Project presentation (2/3 sentences) : In order to reduce greenhouse gas emissions at its Swedish sites, Elis is replaces the use of LPG in its industrial processes with bio-LPG, a lower emission fuel.

Starting date of the project	March 9th, 2021
Project Localisation Places of implementation of the project at this stage and targeted geography if replicable.	Sweden, at the Group's 6 sites using LPG as the main energy source.
Project objectives Type of climate innovation of the project with a description of the problem/issue addressed	The aim of the project is to reduce greenhouse gas emissions by using bio-LPG instead of LPG at 6 sites in Sweden. The bio-LPG is extracted from biobased residual products or biobased waste, following a mass balance approach.
Detailed project description	In order to replace LPG with an alternative fuel, the Group examined the different solutions and finally opted for bio-LPG according to the "mass balance" approach. This approach ensures the traceability and attribution of the bio-based material in the LPG manufacturing process. This still innovative manufacturing process, with potential challenges on the supply of bio-based material and a limited number of players involved in this market today, is relatively complex. However, the benefit in terms of greenhouse gas emissions is significant (-90%) Bio-LPG represents 47% of the total energy of these 6 sites. In total, 56% of the Swedish sites now use renewable energy sources (biogas, bioLPG, heat networks). At the Group level, by the end of 2022, the Group will consume 23% of renewable thermal energy (biogas, biomass, bioLPG, etc.). This project is an example of the initiatives taken as part of the Group's ambitious 2025 CSR commitments. This commitment programme contributes to the fight against climate change, through the following objectives - Reduce CO2 emissions from operations by 20% in intensity between 2010 and 2025. - Improve the thermal energy efficiency of European plants by 35% between 2010 and 2025. - Accelerate the transition of the logistics vehicle fleet to alternative vehicles In addition, the Group has recently committed to have Climate Targets aligned with the Paris Agreements ("Science Based Targets") by the end of 2022. In Sweden, the group aims to achieve Zero Net Emissions by 2035 and has already started an ambitious transition plan for its activities.
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	Use of Bio-LPG instead of LPG for 6 Group sites in Sweden.
☐ 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	All CO2 and other greenhouse gas emissions are reduced through the transition to alternative energy.

<table>
<tr><td>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.</td><td>
<table>
<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>
<tr><td colspan="3">Reduction of the company's carbon dependency</td></tr>
<tr><td>Scope 1
Direct emissions generated by the company's activity.</td><td>Reduction of scope 1 emissions by replacing LPG with BioGPL.</td><td>Reduction of about 4,000 tonnes of CO2e/year</td></tr>
<tr><td>Scope 2
Indirect emissions associated with the company's electricity and heat consumption.</td><td></td><td></td></tr>
<tr><td>Scope 3
Emissions induced (upstream or downstream) by the company's activities, products and/or services in its value chain.</td><td></td><td>Reduction of about 500 tons of CO2e/year</td></tr>
<tr><td colspan="3">Increase of carbon sinks</td></tr>
<tr><td>Emissions Absorption
Carbon sinks creation, (BECCS, CCU/S, …)</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
Emissions avoided by the activities, products and/or services in charge of the project, or by the financing of emission reduction projects.</td><td></td><td></td></tr>
</table>
Clarification on the calculation or other remarks: On average, the 6 sites consumed around 17,000 Mwh of thermal energy in 2021, with a standard emission factor of 0.245 kg CO2e/kWh for LPG (source: Ecoinvent) and 0 kg CO2e/kWh for bio-LPG for scope 1 emissions. For scope 3 emissions, the emission factors taken into account are 0.068 kg CO2e/kWh for LPG (source: Ecoinvent) and 0.036 kg CO2e/kWh for bio-LPG (source: supplier).
</td></tr>
<tr><td>Modality of verification of the quantification.</td><td>Calculation standard used (ADEME base, GHG protocol, etc.): GHG protocol, emission factor from Ecoinvent database for LPG, supplier emission factor for BioLPG.

Verification of the calculation (internal or external): No external verification</td></tr>
<tr><td>Other environmental and social benefits of the project

If possible, list the impacts and Sustainable Development Objectives concerned</td><td>SDG n°7
SDG n°9
SDG n°12</td></tr>
<tr><td>Project maturity level

Tick the corresponding current maturity level</td><td>☐ 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: click here to enter the level of maturity of the project</td></tr>
<tr><td>Capacity and conditions of the project reproducibility, with associated climate impact mitigation potential</td><td>The Group plans to transition the last LPG-fuelled plant in Sweden in the short term.</td></tr>
<tr><td>Amount of investment made (in €)</td><td>Confidential</td></tr>
<tr><td>Economic profitability of the project (ROI)</td><td>☐ ST (0-3 years)
☐ MT (4-10 years)
☐ LT (> 10 years)

Remarks: This project is fully integrated into the Elis Group's CSR strategy</td></tr>
<tr><td>Engaged partnerships</td><td>xxx</td></tr>
</table>

Open comments from the project owner	xxx
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	sustainability@elis.com
Project URL links	xxx
Titre SEO	Elis uses bio-LPG instead of LPG
Méta Description	The Elis Group is replacing the use of LPG in its industrial process with bio-LPG at 6 of its Swedish sites.
Illustrations of the project 3 photos/videos minimum (in HD format to be attached)	