CUSTOMER STORY

A brewery in Cameroon: 620 MWh saved in one year

Energenic, then an Energis.Cloud customer, used the platform to monitor the production lines of a brewery company in Cameroon, evaluate energy costs and inefficiencies, and automate actions on the equipment. In one year: 620 MWh and €88,000 saved.



CUSTOMER

Brewery company in Cameroon

PARTNER

Energenic

SECTOR

Brewing (food and beverage manufacturing)

COUNTRY

Cameroon

620 MWh

energy saved in one year

€88,000

saved in one year

2.5 days

less work per month, thanks to automation

Christian Nolla, CEO of Energenic, on monitoring the production lines of a brewery in Cameroon with Energis.Cloud (in French).

At a glance

- **Who:** a brewery company in Cameroon, supported by Energenic, an energy services company founded in 2017 that serves industrial plants, hotels and shopping centres.
- **What they set up:** meters for electricity, compressed air, cold and steam, data collected by the Raspicy gateway, and monitoring on Energis.Cloud, with the savings measured against an adjusted baseline following IPMVP.
- **The result:** 620 MWh and €88,000 saved in one year, and 2.5 days of work less each month thanks to automation.

The challenge: data collected by hand

Energenic's industrial clients told it the same thing: collecting, processing and analysing energy data was a problem. "Every day, several operators are involved in collecting the data, with the risk of errors that comes with it" (0:15 (https://youtu.be/0YfgHrK2eY4?t=15), translated from French).

Energenic was asked for a more reliable and efficient system for the collection, processing and analysis of data, and one that would help identify and develop energy performance projects. For the brewery, the objectives were set on three levels:

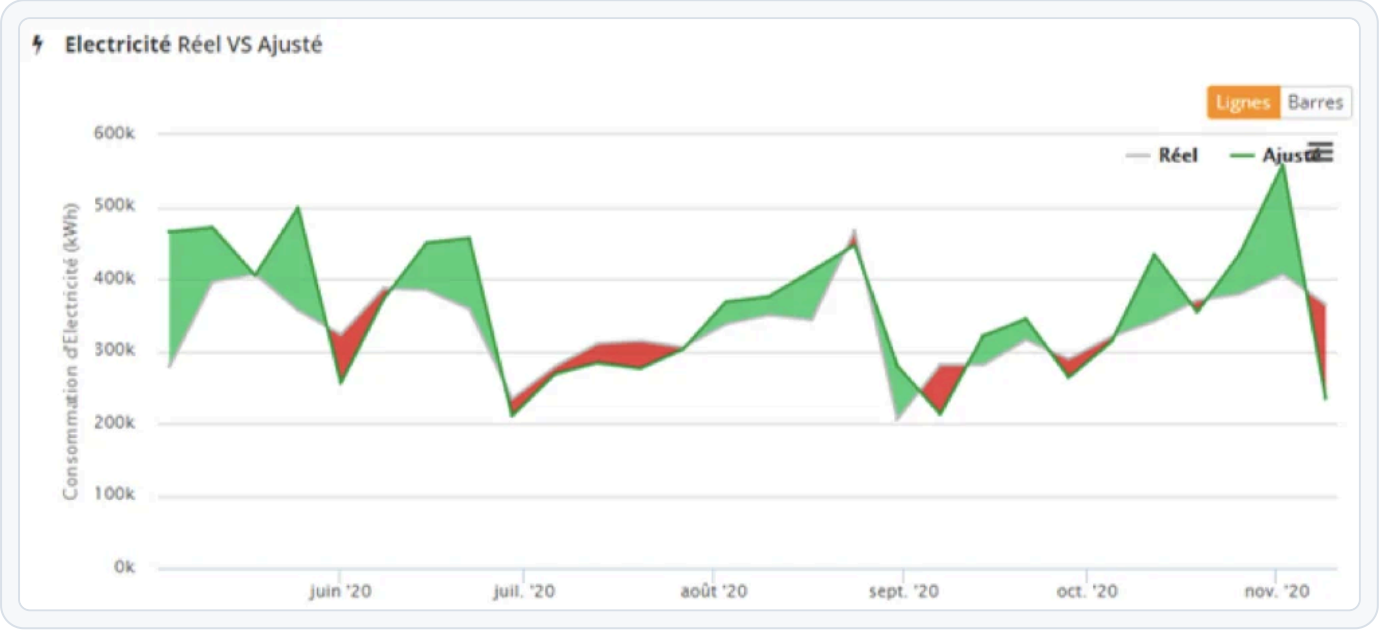
- **Organisation:** measure the volumes produced accurately, so energy per volume can be tracked; appoint an energy expert; model consumption against production.
- **Technical:** optimise the lighting circuits, reduce compressed air leaks, adapt the compressed air and refrigeration processes.

- **People:** make operators aware of energy and of management's energy policy.

These actions, at no extra cost, showed results week after week.

What they set up in Energis.Cloud

- **An energy audit first.** Energenic audits each plant to design a complete metering plan.
- **Meters on every utility.** Electricity, compressed air, cold, steam, water and CO_2 are metered and integrated over Modbus RTU, Modbus TCP and LoRa.
- **The Raspicy gateway.** The data is collected by the Raspicy and sent to Energis.Cloud for processing and analysis. See data integration.
- **Production next to energy.** Energy is read per hectolitre produced, for example the compressed air at 40 bar per hectolitre of PET bottles, against a target. See metrics and KPIs.
- **Drift detection.** The platform shows energy drifts and points to the performance projects worth doing. See anomaly detection.
- **Savings measured in line with IPMVP.** An energy baseline: an equation described the plant's energy profile and gave forecasts of consumption and cost, so the savings were measured and sustained. See IPMVP. Today, the Savings Tracker app follows IPMVP, with a weather-adjusted baseline from a reference year.

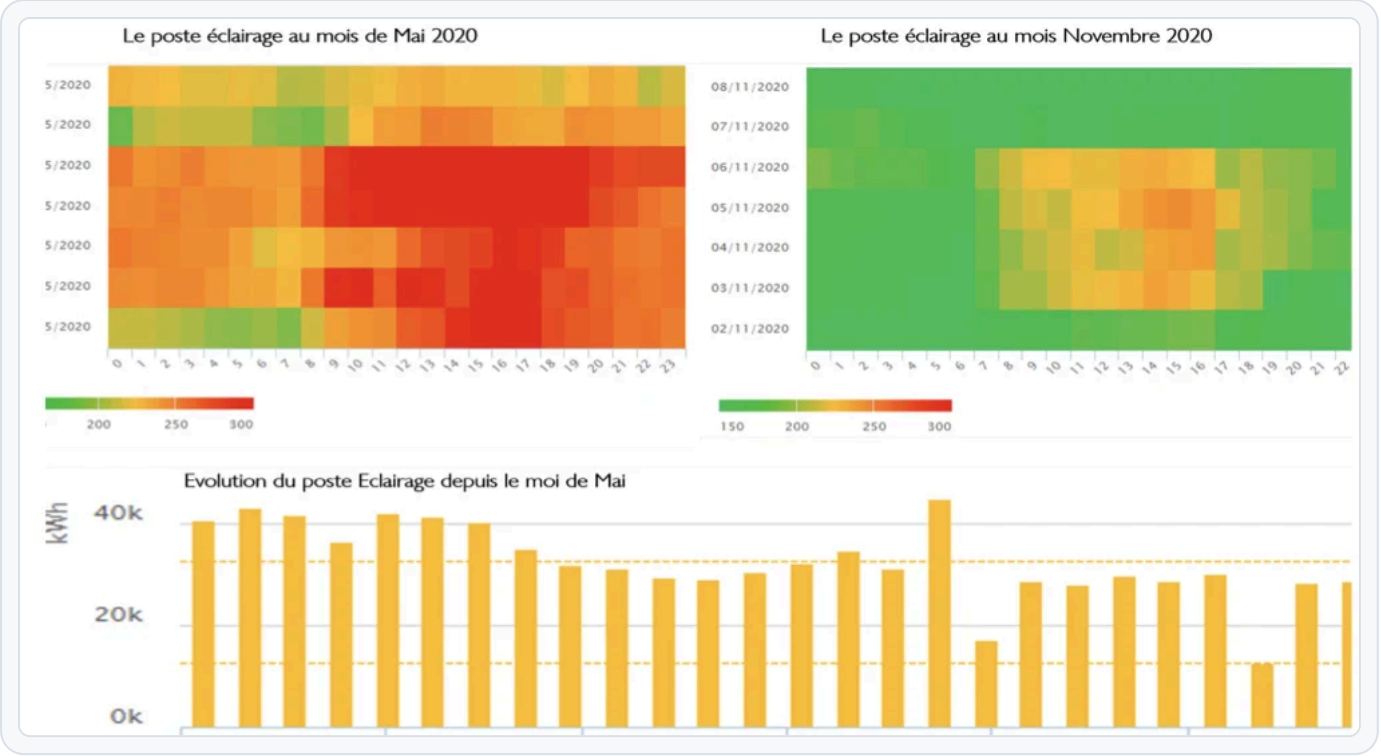


Measured electricity against the adjusted baseline, June to November 2020: green where the plant saved, red where it used more. From the brewery case study by Energenic.

The results

	Before	With Energis.Cloud
Data collection	By several operators, with errors	Automatic, through the Raspicy gateway
Energy saved		620 MWh in one year
Cost saved		€88,000 in one year
Work		2.5 days less each month
Lighting		Lower from May to November 2020, after staff awareness and optimisation
Compressed air	A compressor running more than 20 days without stopping, also when the lines were stopped	Better shutdowns and optimised operation

“Integrating the Raspicy and setting up the Energis.Cloud platform helped us enormously to develop our IPMVP work, the international protocol for measuring energy performance, so we can show and sustain the savings we achieve” (2:09 (https://youtu.be/0YfgHrK2eY4?t=129)).



The lighting station in May and in November 2020, hour by hour, and its consumption week by week in between. From the brewery case study.



A 40 bar compressor running for more than 20 days without stopping, and running after the lines had stopped. From the brewery case study.

In their words

> “An extremely reliable solution that fits the investments industrial companies make, with fast returns on investment backed by real, proven energy savings.”
>
> **Christian Nolla**, CEO, Energenic (3:32 (https://youtu.be/0YfgHrK2eY4?t=212), translated from French)

For whom

Energenic installs the meters and delivers the energy services: the work we describe for integrators and engineering offices.

Frequently asked questions

How do you prove energy savings in an industrial plant?

With a baseline model of the plant, built following IPMVP (https://evo-world.org/en/products-services-mainmenu-en/protocols/ipmvp), the international measurement and verification protocol. Energis.Cloud compared the measured consumption with that model, adjusted for production and weather, so the savings were measured rather than estimated.

Which utilities can be monitored in a brewery?

Electricity, compressed air, cold and steam, each with its own meters, collected in one place so the whole process is visible.

What does automation change for the energy team?

Data no longer has to be collected and checked by hand. Energenic saves about 2.5 days of work a month, which goes into finding and running savings projects.

Is the video in English?

The interview is in French. The quotes on this page are translated, with a link to the moment they are said.