

Industrial Energy Efficiency Project

In order to introduce a structured approach to energy management in their operations, PT. Ching Luh Indonesia has joined hands with the United Nations Industrial Development Organization (UNIDO), the Ministry of Energy and Mineral Resources (MEMR), Ministry of Industry (MOI) and National Standardization Agency of Indonesia. The Global Environment Facility (GEF) funded project, "Promoting Industrial Energy Efficiency through System Optimization and Energy Management Standards in Indonesia" has helped PT. Ching Luh Indonesia to implement an Energy Management System in alignment with ISO 50001 for an overall improvement in energy efficiency and a reduction in energy consumption.

INDONESIA:

A Case Study of PT. Ching Luh Indonesia

Structure brings success to all areas of operation

Structured management systems are not new to Ching Luh; the company is already certified to ISO 9001, ISO 14001 and OHSAS 18001. The importance of systems and their structured approach is clearly recognized by management and their customers, as made evident during various meetings with UNIDO experts, and a Quality Management System, which has been in place since 2006.

UNIDO, a key ingredient in the plant's success

Before joining the UNIDO program, Ching Luh had already implemented an Energy Efficiency program in 2011 to meet the requirements of their biggest client. However, the process was led only by the Energy Team which lacked awareness and understanding of various energy efficiency principles.

Since joining the UNIDO project as a pilot company in February 2013, Ching Luh has seen significant improvements and a large impact on their energy consumption as compared to their original Energy Efficiency program.



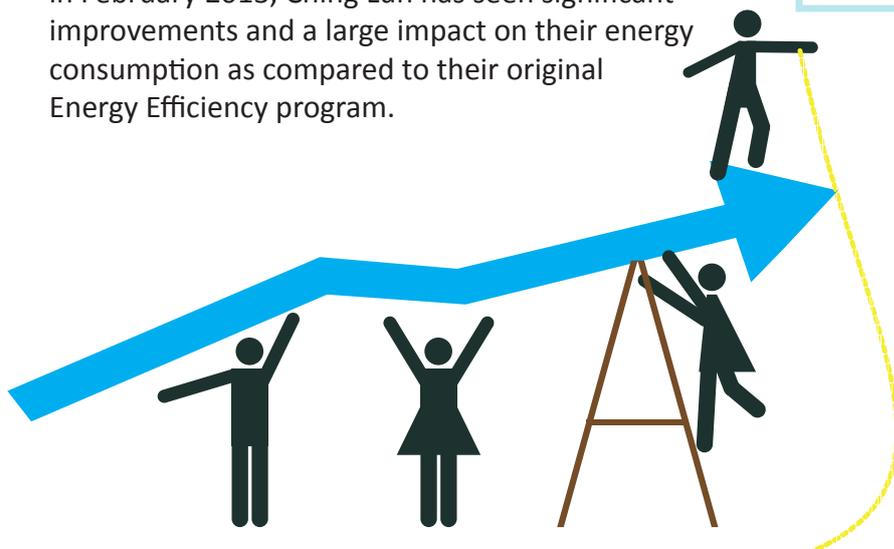
PT. Ching Luh Indonesia is based in Tangerang, is one of the leading shoe manufacturers in Indonesia, specializing in sport shoe products, including high quality shoes for football, basketball, and other sports.



Ching Luh currently employs around 11,000 staff and produces 8 million pairs of shoes per year for both domestic and foreign markets.

The total energy consumption of Ching Luh was 17 MWh for the 2011-13 period, consisting primarily of electricity, LPG and diesel fuel.

source: Schematic World Map, UNIDO



The UNIDO technical assistance has increased the ownership of top management by ensuring that the system does not exclusively belong to the Energy Team.

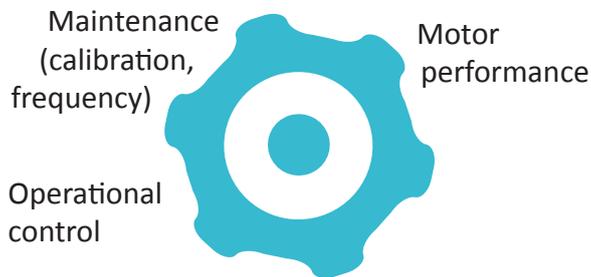
Above all, it improved the understanding of energy efficiency among the Energy Team members, as well as top management.

FOCUS ON SIGNIFICANT ENERGY USERS (SEU)

An initial step in the establishment of an Energy Management System (EnMS) was an assessment by UNIDO-trained national experts who identified the motors operated by the company as the consumers of the most electrical energy.

The next step was to ask the maintenance engineer and production operators, "Why the specific speed setpoint was needed at this level and how it was maintained."

As a result, the project focused on the following parameters:

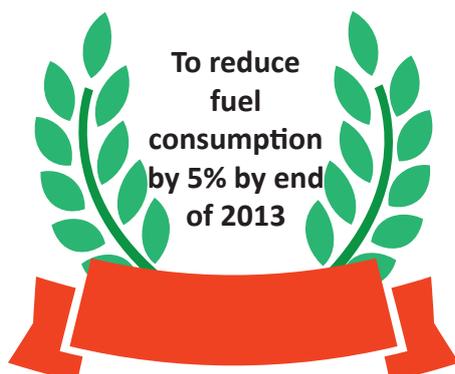


Through close engagement with the quality department, changes were made to the operational set-points of the above parameters, yielding dividends in performance.

The energy reduction initiatives identified and implemented with the support of the UNIDO-trained experts resulted in a:

5.8% improvement in various sections of the factory, monitored by energy performance as compared to the energy baseline of the previous year.

This has served to achieve the established management objective:



A structured management system brings sustainability to the implemented improvements through the annual planning process. As such, and based on the substantial improvements already achieved, Ching Luh has decided to go for ISO 50001 certification.

According to the SGS certification body, Ching Luh has made significant improvements in energy performance and through the establishment of baselines and Energy Performance Indicators (EnPIs), was able to carefully monitor these improvements on an ongoing basis.



Ching Luh believes that the program has provided tangible benefits to the company, and most importantly, has done so in a sustainable manner; ensuring that a system is in place for the future, rather than the implementation of measures for one-time savings.

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