



WWF Low Carbon Manufacturing Programme (LCMP)

Quarterly Newsletter

April 2018 Issue

Success Story

Super Performance Textile (Shenzhen) Co., Ltd., a subsidiary factory of Hong Kong's LAWSGROUP, was established in 2003. It specialises in the manufacture of sweaters, their clients are located in Europe, United States, Southeast Asia and China. Super Performance Textile Co. is very environmentally conscious. Since joining the Low Carbon Manufacturing Programme (LCMP) in 2010, the factory has adopted numerous carbon reduction measures leading to exceptionally impressive results. The factory has achieved consecutive LCMP Platinum labels in the last two verifications. The company's accomplishments include:

- By replacing their piston compressor with a variable frequency rotary screw compressor in knitting machines, the cycle time for changing the lubricant of the rotary screw compressor has been extended by 4 times versus the previous requirement. The usage of lubricant has also been reduced, resulting in a saving on annual electricity consumption of 15 per cent.



Variable frequency rotary screw compressor

- By replacing 36W T8 tubes with 16W LED lamps in knitting machines, the company achieved a 50 per cent (or 950,000 kWh) annual reduction in electricity usage. This is equivalent to avoiding 645 tonnes of carbon emissions.



16W LED lamps

- By using recycled treated wastewater on production lines and for planting / toilet flushing, the overall water consumption was reduced by 50 per cent and 15 per cent respectively.



Water recycling facilities

600 million tonnes carbon sink from China's forestry

China's carbon intensity in 2016 was 43% lower than in 2005, it has already exceeded its target of reducing carbon intensity by 40-45% by 2020. Forestry contributed 500-600 million tonnes carbon sink towards meeting the target and combating climate change. What is carbon sink? Carbon sink refers to the activity or mechanism of reducing greenhouse gas concentration by planting trees, grass, crops or protecting wetlands to absorb atmospheric carbon dioxide through the process of photosynthesis in vegetation and soil. Increasing forest reserves is one of the targets to combat climate change. In fact, the forest reserves in 2013 had already exceeded the target of increasing reserves by 1.3 billion cubic meters by 2020 from 2005. Find out more here:

<http://www.tanpaifang.com/tanhui/2017/1227/61211.html>

LCMP updates and activities

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

- Supply chain environmental research of LCMP factories (Apr-June)
- LCMP verifications of LCMP factories (May-June)
- Webinar on energy efficiency and carbon emissions (June)

For more details, please contact the LCMP team!

Electrochromic glazing

Electrochromic glazing is characterised by electrochromic films which are fixed on to glass window panels to automatically adjust their colour and thereby the light/heat transmittance with changes in sunlight intensity. When sunlight intensity is high, the colour of the glass will become deeper and the transmittance of light/heat will be lowered. Conversely, when sunlight intensity is weak, the glass will return to its original transparent colour. By adjusting the amount of solar radiation and light transmittance, the indoor air-conditioning loading due to sunlight can be minimized and the natural light utilisation can also be maximized. This can save a lot of energy by keeping the building interior cool during summer and warm during winter.

Best practices: Shenzhen Hong Tao Non-Woven Fabric Co., Ltd. - Textile Industry

Shenzhen Hong Tao Non-Woven Fabric Co., Ltd., the production base of Hong Kong Non-Woven Fabric Industrial Co., Ltd. and Hong Kong Bonding Fabric Co., Ltd., was established in 1989. It specialises in the manufacture of fiberfill and insulation materials. The factory joined the LCMP in 2010 and has completed 4 LCMP verifications and implemented a series of carbon reduction measures that include:

- Changing the type of fuel used in their boiler from diesel to natural gas resulting in a reduction of annual carbon emissions by 142 tonnes.
- Gradually replacing T5 tubes with 18W LED lamps on most of the factory's production lines, leading to a reduction of electricity consumption and a lowering of carbon emissions by 9 tonnes annually.
- Using recycled wood in the office renovation reduced both wastage and pollution.
- Using electric induction cookers in the canteen thus reducing carbon emissions.
- Posting LCMP newsletters in the production area, thereby enhancing employees environmental and climate change awareness.



Boiler using natural gas



LED lamps



Recycled wood in office



Electric induction cooker in canteen



Posting LCMP newsletters on notice board