



WWF Low Carbon Manufacturing Programme (LCMP)

Quarterly Newsletter

July 2018 Issue

Success Story

Jun Wei Apparel Co., Ltd. ("Junwei") is located in Zhuhai City, Guangdong Province. Along with the factories in Shenzhen City, Vietnam, Bangladesh and Myanmar, Junwei is one of the subsidiary factories of Hong Kong Lawsgroup. Established in 2004, the company specializes in the manufacture of cotton knitted garments. Junwei has prioritized environmental protection and social responsibility in its business practices. Junwei joined the LCMP in 2016 and received a Platinum label in their second verification this year. The factory has adopted numerous carbon reduction measures with the following results:

• By replacing steam traps in drying machines and steam irons, minimizing boilers' heat loss due to aging of the traps, reducing the number of operating boilers from two to one, resulting in an annual saving of 240 tonnes of fuel oil.



Old steam traps



New steam traps

• By replacing boiler's heating with more energy efficient heating facilities in the dormitory, adding new solar heating panels and heat pumps, installing new environmentally friendly insulation pipes for reducing heat loss. These facilities, in addition to carbon emissions reduction, also save \$60,000 RMB in fuel consumption and reduce sulphur dioxide by 28 kg annually.



Insulation pipes



Heat pumps

• By replacing clutch motors with energy efficient brushless motors in sewing machines, they have improved motor idling issues, increased motor life expectancy and reduced motor noise, reduced electricity consumption by 60-75 per cent and saved about 640 kWh annually for each sewing machine.



Clutch motors



Brushless motors

Official launch of the National Carbon Trading Scheme in China

In 2018 on national low-carbon day, Mr. Li Gao, the director of Climate Change at China's Ministry of Ecology and Environment introduced the "National Carbon Trading Scheme (Power Generation Industry)", marking the official launch of the "National Carbon Trading Scheme". According to the National Development and Reform Commission report, as of the end of September 2017, the pilot carbon trading scheme included more than 20 industries and 3,000 enterprises, the cumulative trading volume and turnover reached 200 million tonnes of carbon emissions and 4.51 billion RMB respectively. To improve the scheme, Li Gao proposed to work in 4 ways: expediting to establish a complete trading system, expediting to build up the infrastructure, driving carbon emissions reporting, auditing and quota management, plus strengthening the capacity building thus providing more professional experts and technical support. Find out more here:

http://www.gov.cn/xinwen/2018-06/13/content_5298525.htm

LCMP updates and activities

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

- LCMP Verifier training (July)
- LCMP verifications of LCMP factories (July Sept.)
- · Webinar on energy efficiency and carbon emissions (Sept.)
- Participation of LCMP team in "Fashion Summit" (Sept.)

For more details, please contact the LCMP team!

Conversion of Waste-to-Energy

Have you ever thought that the landfill gas and sewage sludge can also be a treasure? Landfill gas contains a large amount of methane, which can be used as fuel to drive a generator to produce electricity. It can also be converted into fuels of different calorific values which can be used in different industrial and commercial sectors, such as industrial boilers and compressed gas vehicles. In addition, the incineration of sewage sludge generates a large amount of heat energy which can convert water into steam to drive turbines to generate electricity. This can greatly reduce the volume of solid sludge waste that would otherwise be disposed of in landfills and help reduce greenhouse gas emissions.

Best practices: Jiangmen New Star Hi-Tech Enterprise Ltd. - Fabricated Metal Industry

Jiangmen New Star Hi-Tech Enterprise Ltd., was established in 2001. It specializes in the manufacture of stainless steel sink and kitchen products. The factory joined the LCMP in 2013 and has completed 3 LCMP verifications and implemented a series of carbon reduction measures that include:

- Adopting a solar water heater system for employee showers in the dormitory, installing solar PV panels, lowering carbon emissions in the office area.
- Installing variable frequency control system in punching machines, reducing electricity consumption in each stages of the punching cycle.
- Adopting auto-welding and auto-brushing machines to replace the traditional manual workmanship, enhancing productivity and product quality.
- Installing an intelligent reactive power auto-compensation device to raise the power factor and reduce energy wastage.

• Replacing diesel forklift with electric forklift, reducing carbon emissions and improving air quality.



Solar PV panels



Punching machine



Auto-brushing machine



Power factor auto-compensation device



Electric forklift

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