# LEED-CERTIFIED GREEN FACILITY

PANDORA PRODUCTION CO.LTD. LAMPHUN



**PAND**ÖRA





Welcome to PANDORA Production Co., Ltd. (Lamphun Branch).
This is a green facility in Northern Thailand.

We strive to minimise environmental impact at every stage, from design to construction in compliance with the green building principles of LEED certification.

This facility was also designed to unite all production processes under one roof according to LEAN manufacturing guidelines.



#### LEED

LEED (Leadership in Energy and Environmental Design) is a set of green building criteria established by the US Green Building Council (USGBC) as guidelines for environmentally friendly building design and construction.

Why a green building? Because we want to:

- Minimise the consumption of non-renewable energy
- Minimise environmental impact, such as polluted water, air and soil
- Minimise the consumption of natural resources



Our sustainability features include:

- Water efficiency
- Energy and atmosphere
- Materials and resources
- Indoor environmental quality

- Minimise the amount of waste
- Create a good environment for the facility's occupants, our colleagues

PANDORA's crafting facility in Lamphun is a green facility built with LEED Certificate principles. It is an environmentally friendly facility with the entire site designed to promote sustainable development, minimise impacts on the environment and the community, as well as provide a comfortable and positive workplace for employees.



#### WATER CONSUMPTION

The facility has a highly efficient recycling system, harvests rain water during wet season and uses local plants with low water consumption as outside greenery.

With careful selection of indoor water 45% fixtures and a specially-designed water management system, this facility can







#### A SUSTAINABLE SITE

Located in an industrial zone in Lamphun, the crafting facility has been built taking environmental concerns into account; from the construction control and the engineering to suitable thermal and humidity controls.

The temperature outside the facilities is regulated by the 'Halo', a covered and shaded walk that encircles the common area and connects every building, and several trees.



The solar radiation is reflected by the roof and pavement painted with light colours, which helps to lower the temperature and indirectly minimises energy consumption for the air conditioning system.

The company provides shuttle buses for employees who reside close to the factory, and a bicycle park to minimise the impact of greenhouse gas emissions from transportation.





#### **ENERGY** AND ATMOSPHERE

The photovoltaic panels on the facility's roof can produce up to 1,420 megawatts of electricity annually; the same amount as the average electricity consumption of 700 households. The innovative air conditioning and ventilation system do not only provide pure and clean air but also help reduce energy losses by up to 80%. The facilities are lighted with LED bulbs that consume low levels of electricity and produce less heat. The facility consumes 18% less energy than a conventional jewellery crafting facility because of energy efficiency measures, renewable energy and energy monitoring.

#### **MATERIALS** AND RESOURCES

Most materials used for the facility's construction originate from an area within 800 km from the construction site, in order to minimise the environmental impact from transportation.

of the facility's construction materials  $30\% \text{ are made of recycled content and 75\%} \\ \text{of the project's construction waste was}$ diverted to recycling facilities.



### INDOOR ENVIRONMENTAL QUALITY

The air conditioning system in the building is designed to provide thermal comfort to promote the well-being of employees.

The building is furthermore equipped with an innovative ventilation system that helps to decrease harmful air contaminants.



Taking into account all the facilities and green credentials of PANDORA Production Co., Ltd (Lamphun Branch), it can be said that in addition to the great design, this building also promotes environmentally friendly production.

Coupled with the resources of skilful craftspeople from Northern Thailand, these advanced green manufacturing facilities are ready to create local jobs in line with the sustainable economic development policy of the Thai government.

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