A new solar power plant to decarbonize the energy mix of Fnac Darty

Fnac Darty and renewable energy producer Valeco signed **a Corporate Power Purchase Agreement for the production of a future solar photovoltaic park in the Centre-Val de Loire region**. With an installed capacity of 20MW, this future solar park, which will start generating electricity in 2023, will cover 16% of the annual energy consumption of Fnac Darty's sites in France and increase the share of renewable energies in the French energy mix.

Starting date of the project	Signing of the contract in February 2022 Commissioning date of the plant: during 2023
Project Localisation Places of implementation of the project at this stage and targeted geography if replicable.	Argent-sur-Sauldre (Centre-Val de Loire)
Project objectives Type of climate innovation of the project with a description of the problem/issue addressed	This long-term contract meets two objectives: to reduce the Group's carbon footprint and to secure part of Fnac Darty's electricity supplies by avoiding fluctuations in market prices.
Detailed project description	In a responsible purchasing approach, the Group is increasingly sourcing renewable energy. To reduce the carbon footprint related to its energy consumption, Fnac Darty has chosen to use traceable guarantees of origin, through a direct power purchase agreements with a renewable energy producer (Power Purchase Agreements - PPA). After two contracts signed in 2019 and 2020 to purchase the production of existing power plants, the Group signed a Corporate PPA in early 2022 for the production of a future solar park in the center of France, which will be built and operated by Valeco. With an installed capacity of 20 MW, this future solar park will be built in 2023 and will cover about 16% of the annual energy consumption of Fnac Darty's sites in France. This project is part of the Group's commitment to reduce its CO2 emissions by 50% by 2030 (compared to 2019 – on scope 1 and 2). With this Corporate PPA, this commitment takes on an even stronger dimension, since this contract will not only decarbonize Fnac Darty's electricity supplies, but also contribute to increase the share of renewable energy in the French energy mix thanks to the construction of a new solar power plant.
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)	
☒ Energy Decarbonisation	Construction of a new photovoltaic power plant in France and injection of electricity from renewable sources into the French grid
☐ Energy efficiency improvements	
☐ 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

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.
Reducing the company's dependence on carbon		
Scope 1 *Direct emissions generated by the company's activity.*		
Scope 2 *Indirect emissions associated with the company's electricity and heat consumption.*	Production of electricity from renewable sources (solar photovoltaic)	- 860 tCO2e / an
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: Fnac Darty will directly purchase the guarantees of origin of the future photovoltaic park, for production that will start in 2023. This will represent about 20MW per year, or around 16% of Fnac Darty's electricity consumption in France.

In accordance with the "market-based" methodology and the recommendations of the GHG Protocol, we consider an emission factor of 43 gCO2eq/kWh in scope 2 for electricity on the French grid (residual mix, source AIB 2020 from data provided by RTE), and an emission factor null for the electricity produced by the photovoltaic park. The annual gain in CO2 emissions will amount to 860 tCO2e/year on scope 2 (20MW*0,043/1000).

The calculation carried out takes into account the emissions related to the electricity production phase; it does not take into account other indirect emissions related to energy (scope 3), i.e. upstream emissions, the losses of the grid and the depreciation of the manufacture of the plants.

Modality of verification of the quantification.

Calculation standard used (ADEME base, GHG protocol, etc.): Fnac Darty reports its GHG emissions related to its electricity consumption in "market-based". In accordance with the recommendations of the GHG Protocol, the emission factor of electricity in France is that of the residual mix (consumption mix from which are subtracted the guarantees of origin used in France to certify the renewable origin of consumption in the context of green offers), updated each year by the AIB based on data provided by RTE.

Verification of the calculation (internal or external): The Group's energy-related CO2 emissions are audited by KPMG, a third-party body independent of Fnac Darty, as part of its work to verify the information in the Group's non-financial performance statement.

Project maturity level

Tick the corresponding current maturity level

Fnac Darty and Valeco were particularly thorough regarding the protection of biodiversity to develop this project. With an area of 20 hectares, the future solar park will be developed on a former agricultural land that the municipality has transformed to accommodate an industrial project. Valeco has chosen to keep the initial agricultural activity by deploying a beekeeping activity around the black bee of Sologne as well as a sheep pasture. For this, hedges will be created and the existing hedge will be reinforced both to participate in the landscape integration of the project and to strengthen ecological continuities. Local and attractive species for avifauna and pollinators will be selected (country maple, blood dogwood...).

For the entire project, Valeco will promote the development of local employment, for example by using local incubators and businesses. The company also undertakes to involve local professionals as a priority

	for the maintenance of the vegetation of the site (breeder for grazing, rehabilitation association or company for the maintenance of green spaces, local fencer ...), as well as for the beekeeping activity set up. With this new project and the development of Valeco in the region, a new maintenance base is set to be deployed in the surrounding area. This project contributes to SDG 7 and in particular target 7.2: "By 2030, significantly increase the share of renewable energy in the global energy mix".
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 **Remarks**: The park is in the development phase and will see the light of day in 2023.
Capacity and conditions of the project reproducibility, with associated climate impact mitigation potential	This type of project is reproducible, subject to a long-term commitment. These long-term PPAs, by allowing the construction of new renewable electricity production plants, contribute to increasing the share of renewable energy in the French energy mix. In a responsible purchasing approach, Fnac Darty intends to continue to study future PPA projects for its purchases of electricity from renewable sources.
Amount of investment made (in €)	Not communicated
Economic profitability of the project (ROI)	☐ CT (0-3 years) ☐ TM (4-10 years) ☐ LT (> 10 years) **Remarks:** In a context of high volatility in energy market prices, the economic profitability of the project cannot be calculated.
Engaged partnerships	This contract is the second PPA signed between Fnac Darty and Valeco, after a first PPA for the production of a wind power plant located in Occitania (see "Supply of electricity of wind origin via the signature of a PPA - Ambition4climate"). The electricity produced by the solar power plant will be injected into Solvay Energy Services' equilibrium perimeter before being redistributed to Fnac Darty's consumption sites.
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	geraldine.olivier@fnacdarty.com
Project URL links	/
Illustrations of the project 3 photos/videos minimum (in HD format to be attached)	