Mondo in our CAN0P-2030 ambition: an example of restructuring towards accelerated decarbonisation of our operating buildings

The 33,000 m² building located on rue de Courcelles in Paris is undergoing a major renovation and elevation operation. The project is committed to an ambitious environmental approach as part of the acceleration of the low-carbon trajectory of Gecina's buildings in operation CAN0P-2030 (Carbon Net Zero Plan).

Starting date of the project	2018
Project Localisation Places of implementation of the project at this stage and targeted geography if replicable.	153 rue Courcelles - Paris 17th
Project objectives Type of climate innovation of the project with a description of the problem/issue addressed	Reducing the building's carbon footprint during the development phase and then in the operating phase in order to make it part of the CAN0P-2030 trajectory, Gecina's plan to accelerate the decarbonisation of buildings in operation by 2030.
Detailed project description	Located in the heart of the 17th arrondissement, this project consists of the major renovation of a heterogeneous building complex: a Haussmann-style section facing rue Pierre Demours, a second section facing rue de Courcelles built in the 1960s and the creation of an additional 3,000 sq.m. of floor space. This renovation represents 30,000 m² of offices, coworking spaces, cafeteria, shops, business centre and restaurant. This mix of uses will be enhanced by the creation of terraces and planted areas, thus offering occupants a landscaped living environment that is rare in the heart of Paris. The project is committed to an ambitious environmental approach. Gecina attaches particular importance to limiting the environmental impact of the restructuring and to improving the building's performance once it is in operation. The Mondo restructuring implements a representative set of elements of Gecina's CSR policy, particularly in terms of low carbon and circular economy: ▪ A project designed to consume 66 kWh/m² of final energy and emit 3.4 $KgCO_2/m^2$ once in operation, i.e. respectively 2.5 times less and 4 times less than a comparable building on the market according to the Observatoire de l'Immobilier Durable; ▪ 60% reduction in energy performance and 75% reduction in carbon performance after renovation; ▪ Emissions due to the renovation and the construction materials used very much under control: only about 709 kgCO2/m²/year thanks to the preservation of the existing and the selection of materials that have carried out an LCA. This is a better result than the level of the most demanding label on the market (735 $KgCO_2/m^2$ of the BBCA label - Bâtiment Bas Carbone) and the average of comparable operations (1109 $KgCO_2/m^2$ according to the E+C- Observatory) ▪ Implementation of renewable energy on the site: installation of 315 m² of solar panels on the roof and connection to the urban heating and cooling networks; ▪ Resource diagnosis carried out prior to the project to identify available material deposits and potential outlets; ▪ Inclusion in contracts of specific clauses for the selective removal of materials integrated from the cleaning phase; ▪ Reuse of 22 material flows in and ex situ, i.e. 260 tons of materials: floors, carpet, wall stones, glass partitions etc.; ▪ Seven associations benefited from material donations for responsible and solidarity-based projects (lighting, furniture, kitchen equipment, etc...); ▪ 251 tCO_2 were thus avoided on this project thanks to reuse; ▪ Creation of 2,300 m² of vegetated and accessible surfaces;

▪ 770 m² of rooftop and agricultural greenhouse with an estimated local production of 4 tons of aromatic herbs, vegetables and ornamental flowers;

▪ Multiple services: a workshop and 4 bicycle rooms, 280 m² fitness centre, varied catering offer (ERP food hall, 2 cafes), concierge service, app to access the building's services ;

▪ Proximity to public transport (metro lines 3 and 2, RER C, bus).

This policy enables the highest environmental standards to be achieved on this project:

▪ HQE Sustainable Building Excellent,

▪ LEED Gold,

▪ BBCA Renovation,

▪ WELL Gold,

▪ BiodiverCity®,

▪ WiredScore Platinum.

Main project's drivers for reducing the greenhouse gas emissions

Enter the information in the appropriate boxes

Reduction levers	Details on the aspects of the project
☒ Energy and resource efficiency (including behaviour)	Circular economy actions implemented on the operation
☒ Energy Decarbonisation	Photovoltaic panels installed on the roof Connection to urban heating and cooling networks
☒ Energy efficiency improvements	Operation aiming at a very low energy and carbon performance in operation
☒ Improving efficiency in non-energy resources	Circular economy actions implemented on the operation
☐ Emissions absorption: creation of carbon sinks, negative emissions (BECCS, CCU/S, ...)	
☐ Financing low-carbon producers or disinvestment from carbon assets	
☐ Reduction of other greenhouse gases emission	

Emission scope(s) on which the project has a significant impact and quantification of GHG emission reductions per emission scope

Indicate the aspects of the project that contribute to the reduction of emissions per category of emissions considered (left-hand column) and the quantification of associated emissions.

Indicate the main hypotheses and calculation steps in the intended section (below the table)

For further details, please refer to the methodology guidelines.

	Aspects of the project contributing to the reduction of emissions by emission category	Quantification of associated GHG emissions by emission category Please follow the quantification methodology used in the Afep guidelines.
Reduction of the company's carbon dependency		
Scope 1 *Direct emissions generated by the company's activity.*	Improvement of the carbon performance of the building after renovation	Emissions of 3.4 $kgCO_2/m^2$/year, i.e. 17.6 $kgCO_2/m^2$/year reduction compared to the performance of the building before works (reduction of 27,100 tCO_2e over 50 years)
Scope 2 *Indirect emissions associated with the company's electricity and heat consumption.*		
Scope 3 *Emissions induced (upstream or downstream) by the company's activities, products and/or services in its value chain.*	Low-carbon restructuring through the circular economy approach: a carbon performance of approximately 709 $kgCO_2/m^2$/	Emissions of 21,270 tCO_2, i.e. a reduction of 12,300 tCO_2 compared to the average performance of a comparable building in France
Increase of carbon sinks		
Emissions Absorption *Carbon sinks creation, (BECCS, CCU/S, …)*		
GHG emissions avoided by the company at third parties		
Avoided Emissions *Emissions avoided by the activities, products and/or*		

	services in charge of the project, or by the financing of emission reduction projects.		| **Clarification on the calculation or other remarks:** The building has a surface area of 30,000 m². The carbon footprint of the operation is estimated over the life of the building at 3.4 $kgCO_2/m^2$/year (compared to 21 $kgCO_2/m^2$/year before the works). This represents a reduction of 542 tCO_2/year. The carbon footprint of the renovation is 709 $kgCO_2/m^2$ (compared to 1109 $kgCO_2/m^2$ for a comparable average performance in France). This represents a reduction of 12,300 tCO_2.
Modality of verification of the quantification.	**Calculation standard used (ADEME base, GHG protocol, etc.):** LCA (Life Cycle Assessment) and DES (Dynamic Energy Simulation) study **Verification of the calculation (internal or external):** External verification (consultancy firm)
Other environmental and social benefits of the project If possible, list the impacts and Sustainable Development Objectives concerned	This project contributes to the following SDGs: • SDG 7 Use of renewable energies: installation of photovoltaic panels on the roof and connection to urban heating and cooling networks • SDG 12 Sustainable consumption and production: the principles of the circular economy have been followed for the use of certain materials on the site, thus reducing the consumption of new raw materials while recycling certain components. • SDG 13 Climate change measures: the rehabilitation of the building and the circular economy implemented on this project avoids further CO2 emissions while recycling some materials.
Project maturity level Tick the corresponding current maturity level	☐ Prototype laboratory test (TRL 7) ☐ Real life testing (TRL 7-8) ☐ Pre-commercial prototype (TRL 9) ☐ Small-scale implementation ☒ Medium to large scale implementation
Capacity and conditions of the project reproducibility, with associated climate impact mitigation potential	Circular economy actions are deployed on 100% of Gecina's current developments. As a result, Gecina has reduced its carbon footprint of projects under development by 42% in five years, with an average performance of developments underway in 2021 of 771 $KgCO_2/m^2$. By the end of 2021, Gecina's office developments will target an average consumption of 63.5 kWh/m2/year once delivered and average emissions of 2.5 $KgCO_2/m^2$/year. 100% of Gecina's developments produce renewable energy on site.
Amount of investment made (in €)	confidential
Economic profitability of the project (ROI)	☒ ST (0-3 years) ☐ MT (4-10 years) ☐ LT (> 10 years)
Engaged partnerships	
Open comments from the project owner	
More about the project	
Contact the company carrying the project Please specify an ad hoc e-mail address that will allow the reader to contact the project company directly	Mathilderamos-guerrero@gecina.fr
Project URL links	https://www.gecina.fr/fr/patrimoine-immobilier/projets-immobiliers/mondo?back=/fr/patrimoine-immobilier/projets-immobiliers https://www.youtube.com/watch?v=gEz-yxZGP2w
Illustrations of the project	

3 photos/videos minimum (in HD format to be attached)