



## The LCBI low-carbon label awarded to the CityWave development in Milan and the Roots development in Luxembourg

**Two European real estate developments – CityWave, developed by Generali Real Estate in Milan, and Roots, developed by BPI Real Estate and Unibra Real Estate at Belval in Luxembourg – have been awarded the LCBI “design stage” label for their low-carbon performance. The whole process has been validated by a reliable third party, Bureau Veritas. The Low Carbon Building Initiative (LCBI), launched in 2022, has created the first low-carbon label that is the measure of a building’s carbon footprint over the whole of its life cycle.**

**D**uring SIBCA (the low-carbon real estate trade fair), taking place from 7<sup>th</sup> to 9<sup>th</sup> October in Paris, LCBI (the Low Carbon Building Initiative), launched in 2022 by the major players in European real estate and the BBCA (the Association for the Development of Low Carbon Buildings), awarded its first international labels to two real estate developments: CityWave in Milan, developed by Generali Real Estate, and Roots at Belval in Luxembourg, developed by BPI Real Estate and Unibra Real Estate.

### CityWave, the flagship project of the new Milanese urban landscape

CityWave is a unique development, designed by the Bjarke Ingels Group (BIG) architecture studio. It features two blocks linked by a futuristic portico and creates a new green and protected public space. The iconic part of the CityWave building – the curved arch that links the two buildings – is topped by over 10,000 solar panels, making it the largest solar farm in Milan. This system, with a 1.3 megawatt capacity, provides 65% of the project’s heating and cooling needs.

Furthermore, in order to reduce the total amount of carbon in the development, the design team has been attentive in choosing sustainable building materials, prioritising those with the lowest carbon footprint and which use the highest amount of recycled material. As a result of combining all this know-how, the result is a total embodied carbon level of 997 kgCO<sub>2</sub>e per square metre (over 50 years), 21 kilograms of CO<sub>2</sub> equivalent per square metre (over 50 years) for the storage of biogenic carbon, and an operational carbon weight of 15kgCO<sub>2</sub>e/sq.m. per year.



**«We are delighted to award our first certifications outside France to the CityWave project and the Roots project. These are truly remarkable projects with extremely high-levels of low-carbon performance. Our role is to hasten the decarbonisation of real estate and increase the value of low-carbon assets in Europe. Our label has been perfected by means of a robust methodology that is the result of collaboration with numerous institutions and companies. We are proud that our technical expertise is sufficiently well-recognised in Europe to attract the interest of major players such as Generali Real Estate, BPI Real Estate and Unibra Real Estate. It is a matter of considerable pride for us to see that these companies have taken the issue of decarbonisation on board by showing their confidence in our technology. »**

**– Cécile DAP, CEO of LCBI.**

### About LCBI

The Low Carbon Building Initiative was launched in 2022 by major players in the real estate sector (Generali Real Estate, Covivio, BPI Real Estate, BNP Paribas Real Estate, Bouygues Immobilier, W2, Icamap, NSI, Ivanhoé Cambridge) and BBCA (the Association for the Development of Low-Carbon Buildings). Its aim is to develop the low-carbon certification of real estate projects in Europe in order to hasten the decarbonisation of the sector. Based on key European standards and benchmarks, the LCBI methodology serves to standardise the practice of life-cycle analysis (ACV) throughout Europe. The LCBI label, audited by Bureau Veritas, takes account of the complete life cycle of buildings, and measures the carbon footprint as well as the comprehensiveness of the ACV on three levels: grey carbon (emissions associated with construction) measured in kgCO<sub>2</sub>e/sq.m over 50 ans, carbon from use (linked to consumption and energy sources) measured in kgCO<sub>2</sub>e/sq.m./year, and the measurement of biogenic carbon storage contained in the building measured in kgCO<sub>2</sub>e/sq.m. The label has three performance levels: Standard, Performance and Excellence. [www.lowcarbonbuilding.com](http://www.lowcarbonbuilding.com)



These performances, calculated by the LCBI method and validated by Bureau Veritas, fully justify CityWave's being awarded the LCBI label, and making it not only the first European project to obtain the label, but also the largest, with a total surface area of 63,000 square metres.

### **Roots, an exemplary construction, built on converted wasteland**

In southern Luxembourg, on the outskirts of the country's second largest city, is Belval, a business centre and residential area with an ever-increasing number of inhabitants. Belval is located on the site of a former steelworks that has been in the process

of conversion since the early years of the century, covering almost 300 acres.

Designed by ArtBuild Architects, an architecture studio in Luxembourg, Roots is a mixed-use ensemble of three buildings constructed on a common platform, around a green terrace. It covers over 20,000 square metres and comprises a hundred or so apartments, as well as office space and retail outlets.

Roots is completely in line with the European low-carbon real estate movement. The design team has paid the greatest attention to the choice of materials, prioritising options with the lowest carbon content at all levels of the development, which means that the embodied carbon level is 755 kg/CO<sub>2</sub>e/sq.m., i.e. 25 % below the target threshold. Roots uses the right materials in the right places, with priority given to wood. Its superstructure is mainly composed of wooden elements, producing an exceptional result in terms of stored biogenic carbon (159 kgCO<sub>2</sub>e/sq.m.). The wood used in the construction comes exclusively from sustainably managed forests that are certified under the PEFC scheme (Programme for the Endorsement of Forest Certification).

As regards operational carbon levels, solar panels help reduce energy consumption during office hours.

These features fully justify the fact that the Roots project has been awarded the LCBI label.

**« Today, BPI Real Estate is taking a major step in the decarbonisation of real estate in Europe. We are extremely proud that our Roots project should be one of the first to obtain LCBI certification in Europe. This success is based on the skills of our staff, who are passionately determined to 'do things differently' and be a driving force for positive and sustainable change. »**

**– Arnaud REGOUT**, Chief Investment Officer, BPI Real Estate

**« In joining the Low Carbon Building Initiative, we are being faithful to one of our ESG priorities in terms of decarbonisation. As a member of the Net Zero Asset Owner Alliance, we are committed to reducing the carbon footprint of our assets between now and 2050 by means of an improvement programme that combines the reduction of carbon emissions, energy-saving, and tenant comfort. We have been a sponsor and founding partner of the LCBI initiative since 2022 and are proud to have one of our projects be the first to be labelled LCBI in Europe. »**

**– Gloria BROCCHI**, Head of ESG, Generali Real Estate

**« As part of the process of granting the LCBI label to the CityWave building development in Milan and the Roots development in Luxembourg, Bureau Veritas has checked the calculations regarding the strict factual standards demanded by LCBI with the aim of reducing CO<sub>2</sub> emissions. Assessors from Bureau Veritas have screened the analyses of the life cycles of these projects, covering CO<sub>2</sub> emissions involved in the construction, the use and the end of life of the buildings. »**

**– Samuel DUPRIEU**, Managing Director, Bureau Veritas Certification France.