



Transports Metropolitans de Barcelona, Spain

Start of operation	Number of buses	Type of bus	Type of fuel cell
2022	8	Caetano Solo hydrogen city bus	Toyota FC Stack (60kW)
2023	2	Solaris Urbino 18 hydrogen	FCmove®-HD+ (100kW)
2024	36	Solaris Urbino 12 hydrogen	FCmove®-HD (70kW)



2.2 Mio kilometers driven

148 t of hydrogen used

Challenges and Lessons Learned

- vehicle technology is mature enough but each brand presents different issues and reliability problems
- using hydrogen infrastructure among multiple users is key for increasing production and profitability
- Support from authorities in a global H2 project is necessary to build a community of stakeholders

Best practices

- The vehicle’s cost is competitive. The price of hydrogen is key
- It is necessary to promote competition among suppliers
- Knowledge of hydrogen is a value that can be converted into profits
- Professional profiles for electric buses can easily be reoriented towards fuel cell maintenance
- The fuel cell presents no problems, maintenance and reliability come from the BOP