



EURO
CITIES



Lille - La Lainière Project House

Cradle-to-cradle building validates and publicises innovative concept

The Metropole Européenne de Lille has developed a building that has a positive impact on the environment in order to increase the sustainability of business parks at the heart of its urban regeneration programme. La Lainière Project House acts as an events, resource and meeting space as well as a regional exemplar of a circular approach to architecture and construction.

Lille has prioritised the regeneration of the factories and wastelands remaining from its industrial history - and created the charter for 21st century business parks to outline its strategy. From the start there was a determination to improve the quality and sustainability of the new business parks set up to provide today's employment opportunities. These aspirations led to the city's interest in the cradle-to-cradle (C2C) concept, which enables buildings to be reconfigured, recycled, dismantled and used elsewhere, as well as to its participation in the European INTERREG IV C2C BIZZ project. After contributing to the C2C BIZZ project's framework for the planning, building and operation of C2C business sites, Lille was keen to be one of seven cities that would put these to the test. The Lainière, a 30-hectare site of Europe's first woollen mill, was chosen for the pilot project. Visited by Queen Elizabeth II and other famous guests in the 1950s, more than 6,000 people worked at the site in its heyday. Closed and demolished at the turn of the century, the objective was to reimagine the site as a place to live and to work. The Project House was to be an innovative part of, and the first step towards, this goal.

The difference in designing a C2C building is a question of priorities - besides prioritising the quality of spaces and light as we do normally, we also defined materials and construction methods to make sure they fulfil C2C criteria and ensured the building had the flexibility to change function and be dismantled and put up in another place. We are proud that we proved it is possible and not just a dream.

Olivier Jost, architect of La Lainière Project House, EKO

Three principles

A competition was launched, challenging architects to come up with a visionary design for a future-proof building that would positively impact the environment, economy and society. Lille chaired the judging panel which chose a design by architectural agency EKO. Lille put collaboration at the project's centre, recognising that it would

cities in action

November 2017

where: Lille, France
what: Innovation
when: 2014 - 2016

only succeed if experts from a wide range of fields, from real estate to renewable energy and materials technology, were brought together to stimulate innovation and problem solving. Funding for the building work and operational costs totalled €1,160,000, to which the European INTERREG project contributed 50% and Lille the remainder.

Working with developer SEM Ville Renouvelée, Lille was able to open La Lainière Project House, the first French C2C building, in 2016. From its extractable foundations to its non-bituminous roof membrane, the building brings to life the three founding principles of C2C: that all products must be biodegradable or capable of being transformed into new products for use elsewhere; that diversity and mutability of systems, architecture, social environments, revenue, biodiversity and more are embedded for resilience and longevity; and that energy must be renewable, from diverse sources and saved where possible.

“La Lainière Project House is much more than a place to lay the first stone in the whole site’s redevelopment, it is also a project that demonstrates the C2C philosophy in action to our city and the European area and we are very proud that it has attracted the interest of so many in the stakeholder community.”

**Rachel Philippe, project organiser,
Metropole Europeenne de Lille**

Multipurpose spaces

All the materials used in the building’s construction can be dismantled and reassembled, recycled, biodegraded or reused after the lifespan of the building. Smaller rooms can be easily rearranged to change their function thanks to mobile furniture, lighting, kitchens and electrical cables that circulate through metal beams across the rooms. One of the outstanding elements of the project is the inflatable meeting room which can be stored in a bag and put up in minutes, transforming into a 65m² space.

The infrastructure for water, energy and heating is similarly novel and flexible, allowing for future changes of use and on-site recycling and power generation. The multifunctional rooms are heated by a boiler that combines two energy sources - solar panels and wood pellets - using a heat exchanger. The building also makes use of passive energy systems. In winter the



transparent roof enables it to benefit from free solar calories. And in summer, a natural ventilation system is used to keep the building cool.

Singular example

La Lainière Project House accommodates a wide diversity of uses and users. In its first year, hundreds of local people came to the house for tours, book fairs and upcycling workshops and school children visited to learn about their area and its sustainable future. The building has given The Friends of Lainière opportunities to celebrate the site’s textile past and urban renewal. It also brings together stakeholders in the area’s regeneration to promote C2C principles. In addition, the Project House is home to the Lille team responsible for the Lainière project, 107 people whose energy and commitment have galvanised citizens, associations and public and private partners to participate in the project.

The project could have come to a stop many times. There were significant difficulties with regulations written at a time when the building’s materials and methods were unheard of. Manufacturers initially quoted high prices, given that they were unsure of the C2C concept. Once explanations and design modifications were completed, the build itself took just three months.

In pioneering a change in the way business sites are developed, restructured and managed and learning many lessons along the way, the project has been able to contribute to the C2C BIZZ project’s ‘Guide to cradle-to-cradle Inspired business sites’. This guide will certainly be of great value as the rest of the Lainière site is developed. What is less certain is the future of the Project House itself. But whether it is sold as corporate real estate, or is reused elsewhere, it will fulfill its function as a building designed for a changing world.

