IMPACT SHEET • SWITCH-ASIA PROJECT

IMPROVING ENVIRONMENTAL AND SAFETY PERFORMANCE IN THE ELECTRICAL AND ELECTRONICS INDUSTRY IN CHINA

ENSURING EFFICIENCY ALONG THE SUPPLY CHAIN

SHARING STANDARDS, IMPROVING WORKING CONDITIONS, TAKING SOCIAL RESPONSIBILITY, AND INVESTING IN PARTNERSHIPS IS ECONOMICALLY REWARDING IN THE ELECTRONICS INDUSTRY

switchasia NETWORK FACILITY

THE CHALLENGE

In China, economic growth has contributed to poverty alleviation and improved living standards. However, the economic boom has also increased energy consumption and environmental degradation. Concerns for the health and safety of both workers and consumers are now growing. The electrical and electronics industries have been significant players in this economic growth and often play an important role in international supply chains. At the same time, they are substantial contributors to China's water and air pollution, and are significant emitters of carbon dioxide.

OBJECTIVE

The SWITCH-Asia project *Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China (ESEEC)* aims to promote sustainable production among small and medium-sized enterprises (SMEs) in target regions around the cities of Beijing, Qingdao, Shanghai, Shenzhen and Guangzhou. Its objectives are:

- To improve the performance of over 500 Chinese SMEs in the electrical and electronics sector in the areas of eco-efficiency, occupational health & safety (OHS) and corporate social responsibility (CSR), through the mobilization of both private sector and relevant public sector authorities;
- To enable SMEs with a solid understanding of 'integrated CSR' to streamline the management of environmental and social issues in the workplace;
- To use the integrated CSR model to assure sustainable production cycles by key stakeholders and to strengthen the ability of SMEs to comply with environmental standards in the electric and electronics industry.

ACTIVITIES / STRATEGY

Behind the *ESEEC* project is the belief that if SMEs have a solid understanding of the integrated CSR approach, they will be better able to streamline the management of environmental and social issues in the workplace. This approach helps to make production cycles for key stakeholders more sustainable, as well as strengthening the ability of SMEs to comply with industry standards for the environment.

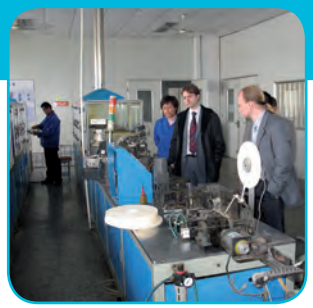
With regards to improving eco-efficiency, OHS and CSR, the project reviewed both European and Chinese standards and produced a comprehensive set of guidelines, and a conformity model. These provided a clear framework for the assessment and auditing of participating SMEs.

Training was major activity and a comprehensive set of support materials was developed. A series of pilot training courses and company assessments were accompanied by launch events in the five target regions. Two one-week policy tours to Germany and Belgium were undertaken for Chinese policy-makers. In September 2011, there was a national high-level event to consolidate support and interest, particularly for the conformity model, and to launch a series of SME workshops and an e-learning platform for sustainable production in the electrical and electronics industry. Following the launch event, more than 20 SME workshops and a series of assessments were conducted across the key regions of the electrical and electronics industry in China. Moreover, project activities focused on SMEs and their use of the e-learning platform, expanding cooperation with brand companies within the sector, campaigning for the conformity model to be accepted as an industry guideline and widely recognised as such, mobilising support from local, provincial and national authorities, stimulating business partnerships and facilitating access to green financing mechanisms for SMEs.

TARGET GROUPS

To scale up its impact in the target regions, the project follows a comprehensive multi-stakeholder approach:
More than 500 Chinese **SMEs** benefit by developing economically and environmentally sustainable production methods. **European businesses** benefit by having greater access to goods of a higher quality from Chinese suppliers, and by an improved sustainability of the industry as a whole. **Chinese and European businesses** benefit from improvements in national and local policies, and by relationships being fostered on the basis of adherence to quality standards. **Chinese auditing and certification bodies** build capacity in standards management and eco-efficiency, and for OHS and CSR practices.

SCALING-UP STRATEGY



The project involved leading Chinese and European enterprises from the electric and electronics industry, such as Hisense, TCL, Huawei, Lenovo, Haier, and Deutsche Telekom. These companies have become promoters of sustainable practises and when successful players in the market advocate to go green, it has a substantial influence on others, especially smaller companies and competitors. Representatives and managers from the leading companies joined project workshops in order to convince others that sustainable practises make a good business case. The opportunity to expand the project's outreach together with key domestic industry players has been formalised by a joint industry declaration on the occasion of the national launch event in Beijing in September 2011.

FOCUS ON SUPPLIERS

The well-known companies also set their own standards. They reached out to a wide pool of SMEs through their supply chains and by demanding certain standards of their suppliers, they influenced a large part of their supply chain, often pulling them into the sustainability journey. Smaller companies attended training workshops to learn how to turn to sustainable practises.

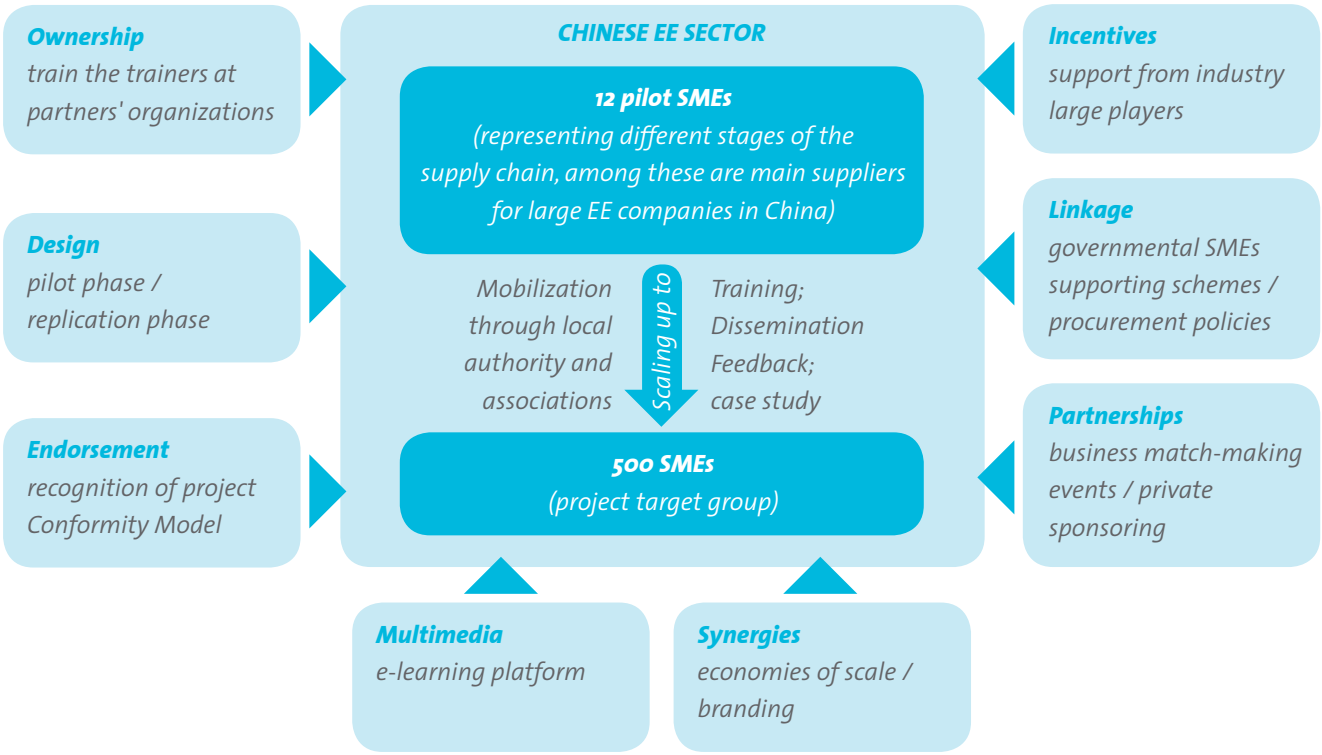
ONLINE OUTREACH

The project prepared a training course, a conformity model, and an e-learning course. The e-learning platform offers knowledge on environmental protection, OHS, energy efficiency and CSR. SMEs can find simple explanations of sustainable production standards in Chinese language and tailored to their sectors. More than 40 workshops and events have reached thousands of companies to draw their attention to both the online platform and the conformity model.

AWARENESS VIA POLICY-MAKERS

China has integrated various directives on environmental protection into its legal framework. The project worked with local authorities and institutions to build local participation and capacity so that they can also spread the message when dealing with SMEs.

Project Scaling-up



RESULTS

BASELINE SURVEY REVEALS INTEREST IN ECO-EFFICIENCY, OHS AND CSR

In 2009, the project conducted a baseline survey on the environmental performance of Chinese SMEs in the electrical and electronics industry. They were found to face a series of hurdles, such as a shortage of qualified service providers for e-waste disposal, a lack of investment, and poor integration of Chinese and European environmental standards. Many SMEs showed interest in the product life-cycle approach to upgrading eco-efficiency, OHS and CSR practices.

STANDARDS GUIDELINES – A ROADMAP FOR IMPROVED ECO-PERFORMANCE

Standards guidelines were created which took account of the findings of the baseline survey. They include best practices, case studies, and a comparative analysis between China and developed countries. They also provide valuable reference material for national, regional and international laws, regulations and standards for environmental and safety performance in the electrical and electronics industry. They form an effective road map for upgrading environmental and safety performance in Chinese SMEs.

CONFORMITY MODEL WITH VOLUNTARY AUDITS

A conformity model and award scale was developed to provide a framework for the assessment and voluntary audit of enterprises as a step towards the improvement of their environmental and safety performance. There are four levels of compliance, each corresponding to a detailed set of indicators and targets, and ranging from basic to pro-active. SMEs can be assessed according to the level at which they have implemented suggested measures, and high-achievers can benefit from facilitated access to supply chains of European companies.

TRAININGS AND NATIONAL OUTREACH

Training materials and practical tools were developed for SMEs in line with the standards guidelines and conformity model. Issues covered include sustainable production and product life-cycle management, and the customised methodology incorporated self-learning techniques. The e-learning platform addresses the needs of SMEs and managers. Other results include the series of events and meetings in China and Europe, the high-level launch in September 2011, the engagement in project activities of leading enterprises from the Chinese electrical and electronics sector, industry associations, as well as national, provincial and local policy-makers.

While promoting responsible resource management models, our project Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China generated multiple win-win benefits for European supply chains and more than 1,600 Chinese SMEs of a fast-growing and traditionally export-oriented sector. To achieve upgraded and sustainable practices in the field of eco-efficiency, occupational health and safety and corporate social responsibility, a flexible incentive and capacity building programme engaged the entire chain of stakeholders from producers to standardisation authorities and policy makers and contributed to strengthened trade relations between China and Europe.

Igor Darbo,
Project Manager from AHKB/DIHK

IMPACT IN NUMBERS

ECONOMIC IMPACT 	• Facilitated trade and cooperation among Chinese and European enterprises of electrical and electronics sector resulting from compliance with eco-efficient and sustainable production standards • 2 Business Facilitation Conferences organized
ENVIRONMENTAL IMPACT 	• Baseline survey on environmental performance of Chinese electrical and electronics enterprises conducted • Conformity model for SMEs applied in 5 regional clusters • Pilot SME Assessment Programme completed: interactive discussions, on-site visits and checklists to measure impact of Pilot SME Training Programme • Declaration signed by 6 key domestic industry players • SME Training and Assessment Programme implemented: more than 22 training workshops and a series of assessments
SOCIAL IMPACT 	• Reduced risk of workplace accidents and health hazards through implemented OHS measures • Improved social standards through implemented CSR practices
ENGAGEMENT OF TARGET GROUP 	• More than 1,600 SMEs participated in past project events • 12 pilot enterprises successfully completed the project's Pilot SME Assessment and Training Programme • Involvement of leading Chinese and European enterprises of EE industry – reaching out to wide pool of SMEs through supply chains • Collaboration with industry associations (e.g. Chinese Institute of Electronics, South China Household Electric Appliances Association)
POLICY LINKAGES 	Recorded interaction with policy-makers: • More than 200 policy-makers involved in project activities • Standards Guidelines developed and disseminated • 2 one-week Policy Tours to Belgium and Germany organised for Chinese delegation including policy-makers from Ministry of Industry and Information Technology, Ministry of Environmental Protection and Ministry of Finance • Regular involvement in project activities (e.g. regional & national launch events)

"As an initial achievement on eco-efficiency, since the ESEEC training, we improved the design of our product's power switch during the design phase, which led to a 10% decrease in power consumption. In addition, we installed new air exhaust pipes and ventilators above our production line for a healthier and safer work environment. In the after-sales phase, we started a free-of-charge replacement for product plastic cases for our key customers. This extended the product usage time and ensured that the old covers can be recycled in a proper way. We also reduced energy consumption up to 70% by redesigning our product testing process. We expect to save up to 60% in power consumption caused by illumination."

Mr. Luo Yunhua, General Manager, Shanghai BOSHI Business Systems Technology Co., Ltd.

Legend

Eligible countries where SWITCH-Asia projects are implemented

Eligible Asian countries for the SWITCH-Asia programme

Non-eligible Asian countries for the SWITCH-Asia Programme

Project implementation area

City *Region* *Country*

The boundaries shown on this map do not imply on the part of the European Union any judgment on the legal status of any territory or the endorsement or acceptance of such boundaries.

OBJECTIVES

The SWITCH-Asia project *Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China* aims to promote sustainable production patterns among small and medium-sized enterprises.

DURATION

02/2009 - 02/2013

2008 2009 2010 2011 2012 2013 2014

PROJECT TOTAL BUDGET

EUR 2,599,087 (EU contribution: 80%)

PROJECT CONTACT

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PROJECT CONSORTIUM

Delegation of German Industry and Commerce Beijing / Deutscher Industrie- und Handelskammertag (AHKB / DIHK)

China National Institute of Standardization (CNIS)

China Standard Certification Center (CSC)

Chinese Institute of Electronics (CIE)

ASSOCIATE

Deutsche Telekom