

CASE STUDY

ENERGY SAVINGS IN BOTTLING PLANT

ABSTRACT

This case study explores the installation of LEC Lighting energy controllers in four bottling plants in Poland. Benefits include reduction of electrical costs by 16% - 21% and a return on investment of around two years.

CLIENT PROFILE

In Poland, Coca-Cola beverages are produced and distributed by Coca-Cola HBC Polska who owns and operates four bottling plants in Poland. It also has 31 sales and distribution centers located throughout the country. The range of trademarked beverage brands produced and distributed by Coca-Cola HBC Polska now includes carbonated soft drinks, juices and nectars, energy drinks, spring water and mineral waters.



BUSINESS NEED

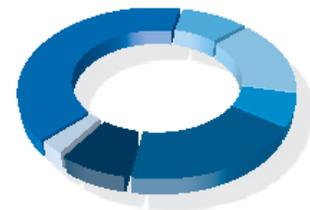
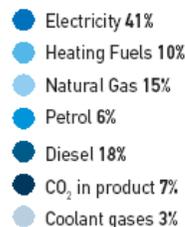
Coca-Cola HBC Polska is following the mission and values of the parent company Coca-Cola Hellenic, and is taking a leadership position on climate change. The Company has committed to reducing CO2 emissions across all manufacturing plants by an average of 20% within the next two years. Electricity used in operations was the source of 41% of CO2

emissions¹. The company pursued solutions to reduce the use of energy, thereby saving carbon emissions. Power Electronics solution energy efficient lighting was selected as a solution that could be implemented immediately, with clear evidence of electrical savings and reduced energy consumption.

SOLUTION

The Lighting Energy Controller was selected by Coca-Cola HBC Polska as a solution that could be installed today on existing infrastructure, with immediate results in energy efficiency. The LEC products were installed in all of their production facilities around

Sources of CO₂ Emissions in Operations



the country. In total, there are 23 LEC systems installed in four production plants, with savings averaging between 16-21% on electrical consumption.

The Lodz production plant was the first installation of the LEC and the valuable results led to the purchasing and installation of additional LEC units in three more production plants.

¹ Coca-Cola Hellenic Social Responsibility Report 2007

INSTALLATION

Radzymin Production Plant:

In the Radzymin production plant, the LEC was installed on internal lighting of the plant, and the external lighting for lorry parking. This plant uses Fluorescent lights for internal lighting, and Sodium



Lamps for external lighting. The LEC was effectively installed on both sets of lighting and saves approx. 21% of the utility bill for particular lighting circuits at this facility.

Lodz Production Plant – This production plant is in the center of Poland and required the LEC on internal and external lighting for Fluorescent and MH lamps.

Staniatki Production Plant: This production plan is located next to Cracow. The LEC was installed on internal and external lighting and controlled the voltage to MH, HPS and Fluorescent lamps.



Tylicz Production Plant: This product plant in the south of Poland is located in the mountain region

where they bottle spring and mineral water. The need for the LEC was on the internal lighting fixtures.

Bits & Bricks Ltd. is the regional distributor of LEC products in the region and successfully executed the sales, installation and support necessary for the entire Coca-Cola project.

RESULTS

After the first successful installation in the Lodz Production facility, three more production plants were successfully implemented with the LEC to reduce the energy consumption and CO2 emission levels. The average savings in electricity is between 16-21%.

With the original goal of Coca-Cola HBC Polska to reduce the CO2 emissions, the LEC from Power Electronics has reduced electricity consumption, with electricity being the biggest producer of the CO2 emissions of the plant. With this reduction in electrical consumption, the estimated CO2 emissions from electricity that was originally 41%, has been reduced to approximately 25%.

Coca-Cola HBC Polska is making a great step towards a greener environment by implementing the LEC into their energy efficiency strategy throughout their lighting systems of production plants.

Coca-Cola Hellenic Corporate Report on Progress for the Social Responsibility Plan:

The overall reduction in CO2 emissions from all 80 of the Company's facilities will be 20%. European Commission Vice President, Günter Verheugen, who attended the public announcement of the project, said:

"This demonstrates how innovation is not just a driver of economic competitiveness, but can also underpin business contribution to wider societal goals".