

Construction of an energy-positive leather goods factory

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Hermès is building the first positive energy leather goods factory in Louviers (Normandy).

Starting date of the project	September 2020	
Project Localisation Places of implementation of the project at this stage and targeted geography if replicable.	The foundation stone for the factory was laid in September 2020 in Louviers, Normandy. This project will also allow for the rehabilitation of a brownfield site near the city centre and will serve as a proof of concept for the Hermès Group's future leather goods factories.	
Project objectives Type of climate innovation of the project with a description of the problem/issue addressed	To offset the energy consumption of the new leather goods factories from the point of view of the electricity grid and to reduce the associated CO2 emissions. This 20th leather factory will not use any fossil energy for its operation and will generate at least as much energy as it consumes.	
Detailed project description	The environmental responsibility of Hermès is asserted in the construction of this building, which will be positive energy (energy consumed < energy produced). The building is partially self-consuming and the surplus electricity is fed into the grid. Most Hermès leather goods factories use natural gas and electricity for their processes and to produce heat and cold, or domestic hot water. Recent buildings mainly use electricity or renewable energy, but have not yet reached the Positive Energy objective. The Maroquinerie de Louviers aims to achieve this target as well as the french E4C2 label (energy performance and greenhouse gas reduction). This 6,400 m2 bioclimatic building, designed to make the most of its location and environment, is made up of triple row north-facing sheds that will provide natural and stable light, reducing energy requirements. Analysis of natural flows (wind, rain and sun) has enabled the architect to significantly reduce heating and cooling requirements. In order to preserve the biodiversity of the site, most of the trees will be kept in the gardens and others will be planted. Since 2015, Maison Hermès has developed a Sustainable Construction Standard based on 5 pillars: 1. Controlling the carbon impact, 2. Biodiversity balance, 3. Air quality 4. Environmental quality. 5. Local sourcing. It is reflected in the quality of our spaces and the well-being of our employees and craftsmen. The Louviers project will be the group's first positive energy building, with the objective of achieving the french E4C2 label (including process energy/water consumption).	
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)	Compact building, with load-bearing brick walls and a wooden roof structure. The thermal inertia is optimised.
	☒ Energy Decarbonisation	Electrification of certain uses, use of geothermal energy
	☒ Energy efficiency improvements	High energy performance of the building and the production processes
	☐ Improving efficiency in non-energy resources	
	☐ 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	<table border="1"> <thead> <tr> <th></th><th>Aspects of the project contributing to the reduction of emissions by emission category</th><th>Quantification of associated GHG emissions by emission category Please follow the quantification methodology used in the Afep guidelines.</th></tr> </thead> <tbody> <tr> <td colspan="3">Reduction of the company's carbon dependency</td></tr> <tr> <td>Scope 1 <i>Direct emissions generated by the company's activity.</i></td><td></td><td></td></tr> <tr> <td>Scope 2 <i>Indirect emissions associated with the company's electricity and heat consumption.</i></td><td>Removal of fossil fuel sources</td><td>24 tCO2e/year</td></tr> <tr> <td>Scope 3 <i>Emissions induced (upstream or downstream) by the company's activities, products and/or services in its value chain.</i></td><td></td><td></td></tr> <tr> <td colspan="3">Increase of carbon sinks</td></tr> <tr> <td>Emissions Absorption <i>Carbon sinks creation, (BECCS, CCU/S, ...)</i></td><td></td><td></td></tr> <tr> <td colspan="3">GHG emissions avoided by the company at third parties</td></tr> <tr> <td>Avoided Emissions <i>Emissions avoided by the activities, products and/or services in charge of the project, or by the financing of emission reduction projects.</i></td><td></td><td>242 tCO2eq/year</td></tr> </tbody> </table> Clarification on the calculation or other remarks: The construction of this leather goods factory does not replace an existing one. Its construction does not therefore result in a reduction in CO2 emissions. However, it is a model that Hermès wishes to replicate. In this sense, the above calculations were made in comparison with the construction of a traditional leather goods factory with the same characteristics. • Pre-Project: mix use of Gas + Electricity: average emissions 266 tCO2e /year (average of scopes 1+2 emissions of 5 leather factories) • Post-Project: estimated emissions: - o Scope 1: 0 tCO2e /year - o Scope 2: 24 tCO2e/year - o Avoided emissions: 242 tCO2e/year		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 <i>Direct emissions generated by the company's activity.</i>			Scope 2 <i>Indirect emissions associated with the company's electricity and heat consumption.</i>	Removal of fossil fuel sources	24 tCO2e/year	Scope 3 <i>Emissions induced (upstream or downstream) by the company's activities, products and/or services in its value chain.</i>			Increase of carbon sinks			Emissions Absorption <i>Carbon sinks creation, (BECCS, CCU/S, ...)</i>			GHG emissions avoided by the company at third parties			Avoided Emissions <i>Emissions avoided by the activities, products and/or services in charge of the project, or by the financing of emission reduction projects.</i>		242 tCO2eq/year
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Modality of verification of the quantification.	Calculation standard used (ADEME base, GHG protocol, etc.): GHG Protocol																											
Other environmental and social benefits of the project	Verification of the calculation (internal or external): Internal This project contributes to the following SDGs: • SDG 7 Clean and affordable energy: by eliminating all sources of fossil fuels and allowing the building to be self-consuming; • SDG 8 Decent work and economic growth: by providing new jobs in this energy positive leather goods factory; • SDG 11 Sustainable cities and communities: by rehabilitating a brownfield site; • SDG 13 Measures to combat climate change: by achieving the objective of an energy positive leather goods factory (energy consumed < energy produced), the Maroquinerie de Louviers also aims to obtain the E4C2 label (energy performance and greenhouse gas reduction).																											

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: Building under construction.
Capacity and conditions of the project reproducibility, with associated climate impact mitigation potential	All future Hermès leather goods projects are carried out with this experimentation in mind.
Amount of investment made (in €)	Project cost between 15 and 30 M€ (land + operations)
Economic profitability of the project (ROI)	☐ ST (0-3 years) ☐ MT (4-10 years) ☒ LT (> 10 years) Remarks: click here to enter the information
Engaged partnerships	The 511,000 bricks in the building are manufactured by a local company. The site was chosen in collaboration with the Communauté d'agglomération and allows for the rehabilitation of an industrial wasteland.
Open comments from the project owner	/
More about the project	
Contact the company carrying the project	Erwan Dufresne: erwan.dufresne@hermes.com
Project URL links	/
Illustrations of the project	