

Lantania completes the construction of the largest vertical gardens in Europe

- The Calle 30 Natura pilot project, carried out in collaboration with Padecasa and Azul Repair, includes 3,250m² of walls covered with plants

Madrid, 18 of July 2023. Lantania has completed the works of the first phase of the vertical gardens on Calle 30 Natura, in Madrid, which it has carried out together with Padecasa and Azul Repair. The City Council of Madrid's pilot project had a budget of 3.8 million euros and was developed on the 400 metres of walls of the M-30 ring road, which separates the Mariano Salvador Maella and Nueva Zelanda roundabouts on the Avenida de la Ilustración. The work, which has resulted in the largest vertical gardens in Europe, took six months to complete.

The joint venture between Lantania, Padecasa, and Azul Repair has covered 3,250 square metres of concrete walls with 23 highly durable plant species with the capacity to absorb pollutants. The project aims to improve the environment by reducing the urban heat island effect, reducing road traffic emissions and noise pollution, as well as improving the aesthetics of the city.

This pilot project will be used to study the effects of implementing this type of garden. Thus, pollution sensors have been installed in the form of folding panels to record the pollutant levels in the gardens. The data obtained will be compared with the general pollution data available from Calle 30 or from the pollution stations of the City Council of Madrid in order to show the difference in pollutant concentration between the different zones.

In addition, the capacity to attract biodiversity in the vegetated walls and its evolution throughout the year will be assessed. The work will mainly focus on the detection of bird species and pollinating insects.

The vertical gardens have a centralised and sectorised irrigation system with different sensors to show the impact and to adapt the irrigation to the needs. Each module or panel has horizontal irrigation pipes at different heights, which have drippers with different flow rates depending on their location in height to optimise the necessary irrigation.

This pilot project is the first phase of Calle 30 Natura, a 30 million euro investment by the City Council of Madrid to cover the concrete walls of the M-30 with large vertical gardens. The City Council of Madrid plans to launch the second phase of Calle 30 Natura in 2024, with the aim of transforming another 100,000 square metres of concrete into vegetation.