Installation of a wind turbine,
In Herentals, Belgium

In line with its goal of achieving carbon neutrality in its operating activities (scopes 1 and 2) by 2025, Plastic Omnium has decided to install a wind turbine at the Herentals production facility in Belgium. It complements the solar panels already installed in 2019 on the building's roof.

Starting date of the project	**February 2017:** Start of consultation with suppliers. **December 2017:** Signature of the contract with EDF Luminus. **October 2021:** Start of construction of the wind turbine. **March 2022:** Start of electricity production from the wind turbine.
Project Localisation Places of implementation of the project at this stage and targeted geography if replicable.	Project implemented at the Plastic Omnium Herentals site in Belgium.
Project objectives Type of climate innovation of the project with a description of the problem/issue addressed	In order to contribute to Plastic Omnium's ambition to achieve carbon neutrality on its scopes 1 and 2 by 2025 compared to 2019 CO2 emissions, the company is turning to wind power generation. Through this project in Herentals, Plastic Omnium wants to reduce its environmental impact by installing a 138.5m high wind turbine with 3.5MW of installed power in front of the production plant.
Detailed project description	Through the wind turbine project in Herentals, Plastic Omnium aims to demonstrate the added value of the initiative for the Division and for the Group: - An annual reduction of 1,400 tons of CO2 emissions from the site - Annual local electricity production of more than 7 GWh with self-consumption of 4 GWh (approximately 50% of the site's annual electricity needs) - Energy independence in case of grid failure - Limit the site's exposure to the high volatility of the electricity market.
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	Self-consumption of the wind energy produced to replace electricity from the Belgian electricity 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.
Reduction of the company's carbon dependency		
Scope 1 *Direct emissions generated by the company's activity.*		
Scope 2 *Indirect emissions associated with the company's electricity and heat consumption.*	Self-consumption of wind energy produced to replace electricity from the Belgian grid (about 50% of the annual electricity needs of the site).	Production estimated at 7 GWh/year (theoretical data from EDF), of which 4 GWh are dedicated to the Plastic Omnium Herentals site. This is equivalent to a reduction of about 800 tons of CO2 for the site.
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 of the project, or by the financing of emission reduction projects.*	*Introduction of the remaining production (3 GWh/year) on the Belgian electricity network*	The introduction on the Belgian electricity network of the remaining production (3 GWh/year) avoids (all things being equal), the emission of approximately 600 tCO2eq/year

Clarification on the calculation or other remarks:

The project was finalized in March 2022, therefore, these calculations are estimates.
The project has an annual production of 7 GWh (of which 4 GWh is dedicated to the Plastic Omnium Herentals site).
The carbon intensity of the electricity from the Belgian electricity grid was considered to be about 0.1998 kgCO2eq/kWh. Considering an emission factor of 0.0141 gCO2/kWh for the installed wind turbine, this represents an annual reduction of 742.8 tCO2eq for the site.
The annual electricity consumption of the production site is about 10MWh, which is equivalent to 1998 tCO2eq/year.
Moreover, the introduction of the remaining production (3 GWh/year) into the Belgian electricity grid avoids (all other things being equal) the emission of 557.1 tCO2eq/year.

Modality of verification of the quantification.

Calculation standard used (ADEME base, GHG protocol, etc.):
Use of ADEME coefficients.

Verification of the calculation (internal or external):
Third party verification: supplier invoice and calibrated electricity meter and verification by Mazars of ADEME coefficients used.

Other environmental and social benefits of the project

If possible, list the impacts and Sustainable Development Objectives concerned

This project contributes to the following environmental benefits:
- Decreasing domestic generation needs and decreasing overall demand.
- Freeing up transmission systems to help meet domestic demand.

This project contributes to SDG 13 Climate Change Action & SDG 7 Clean Energy: By using less carbon-intensive wind power, the project reduces the company's carbon footprint.

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	The project can be replicated depending on the following conditions: energy costs, wind exposure, local subsidies and taxes, local legislation and technical feasibility. The economic balance necessary for the profitability of the project must be respected.
Amount of investment made (in €)	PPA partnership (long-term electricity delivery contract between two parties) No investment by Plastic Omnium, 4.5 million euros by EDF Luminus.
Economic profitability of the project (ROI)	☒ ST (0-3 years) ☐ MT (4-10 years) ☐ LT (> 10 years) **Remarks:** The energy produced by the wind turbine is sold by EDF Luminus to Plastic Omnium Herentals at a fixed cost reduced by 50% compared to the market cost. The contract has a duration of 25 years.
Engaged partnerships	-Subcontracting the installation, operation and maintenance of the structure -Partnership with EDF Luminus for the implementation of the production project and the submission of the file to the government agencies.
Open comments from the project owner	This project demonstrates Plastic Omnium's commitment to the environment. It is part of an ambitious carbon neutrality project that is in line with SBTI objectives.
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	actforall@plasticomnium.com
Project URL links	To learn more about Plastic Omnium's environmental impact strategy, see the following links: https://www.plasticomnium.com/en/act-for-all-en/ https://www.plasticomnium.com/wp-content/uploads/2022/04/plastic-omnium-universal-registration-document-2021-en.pdf
Illustrations of the project 3 photos/videos minimum (in HD format to be attached)