



# WWF Low Carbon Manufacturing Programme (LCMP)

## Quarterly Newsletter

2013 April Launch Issue

### CEO's message



WWF-Hong Kong is a science-based conservation organization. We actively engage manufacturers and supply chain managers, encouraging them to implement energy efficiency measures and greenhouse gas management best practices. The aim is to cut carbon emissions and reduce energy consumption as well as decrease the level of air pollutants being emitted.

It gives me great pleasure to announce that WWF's Low Carbon Manufacturing Programme (LCMP) is extending its reach and expanding from the Pearl River Delta to the Yangtze River Delta region. I am also excited about the upcoming "idea exchange" with government officials and business leaders who are committed to combating climate change and tackling air pollution issues. These breakthroughs mark an exciting year for the LCMP and I look forward to sharing it with all of you!

**Mr. Adam Koo, CEO of WWF-Hong Kong**

### Editor's note

To enhance communication and interaction between stakeholders in the manufacturing supply chain community, WWF's LCMP will start publishing a quarterly newsletter from April 2013. The newsletter will cover case studies, the latest environmental news, upcoming LCMP activities and low-carbon tips. In this issue, we will present the success stories and best practices of two accredited factories. If your company is interested in sharing your story, we encourage you to contact us and provide us with the relevant case study information. Once selected, case studies will be published in the newsletter and circulated among industry players, brand owners and relevant government departments.

**Ms. Karen Ho, Business Engagement Leader, Climate at WWF-Hong Kong**

### WWF and Low Carbon Manufacturing Programme (LCMP) introduction



WWF is a leading global conservation organization, with a global network active in more than 100 countries. WWF's mission is to build a future in which humans live in harmony with nature. WWF was founded in 1961 as a non-profit organization with its headquarters based in Switzerland. Operating for more than fifty years, WWF has forged unprecedented global partnerships with governments, other NGOs and the private sector, and has inspired individuals to take action and make a difference. With a global perspective and network, WWF is always determined to identify and implement solutions to achieve successes, working with others to achieve our goals. WWF-Hong Kong has been working since 1981 to deliver solutions for a living planet through our Conservation, Footprint and Education programmes.

**The Low Carbon Manufacturing Programme (LCMP)** has two main aims: to reduce the carbon emissions generated by product manufacturing and to develop environmental social governance along the entire value chain. By providing manufacturers with a carbon accounting and labelling system, the LCMP helps to measure their effectiveness in reducing carbon emissions and equip them with best practices in greenhouse gas management. Since its launch in 2010, 57 factories have participated in the programme. These factories, located in both the Pearl River Delta and the Yangtze River Delta regions of China, range from textiles and apparel manufacturing to electrical appliances, houseware and electronic toy manufacturing, fabricated metals manufacturing and machinery, equipment, parts and components manufacturing. In 2012, the 15 accredited manufacturing companies collectively avoided over 14,000 tonnes of carbon emissions, equivalent to 53,700 return flights between Hong Kong and Shanghai, or the average yearly electricity consumption of 4,400 Hong Kong families.



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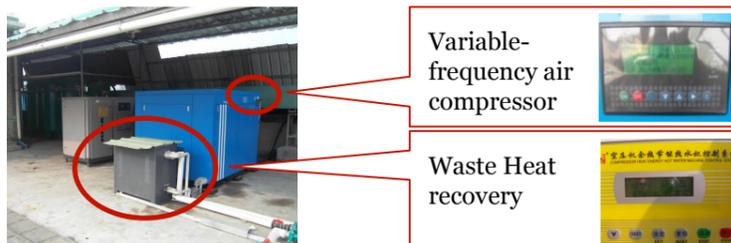
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### Success story

**Spintec Precision (Shenzhen) Ltd.** is a wholly-owned subsidiary of Spintec Precision Ltd. The company specializes in the manufacture of worms, gears, shafts and locating rings for automotive motors. The company is located in the Bao'an district of Shenzhen, Guangdong province and employs over 500 staff. In 2012, Spintec adopted a series of carbon reduction measures and achieved impressive results. It has:

- Installed a variable-frequency air compressor. The recovery of waste heat from the compressor provides a hot water supply to factory dormitories, saving 100,800 kWh or more than 30 percent of electricity and carbon emissions annually.



- Transformed the individual cooling system of their CNC hobbing machine into central air-conditioning, which translated into a savings of 9.1 percent on electricity and carbon emissions.



Individual cooling system



Centralized air-conditioning

- Replaced T8 tubes with T5 tubes, saving 40,000 kWh or 38 percent of electricity and carbon emissions annually.



T5 tubes



Use natural light if possible

### Environmental news

#### Environmental tax now covers carbon emissions

In February of this year, Mr. Jia Chen, Head of Ministry of Finance's Tax Policy Division published an article entitled "Accelerating Tax Reform Following the Spirit of 18th Communist Party of China National Congress" on the Ministry of Finance's website. The article discussed the fact that environmental tax reform will now be actively promoted. This reform will include changing the existing sewage tax into an environmental protection tax, which will include carbon emissions. This tax will be collected by local tax authorities instead of Environment Department. For details, please click the following link (Chinese only):

[www.mof.gov.cn/zhengwuxinxi/diaochayanjiu/](http://www.mof.gov.cn/zhengwuxinxi/diaochayanjiu/)

### LCMP updates and activities

The LCMP is organizing a few engagement activities in the coming months, we hope you will be able to participate in some or all of them!

- Kingfisher supplier conference meeting in Shanghai and Shenzhen (Apr – Jun)
- LCMP carbon accounting online training (May)
- LCMP SDF Low Carbon Workshop co-organized by the Hong Kong Council of Social Service (HKCSS) (Jun)
- LCMP Accreditation Committee meeting (Jun)

Please feel free to contact us for more details.

### Low carbon tips: Lighting system

The T5 lamp is a fluorescent lamp with a diameter of 5/8" which is more efficient than the conventional 8/8" T8 lamps. The standard wattage of the T5 lamps includes 14W, 21W, 28W and 35W. Higher output versions are also available for special applications.

Compared with the T8 lamps with conventional electromagnetic ballast, T5 lamps use electronic ballast, which makes them much more energy efficient.

## Best practices: Zhejiang Pleast Sanitary Ware Co. Ltd. - Fabricated metal industry

The company implemented carbon reduction measures for general plant equipment and used staff engagement to ensure success. These measures included:

- Using energy-saving light bulbs and tubes
- Reducing paper consumption by making general administrative announcements through the ERP system
- Implementing strict standards on assigning office/plant equipment, trying to procure environmentally-friendly office facilities wherever possible, i.e. facilities which are high quality, low cost and energy efficient
- Pre-setting office equipment to go into sleep mode when it is not in use
- Promoting water-saving and energy-saving habits in morning staff meetings



Energy-saving lights



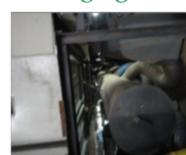
Morning staff meeting

The company also strove to make their manufacturing machinery energy-efficient to achieve carbon reduction goals by:

- Adding variable-frequency devices to machines
- Retrofitting polishing and dust removal machines
- Changing kerosene pipelines into natural gas pipelines in forging process
- Transforming fume exhaust systems in forging process
- Changing their CNC lathe to variable-frequency



Variable frequency machines



Polishing and dust removal machines



Variable-frequency CNC machine

