

**ENGAGING SERVICE PROVIDERS
FOR SUSTAINABLE CONSUMPTION
AND PRODUCTION**
A THEMATIC STUDY
OF SWITCH-ASIA PROJECTS, 2010



SWITCH-Asia Network Facility
is funded by the European Union.



SWITCH-Asia Network Facility is implemented by UNEP/Wuppertal Institute
Collaborating Centre on Sustainable Consumption and Production and Wuppertal
Institute for Climate, Environment and Energy.



Wuppertal Institute
for Climate, Environment
and Energy

A key challenge for the SWITCH-Asia Programme is to replicate successful approaches and methodologies, which can speed up the implementation of Sustainable Consumption and Production, and the road to sustainable development. By exploring and testing the best ways to interact with SMEs and consumers in large scale SWITCH-Asia can support policy-makers and business entrepreneurs with information of how to make the right choices for a sustainable Asia.

In the last decade, a vast array of good practices on sustainable production and consumption have been developed and demonstrated. The SWITCH-Asia Programme aims to take this one step further. The projects funded under the Programme should seek for “replication mechanisms” to scale-up existing good practices. Replication can be achieved through multi-stakeholder approaches, for example by building partnerships with business service providers and actors along the supply chains. Involving policy-makers and developing enabling policy environments for SCP are equally important.

The Network Facility launched a long-term analysis of the contribution of how the SWITCH-Asia programme is contributing to the understanding of how SCP can be mainstreamed in society and scaled-out effectively. This report is the first part in the analysis of SCP replication mechanisms via identifying interesting areas that can make a difference. This study will be continued along with the advancement of the projects.

EXECUTIVE SUMMARY

Service providers in the context of SCP refer to businesses that provide services to other businesses or individuals to enable them to implement sustainable consumption and production, inducing a behavioural change and a more sustainable way of acting. The purpose of this paper is to start a dialogue on how to engage service providers for sustainable consumption and production (SCP), and to provide a map of the context, key issues, and questions that should be addressed in order to effectively replicate best practices on a larger scale.

A group of ongoing SWITCH-Asia projects have been studied in order to understand the role and involvement of service providers and their potential to provide best practices for replication of SCP. All the concerned projects are still in an early stage of implementation, and therefore it is still premature to outline the final picture of potentials and barriers for scaling up project activities, and of mechanisms for replication. However, this study attempts to illustrate the different aspects of engaging service providers for SCP with real examples from the ongoing SWITCH-Asia projects. The types of services provided were analysed resulting in a 'service mix'. The hierarchical allocation of services along the 'service chain' is identified as the core mechanism to build capacity on local level with the potential to replicate services beyond the framework of a project. In the final chapter, the capacity building process itself, the need for institutionalisation, and the limitations of the market are discussed regarding observed strengths and weaknesses. This thematic study concludes that service providers in their variety of types are inevitably necessary to provide SCP services to the Asian market and their SMEs. They are the backbone for the promotion, communication, and technical assistance how to apply SCP. In order to replicate SCP, capacity building for local service providers deserves the highest attention. It is the natural first step and the inevitable precondition to achieve the desired outreach to a bigger number of SMEs.



*SWITCH-Asia Workshop
with Bangladesh Tannery Association*

THE NEED TO REPLICATE SCP PRACTICES

Over the past two decades pioneers in business, government, and civil society made considerable efforts in how consumption and production can become more sustainable. However, to achieve the overall goal of a more sustainable world these good examples need to be mainstreamed. In other words, if replication of sustainable business models does not take place, sustainable consumption and production will remain an elite ideology of a few. The challenge is how the big mass of small and medium-sized enterprises (SMEs), and a greater proportion of consumers, can be convinced to share the mission of generating value through the use of resources differently and more efficiently.

THE CRUCIAL ROLE OF SERVICE PROVIDERS

This study investigates one of the strategies how replication is presently covered in the context of SWITCH-Asia projects. It is obvious that the techniques, enabling instruments, and motivating drivers for sustainable consumption and production require proper ways of communication; and

GLOSSARY OF PROJECT NAMES

Train the Trainers: „Train the Trainers, Train Chinese Construction Sector SMEs in Energy Saving Techniques and Technologies”; **MEET-BIS:** “Mainstreaming Energy Efficiency through Business Innovation Support Vietnam”; **Re-Tie Bangladesh:** “Reduction of Environmental Threats and Increase of Exportability of Bangladeshi Leather Products”; **CSR Vietnam:** “Helping Vietnamese SMEs Adapt and Adopt CSR for Improved Linkages with Global Supply Chains in Sustainable Production”; **China motors challenge:** “Electric Motor Systems Energy-Saving Challenge in China”

it is assumed that ‘service providers’ (can) play a crucial role in the communication of sustainable consumption and production towards SMEs and consumers.

WHAT ARE ‘SERVICE PROVIDERS’ IN THE CONTEXT OF SCP?

In general terms, a ‘service provider’ in the context of SCP is a business that provides services to other businesses or individuals to enable them to implement sustainable consumption and production, which then leads to a behavioural change and a more sustainable way of acting.

Potentially, each business, which is providing services along these lines in a professional way, can be considered as a service provider. Service providers are often acting as intermediaries or agents, and therefore they can easier be enabled to ‘spread the word’ within the private sector.

The ongoing SWITCH-Asia projects already involve many types of ‘service provider’. There are national and international expert organisations (consultancies, academic institutions, and other professional organisations with extensive experience in providing technical assistance at company, institutional, and policy level), business membership organisations (chambers of commerce and industries, industrial associations) with European, international, and national scope of activities, and a number of national governmental institutions. Several projects also have multilateral organisations on board, such as UN agencies. Some projects make links to financing institutes and key technology providers or other specific service providers such as energy service companies (ESCOs).

TYPES OF SERVICE PROVIDERS

Overall, the service providers can be grouped into:

- Expert organisations
- Business membership organisations (BMOs)
- Governmental agencies
- Other specific service providers



WHAT ARE ‘SERVICES’ IN THE CONTEXT OF SCP?

Frequent SCP services concern the promotion and communication of SCP practices including the techniques, enabling instruments, and motivating drivers for sustainable consumption and production to SMEs and consumers. Services are delivered through capacity building, institution building and training, consulting, coaching, and targeted research and information on SCP issues. In certain cases services can include the provision of technologies and products in the hardware sense. Services can also be financial support, policy recommendations, and instruments development.

TYPES OF SERVICES PROVIDED

Overall, the service provided can cover the following:

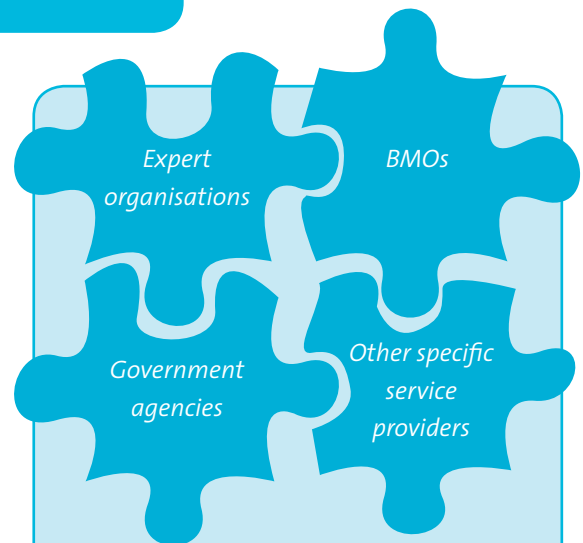
- Strategic consulting
- Technical support
- Capacity building and trainings
- Financial support

These types of services should reach the target groups of SWITCH-Asia at a programme level: SMEs and consumers in Asia, which form the majority but are the least involved and reachable group of stakeholders in the system. Consequently, these players need more attention compared with big players like large companies, multi-national entities, and worldwide acting retailers, who have their own policies and instruments, and sufficient resources to create and execute their own business models.

THE ROLE OF SERVICE PROVIDERS IN SWITCH-ASIA PROJECTS

THE ‘SERVICE PROVIDER MIX’

The different types of service providers can be roughly grouped into ‘expert organisations’, ‘business membership organisations’, ‘governmental agencies’, and a number of ‘other specific’ service providers. This sub-chapter tries to give an impression of the colourful mix of service providers and how they occur in diverse combinations in the SWITCH-Asia projects. It was observed that most of the service providers identified are partners or associates of a project. Some projects also address service providers beyond the scope of the projects’ consortium.



The ‘service provider mix’ can be seen as a puzzle, where each component is potentially linked with another. Not all components have to be present in every project, nor to the same extent. The actual constellations depend very much on the subject of a project and the framework in which a project takes place. However, there is no single standard blueprint service providers mix linked to a project, but a customised and functional setup will support its success and replication.

EXPERT ORGANISATIONS – THE BACKBONE OF TECHNICAL ASSISTANCE

In order to make the rich portfolio of SCP practises available to a larger clientele, every SWITCH-Asia project involves one or more expert organisations, such as a consultancy, academic institution, or other professional organisation, to deliver technical assistance. Such organisations are recognised for their good field experi-

ence of SCP and their ability for providing technical assistance at company, institutional, and policy level. Ideally, a project should include such organisations from both Europe and Asia.

ACADEMIC AND CONSULTING ORGANISATIONS

The SWITCH-Asia project ‘Train the Trainers’, which aims to promote SCP in the construction industry in China, links the European expertise of the ‘Swedish Environmental Research Institute IVL’ with the competencies of the ‘Tongji University of Shanghai’ to promote sustainable construction standards and practices through training of key experts.

The SWITCH-Asia project ‘MEET-BIS’, which aims to promote sustainable energy and water solutions to SMEs in Vietnam, combines the expertise of the ‘ETC Foundation and other expert organisations from the Netherlands with the capacity of the Vietnamese Research Centre for Energy Efficiency’.

SPECIALISED EXPERT ORGANISATIONS TO SERVE BMOS



European expert organisations may provide expertise through training and coaching directly local Asian service providers such as business membership organisations in order to help build their own expert capacity.

An example of this is found in the SWITCH-Asia project ‘Re-Tie Bangladesh’, where the German institution ‘SEQUA’, an umbrella expert organisation of the German Chambers of Commerce and Industry, provides capacity building to leather associations in Bangladesh.

MULTILATERAL ORGANISATIONS

A final example concerns the involvement of multilateral expert organisations like UNIDO, which is involved in a number of ongoing SWITCH projects such as ‘CSR Vietnam’, ‘Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China,’ and ‘Re-Tie Bangladesh’.

BUSINESS MEMBERSHIP ORGANISATIONS AS PROJECT PARTNERS

The SWITCH-Asia project ‘CSR Vietnam’ involves a dozen partners of which more than half are Vietnamese business member organisations, chambers of commerce, and industry, and several industrial associations as well. With strong involvement of business membership organisation the project is reaching a wider range of SME’ from different sectors (textile, leather, and electronics) than many other projects.

The SWITCH-Asia project ‘Re-Tie Bangladesh’ has involved not only the ‘Dhaka Chamber of Commerce and Industry’ but all major associations of the local leather and tannery industries and therefore has the potential to approach almost all SMEs of these sectors.

The SWITCH-Asia project ‘Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China’ is using the ‘Chinese Institute of Electronics’, a membership based organisation, to reach out to the ten thousands of SMEs in this sector.

BUSINESS MEMBERSHIP ORGANISATIONS – THE BRIDGE TO SMES

BMOs are chambers of commerce and industry, and industrial associations. While chambers of commerce and industry usually represent a wide range of businesses, industrial associations are typically targeting a certain business sector only, e.g. the leather industry or manufacturers of electronic products. Many of the SWITCH-Asia projects have such organisations involved, either as project partners, or, in a few cases, as project leaders.



BUSINESS MEMBERSHIP ORGANISATIONS AS PROJECT LEADERS

Some projects are being led by European chambers with a base in Asia and play the role as the expert organisations. The SWITCH-Asia project ‘Train the Trainers’ is managed by the ‘European Chamber of Commerce in China’. The ‘Delegation of German Industry and Commerce Beijing’ manage the SWITCH-Asia project ‘Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China’.

GOVERNMENTAL AGENCIES – THE ESSENTIAL LINK TO POLICY

Particularly in countries like China and Vietnam where state agencies and state-owned companies play a crucial role, and in countries in transition like Mongolia, the involvement of governmental institutions in a project partnership can provide good leverage. SWITCH-Asia projects engaging with such institutions form strong strategic partnerships to help strengthen the concept and uptake of SCP by, for example, development of standards, labels, and certification schemes, or to elicit stronger political support.



NATIONAL GOVERNMENT BODIES ASSOCIATED TO PROJECTS

Some projects expanded their partnerships with ‘associates’. These can be national government institutions which are not eligible to be full partners in a SWITCH-Asia project, but they can make useful contributions to a project’s goal. Not all such associates can provide a direct service, and some operate in a more supporting role.

OTHER SPECIFIC SERVICE PROVIDERS – BUILDING CAPACITY BEYOND THE PROJECT PARTNERSHIP

Most SWITCH-Asia projects are implemented by a diverse group of partners working to build sufficient capacity to replicate project activities and to develop mechanisms to extend SCP. Some innovative new approaches are emerging for involving more service providers and for establishing new types of service providers.

STANDARDISATION AND CERTIFICATION INSTITUTES

The SWITCH-Asia project ‘China Motor Challenge’ is promoting energy efficient motors to both sides, the motor manufacturers and the end users - which together constitute a potentially large number of SMEs. To make the system more transparent, an adequate standard for energy efficient motors, flanked by a new label and certification mechanism, is being developed. The project is driven by the ‘China National Institute of Standardisation’, which is providing support for developing government standards and legislation. Technical support is provided by the Portuguese University of Coimbra, a leading academic institution for similar efforts in the EU.

The SWITCH-Asia project ‘Green Products Development and Labelling in Mongolia’ works with the Mongolian Agency for Standardisation and Metrology to develop a new green product label, in addition to two European expert organisations and a business membership organisation.

The SWITCH-Asia project ‘CSR Vietnam’ has, besides a large number of business member organisations, also several governmental academic and standardisation institutes on board.



ENERGY SERVICE COMPANIES

In order to better bridge the link between suppliers and users of energy efficient motors, the SWITCH-Asia project 'China Motor Challenge' is improving the capacity of Chinese energy service companies (ESCOs) through one of its partners, the China Energy Conservation Association, with its membership of hundreds of ESCOs in China.

ESCOs are a relatively new type of service company in China, the first ones emerging around 2004. Currently around 300 are operating across the country, advising companies how to improve their energy efficiency. In China, the ESCO undertakes an energy audit and may provide new equipment to improve energy efficiency. The service company makes all the up-front costs and is paid a proportion of the energy savings achieved. This contracting method is known as 'energy performance contracting' and effectively eliminates the risk for the customer. Although this provides a convenient mechanism for motor users to save on energy and costs, the services are so new that in many sectors ESCOs have yet to gain trust. By training and building up the capacity of ESCOs (training them using international best practices for the design and application of energy-efficient motor systems), the project contributes to further electricity savings of industrial motor system users even beyond the lifespan of the project.



KEY TECHNOLOGY SUPPLIERS

The SWITCH-Asia project 'MEET-BIS' is working with carefully selected key suppliers of energy efficient technologies to help them offer comprehensive service packages to SMEs. As these also include financing proposals for related investments the project is also linking up with financial institutions.

In the SWITCH-Asia project 'Train the Trainers', many of the key experts being trained as trainers come from supply companies in the engineering and construction sectors. A task force of local trainers and multipliers is therefore being developed which already has a business relationship with construction companies. In this way, the project hopes to reach out to the enormous number of construction workers in China to elicit changes in their behaviour.



CONSULTANTS AND FREELANCE EXPERTS

Some projects follow more conventional paths by training local experts in SCP techniques who, in turn, will transfer them to SMEs in the future. The SWITCH-Asia project 'Re-Tie Bangladesh' has established 'nucleus managers' in the leather and tannery associations and the Dhaka Chamber of Commerce and Industry. A further dozen technical consultants are going to be qualified in key consumption and production issues by UNIDO.



The SWITCH-Asia project 'CSR Vietnam' will train up to 60 local experts to become trainers in corporate social responsibility (CSR). This new capacity should spread the word to hundreds of SMEs all over Vietnam. The SWITCH-Asia project 'Green Products Development and Labelling' in Mongolia is providing training to the staff of the countrywide network and branch offices of the project partners (MNCCI and MASM), who should be enabled to approach SMEs also in remote and poorly developed regions.

TRANSNATIONAL COMPANIES AND RETAILERS ASSOCIATED WITH PROJECTS

There are profit-making organisations not eligible to be project partners under the SWITCH-Asia programme but who can make relevant contributions to a project's goal. They can be associated with a project, not necessarily by providing a direct service, but often with a supporting function. For a more de-tailed discussion of the role of retailers and similar organisations, please refer to the thematic study on 'supply chain management'.

Despite the above, the SWITCH-Asia projects can produce some examples of 'associates' as 'service providers'. The SWITCH-Asia project 'Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China' gets support from 'Deutsche Telekom', which is ready to share its advanced experience with the other project stakeholders on how to establish SCP in the electronic industry.

Although not officially mentioned in the project description, some projects try to associate with such big players in order to widen the project's horizons. For example, the SWITCH-Asia project 'MEET-BIS' is linking up with big technology suppliers like 'ABB' and 'Siemens'.



CONDITIONS AND OPPORTUNITIES TO ENHANCE REPLICATION BY SERVICE PROVIDERS

THE SERVICE MIX

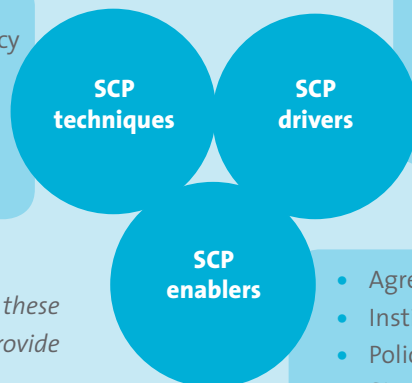
SWITCH-Asia aims at reaching out to a large number of SMEs and consumers. This sounds straightforward but in practice shows it is sometimes complicated and involves several stages - SCP is a complex concept covering a range of social and technical components. To successfully apply SCP at the level of an SME the company must be able to understand SCP, why it is useful and necessary, and which favourable conditions exist. In order to effectively support replication,

service providers (a) should address capacity building on SCP practices (b) manage to explain the business case for SCP, and (c) collaborate with enablers of SCP.

The investigated SWITCH-Asia projects comprise a rich portfolio of services, which are provided in various ways. The following sections try to systemise these services by looking at the 'service mix' from two angles. First, what are the contents of the provided services and which subjects are addressed? Second, what methodologies are applied to deliver these services?

THE SERVICE MIX

- Cleaner production
- Resource & energy-efficiency
- Benchmarking
- Technology innovation
- Eco-design
- etc.



- Economic & social aspects
- Costs & benefits
- Customer demands
- Market opportunities
- CSR, OH&S
- etc.

Typically a combination of these aspects is necessary to provide valuable services to SMEs.

- Agreements
- Institutional strengthening
- Policy & legislation
- Standards, labels
- etc.

SCP practices and techniques: These comprise a number of tools ranging from cleaner production, resource and energy efficiency, benchmarking, technology innovation and technology change, innovative product design, sustainable procurement, supply chain management, life-cycle assessment, and similar approaches. Many of these naturally overlap, which is important to keep in mind in order to avoid using different terminology when addressing the SME managers.

Drivers for SCP - the business case for SCP: There must be a set of 'business drivers in place to realise the implementation of SCP. They typically include economic and social aspects such as savings and efficiencies, costs and penalties, customer demands, and market opportunities. Frequently used approaches and tools in this respect are corporate social responsibility and occupational health and safety (OH&S). In the concept ESCOs, they provide the incentive via direct funding for companies to engage in investments of new technologies.

Enablers for SCP: These might include voluntary agreements, institutional strengthening, and the political and legislative framework and all related instruments of which standards, labels, and certification schemes are particularly prominent.

HOW DOES THE SERVICE MIX APPEAR IN SWITCH-ASIA PROJECTS?

Usually SWITCH-Asia projects deal with more than one topic. Below are some project examples and an attempt to systemise the different approaches:

SCP DRIVERS AS THE STARTING POINT

Some SWITCH-Asia projects build their service mix on the assumption that Asian SMEs can be attracted by addressing their ability to compete in the global market.

The SWITCH-Asia project ‘Re-Tie Bangladesh’ is organised around the driver to increase the export potential of Bangladeshi leather producing SMEs, which requires complying with international standards. In this message CSR and OH&S are covered. The project is aiming to improve the environmental and economic performance of leather producing SMEs so SCP techniques focussed on cleaner production are high on the agenda. An institutional strengthening of the Bangladeshi BMOs to help them spread the word about SCP in the leather sector complements the service mix of this project.

The SWITCH-Asia project ‘Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China’ has a similar orientation. The project assumes that this sector would succeed in exporting products to Europe

in the long run, if only the performance of SMEs regarding eco-efficiency, CSR, and OH&S is improved. The SWITCH-Asia project ‘CSR Vietnam’ again uses the driver of exportability of leather, textile, and electronic products to attract SMEs of these sectors. Under the umbrella of the project’s name, with the emphasis on CSR, all relevant issues from SCP techniques such as cleaner production, customer relationship and working conditions, and SCP enablers like international standards are covered.



SCP TECHNIQUES AS THE MAIN SERVICE

The SWITCH-Asia project ‘Train the Trainers’ deals mainly with SCP techniques, which are concentrated on the single aspect of the proper use of construction materials for the thermal insulation of walls. Only along this clear focus, SCP drivers in terms of economic and environmental benefits are addressed in the project. The project might indirectly, and in the longer term, also contribute to an improved enabling framework by highlighting the need of adequate qualification systems to improve the skills and awareness of construction workers.



ADDRESSING THE ENABLING FRAMEWORK

Some projects are improving the existing framework through the development of new product standards and labels and certification schemes.

The SWITCH-Asia project ‘China Motor Challenge’ is assisting industrial users of electric motors in switching to high efficiency electric motor systems. As this also depends on the availability of such systems both the end users and the manufacturers of such systems need to understand the underlying techniques and why switching towards SCP is worthwhile. However, the main content of this project is the development of an enabling framework in form of appropriate standards, labels, and certification schemes.



Workshop on Electric Motors

The SWITCH-Asia project ‘Green Products Development and Labelling in Mongolia’ is firstly dealing with SCP techniques as a combination of cleaner production and eco-design. But the second part of the project aims predominantly at improving the enabling framework through the development of a new green product standard and labelling system.

CREATING NEW SERVICES

The SWITCH-Asia project ‘MEET-BIS’ aims at the development of self-propelling markets for efficient energy and water technologies for SMEs in Vietnam. The main service is the provision of ‘business innovation packages’ to SMEs, which include tailor-made investment proposals for adequate efficient technology solutions that shall be brought to the market by selected key-technology suppliers. The project is systematically combining SCP techniques and SCP drivers to a new service, which should be promoted by a new type of service providers.

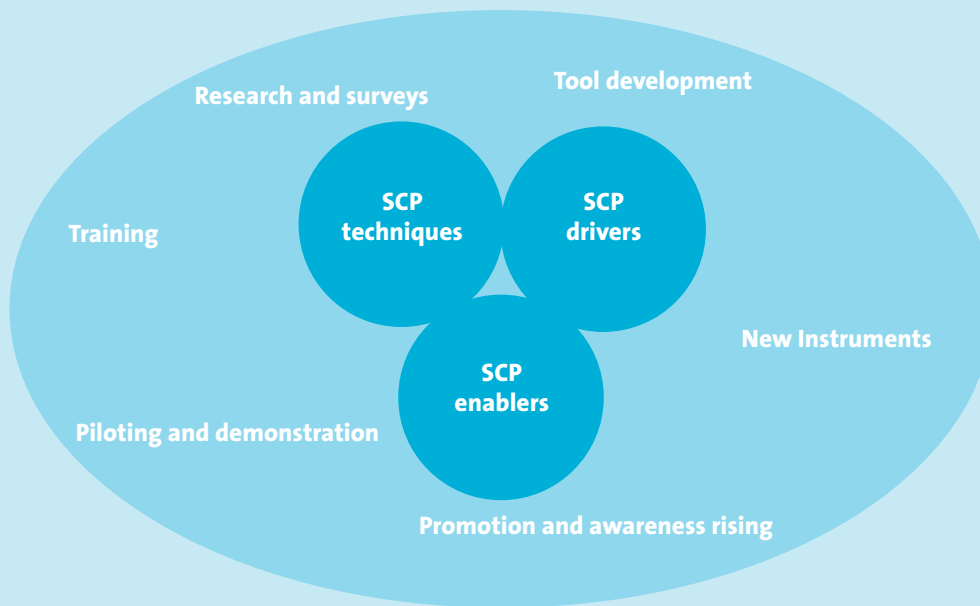
The SWITCH-Asia project ‘China Motor Challenge’ is promoting ESCOs, thus not creating a new service per se, but trying to popularise this rather new type of service in China.

HOW ARE THE SERVICES IN THE CONTEXT OF SWITCH ASIA PROJECTS DELIVERED?

This section explores how service contents are communicated in ongoing SWITCH-Asia projects. The projects are designed, and have an approach, to really extend their outreach to SMEs. This is a goal supported by activities specifically to build capacity in this area:

- The projects develop and apply specific mechanisms such as the ‘train the trainer’ approach, including relevant certificates for trainees – thereby creating a large group of experts with a high potential of multiplication;
- They are establishing challenges and other competitive incentive systems to attract SMEs;
- They are working on standardisation, labelling, and evaluation and auditing schemes for processes and products;
- They are trying to enlarge the focus of narrow company or procurement activities to encompass a larger view of supply chain mapping;
- The focus of technical assistance is enlarged to social and economic aspects.

THE „SERVICE MIX“ - WAYS OF DELIVERY



The ‘service mix’ – ways of delivery: There appear to be as many different ways of delivering SCP services as there are projects to deliver them. This is largely because of the individual nature of each project with its own set of objectives and the particular environment in which it is working. However, there are also some commonly occurring features such as training, research and surveys, tool development, pilot and demonstration activities, and general activities, to promote SCP.

TRAINING – CONVENTIONAL TO INNOVATIVE



All the investigated projects have significant training components, although the types of training vary from project to project. There are short instruction courses lasting only one to two days, longer-term curricula ranging from one week to several modules over a longer period; and conventional classroom courses with front desk presentations and interactive workshops. There are also some

innovative approaches to training provision, which deserve a closer look.

Most of the projects identified the internet as a useful channel for the communication of SCP content and are developing customised websites where visitors can get access to relevant information and training materials. The SWITCH-Asia

project ‘Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China’ is even setting up a comprehensive e-learning system. In the Asian context, the SWITCH-Asia project ‘Train the Trainers’ is applying a rather unique concept through offering mainly practical training. The trainees get the opportunity to exercise the proper construction of thermal insulated walls in a simulation yard equipped with real walls and construction materials.



Other SWITCH-Asia projects like ‘Re-Tie Bangladesh’ are providing training on-the-job; local experts are teaming up with experienced international experts to learn how cleaner production assessments work in practice.

RESEARCH AND SURVEYS – TO EXPLORE THE SYSTEM AND COLLECT FEEDBACK

Several projects have, in the early stages, research and other fact finding activities on the agenda in order to update SCP-manuals, to define baselines, or to identify the needs of target groups in more detail.

Projects aiming at the development of SCP-strategies (such as new standards) are performing desk studies about existing strategies with the purpose to extract experiences, which could be relevant, applicable and feasible in an Asian context. The SWITCH-Asia project ‘Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China’ screened dozens of international standards and regulations, which companies usually have to comply with in the international context. The SWITCH-Asia project ‘China Motor Challenge’ evaluates standards for energy efficient motors in developed countries. The SWITCH-Asia project ‘Sustainable Public Procurement in China’ investigated such practices in Europe including selected case studies.

In some cases, research is performed to develop new technologies that can update SCP techniques and practices, such as regarding emerging

technologies for energy efficient motors or new developments in sustainable building. Several projects conduct surveys to better understand the needs and constraints of their target groups. To receive answers some projects apply quite creative approaches.

To get full access to the project website of the SWITCH-Asia project ‘Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China’, visitors have to register by completing an online questionnaire. To become a member of the ‘China Motor Challenge’ companies have to pass an online questionnaire, and to be qualified as a successful member, they have to report their improvements in an online format in terms of internal benchmarking.



Collecting feedback from SMEs and adapting and fine-tuning the SCP services continuously is one of the main features of the SWITCH-Asia project ‘Re-Tie Bangladesh’. ‘Nucleus managers’, which have been instructed first by the German project partner ‘bfz’, periodically bring together leather manufacturers in groups of up to 15 companies each. Moderated meetings are then used to help explore the problems and needs of the companies, to prioritise them and to define the right response. Initial workshops with similar intentions were also conducted, at the meta-level of the BMOs, to explore the present service profiles for their members.

The SWITCH-Asia project ‘MEET-BIS’ performed a market survey including field interviews to get insight into the clean technology sector in Vietnam and how it is recognised by SMEs including for its barriers and potentials. A second survey identified key players for clean technologies who are ready to serve SMEs to improve their profit margins by applying efficient technologies.



TOOL DEVELOPMENT – IN ORDER TO SIMPLIFY

SWITCH-Asia projects spare considerable time for the development of tools in form of guidelines, checklists, manuals, and e-learning platforms. Such efforts are necessary to break down the immense available and potential endless materials about SCP to the specific project objective and to tailor it for the final target groups. Usually, SMEs don't have sufficient time and resources to follow comprehensive academic approaches. They need quick working guidance, simple, and easy-going tools. E.g. the 'Institute of Electronics of China' has requested its other project partners, who laid the scientific basis for a so called 'conformity model' along which SMEs should check their actual performance and conformity with a big number of international standards, to collapse this checklist to a document of maximum 20 pages, otherwise SMEs will not be able to digest it.

PILOTING AND DEMONSTRATION – PRODUCING SHOW CASES

Today, there already exist plenty of pilot and demonstration projects for SCP. However, most of the SWITCH-Asia projects studied have their own

pilot studies and demonstration projects which serve mainly to test the developed or modified tools and to create show cases with local characteristics. In the SWITCH-Asia project 'Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China', the so called 'conformity model' is tested first with a few pilot companies before being promoted to larger numbers of SMEs.

Those companies involved in the early days of SCP as a concept are going to be good examples for other SMEs to follow. In the case of the SWITCH-Asia project 'MEET-BIS', the innovative business packages for clean technologies will first have to show benefits before a market is established. The SWITCH-Asia project 'Re-Tie Bangladesh' assumes that demonstrating water treatment plants and renewable, and energy saving, technologies will be more practical than presenting such innovations in text books and therefore more SMEs will be convinced of their effectiveness.

DEVELOPMENT OF NEW STANDARDS, LABELS, AND CERTIFICATION SCHEMES

Several projects include in their scope of activities the development of new standards, labels, and concerned certification schemes. For some projects this is even the main purpose.

On-site SME assessment in the project 'Improving the Electrical and Electronics Industry in China'





Awards for electric motor users

PROMOTION AND AWARENESS RAISING

All SWITCH-Asia projects studied have some sort of general activities to campaign to the public or certain stakeholders like governments. Frequently used instruments are newsletters, stakeholder and steering committee meetings, or promotional activities at fairs and other events.

Another example of promotion is available in the 'China Motor Systems Challenge Club from the Electric Motor Project'. The project has established the China Motor Systems Challenge Club, a national information platform with around 600 members, connecting both users and producers of motor systems as well as ESCOs and public energy administrators. Through the Club best practices in the design and application of energy efficient motor systems are promoted. An annual award ceremony gives recognition to excellent cases of energy savings achieved in the industry. In 2009, the Tianjin Iron and Steel Company's 'Power Supply System Energy Saving Upgrade Project' and Datang Generation Huayin Jin-zhushan Power Plant's '600 MW Unit Induced Draft Fan Energy Saving Upgrade Project' received the awards. Furthermore, the Club gives the different value chain stakeholders the opportunity to exchange and network, e.g. industrial motor users get to know ESCOs and can make use of ESCO services. The Club will continue to function beyond the three years duration of the project, and will continue to have a website with relevant databases, reference materials, and technical solutions.

THE FLOW OF KNOWLEDGE ALONG THE 'SERVICE CHAIN'

The engagement of different types of service providers, with different functions, and different potentials, helps to provide different scenarios of final outreach. This is what is called the 'service chain', i.e. the mutual dependence of service providers, and their collaborative efforts, to reach the final target group.

The SWITCH-Asia project 'Re-Tie Bangladesh' is a comprehensive example for how the 'service chain' is engaged. At the top of the pyramid are two European expert organisations, 'SEQUA' and 'bfz', with rich experience in how to improve the organisation and the service profile of BMOs. Also at the top of the pyramid is the international organisation 'UNIDO'. At the intermediate level are the Bangladeshi BMOs with ample access to their SME members in the leather sector. In the first stage, 'SEQUA' and 'bfz' provide training and coaching to the local membership organisations on how to approach their members better. Each BMO is then allocated a 'nucleus manager' who has been trained to liaise more closely with SMEs and to become a trusted counterpart in the discussion of their needs and constraints. Because neither the local BMOs nor the 'nucleus managers' are experienced in SCP, 'UNIDO' is providing training on the job for a dozen of local experts, who form a new expert capacity to serve SMEs individually.

THE „SERVICE CHAIN“

The mutual dependence of service providers and their collaborative efforts to reach out to the final target group SMEs.



The flow of knowledge

The flow of knowledge – In most projects, there is a clear hierarchy in the flow of knowledge from European to Asian, or from professional expert organisations to local business membership organisations, this way developing local capacity. The dotted line at the bottom of the figure shows that the reverse flow of knowledge to understand local conditions, needs, and constraints is part of the system.

BUILDING CAPACITY AT LOCAL LEVEL

Variations of capacity building exist in the SWITCH-Asia projects. The SWITCH-Asia project ‘CSR Vietnam’ will train up to five dozen Vietnamese experts as CSR consultants, who shall reach out to thousands of SMEs with the intermediary support of Vietnamese BMOs. The BMOs in turn receive basic awareness packages to promote CSR as a beneficial approach for their clientele. In the case of the SWITCH Asia project ‘MEET-BIS’, the development of innovative business packages is undertaken by the European and Vietnamese expert partners together with local key suppliers of clean technologies. These key suppliers will later do the groundwork to promote SCP and sell the business packages

to hundreds of SMEs. The SWITCH-Asia project ‘China Motor Challenge’ trains ESCOs, which will support SMEs in the switch towards high-efficient electric motor systems. The SWITCH-Asia projects ‘Improving Environmental and Safety Performance in the Electrical and Electronics Industry in China’ and ‘Train the Trainer’ hope to enable the first trainees to take over the lead in promoting SCP to SMEs.



OBSERVED STRENGTHS AND WEAKNESSES

SWITCH-Asia intends to promote success stories, and to understand how these can be replicated, duplicated, copied, or multiplied. In a scientific meaning ‘replication’ describes the property of an activity, process, or test result that allows it to be duplicated producing the same or a similar output elsewhere. To replicate something means to apply the same or similar conditions and procedures at another location or time. This begs the question, what is worth replicating? Probably failures can be replicated much easier than success stories. But there is no value in replicating errors. Therefore, it is important to understand what a success story is and why it can happen.

“The most convincing success factor of a project is the long-term sustainability of its intervention.”

The most convincing success factor of a project is the long-term sustainability of its intervention. In other words, can the project activities be continued after the project ends, and only with local resources? In practice, can a project create sufficient political, institutional, and financial sustainability, and can the service in this way become independent from international funding through local ownership? In the closer context of ‘service providers’, will they be able to create an SCP business and what conditions are required to this end?



However, not all projects take place in a favourable environment and there might be factors outside of the control of a project, which can be a barrier to its potential replication. Nevertheless, such projects can still develop or demonstrate mechanisms, which could work under better conditions. The opposite may also occur: where projects suddenly experience a higher replication potential than planned or even desired, e.g. when a project approach is taken up by governments.

THE NEED TO SUSTAIN BUILT CAPACITY

Over decades of developing aid programmes, not only those financed by the EU, capacity building has become accepted as a crucial and effective instrument of change. This conclusion remains valid: without capacity there will be no service. Therefore it must be asked: does a project build sufficient capacity? Will the services of a project be transferred into local ownership? And in more practical terms, will local service providers be able to make a business case out of providing certain services, in our case SCP? For the replication of SCP it seems to be crucial to see to what

degree the Asian service providers are able to institutionalise SCP services and to what extent other specific service providers are engaged or are going to be involved. Project partnerships are alliances for a certain time only, and therefore the replication potential depends very much on how, how much, and to what quality capacity building beyond the closer system of a project partnership is realised.



All the SWITCH-Asia projects involved in this study conduct capacity building, either on institutional, company, or on individual expert level, and some even on political level. However, to sustain the capacity built beyond the lifetime of a project is considered to be the main bottleneck for replication of SCP. The potentials of the investigated projects vary in this respect, due to internal project factors, but also due to external conditions.

One aspect concerns the big gaps between Asian countries. Projects with a strong anchor in the existing political and legislative framework will obviously have a greater chance to sustain the service. For example, the ESCO business in China will prosper also in the future driven by a strong governmental request. Much poorer is the situation for service providers in Bangladesh, where reliable political frameworks and institutions are basically missing and a completely different business culture is in place. To ensure sustainability and the potential for replication, a project in Bangladesh has actively to navigate against an unfortunate wind. As an example the SWITCH-Asia project 'Re-Tie Bangladesh' tries to ensure that trained experts will continue providing services after the project ends, when they are no longer on the payroll of the project. These experts are gradually transferred under the responsibility of the local BMOs, which, year by year, take an increasing share of costs for these experts on their own shoulders.

A promising example to create and sustain local capacity right from the beginning is the SWITCH-Asia project 'MEET-BIS' with its intention to make local key players the founders of

a self-propelling market for clean technologies in Vietnam. Overall, the biggest challenge is to establish and maintain a business independent from EU funding. This important issue must actively be addressed by the projects.

As one promising example, the SWITCH-Asia project 'Train the Trainers' foresees the training activities for local construction companies to be institutionalised in a training centre.

IS THERE A MARKET FOR SCP?

The main potentials and limitations to make SCP-services a profitable business is the existence of a market for SCP, which in many cases is not yet established. However, a fair look at the situation in developed countries shows that the application of SCP, for example, in European industry is favoured by a much more enabling political framework, strong enforcement of regulations, a qualified labour force, and a competitive economy, where resources and energy and the handling of waste and emissions is going to overtake other options to achieve higher efficiency and profits. Such a context is still widely missing in many Asian economies. Looking at consumption, it is true that 'cheap buyers' are still in the majority in Europe.



Facing this difficult situation, some of the SWITCH-Asia projects chosen the strategy by referring mainly to export opportunities for certain sectors, e.g. leather, textiles, electronic goods, rattan products, etc. This way the as yet limited domestic market for SCP is substituted by a growing SCP demand on the international market. But it has still to be seen how local service providers

will be able to take up SCP and whether they can create a business case out of it by providing relevant services to local SMEs. This will very much depend on how the services, which are promoted by SWITCH-Asia projects, are recognised and perceived. In the words of representatives of local BMOs: 'All depends on the quality and the usefulness of the services provided for our members.'

It can be expected that projects dealing clearly with how to increase SME profit margins through SCP, e.g. through energy and resource efficiency measures, will have a better acceptance and higher replication potential, simply because the pay off is transparent and reasonably short.

PLAN AND REALITY

When initiating the SWITCH-Asia projects, it has proven to be important that projects have a solid and simple design. Very ambitious project designs can lead to overloaded agendas and it is difficult for local stakeholders to create local ownership out of the high amount of presented topics and activities. E.g. it is unrealistic that a four-day training on CSR is sufficient to become an advanced CSR consultant, while in Europe experts need several weeks to run through the same curriculum. It is most likely impossible that local experts, who have received only few days' theoretical instruction, can provide valuable advice to SMEs regarding cleaner production and eco-design. It has to be seen how complex contents, which have been developed in time intensive pilot projects, and which are now communicated mainly via internet learning platforms, will actually result in switching the behaviour and performance of SMEs, when direct human interaction is replaced by electronic information. In several cases SWITCH-Asia project managers have already realised the need to redesign their actions to a certain extent and to reallocate resources so far as they can to where they are needed the most which is in providing capacity building for the local stakeholders.

The SWITCH-Asia project 'CSR Vietnam' may serve as an example for such modifications. The project intends to enable Vietnamese SMEs to comply with large foreign buyers' CSR procurement guidelines and integrate themselves into



global supply chains by increasing awareness, understanding and adoption of triple-bottom-line (TBL) CSR, which includes environmentally sound production, improvement of labour practices and enhancement of international competitiveness. Originally, the project intended to educate approximate 60 CSR consultants within a few days for mainstreaming CSR as a business case and conducting in-plant assessment. When this idea was recognised as insufficient and not very realistic the project turned to the idea of qualifying 'CSR Mentors'. Ten to twelve carefully selected experts are now being offered three weeks of intensive training and practical assessment on CSR. After completing the course, these CSR mentors are expected to deliver lectures/training in CSR to the initially targeted experts of the project – and to get remuneration for their job.

CONCLUSION

Although plenty of knowledge and capacity in Asia regarding SCP already exists, this is only partly true when it comes to the practical level, especially at the level of small-scale business and enterprises. At this level, much information and capacity is still needed, especially as it is so difficult to reach the broader groups of stakeholders. SWITCH-Asia projects dealing with very complex services will face the challenges either to dramatically simplify existing tools in order to reach out to a bigger number of SMEs with perhaps limited impact or they will have to enhance their capacity building efforts to establish a professional local consultant group. It also seems necessary that the services provided and the way they are delivered have to be tailored carefully, in order not to overload the business agenda of SMEs and not to overcharge them. Like other businesses, service providers promoting SCP are requested to meet their customers' demands. In order to achieve sustainable impacts and quality it could be worth thinking about achieving more



with less. This thematic study, based on the intermediary analysis, concludes that the variety of SCP service providers are all inevitably necessary to provide SCP services to the Asian market and SMEs. They are the backbone for the promotion, communication, and implementation of SCP contents and tools. Although there is no final recipe which constellations of service providers need to build a successful project; some conditions have to be met to this end. First, in-depth expertise in the subject of SCP and its manifold features, a condition, which is mainly guaranteed through the inclusion of expert organisations. Second, ample access to SMEs which is a must to attract the final target group in bigger numbers; a condition which can be eased through the involvement of local BMOs or other local institutions trusted by small and medium-sized businesses. Third, involvement of governmental institutions and other stakeholders like retailers or multinational entities can be an asset, but this depends very much on a project's mission. However, in order to achieve replication of SCP, capacity building for local service providers deserves

the highest attention. It is the natural first step and an inevitable precondition to achieve the desired outreach to a bigger number of SMEs in the following steps. In the mid- and long-term it will be necessary to sustain built capacity to ensure that it is still available and effective after the project funding ends.



As mentioned at the beginning, the purpose of this paper is to start a dialogue on how to engage service providers for sustainable consumption and production (SCP). There will be a follow-up study, which will include new project cases and experiences from the investigated projects at a more mature stage. Definitely, the capacity building process for and through service providers and the modes of transferring knowledge to SMEs will deserve further research.

ACKNOWLEDGEMENT

PUBLISHER

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This publication has been produced for the SWITCH-Asia Programme and the European Union. The contents of this publication are the sole responsibility of the UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP) and can in no way be taken to reflect the views of the European Union.