

Installing an energy management system in Pivovarna Laško



Pivovarna Laško has always valued environment preservation and strives to keep up and adhere to sustainable development guidelines; in 2009, they started thinking about introducing an energy management system when energy prices started drastically surging in Slovenia.

Thinking about solutions

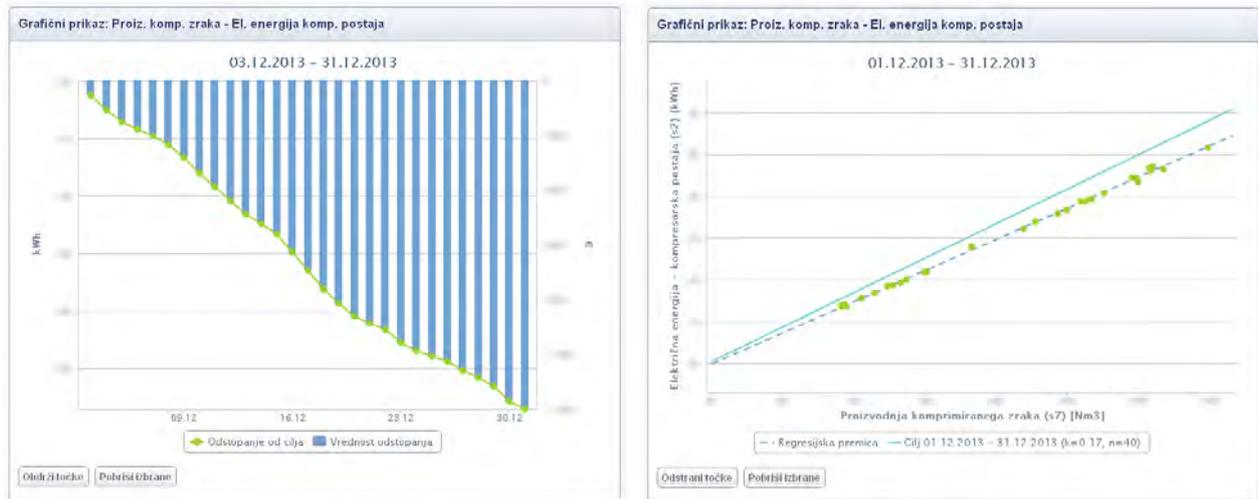
Increased energy costs were a kind of breaking point for Pivovarna Laško, as they felt an urgency to install an energy overview system in order to further improve their competitiveness in the market. The implementation process took two and a half years and started by calling for offers by energy management system providers. After a year of collecting offers, they decided on the solution by Solvera Lynx: the GemaLogic energy management system.

Pre-investment study

The energy review, which normally serves as the basis for any energy efficiency improvement activity, was not carried out due to time restraints. Instead, a pre-investment study was done on implementing an energy management information system in Pivovarna Laško; it was a precondition to start the implementation of energy management in the company. The pre-investment study encompassed a description and documentation of the existing condition and the proposed solution about how to set up the energy management information system for the electric energy and all other energy sources (gas, steam, compressed air, technological water, CO₂, cooling). The study also included the financial aspects of introducing the system and the expected results.

Deciding to carry out the investment

The significant investment, which amounted to about 250,000 euro with all the additional equipment and accompanying services, continued to raise some understandable doubts about the financial justification of the project. Due to uncertainties in the initial phase, only the compressed air was monitored at first, not the entire system; Solvera Lynx predicted 10% savings in the first sector. After the introduction of active compressed air monitoring, Solvera Lynx's estimate was more than confirmed: by optimising the working schedules of compressor stations, Pivovarna Laško managed to save even more than 10% of the compressed air. This kind of reduction was cause enough for Pivovarna Laško to decide and implement the entire GemaLogic energy management information system.



GemaLogic

Pregledna plošča | Moje shranjene analize | Nova analiza

Energetska učinkovitost - Kompresorska

Parametri

Prikaži

Obdobje:

od: 01.12.2013

do: 31.12.2013

Časovni interval:

Dnevni

Način prikaza:

Karakteristični kazalniki

MST-diagram

CoSum

Nova ciljna poraba:

Nedoločena

Nižja za 0 % od prikazanega trenda.

Enaka trendu najboljših 40 % prikazanih vrednosti.

Podatki:

Meritve proizvodnih količin

Meritve po lokacijah

Meritve po energentih

Kompresorska postaja Zrak

Proiz. komp. zraka - El. energija komp. postaja

Prikaži

Grafični prikaz: Proiz. komp. zraka - El. energija komp. postaja

01.12.2013 – 31.12.2013

Električna energija – kompresorska postaja (s2) [kWh]

Proizvodnja komprimiranega zraka (s7) [Nm³]

— Regresijska premica — Cilj 01.12.2013 – 31.12.2013 (k=0.17, n=40)

Odstrani točke Pobrishi izbrane

Prihodnji dnevni cilji

Spremenjivke ciljne premice			Zastavljeni cilji		Osnova cilja		Opomba	Akcija
Odvisna (k)	Neodvisna - pasovna poraba (n)	Cena energije / energenta (€/enota)	Od	Do	Od	Do		
			01.12.2013	31.12.2013	01.01.2012	31.01.2012		Eniši

Demands of energy management

Energy management demands a comprehensive approach and the person monitoring the energy use must be highly qualified. Even though Solvera Lynx offers the service of energy monitoring and management, Pivovarna Laško decided to tackle the issue internally. They appointed an energy manager who used the GemaLogic software to monitor the daily energy use and detect any deviations that are corrected by their team.

Benefits and improvements

The precise data on energy, consumption displays, and data analysis (“benchmarking”, contour diagrams, KPI, M&T, etc.) enabled by the GemaLogic system to show trends and areas where a change is required. Based on this, the company has a better insight into their energy use in individual processes and can manage the energy use in the entire manufacturing and bottling process. By regularly monitoring their energy use, they were able to reach a faster reaction time in their machine and equipment maintenance. During active monitoring and implementing the appropriate measures, they were able to decrease their water use by 14%, their electric energy use by 11%, their heat consumption by 10%, and compressed air by 10%. The precise data supplied by GemaLogic are also used to assess and optimize all the organizational and investment measures, which was a challenge before the installed system due to the lack of data. Based on the system data, they also optimized their co-generation of heat and energy working time (cogeneration) to match their needs for heat in the manufacturing process. As they themselves say, the measurements are an additional incentive for them to use energy more efficiently and focus even more on protecting the environment.

Plans for the future

Representatives of Pivovarna Laško stated that they recouped their investment within a year and a half of implementing the system.

They assured us they will allot even more time for focused energy monitoring in the future and introduce additional parameters and analyses into their energy monitoring system. They will also start regularly using the report system and preparing annual energy reports with specific energy goals.

It is clear that Pivovarna Laško is very aware of the importance of energy efficiency; the company follows the newest sustainable development guidelines and invests in environmentally friendly technologies and equipment. Pivovarna Laško is on the right track to a model energy attitude and is an example to many Slovenian companies. Merely installing an energy monitoring system does not cut costs: the system is a tool that helps us actively monitor the energy use and implement measures that consequently lead to decreased energy costs.

An energy management system installation is not an overnight procedure. The GemaLogic information system means collaborating with the company for a period from six months to a year and a half.