

Hydrogen in TMB

Apuesta de la red de
Autobuses de TMB por las
energías verdes

October 2022



Transports
Metropolitans
de Barcelona

Hidrogen Buses

8 hidrogen buses from february 2022.



Manufacturer: Caet

Model: H2 City Gold LHD de Caetano

Fuel Cell: Toyota, 60 kW.

Powertrain: .Siemens.



Reliability

Low hours in operation at the beginning

Total km in operation in all buses: 46.000 km

Reliability problems in all buses today: There is one reason:

- Batteries

There is a design problem:

- Too noise in the driver zone with the steering wheel

Note: Noone problems with the Fuel Cell.



First Operation Data

Kg refulled (september2022)	Km Distance
3.694	46.868

Media ponderada	7,90kg/100km
Consumption forecasted	9 kg/100km



Public hydrogen station



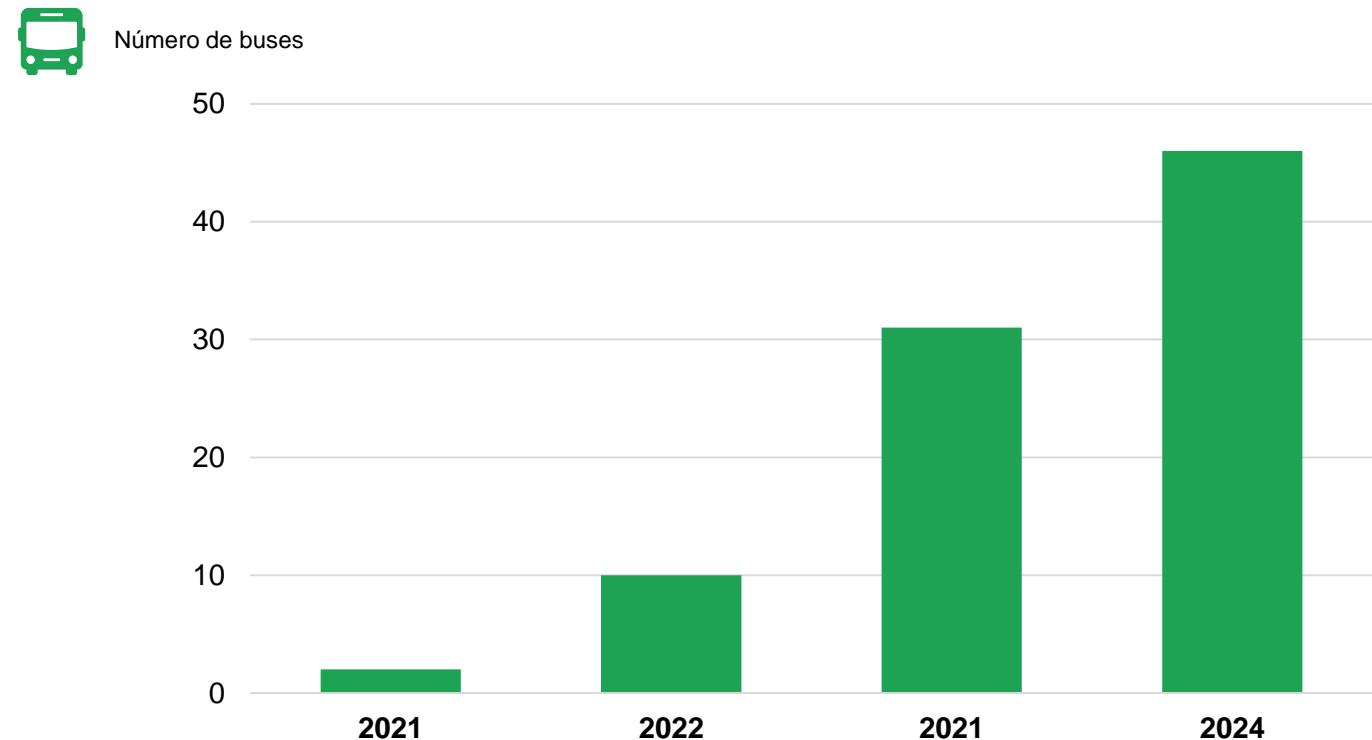
Reliability: no special problems.

We have to design the adpatation for the next investments.



Capacity of the buses: 37,5 kg

Forecast Investment 2021-2024



**Investment about 36 MM€ in
hydrogen buses.**

TMB, el futuro es verde

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