Definition of a low-carbon roadmap: **Focus on energy in buildings**

In order to reduce the carbon footprint of its real estate portfolio, which alone represents 38% of its GHG emissions, Korian has designed a low-carbon roadmap focused on improving the energy efficiency of buildings.

Starting date of the project	2020
Project Localisation Places of implementation of the project at this stage and targeted geography if replicable.	Roadmap implemented in all countries of Korian: France, Germany, Italy, Belgium, Spain and the Netherlands.
Project objectives Type of climate innovation of the project with a description of the problem/issue addressed	**In order to reduce the carbon footprint of the Group, in accordance with the regulations and the low-carbon objectives of the countries in which Korian operates, the company has defined a low-carbon roadmap relating to the energy of buildings, allowing to contribute to the objective of reducing GHG emissions by 40% by 2030.** Energy of buildings represents the majority of the Group's emissions, with 38%. It is therefore critical to take actions to achieve the carbon reduction ambitions.
Detailed project description	Korian has a real estate portfolio of more than 4 million sq. meters. The low-carbon roadmap for the "Building Energy" category is very significant as this category represents more than a third of the Group's carbon emissions. This roadmap defines several concrete operational objectives: • Promote low-carbon energies by favouring renewable energies • Develop equipment that consumes less energy, such as heat pumps or connection to the heat pumps or connection to the district heating network. • Improving the energy efficiency of buildings (by improving the insulation of buildings and renovating the most energy and renovating the most energy-intensive equipment) • Reducing the use of high-carbon energy sources such as fuel oil and propane and giving priority to renewable energies as much as possible • Energy labelling of new building projects (HQE, DGNB, BREAM, LEED, etc.) • Raising awareness of eco-actions in the establishments (energy savings through use) The low-carbon roadmap for "Energy of buildings" was developed jointly between the Group CSR Department, the Group Real Estate Department and each country real estate departments. A Group carbon committee has been set up in 2019 to define the carbon strategy and associated indicators, exchange best practices between communities of technical experts and address environmental issues of concern across the Group. The low-carbon energy roadmap was also validated by the Group's General Management in November 2020. The deployment and construction of the country roadmaps began in 2021 with associated CAPEX and governance/steering.
Main project's drivers for reducing the greenhouse gas emissions	

Reduction levers	**Details on the aspects of the project**
☒ Energy and resource efficiency (including behaviour)	Raising awareness of eco-actions
☒ Energy Decarbonisation	Phasing out fossil fuel (gas and propane)
☒ Energy efficiency improvements	Use of more energy efficient equipment Increasing the thermal insulation of buildings and low energy specification for new building projects
☒ Improving efficiency in non-energy resources	Development of renewable energy measures
☐ 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

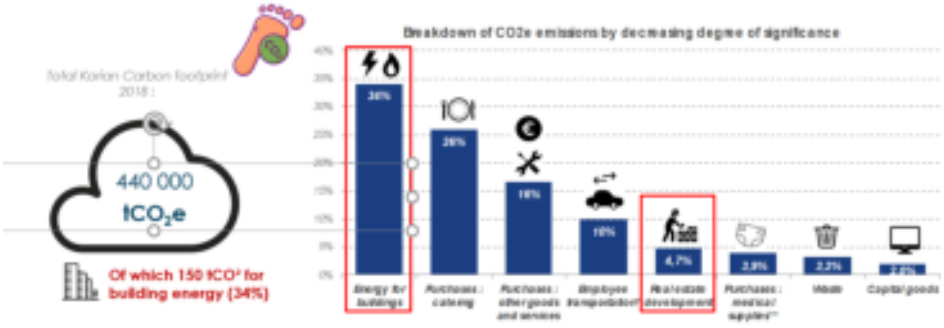
Emission scope(s) on which the project has a significant impact and quantification of GHG emission reductions per emission scope

	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.*	Use of more energy efficient equipment Thermal retrofitting Electrification of uses Raising awareness of eco-actions	GHG emissions related to building energy are the Group's largest emissions source. This category represents approximately 171,000 tCO2.per year. (based on our Carbon footprint study in 2018). The "energy of buildings" low carbon roadmap targets the 3 scopes
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.*		
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:

Thanks to a Carbon Review carried out in 2019 and with the support of Carbone 4, the Group was able to quantify its environmental impact:

- An overall GHG reduction target of 40% is considered by 2030 (vs. 2018)
- 38.7% of the Group's emissions are related to building energy and real estate development.
- These two categories represent approximately: 171,000 tCO2/year



Modality of verification of the quantification.	**Calculation standard used (ADEME base, GHG protocol, etc.):** Carbon balance based on the GHG Protocol carried out in 2019 on the 2018 data with the support of Carbone 4. **Verification of the calculation (internal or external):** external
Other environmental and social benefits of the project	• SDG 3: Good Health and Well-being: Improving Residents' Comfort and Quality of Life • SDG 7: Clean and affordable energy by improving the energy efficiency of the housing stock; • SDG 9: Industry, innovation and infrastructure: making more efficient use of resources and environmentally friendly materials; • SDG 11 Sustainable cities and communities by improving air quality; • SDG 12: Sustainable consumption and production: Focus on carbon-impact materials for greenfield construction, or increase the share of green energy… • SDG 13: Measures to Combat Climate Changes: This low-carbon roadmap on building energy aims to reduce the impact of activity on the environment and in particular to combat global warming by reducing CO2 emissions (from real estate). While strengthening the summer comfort of our residents, this includes a combination of actions such as: reducing the share of fossil fuels in the energy mix, strengthening the thermal insulation of buildings and developing self-consuming energy production.
Project 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 **Remarks**: • Low carbon roadmap validated by the Group's Directors board in November 2020. • Deployment and construction of country roadmaps in 2021.
Capacity and conditions of the project reproducibility, with associated climate impact mitigation potential	The roadmap agreed with Carbone 4 is approved and meets reproducible methodologies and benchmarks.
Amount of investment made (in €)	• Coming up in 2021: need for additional institutional funding to finalize roadmap • Inclusion of low-carbon investments in the company's CAPEX maintenance trajectory
Economic profitability of the project (ROI)	☐ ST (0-3 years) ☐ MT (4-10 years) ☒ LT (> 10 years) **Remarks:** This roadmap reduces energy costs and enhances assets.
Engaged partnerships	N/A
Open comments from the project owner	Two other low-carbon projects were initiated in 2020: one on "Catering", the second factor of GHG emissions from the Korian Group given the high number of residents/patients and the large share of meals taken over a year; and another on the eco-mobility of employees who, in a very "intensive people" environment, generate 10% of the Group's GHG emissions. These working groups continue their work in 2021 to complete the Group's 2030 decarbonization roadmap.
More about the project	
Contact the company carrying the project	csr@korian.com
Project URL links	Korian CSR booklet : https://www.korian.com/sites/default/files/documents/CSR-booklet_Korian.pdf

Illustrations of the project