

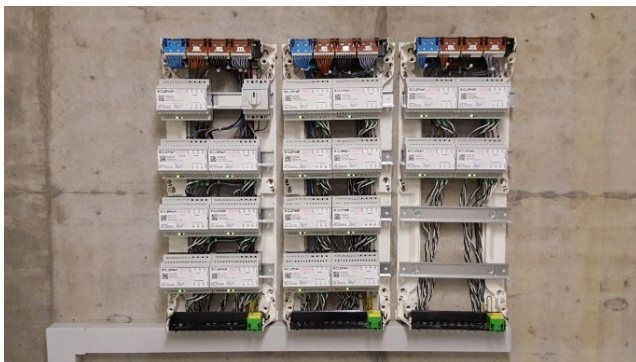
The CLEMAP Grid as monitoring of a district heating system

Energy management is highly relevant for the Gassmann Groupe office in Biel with its machines, offices and subtenants. CLEMAP has made it possible to bill electricity at different power levels (80A, 400A, 1600A) on a sourcebased calculation.

Diverse needs due to different power levels

With the reorganisation of the Biel site, Gassmann was looking for an energy management system that met the site-specific requirements. The site comprises three relevant cost centres: Office, Factory, Subtenants. Particularly in the case of subtenants, source-based billing is mandatory.

And also for correct internal billing, a breakdown according to consumption is required. Due to the different devices in the respective categories, the solution sought had to be capable of measuring different power levels. While current strengths of over 300 amperes flow through the printing machines in the factory, a maximum permissible strength of 80 amperes is sufficient for devices on the office floor. In addition, there is the monitoring of the main distribution, through which 1,600 amperes flow without interruption.



Thanks to the flexible configurability of the CLEMAP Energy Monitor all the currents could be measured and brought together in the web portal, the CLEMAP Floem. The energy manager, Mr Bucher benefits from a clear overview of the 19 sensors installed on his site and knows thanks to the real-time data transfer about the current status. If an anomaly should occur, he can quickly and easily determine the cause via CLEMAP Floem. All he has to do is check the current

About CLEMAP

An important district heating system of a large Swiss energy supplier is fed by two powerful heat pumps of 1MW each. Their operational reliability is of utmost relevance in order to supply the supply area with heating and cooling. Two CLEMAP grids were installed to monitor the electrical system:

- Data collection using own energy meters
- Automated data processing and intermediate storage on web servers
- Visualisation and control via user-friendly energy portals

CLEMAP supports you with clever energy solutions on your way to optimising consumption by controlling devices, identifying unused savings potential and avoiding idles.

About the project

Gassmann Groupe was looking for an energy management system that would allow for source-based billing by floor, subtenant and machine. The picture shows the latest satisfied CLEMAP customer, Mr. Mathias Bucher, energy manager at Gassmann.

Overview:

- 19 installed CLEMAP energy meters
- Digitalised current measurement
- Automatically sent e-mails to accounting for source-based electricity billing

profiles of the various sensors and see at a glance which one showed excessively high consumption. In contrast to the previous method, where each machine had to be checked individually as a result of a failure, Mr Bucher saves a lot of time and work with CLEMAP.

The CLEMAP Grid as monitoring of a district heating system

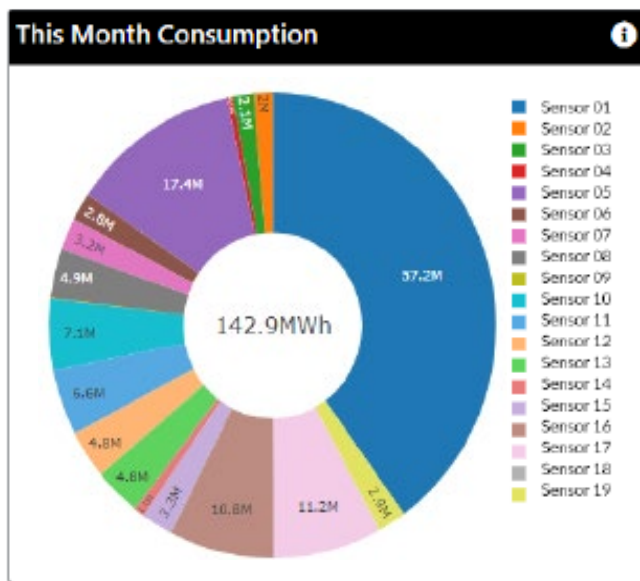
Digital power billing simplifies the work of the accounting team

Until now, the energy manager at the Biel site had to read the electricity consumption manually by hand from the analogue electricity meter. This cost him a lot of time each time. Thanks to CLEMAP's digitalised electricity metering, these tasks are now over. The switch from analogue to digital billing offers Gassmann numerous advantages. In addition to saving time, they benefit especially from simplified billing. The accounting department now automatically receives an e-mail every month with all relevant information including costs. To check the data presented in the e-mail, the accounting department or the energy manager also has the option of viewing the current figures at any time via the CLEMAP Floem energy platform. The statistics show, for example, the



monthly consumption, broken down by individual sensors (see figure below). This enables sourcebased billing per floor, machine and subtenant.

The installed energy meters offer the possibility to identify irregularities in consumption and to increase energy efficiency. If the business wants more in-depth analyses in the future, services can be activated quickly and easily without local intervention, which, for example, produce automatically generated alerts in the event of failures so that they can react immediately. In addition, thanks to the monitoring of machines, maintenance can be recommended and downtime reduced as a result.



For more information on our smart energy meters and intuitive energy portals, visit our product portfolio at:

www.clemap.ch/en/solutions/product-portfolio



With the developed innovative products and the technologies, CLEMAP offers its customers real added value in the form of energy data analytics and is thus actively committed to protecting the environment. This contribution to climate protection has been recognised by the Swiss Climate Foundation, which is why CLEMAP has been included in its funding programme for Swiss innovation projects in 2019.



At CLEMAP, in-depth know-how of the development of innovative technologies meets many years of experience in the energy sector. This is why CLEMAP is part of the technical committee of the Smartgridready association for the interface between energy supply companies and building control systems and actively promotes the change towards environmentally friendly energy supply.