



低碳製造計劃乃世界自然基金會的項目，旨在減少製造業的碳排放。

A WWF initiative to reduce carbon emissions in manufacturing

# WWF Low Carbon Manufacturing Programme (LCMP)

## Quarterly Newsletter

April 2016 Issue

### Success Story

**Nexus Electrical (Jiaxing) Limited (“Nexus”)** is located in Jiaxing City in Zhejiang Province. The company specializes in the development and manufacture of electrical products. Its major products include wall switch, power strip, electrical switch box, lamp fitting and TV-mounting rack and more. Nexus stresses the development of energy saving design and tightly control its energy usage in product design, manufacture and sales activities. The company joined the LCMP in 2013, and received a Gold label in its 2013 and 2015 verifications. Over the years, the factory has adopted numerous carbon reduction measures, most notably in the usage of natural and solar lighting:

- A 0.75MW solar PV system with 3,010 solar panels was installed in 2014 to supply electricity to production lines. The system generates a total of around 700,000 kWh annually, amounting to about 13.5 per cent of Nexus’ total power consumption and lowers the company’s carbon emissions by 530 tonnes annually.



Solar PV panels

- Installing heat recovery ducts in 20 injection moulding machine dryer units. The ducts recycle waste heat from the dryer exhaust to dry the raw materials, reducing the factory’s annual electricity consumption by about 190,000 kWh.



Heat Recovery  
for dryer  
(Before  
Improvement)



Heat Recovery  
for dryer  
(After  
Improvement)  
– Red ducts

- Installing a variable speed screw air compressor with permanent magnet motor. This reduces energy loss when compared to belt-driven type. Electricity consumption is reduced by 40 per cent and 10 per cent respectively, when compared to traditional and variable speed air compressors. This feature has reduced electricity consumption by about 40,000 kWh annually.



Variable speed screw air  
compressor with  
permanent magnet motor

### LCMP becomes part of Marks and Spencer (M&S) “Plan A” sustainability goals

Marks & Spencer (M&S) is a global and multi-channel retailer specializing mainly in own brand food, clothing and home products. There are over 1,300 M&S stores worldwide, with over 83,000 staff. Quality, value, service, innovation and trust are the core values of the company.

In 2007, M&S launched its “Plan A” to help protect the planet – by sourcing responsibly, reducing waste and helping communities. In 2014, the company set out the third stage of its “Plan A 2020” which consists of 100 new, revised and existing commitments, with the ultimate goal of becoming the world’s most sustainable major retailer.

In 2015, M&S stores, offices and warehouses in the UK and ROI improved their energy efficiency by 36 per cent. They also purchased electricity from renewable sources and started to use bio-methane gas supply. For the supply chain, they have collaborated with WWF for over ten years, with a shared vision of sustainable natural capital, such as fishing, forestry, cotton and water.

**M&S has included LCMP certification in its 2015 Plan A Attribute Guideline.** LCMP has been recognized as a leading standard for measuring a supplier’s carbon footprint, greenhouse gas management and energy efficiency. Factories that have attained LCMP Gold or Platinum labels are qualified for a Plan A attribute. For more details about Plan A, please visit:

<http://corporate.marksandspencer.com/plan-a/our-stories/about-plan-a>

### Environmental news

#### Establishing a carbon trading market across China in 2017

A global agreement on carbon emissions reduction was reached in Paris climate summit. In order to fulfill the commitment, China has decided to pursue the implementation of low-carbon and green development in its thirteenth five-year plan. This will not only help China meet its 2020 climate change target, but also build the foundation for peaking its carbon emissions in 2030. One of the major plans is to work towards establishing a carbon trading market and build a proper distribution system of carbon emissions right across China in 2017.

Find out more here: <http://goo.gl/J9AHtc>

### LCMP updates and activities

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

- The LCMP / LOOP workshop, co-organized by Intertek Testing Services Hong Kong Limited (June)
- Launch of new LCMP promotional video (May / June)
- Launch of new LCMP e-learning platform (June)
- Webinar on energy efficiency and carbon emissions (June)

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

### Low Carbon Tip: Occupancy & Photocell sensors

Occupancy and photocell sensors are commonly used in factories and offices. What are their differences?

A typical occupancy sensor includes a motion detector which detects the frequency change when object is moving in the interior area. Signals are then transmitted to the controller and control the ON/OFF action of the lighting system. Occupancy sensors help save energy by automatically turning off the lights in unoccupied spaces. A photocell sensor includes a variable resistor and is usually mounted near a window. When light strikes the sensor’s cell, its resistance decreases. On the contrary, its resistance increases when the light becomes dimmer. By identifying the background lighting level, the artificial lighting level can therefore be automatically adjusted.



Commitment

To have at least one Plan A quality in all M&S General Merchandise by 2020

Description

Leading standard for a facility’s carbon footprint reduction. Greenhouse Gas management and energy efficiency.

Minimum Standard

Gold standard qualifies for a Plan A attribute. The audit is valid for 2 years.

Requirement

Applies to tier 1 & 2 suppliers, NOT valid for Tier 2 laundries. Fabric processed through the facility must account for at least 50% of the overall product composition.

Any Tier 1 supplier with a “critical” ethical compliance rating will not qualify for the attribute.

Tier 2 suppliers still need to be ECP approved. Any Chinese Tier 2 who have any violations on IPE will not qualify for the attribute.

If the facility is comprised of geographically separate units then all units that are used in the processing of the relevant fabric or textile must be certified.

Certification

Certification endorsed by WWF

Notes

ONLY RELEVANT FOR FACILITIES IN CHINA CURRENTLY

**M&S - Plan A Attribute Guideline**