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NETWORK FACILITY

IMPACT SHEET • SWITCH-ASIA PROJECT

PREMIUM ENVIRONMENTAL MANAGEMENT FOR COMPANIES IN CHINA (EMAS GLOBAL CHINA)

Promoting the Environmental Management Systems, EMAS Global, in China

First EMAS Global registrations and a promising nationally-orientated approach from China

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The Challenge

Products made in China are increasingly found throughout the world, however, there are concerns about the sustainability of production and its negative environmental and social impacts. The project set out to promote the adoption of the European 'Eco Management and Audit Scheme (EMAS)' in China. EMAS, established in 1995, looked to broaden its appeal geographically at the time of project design in 2011. The project's challenge was, for both the EU and China, to test the assumption that EMAS was the optimal instrument to instil the implementation of an environmental management system in Chinese businesses, based on the European model. EMAS is a premium environmental management system that goes beyond other standards (e.g. ISO standards); its application requires strong commitment from entrepreneurs.

Objective

The project aimed at promoting the adoption of the European Eco-Management and Audit Scheme (EMAS) for production sites located in China.

The specific objectives included:

- Designing and establishing a conformity (policy) model for the uptake of EMAS Global in China;
- Increasing the capacity of Chinese environmental consultants to coach Chinese SMEs in best practice of environmental management systems (EMS), including EMAS Global in part or whole;
- Creating alternative entry points for the concept of EMAS Global to be introduced and implemented in existing Chinese environmental management contexts.

TARGET GROUPS

- Enterprises with production sites located in China, who would be attracted to adopt EMAS Global or a similar EMS approach suitable within the Chinese context
- Chinese consultants, in order to assist enterprises in developing, auditing and verifying EMS, including EMAS
- Policy makers and authorities responsible for EMS, both in the European Union and in China

Activities / Strategy

Capacity Building Using "Train the Trainers" Approach

Training was provided to local consultants so that they were able to coach SMEs to implement EMAS Global. The training put a strong focus on expert know-how, best practice examples, case studies, on the job training and marketing of EMAS Global. With this approach, the project established sufficient EMAS capacity in China. The first batch of industrial sites in China to achieve EMAS registration has already been established.

Developing an Enabling Policy Environment

The project designed a conformity model to reconcile the requirements of two different EMS, the EMAS launched by the EU and China's environmental management systems. This included harmonisation of certification, and verification and registration procedures for companies with production sites in China.

Creating Business Intervention

The project prepared SMEs for EMAS Global registration and assisted SMEs in its implementation. Having been trained on EMAS Global, the local consultants worked directly with the participating companies in order to help them prepare for registration.

Broad Awareness Raising and Promotion

A series of training events, workshops and conferences, combined with a marketing strategy, created interest about EMAS Global among the target groups. These activities were targeted to companies and industrial sites producing for European customers or belonging to European companies.

EMAS Helpdesk

An EMAS helpdesk was created to facilitate EMAS Global implementation in China. Similar to the EU's EMAS helpdesk, the Chinese consultants, verifiers and interested companies had an online helpdesk that provides information and answers to questions.

Introduction of EMAS Global to industrial sites in China

Scaling-up Strategy

What had appeared initially as a straightforward case of replicating an approach from the EU in another part of the world changed to a trial and error exercise. It became apparent that the project had been built on assumptions, which were too optimistic, in particular regarding the attractiveness of EMAS for the business community in both the EU and in China, and the interest of European companies holding EMAS certification to support global ambitions. Despite the challenges, the project generated a number of positive outcomes that would provide feedback to the EMAS Global framework in the EU and promote the uptake of EMAS Global's core features into a comparable Chinese system.

Creating a Tandem Model

Through the project, a 'tandem model' was created. Currently, this is the only legal option for Chinese industrial sites to register with EMAS Global in one of the EU Member States. The model requires collaboration between European and Chinese experts to meet the complex administrative requirements requested by the EMAS authorities in the EU. It is an expensive exercise, thus, so far only two European multinationals have registered six of their production sites in China. Unfortunately, these thorough but complicated procedures make EMAS Global irrelevant for other companies, and particularly for SMEs.

Workshop on EMAS Global and China's environmental management systems

Creating a Pool of Local Consultants

The project ensured that a sufficient capacity of local consultants was trained to support the implementation of EMAS Global. However, without a convincing business case, consultancy services on EMAS specifics became obsolete. The project thus put emphasis on EMAS elements which are relevant to SMEs, such as the methodology and tools to compile EMAS-inspired environmental statements and improvement plans.

Implementing a Pilot Scheme

The project trained additional consultants to run a pilot scheme with an adapted ('EMAS-inspired') system. This activity involved training provision to SMEs in Suzhou Industrial Park (SIP), Tianjin Economic-technological Development Area (TEDA) and Tianjin Airport Area of China Pilot Free Trade Zone (TJFTZS). The training focused on improving productivity and resource use, and increasing the transparency, liability and disclosure of environmental information required by the market and regulations.

Alternative Entry Points for EMAS

Realising the non-practicality of EMAS Global for China's current business context, the project decided to contribute to the existing Business Environmental Credit System. It is a governmental scheme that incentivises enterprises to implement premium EMS with awards and recognition (environmental credits). There are incentives for compliance and disincentives for non-compliance.

> ***In December 2015, the Chinese Ministry of Environment (MEP) jointly with the National Development and Reform Commission (NDRC) issued guidance on 'Strengthening the Business Environmental Credit System,' which underlines the importance of premium EMS. Although the direct transfer of the EU's EMAS policy to China is not realistic, the concept of continuous improvement of production performance will be an even bigger issue in China in the future. It will include clear signals to companies in the form of award and discouragement, a lesson that could also improve EMAS in the EU.***
>
> *Ms. QIN Yuan,*
> *Project Manager, The Administrative Centre for China's Agenda 21 (ACCA21)*

Results

Provided Feedback to the EU EMAS Global

Despite the well-designed approach, the project faced major challenges in its implementation. At the time of project proposal development, only the EU Directive on EMAS Global was available, without policy guidance for its implementation. The project was therefore based on a number of assumptions not all of which were reflected when the EU policy guidance was finally published in 2012. The project intended to support the development of a verification system that would allow EMAS registration in China by Chinese EMAS verifiers. However, this was not possible according to the EU policy guidance. Companies wishing to register for EMAS had to do so in an EU Member State, including the accreditation of all EMAS verifiers. Enforcing registration of Chinese consultants in Europe made EMAS Global impossible on a practical level. For Chinese companies, EMAS Global became more costly and complicated, while European-owned production sites in China showed similar reluctance. Under the current regulatory framework, it is not possible to replicate EMAS outside the EU.

Modification of a New Strategy

Under the circumstances, the project adapted its strategy by promoting 'EMAS-inspired' elements suitable for the local context, such as initial environmental assessment, establishing key performance indicators for benchmarking, formulation of environmental statements and improvement programmes of a company's performance. While certain initial quantitative indicators (number of EMAS Global registrations, Chinese professionals accredited as EMAS auditors) were lower than anticipated, the project has seen the uptake of EMAS ideas by Chinese authorities and enterprises.

Built Capacities for EMAS Global

The project created a pool of EMAS local consultants who were able to meet the market demand now and in the future, if changes in the EMAS framework occur. It also developed and tested the only feasible model of EMAS Global implementation which resulted in six industrial sites registered with EMAS Global in China.

Created Conducive Policy Environment

The project convinced industrial clusters in China to embark on the EMAS concept and to use 'EMAS-inspired' elements in the Chinese Business Environmental Credit System, which assesses the environmental performance of enterprises and provides rewards and penalties. This approach was built on new policies by the Ministry of Environmental Protection and the National Development and Reform Commission and local environmental authorities.

> ***From my point of view, EMAS is the world premium environmental management system. We have experienced environmental, economic and management benefits from implementing EMAS. The scheme is really helpful for us and I think EMAS is valuable for companies.***
>
> *YOU Li,*
> *Manager, EHS Department of*
> *Schaeffler Group*

Generated 158 Pilot Projects

The project generated 158 pilots in eight Chinese provinces, which demonstrated the usefulness of the 'EMAS-inspired' approach for sustainable production: saving of energy and resources, reduction in emissions and waste, increase in awareness for evidence-based management, and continuous improvement towards productivity, workplace safety and resource efficiency. The companies recognised the benefits of performance disclosure to improve the image of Chinese production standards. Benefits were estimated to include the saving of 1 million tonnes water, 20 million kWh, 30 000 tonnes coal, and reduction of 700 tonnes SO_2, 100 tonnes NO_x, and 80 000 tonnes CO_2.

Lessons Learned

During a study tour to Europe in November 2015, the project shared its experience at a High Level Conference on EMAS (20 Years of Premium Environmental Management) in Frankfurt. The project explained the 'tandem model' and the alternative EMAS-inspired approach in which core elements of EMAS can be translated to the Chinese context.

Impact in Numbers

Economic Impact

- Chinese companies recognised the benefits of EMAS Global, such as increasing resource efficiency which in turn increases financial performance.
- The project generated 158 pilots in eight Chinese provinces, which resulted in economic benefits from energy and resource efficiency, reduction in emissions and waste, an increased awareness for evidence-based management, and continuous improvement towards productivity and workplace safety.

Environmental Impact

- Reduced emissions, waste, and other negative environmental impacts at industrial sites.
- 158 industrial sites in eight provinces achieved a saving of 1 million tonnes water, 20 million KWh of electricity, 30 000 tonnes of coal, and a reduction of 700 tonnes SO_2.

Social Impacts

- Enhanced the quality of life of local communities through pollution reduction at industrial sites.

Climate Benefits

- 158 industrial sites achieved a reduction of 100 tonnes of NO_x and 80 000 tonnes of CO_2.

Target Group Engagement

- The first and only six industrial sites (producing vehicle parts, and pulp and paper) in China were registered with EMAS Global: five in Jiangsu province, and one in Ningxia province.
- The project trained local consultants to conduct pilot projects using the EMAS-inspired approach and provided training for enterprises in Suzhou Industrial Park, Tianjin Economic-technological Development Area (TEDA) and Tianjin Airport Area of China Pilot Free Trade Zone.

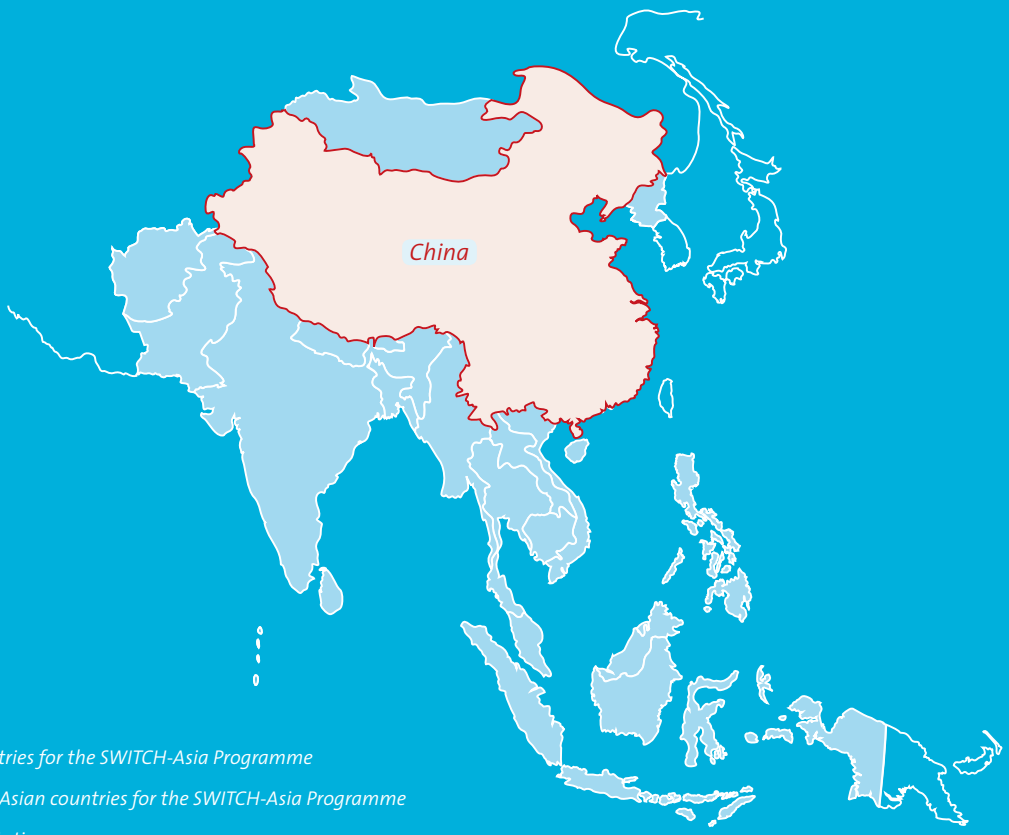
- EMAS inspired methodology in Chinese pilot sites:
  - 10 sites in Guangdong province, in the following sectors: hardware fitting, tungsten, ceramics, schools, hotel, beverages;
  - 1 site in Hebei province in the machinery and forging sector;
  - 13 sites in the Liaoning province, one in the Xinjiang province and one in Inner Mongolia, all in the chemicals sector;
  - 4 sites in the Sichuan province, in the chemicals and machinery sectors
  - 110 sites in the Tianjin province, in the following sectors: electronics, chemicals, painting and coating, machinery, plastics, aluminium alloys, grain and oil, rubber tyres, food, power generation, waste water treatment, microbial pharmaceutics, beverages, pharmaceuticals, household appliances, dairy, port logistics and services, and parts and accessories for motor vehicles;
  - 12 sites in the Zhejiang province, in the following sectors: power generation, machinery, pharmaceuticals, food, plastics, chemicals, household appliances, and optic cables.

Policy Development

- The project contributed to the Business Environmental Credit System, a scheme established by China's environmental authorities. The scheme encourages enterprises to implement premium environmental management systems (EMS) by offering award and recognition (environmental credits).
- Designed a conformity (tandem) model to reconcile the requirements of two different EMS, the EU's EMAS Global and China's EMS, including harmonisation of certification, and verification and registration procedures for companies with industrial sites in China.

Europe-Asia Cooperation

- The project shared its experience at a High Level Conference on EMAS (20 Years of Premium Environmental Management) in Frankfurt in November 2015.



Legend

Eligible 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

To promote sustainable production through the application of best practice and voluntary environmental management systems, such as EMAS Global

DURATION

PROJECT TOTAL BUDGET

EUR 1 234 298.50 (EU contribution: 80%)

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Published in April 2017.
This publication is printed on 100% recycled paper using an eco-friendly process.
Photo source: EMAS Global China project