

Alban Muller

Part of Croda International Plc.

Alban Muller uses **natural ingredients to manufacture products** for the **cosmetics** and **pharmaceutical industries**.

Its R&D laboratory and production site are located in Fontenay-sur-Eure, in the heart of the **Cosmetic Valley**. This is where Alban Muller's teams develop solutions based on plant extracts and tested active ingredients to offer natural alternatives to synthetic products.

A few numbers



85

employees on site



€16 mil

annual turnover
for the site



1978

Based in Fontenay-sur-Eure
for almost 35 years



2021

Became part of the British group
Croda International

Client case study



Alban Muller aims to reduce carbon emissions by 50% by 2030

The cosmetics manufacturer Alban Muller aims to halve its carbon emissions by 2030. To address this huge challenge, Dametis has sent its experts to Alban Muller to assess and identify priority action areas. In just two years, Dametis has already helped Alban Muller to reduce its gas consumption for domestic hot water production by 82% by recovering heat from its refrigeration units.

Results



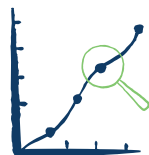
82%

reduction in gas consumption for domestic hot water production by recovering heat from refrigeration units, exceeding the initial objective of 80%.

in potential savings per year with simple adjustments and zero investment. This figure rises to €280,000 with minor works, and €330,000 with more significant investments.



€140,000



180 T CO₂

in potential savings per year. This figure rises to 330 tonnes with minor works, and 410 tonnes with more significant investments.





• Problem No.1

Replacing refrigeration units and recovering waste heat

Refrigeration units are essential for regulating the temperature of machines and production systems. The latter had to be replaced to improve the site's energy performance.

Significant heat loss was also detected and there were no waste-heat recovery systems installed in the refrigeration units. Alban Muller has set itself the target of reducing CO₂ emissions from heat loss by 80%.

• Problem No.2

Multiple excesses that affect energy performance

Once the refrigeration units have been replaced and the heat-recovery system is optimised, how can we prevent energy excesses from reoccurring in the future? This is the second major issue facing the Alban Muller site.

• Problem No.3

Challenge: reducing carbon emissions by 50% by 2023

In March 2021, Alban Muller joined Croda International. The British chemicals and cosmetics group has set ambitious decarbonisation targets for site production.

Taking 2018 CO₂ emissions as a baseline, Croda International aims to reduce emissions by 50% by 2030 and 100% by 2050.

These targets concern direct on-site emissions such as gas consumption and company vehicles (scope 1), as well as indirect energy emissions, and electricity consumption in particular (scope 2).

• Solution No. 1

Replacing the refrigeration units and heat recovery with Dametis

The Alban Muller site called on Dametis to replace its refrigeration units and install a more efficient heat-recovery system.

The solutions provided by Dametis have saved the manufacturer 81.92% on its gas bills for domestic hot water production in just two years, exceeding its 80% target.

• Solution No. 2

Preventing future excesses through MyDametis

MyDametis allows you to monitor refrigeration-unit performance and heat recovery in real time.

To prevent any future excesses, alarms can be configured to send alerts automatically as soon as a variable exceeds a given threshold.

• Solution No. 3

Optimising processes to improve energy performance with Dametis Expertise

1 During their initial visit, Dametis experts carried out an energy audit, inventoried the site's equipment and collected as much data as possible. After measuring the performance gaps between the site's current processes and their optimum levels, they proposed areas for improvement to reduce CO₂ emissions on a zone-by-zone basis.

2 A measurement plan then identified where to install sensors to improve performance. Additional measures have been set out for areas with insufficient data collection to obtain a relevant quantitative analysis.

3 Dametis Expertise has implemented an action plan based on a decision matrix that allows you to select priority action areas according to return on investment and ease of implementation.

4 This is supplemented by long-term energy support, with action-plan monitoring and studies on areas with high energy-reduction potential.

