

PUBLIC BUSES POWERED BY BIOSIDEL DERIVED FROM USED COOKING OILS IN PORTUGAL

The beautiful city of Lisbon in Portugal, European Green Capital 2020, has launched the first public buses powered by biodiesel derived from used cooking oils.

The [Powered by Biodiesel](#) innovative pilot project started in 2019 on the initiative of the Lisbon's main public bus company Carris, in partnership with Prio private company specialized in creating sustainable energy, which was in charge of the design and development of Prio's B100, an equivalent diesel produced with used cooking oils. From the three buses initially converted in 2019, currently six buses of a city line of Carris operate on 100% biodiesel obtained from used cooking oil.

This biodiesel allows to reduce the greenhouse gas emissions of traditional fossil fuels by 83%, while recycling and valorizing a residue that has no alternative use and which must be appropriately disposed in order to avoid environmental damages. If thrown into the drain, in waterways or at sea, exhausted cooking oil represents a serious environmental threat: floating on the surface of the water, it prevents the normal exchange of oxygen with the outside. A single liter can damage up to 1 million liters of water. On the contrary, if properly recovered and reused, it can prove to be a precious resource, both in environmental and economic terms.

The used cooking oil recycled in Portugal comes from the collection carried out by Prio company through agreements with restaurants, hotels, other reception facilities and 600 recycling containers installed across the country, cleaner and with a larger storage capacity than traditional ones. The company also plans to grow the network of recycling containers, in order to use the huge amount of cooking oil which is not being collected yet. Once recovered, this waste is transported to their factory in the port of Aveiro, in central-northern Portugal, where over 80,000,000 liters are processed every year through an efficient method for producing liquid fuels with positive environmental benefits.

The project to use a biodiesel derived from waste oils is part of the policies and operational choices already made by the city of Lisbon for a sustainable mobility. Lisbon has one of the largest city networks of electric charging stations and a municipal light-duty car fleet that is 91% electric. One of Lisbon's bus routes is already served by electric buses, and another one by biofuel buses. Lisbon achieved a 28% reduction in energy consumption between 2012 and 2017 and surpassed its 2030 target of 40% carbon emissions reduction in 2016. Its ambitious new target is now a 60% reduction of CO2 emissions by 2030 and carbon neutrality by 2050. In this framework the city is investing in a new fleet of electric and natural gas buses.



[Lisbon was awarded the title of European Green Capital 2020](#) by the European Union. The distinction was decided by international experts through a study made in 2018 using a set of 12 indicators aimed at assessing sustainability in the European cities. Despite the difficult situation created by the Covid-19 pandemic in 2020, the city has used this opportunity to strengthen its campaigns and initiatives to design and adopt a new sustainable urban model that can cope with and mitigate climate change, encourage economic and social prosperity, and provide opportunities for all. [The initiative's website shows the many activities carried out](#)

The inauguration of the first six buses powered by biodiesel derived from cooking oils planned by the [Powered by Biodiesel](#) innovative pilot project was part of this special moment in the city of Lisbon.

The Carris Lisbon's public transport company is now carrying out a comprehensive assessment of the initiative in order to define the interest in scaling-up the use of this type of fuel. Final decisions will take into account parameters such as costs, functionality, the citizen and other city stakeholders satisfaction for this solution compared to others adopted in the city, as well as the benefits for the environment and for the economy.

Circular economy approach is part of the [European Green Deal](#), the European Commission's policy agenda for a sustainable, climate-neutral Europe by 2050, acting as a vehicle for investment and growth. The project carried out in Lisbon shows the great economic and environmental potential of this approach for a sustainable mobility and may inspire similar practices in many other cities in Europe and in other countries.

To know more

[Powered by Biodiesel project](#)

[Article in euractiv.com](#)

[Used cooking oils in euractiv.com](#)

[Carris company website](#)

[Prio company website](#)

[Article in themayor.eu](#)

[Article in digital.grupoma.eu](#)

[Article in energias-renovables.com](#)

[Article and video in enae.toluna.com](#)

[Article in jttri.org.jp](#)

[Article in biovoices-platform.eu](#)

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