# WWF Low Carbon Manufacturing Programme (LCMP)

## Quarterly Newsletter

**July 2014 Issue**

## Success story

**Zhejiang Shenghui Lighting Co., Ltd.** (Shenghui) was established in 2004. A high-tech enterprise located in Zhejiang Province's Jiaxing City, the company specializes in the manufacture of LED indoor lights and lighting fixtures, with clients located throughout Europe, the US and other regions. In 2013, the production output value of the company was 1.06 billion RMB. In the same year, they set up an R&D and a testing centre. Shenghui joined the LCMP in 2012 and was awarded the LCMP Gold label last year. The factory has adopted a series of carbon reduction measures and has achieved impressive results so far. The company has:

- Replaced their traditional drilling and cast aluminum polishing machines with a high-efficiency CNC tapping centre and shot-blasting machine. CNC tapping has raised productivity by more than five times, cut annual electricity consumption by 56 per cent (equivalent to 177,000 kwh), and lowered carbon emissions by more than 130 tonnes annually. Shot-blasting has raised productivity by over five times and reduced wastewater discharge by 100 per cent.

CNC tapping centre

Shot-blasting machine

- Shortened the length of 10 drying production lines in the assembly process from ten metres to six metres, reducing annual electricity consumption by 24 per sent (equivalent to 151,800 kwh) and lowering carbon emissions by more than 110 tonnes annually.

Drying lines

- Replaced metal halide lamps on production floors and lighting in their new office building with the LED lighting; and replaced high pressure sodium lamps with the solar street LED lights equipped with an automatic switch on/off system. These have reduced annual electricity consumption by 240,000 kwh and lowered carbon emissions by more than 180 tonnes annually.

LED lightings in production floor

Solar street LED

## Environmental news

**Review of Shenzhen carbon trading scheme: 635 firms have reduced carbon emissions by 3.7 million tonnes**

Since the start of the Shenzhen carbon trading scheme in June 2013, 635 firms have reduced their carbon emissions by 3.7 million tonnes in the first compliance year, compared with the base year figures from 2011 - a decline rate of about 11 per cent. Meanwhile, their business growth increased by 79.2 billion RMB, an increase of 29 per cent, leading to a decrease in carbon intensity by 0.13 tonnes / 10,000 RMB – a decline rate of 23 per cent. The result is even better than the target of a "21 per cent decrease in carbon intensity" set by Guangdong Province for Shenzhen in the 12th Five-Year Plan.To find out more, click here: ***http://goo.gl/zLEUiQ***

## LCMP updates and activities

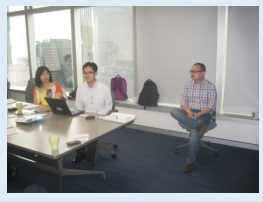
The LCMP is organizing a series of engagement activities in the coming months:

- LCMP kick-off meeting for GAP suppliers (July)
- Introduction of a new LCMP Secretariat – ***Intertek Testing Services Hong Kong Limited*** (Aug)
- Webinar on energy efficiency and carbon emissions (Sept)

For more details, please contact the LCMP team at any time!

## LCMP kick off meeting for GAP suppliers

Three Gap pilot suppliers attended the LCMP kick-off meeting on 2 July. During the meeting, Gap introduced their environmental vision and explained that they expected their suppliers to share the same vision and produce low-carbon products. HKPC presented low-carbon best practices for general utilities and production facilities, while the new LCMP Secretariat – Intertek Testing Services - demonstrated an online platform which will allow LCMP factories to better manage their documents and data. Moving forward, WWF hopes to see more brands-manufacturers collaboration in combating climate change and practicing low-carbon manufacturing, and partnering with us for a sustainable future.



## Best practices: Dayssan Lighting Industrial Ltd. - Electrical Appliances and Houseware Industry

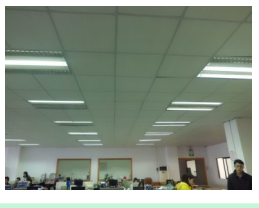
**Dayssan Lighting has implemented several carbon reduction measures in their general utilities and production facilities. Steps taken by the company include:**

- **Production line:** Replacing traditional soldering irons without temperature controls with energy saving irons which allow the regulation of temperature within a preset range during operation;
- **Lighting system:** Replacing most T8 lamps with the more energy efficient T5 lamps;
- **Compressed air system:** Installing a variable frequency drive (VFD) to save energy and cost;
- **Electrical system:** Installing an intelligent reactive power auto-compensation device to raise the power factor;
- **Dormitory:** Installing a solar hot water system, reducing carbon emissions from the diesel backup system;
- **Logistics management:** Optimizing the routing and scheduling of fleet, reducing fuel usage and carbon emissions.

VFD in compressed air system

Temperature controlled soldering iron

Reactive power auto-compensation device



T5 lamps

Solar hot water system

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