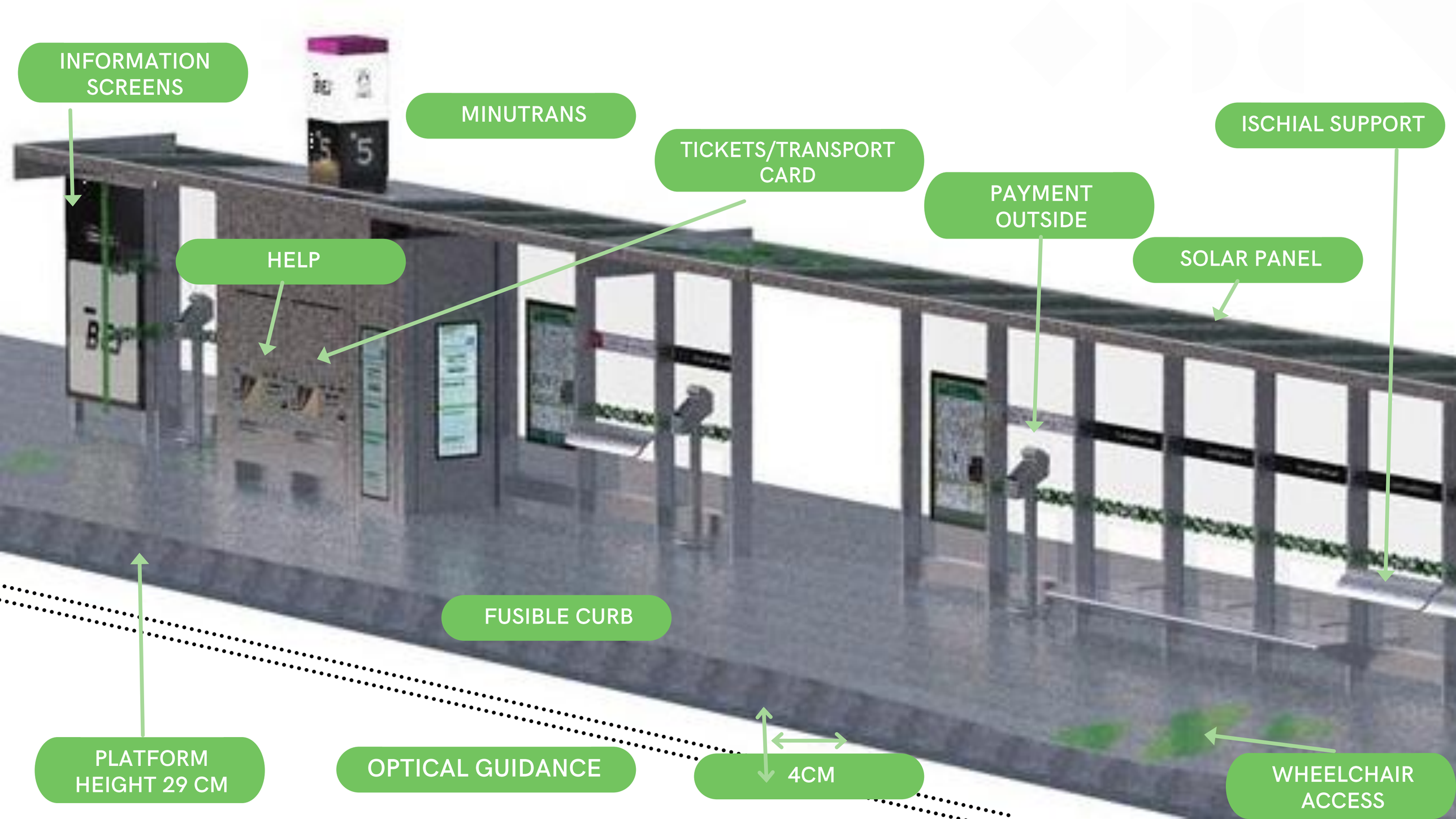
Segregated lane

Green corridor



Traffic light priority

Stops


INFORMATION SCREENS
MINUTRANS
TICKETS/TRANSPORT CARD
ISCHIAL SUPPORT
PAYMENT OUTSIDE
HELP
SOLAR PANEL
FUSIBLE CURB
PLATFORM HEIGHT 29 CM
OPTICAL GUIDANCE
4CM
WHEELCHAIR ACCESS

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Candidatura a Misión Europea

Vitoria-Gasteiz, una de las 100 ciudades europeas climáticamente neutras para 2030

European Missions

100 Climate-Neutral and Smart Cities by 2030

Ayuntamiento de Vitoria-Gasteiz
Vitoria-Gasteizko Udala

Thank you!

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