



TMB CHIEF EXECUTIVE OFFICER, GERARDO LERTXUNDI.

TMB WANTS TO PROMOTE A BIOGAS PLANT IN CATALONIA FOR A GREENER BUS NETWORK

• BY CRISTINA MARTÍN VALBUENA | 8 MAR 2021

Catalonia's largest public transport operator is working in various areas to move towards sustainable mobility, such as the electrification of the fleet and the construction of a hydrogen plant with Iberdrola. Now, it wants to add biogas and is looking for producers who can supply it.

Reducing bus fleet emissions emitted is one of the obsessions of the Transports Metropolitans de Barcelona (TMB) team, which is working to make all its vehicles sustainable, but also to become an example for citizens and encourage a social change towards more environmentally friendly mobility. **The green transition being led by TMB involves electrification, acquiring only clean vehicles, and the creation of a green hydrogen plant in the Zona Franca**, which will supply this new fuel to buses and industries on the industrial estate that want to incorporate it.

The public company directed by Gerardo Lertxundi **wants to add yet another way to consolidate clean energy in its operations with biogas**, which is obtained from waste such as slurry, manure, sewage treatment plant sludge and slaughterhouse waste, and is used to obtain heat and electricity. Together with green hydrogen, biogas is presented as a non-polluting alternative fuel for vehicles and should make it easier for TMB to fulfil its commitment to reach emission neutrality by 2030. In France, the use of biogas is starting to become widespread thanks to public funding, which has made it profitable for operators.

According to Lertxundi in an interview with *The New Barcelona Post*, **the scheme to be followed for the introduction of biogas in TMB is similar to the one promoted for the construction of the first hydrogen plant for public use in Spain**, in the Zona Franca, and one of the first in Europe. “For this plant we have talked to hydrogen producers: they produce it and supply it to us. We want to do the same with biogas”, said Lertxundi.

In the case of the hydrogen plant, Iberdrola will be in charge of its development and it is expected to start operating in November 2020. Hydrogen-fuelled buses can be charged in a few minutes and have an excellent range of operation. TMB will only pay Iberdrola for the green hydrogen used.

As for biogas, **Lertxundi specifies that the supply does not need to be from Barcelona**. Production can be located anywhere in Catalonia, taking into account that this fuel can be transported through pipes to the depots.

In addition to looking for potential manufacturers, TMB is including the possibility of using biogas as fuel as a requirement in the purchase of new buses. Likewise, **the operator is approaching the administrations to provide funding to facilitate the incorporation of this new energy source** in the bus network, in line with the support it receives in France.

European project for testing biogas production

Since October 2020, TMB has been taking part in a European research project, Life Nimbus, to convert wastewater treatment plants sludge into methane gas – biogas is basically made up of methane. The product obtained in this experiment will serve as fuel for a city bus of the Barcelona operator's fleet, from the Zona Franca depot, which will use it for its daily circuit.

Specifically, **the Baix Llobregat wastewater treatment plant (WWTP), located in El Prat and managed by Aigües de Barcelona, is where this way of revaluing waste and reusing it in the bus network is being tested**. The project has partners such as the Water Technology Centre (Cetaqua), the project leader; the company Labaqua, and the Universitat Autònoma de Barcelona (UAB), as well as Aigües de Barcelona and TMB.

European funds to drive its commitment to green energy

Like many other administrations and companies, TMB is finalising the projects it wishes to present to apply for European funds. “These are projects that we were already working on at TMB and that fit in perfectly”, Lertxundi said. “We will be very ambitious”, he added.

According to the CEO of TMB, European resources **can be used to accelerate the electrification of its fleet and the adoption of new fuels such as hydrogen**, making its use cheaper. Also on the table is the completion of the L9, as announced by the Government, which is to invest in the implementation of the central section of this infrastructure. “It is a project that will transform the mobility of the city and the metropolitan area. It's strategic”, he remarked. But **TMB is also thinking about other**

metro lines. “There are more lines that need to be improved, in supply and in trains, and we're talking about quite a few: L1, L4 and L5”, he says.

Impact of COVID-19: drop in revenue and deployment of a historic offer

The pandemic has had a clear impact on mobility and public transport. The restrictions have led to an unprecedented drop in travel, especially in the harshest months of confinement. In April last year TMB recorded a 91.5% drop in passengers. But COVID-19 has also meant the implementation of new security measures to prevent contagion. “Public transport is not a source of infections”, underlined Lertxundi, backed by “many studies that have said it is safe and none that say otherwise”.

The operator **has reinforced the ventilation and cleaning systems**, has provided passengers with hydroalcoholic gel and masks, placed screens to isolate drivers and has prohibited payment in cash on buses. **It has also increased supply**, reaching the highest number in its history. “This is not at all easy to do. It is a great organisational and management effort because it forces us to work without a network: at rush hour we don't have any trains in maintenance, we have them all running”, explains the CEO.

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With the drop in passengers, from 623 million users in 2019 to 333 million in 2020, **TMB's revenue has fallen proportionally**, even more so due to the loss of tourists, who pay higher fares. If in the year before the pandemic, TMB earned 392 million euros, it expects to close 2020 with a 50% drop in turnover.

The administrations have approved several rescue funds to cover operators' losses and Lertxundi points out that **a large part of the fall in TMB's revenue registered in 2020 has been covered**. The public support required in 2021 is expected to be less, but will still be needed. “There must be a commitment to public transport. These funds are absolutely necessary for sustainability, the environment and the lives of people who live in cities”, concluded Lertxundi, also hoping that Congress will finally pass a law to finance public transport, one of Spain's long-pending issues.