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switchasia MAG

Access to Finance for SMEs

Engaging in Sustainable Production and Consumption Practices

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FEATURE ARTICLE

Green SME finance – where does Asia stand?

Interview with ADFIAP Secretary General, Mr. Octavio B. Peralta

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About

switchasia PROGRAMME

The overall objective of the SWITCH-Asia Programme is to promote sustainable growth, to contribute to the economic prosperity and poverty reduction in Asia and to mitigate climate change. For more information, see: www.switch-asia.eu

Disclaimer

Editorial

Dr. Uwe Weber
Team Leader
SWITCH-Asia Network Facility

Dear Readers,

Welcome to the first issue of the SWITCH-Asia Magazine!

This first issue is dedicated to the theme of "Access to Green SME Finance in Asia", which continues to be one of the main thematic areas of the SWITCH-Asia Programme, including the latest call for proposals published (3rd December 2014).

In 2013 the SWITCH-Asia Network Facility published an initial study on **"Greening SMEs by Enabling Access to Finance"** which summarises first experiences and strategies of the Programme. To continue this stream of work, this first issue of the SWITCH-Asia Magazine provides further analysis and updates on recent developments in Asia's green finance landscape.

This issue follows a networking event on green finance, which the SWITCH-Asia Network Facility organised in March 2014 in Hanoi, and a thematic webinar held in September 2014. It brings together articles, opinions and outlooks by various stakeholders, including SWITCH-Asia projects working on green finance, finance professionals working in the area of climate finance and responsible investments and SME experiences from the ground.

The contributions to this first Green Finance issue of the SWITCH-Asia Magazine clearly show: there is no single solution for financing SMEs. Which option is most suitable depends on the specific situation of the country and SME sector. We hope that through this first issue on Green SME Finance we provide a good overview of different existing financing options, which can be further explored by SWITCH-Asia projects in the individual countries.

The Magazine also gives a first brief introduction to country studies on Green SME Finance, which the SWITCH-Asia Network Facility has carried out with two of its partners, the Association of Development Financing Institutions in Asia and the Pacific and the Association for Sustainable and Responsible Investment in Asia. The objective of these studies is to provide SWITCH-Asia stakeholders with the necessary information to successfully navigate the Green Finance landscape in Asia – a complex and evolving field. The studies will be published in early 2015 and will be followed by investor matchmaking events to explore untapped potentials.

We will continue to provide information, space for discussions and news on Green SME Finance and other themes of relevance for SWITCH-Asia stakeholders.

We wish you an informative reading experience!

On behalf of the SWITCH-Asia Network Facility Team

Dr. Uwe Weber, December 2014

SWITCH-Asia Programme News

SWITCH-Asia II – promoting sustainable consumption and production

The new call for proposals was launched on 3rd December 2014. Access to Green Finance will continue to be a focus of the next funding phase of the SWITCH-Asia Programme. Priority 2 (LOT 2) of the new call for proposals has the objective to support SCP uptake and access to finance for micro, small and medium entreprises.

In particular, the need for increased capacity of SMEs concerning Green Finance issues and the preparation of credible „green" business proposals is mentioned in the call. Furthermore, a clear analysis of the types of constraints in terms of access to finance encountered by firms and other productive actors involved in SCP-related activities, will need to be made. Based on these analyses, projects should implement concrete solutions and activities to facilitate the access to finance to support SCP, e.g. in terms of awareness raising on opportunities and challenges of green finance and capacity building of relevant stakeholders (e.g. at policy and industry levels). Engagement of business intermediaries (e.g. industrial associations, research/finance academies, chambers of commerce) and SMEs' business partners (retailers, financial institutions, multi-national corporations) in the project activities is encouraged.

In this issue on Green Finance, many of the existing challenges and some possible solutions to overcome the challenges have been presented and discussed. We hope the contents of this first SWITCH-Asia Magazine issue will be useful in the preparation of your project proposals.

The European Union's Asia Investment Facility

Launched in 2012, the Asia Investment Facility (AIF) is a key instrument of EU Development Cooperation. Asia is a diverse and dynamic region, but large differences in development stages continue to persist between and within individual countries. The AIF's main goal is to foster investments in infrastructure projects, with a focus on climate change relevant and „green" investments. AIF thus supports projects in environment and energy sector. However, projects for the benefit of Small and Medium Entreprises (SMEs) as well as the social sector are considered eligible for AIF support.

Funded by the EU's Development Cooperation Instrument, AIF works by providing grants to mobilise loans and other financing for projects that are unable to attract a complete financing package on a purely commercial basis. Finance institutions currently operating as implementing partners include the European Investment Bank (EIB), European Bank for Reconstruction and Development (EBRD), Council of Europe Development Bank (CEB), Nordic Investment Bank (NIB), Agence Française de Développement (AFD), Kreditanstalt für Wiederaufbau (KfW), the Spanish Agency for International Development Cooperation (AECID) and the Italian Società Italiana per le Imprese all'Estero (SIMEST).

The AIF intervenes in cases where the regular market fails to offer adequate financing, thus hindering the realisation of important projects with the potential to reduce poverty. Infrastructure projects, for example, are crucial to ensure access to clean water and wastewater services or to decrease a country's dependence on energy imports. SME growth and proliferation is critical in battling unemployment. On the other hand, the population of poor countries is especially vulnerable to the effects of climate change, as measures to adapt to changing weather conditions are often not realised due to lack of appropriate financing. The AIF is an excellent tool to offer financial assistance in these cases. It takes effect precisely where it is needed, fostering sustainable development and supporting projects with a long-lasting effect.

The AIF supports projects for both climate change mitigation and adaptation. Besides, it also fosters "green" investments in general, as, for example, projects aiming to reduce water and air pollution or to save natural resources. Two initiatives have been running successfully launched already:

The **Microfinance Initiative for Asia ("MIFA")** Debt Fund is an initiative to support micro and small enterprises (MSEs) and low income households by providing credit and equity products on commercial terms. The Fund is co-financed by KfW and the International Finance Corporation (IFC, a member of the World Bank Group) and will contribute to resolving the problem of underdeveloped microfinance sectors in some Asian countries, thereby helping to improve employment and thus the economic and social living conditions of the people in the Asian region.

The **Carbon-linked Incentive Scheme (CLS)** in Indonesia is a project to support energy efficiency and renewable energy policies of the Government of Indonesia in the industrial sector. The incentive scheme will promote and reward investments in low emission technologies by SMEs, focusing on companies active in the most energy-intensive industry branches. The pilot project, co-funded by KfW, will serve as a showcase, providing a good basis for the further development of Indonesia's climate change mitigation policies.

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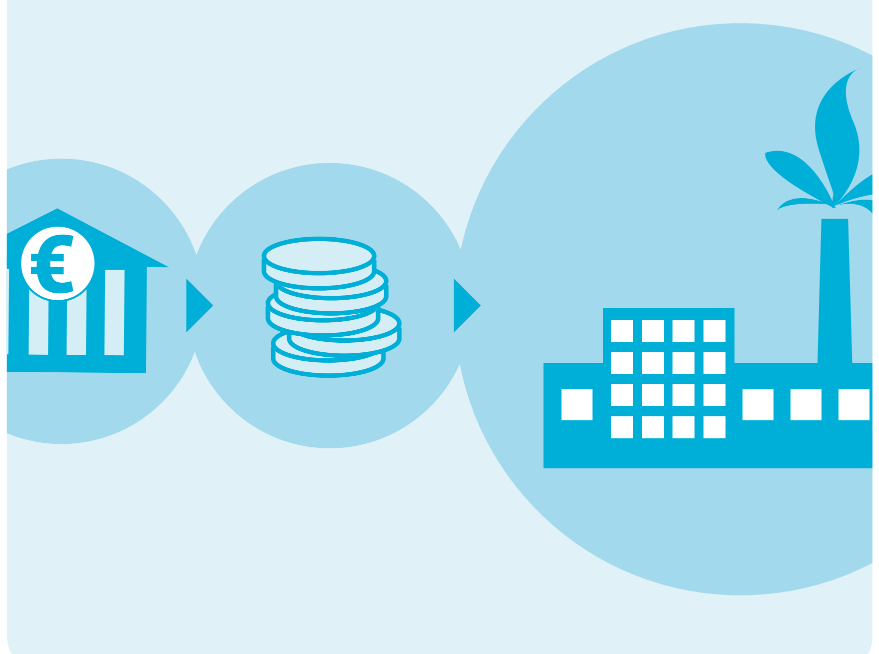
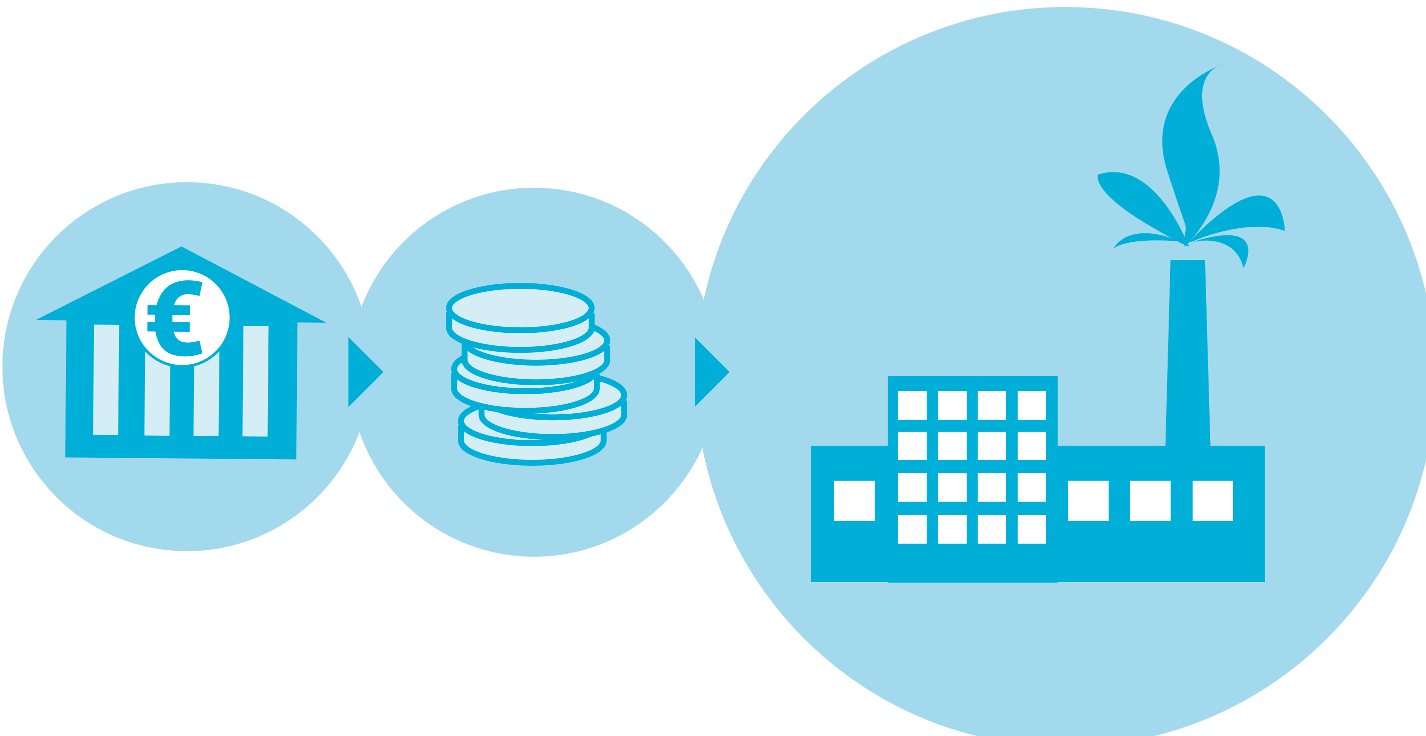


Mainstreaming SCP practices through green SME investment

by Dr. Uwe Weber and Dr. Patrick Schroeder



The SWITCH-Asia programme has been supporting the uptake of sustainable consumption and production (SCP) in Asia through a number of approaches. Lack of access to green finance for SMEs has been identified on several occasions as an important barrier for mainstreaming SCP practices. In 2013, the SWITCH-Asia Network Facility published a study "Greening SMEs by Enabling Access to Finance" which summarises first-hand experiences and strategies applied by grant projects to provide enhanced access to finance for SMEs. However, numerous barriers at the macro level still exist. The SWITCH-Asia programme will continue to raise these issues with governments and financial institutions, encouraging them to put in place solutions to these systemic issues.

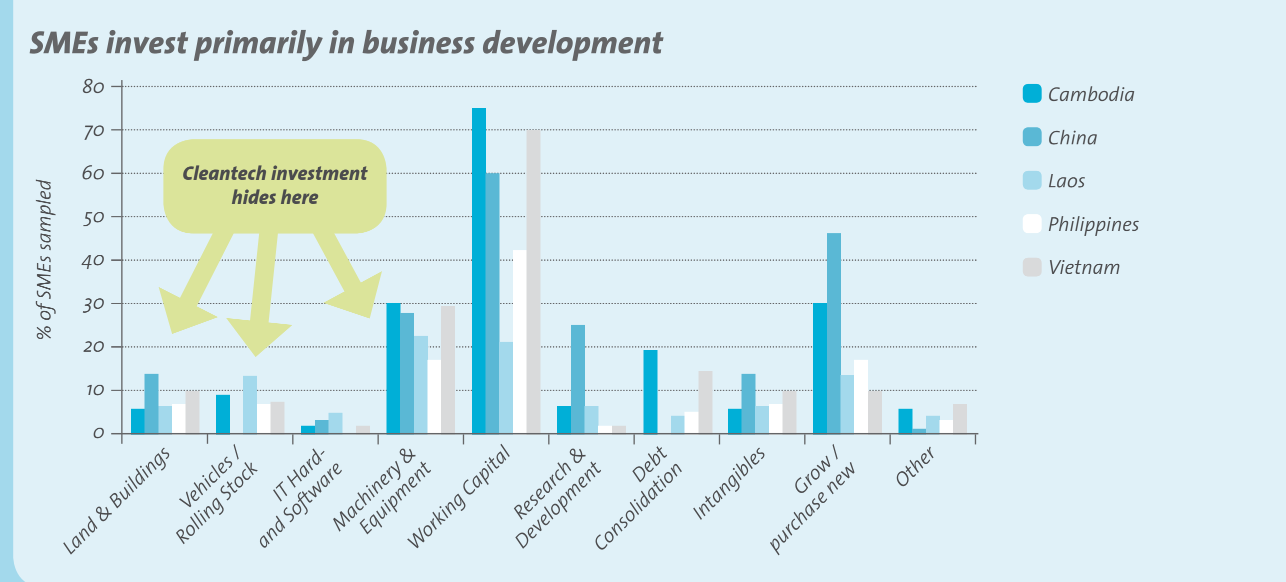


Figure 1: SME investment priorities in selected Asian countries.
Data from 'Small and Medium Enterprises Access to Finance in Selected East Asian Economies', ERIA Research Project Report 2010, No. 14

SCP – the way forward for Asian development

Asian economies have witnessed substantial economic growth over the last decades, lifting large parts of the region and its people out of poverty. This rapid economic growth has principally been fuelled by infrastructure investments, government-backed loans and an export-led economy. It came, however, with the downside of severe environmental degradation and substantial increases in greenhouse gas (GHG) emissions, resulting in Asia being the region with the highest GHG emissions in absolute terms. Reversing this still ongoing degradation of environment and biodiversity, stopping the growth of GHG emissions, restoring environmental quality, particularly in Asia's megacities, and establishing SCP patterns, will require substantial investments of a very different kind than from previous decades. The private and public sectors as well as international development institutions need to act to develop financial facilities for financing large pollution-preventing infrastructure and environmental clean-up. Some financing mechanisms are already available from international development banks and institutions, however, not yet at the scale required. At the same time, Asia's financing landscape needs to develop further to keep pace with private sector financing needs, in particular investment from SMEs, which constitute the backbone of Asia's economies. SMEs accounted for 98% of all enterprises and 66% of the national labour force on average during 2007–2012.[1] For this reason, the SWITCH-Asia programme increasingly focuses on the financing needs of SMEs for energy efficiency, clean energy, resource efficiency, water saving technologies and other solutions for SCP. Looking more specifically at the situation and financing needs of SMEs in Asia, what are the barriers that prevent Asian SMEs from accessing green finance for implementing SCP and what are possible ways forward?

Understanding investment priorities of Asian SMEs and designing appropriate policy environments

Today up to 80% of SMEs in Asian economies still face severe difficulties in accessing financing for their business development, which is their primary investment objective. Approximately 10% of SME investment is directly targeted towards improving these companies' performance and reducing their products' environmental footprint. As shown in Figure 1, SMEs in Asia mainly invest in working capital, second priority being machinery and equipment. This second area particularly, together with land & buildings and vehicles, offers much potential for untapped cleantech investment opportunities. How can this potential be utilised? Many regional economic institutions already offer targeted programmes to ease access to green finance for SMEs, backed by loan guarantees, preferential interest rates and streamlined credit application procedures to enhance SME bankability. At the same time, governments, donors and multilateral finance

1) Asian Development Bank (2014) Asian SME Finance Monitor 2013 www.adb.org/sites/default/files/pub/2014/asia-sme-finance-monitor-2013.pdf

SWITCH-Asia Green Finance Networking Event, Hanoi, 14th March 2014.
Source: SWITCH-Asia Network Facility

institutions have started offering dedicated financing instruments for investments related to environmental and climate performance. Consequently, policy makers wish to enhance the awareness and resulting demand for such loans by the private sector for green growth and climate mitigation related investments.

Programmes intended to facilitate the access of SMEs to financing have already proven to be effective, but still need to expand in volume. Their implementation has improved, in particular with regard to accessibility from SMEs. The new objectives need to increase private sector investments in modernising facilities and cleaning up business operations with the goal of developing, producing and delivering environmentally friendly goods and services. Besides offering dedicated financing instruments for environmental protection, business development can be greened via incentivising investments. In addition to expanded capacity and productivity, these incentives will improve companies' environmental performance and reduce product footprints.

Reducing risk for financial institutions

According to recent data from the Asian Development Bank[2], SME loans made up only 25% of total bank lending in Asia and the Pacific in 2012, down from 27% in 2011. SME loans grew at 10% year-on-year in 2012, down from 19% in 2011. This trend indicates that banks are raising risk consciousness to SME credit from the perspective of banking stability – an issue that has been identified many times as a major barrier for SMEs.

At the same time, Asian SMEs increasingly need to raise long-term growth capital, a new challenge in Asia's SME finance. Solutions to this problem exist: financial products that enable risk transfer from small finance institutions that offer loans to SMEs, to strong investors, thereby closing the gap between SMEs and the formal financial sector.

Better coordination between environmental policy implementation and green finance required

Non-compliance with environmental laws by SMEs has long been an issue in many Asian countries. Often it is not necessarily due to ill will, rather many SMEs are not aware of their environmental obligations. They are similarly unaware of the benefits of being green: new market opportunities and cost savings. To enhance the benefits for SMEs from greening investment and internalising environmental costs resulting from business operations, appropriate environmental legislation and adequate enforcement are required. Rendering environmental compliant and pro-active companies more competitive through government support can complement this approach. Supporting SMEs in achieving compliance and enhanced competitiveness can be achieved by various means. For instance, SWITCH-Asia projects have developed voluntary agreements between government and industry for compliance with energy efficiency targets and jointly developed new sector specific policies based on dialogues between industry and government agencies.

To achieve the objective of linking green finance to compliance with environmental regulation, all publicly backed credit facilities would need to include climate and environment considerations in the process of risk evaluation and financing approvals. Furthermore, companies' track records of (non)-compliance with environmental legislation would need to be made accessible to financing institutions. Designing and providing such private sector-oriented financing programmes with integrated climate and environmental protection criteria, will effectively mainstream SCP and climate mitigation into core business processes.

Environmental compliance is not a driving force of SME investment

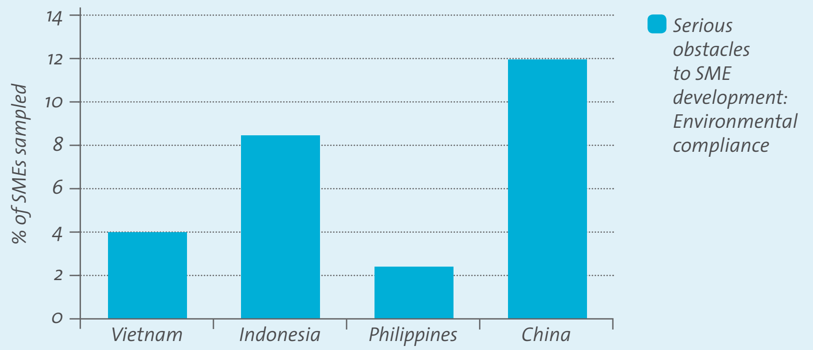


Figure 2: Non-compliance with environmental regulations of SMEs in selected Asian countries.
Data from 'Small and Medium Enterprises Access to Finance in Selected East Asian Economies', ERIA Research Project Report 2010, No. 14

SWITCH-Asia Green Finance Networking Event, Hanoi, 14th March 2014.
Source: SWITCH-Asia Network Facility

Linking eco-innovation and green SME finance

Many innovative solutions for SCP have been developed by SMEs and the multiple examples of SWITCH-Asia grant projects are a case in point. However, these eco-innovations often can not easily be scaled up due to a lack of access to finance. Closer alignment of eco-innovation policies and support funds with SME sector development policies could play a positive role in channelling innovation funding to SMEs. An example of alignment of government innovation policy and green SME finance can be seen in South Korea's National Strategy for Green Growth (2009-2050), which includes financing elements and fiscal support for green research and development (R&D) by SMEs. SWITCH-Asia projects, for instance the Sustainable and Cleaner Production in the Manufacturing Industries of Pakistan (SCI-Pak), have proposed transparent and competitive R&D grants that should provide invoice-based financing, where borrowers provide accepted invoices or receivables as collateral to the commercial bank, which could be promoted by the State Bank as an alternative to collateral-based lending.

Continuous capacity building of all stakeholders crucial

Improving the overall financial infrastructure for SME lending on a national level is the most obvious approach to make quick progress. An example is the centralized national credit bureau in the Philippines. These structural improvements need to go hand in hand with ongoing capacity building activities for the various stakeholders involved. Promoting the financial literacy of SMEs is equally important, an approach taken by several SWITCH-Asia projects, for instance the SMART-Cebu project implemented in the Philippines. The ability to provide reliable balance

2) Asian Development Bank (2014) Asian SME Finance Monitor 2013
www.adb.org/sites/default/files/pub/2014/asia-sme-finance-monitor-2013.pdf

SWITCH-Asia Green Finance Networking Event, Hanoi, 14th March 2014.
Source: SWITCH-Asia Network Facility

sheets, turnover estimates and business plans with stringent bookkeeping and accounting standards are basic requirements. Training of both SMEs and the financial sector institutions to understand double or triple bottom lines of proposed green investments is also relevant. Such capacity building programmes need to be implemented jointly with financing institutions and investing businesses respectively, for evaluating environment and climate protection performance.

Governments also have an important role to play in establishing clear, simple and meaningful public registration schemes for SMEs. Based on these schemes, the informal SME sector can shift towards becoming formalised and SMEs can provide more reliable information to lenders.

European experiences in green SME financing

In terms of environmental compliance, European examples can be cited. For instance, the European Commission initiated an Environmental Compliance Assistance Programme to make it easier for SMEs to comply with their obligations and improve their environmental performance. In addition, as recently as July 2014, the European Union initiated the Green Action Plan (GAP) for SMEs, which aims to enable SMEs to turn environmental challenges into business opportunities. In the context of the GAP, the European Investment Bank is to provide financing through financial intermediaries for resource efficiency improvements in SMEs.

Another recently initiated programme is the Network for Eco-Innovation Investment (INNEON)[3], which aims to extend public and private funding sources available for eco-innovation and social innovation in Europe, specifically targeting SMEs.

SWITCH-Asia Programme initiatives on green finance

To conclude, challenges are multiple, but opportunities and solutions are emerging. The SWITCH-Asia programme has been following the issues and opportunities for green SME finance in Asia for a number of years. More and more projects are including green finance as important elements in their activities. The SWITCH-Asia Network Facility will continue being engaged on the topic and try to make a contribution for mainstreaming SCP through greening SME investments in Asia.

About

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3) www.inneon.eu

Experiences from SWITCH-Asia projects: MEET-Bis Cambodia

by Mayte de Vries

The Cambodian banking industry has dramatically improved over the last few years, and is now a key sector contributing to Cambodia's economic development. However, providing loans to SMEs is considered to be one of the main challenges, especially green loans for SMEs to invest in Energy Efficiency (EE) and Renewable Energy (RE) equipment, according to research done by MEET-BIS Cambodia. The findings are presented in a report titled "SMEs Access to Finance for Energy Efficiency and Renewable Energy Investments in Cambodia", which was published in August 2014.

MEET-BIS (Mainstreaming Energy Efficiency through Business Innovation Support) is a four-year (2014-2017) project under the SWITCH-Asia programme, funded by the European Union. It aims to improve the competitiveness of SMEs in selected sectors in Cambodia through commercially viable and scalable business innovation packages enabling SMEs to invest effectively in EE and RE for their businesses.

During this period, MEET-BIS Cambodia will focus on many activities such as workshops, trainings, seminars, exhibition and case studies. Its goal is to have 200 SMEs invest in EE and RE solutions, and 1000 SMEs reached through the website and newsletters to increase awareness regarding EE and RE. Within this, Access to Finance (A2F) is a significant component that aims to facilitate access to green finance for 50 SMEs for investment in EE and RE solutions. To understand more about the challenges faced by both SMEs and Financial Institutions (FIs) providing green loans, a team of international and local consultants conducted interviews in April and May 2014 with various FIs, including banks and microfinance institutions as well as other financial stakeholders involved in mobilization of access to finance for SMEs and EE investments. MEET-BIS Cambodia found that the sheer concept of financing EE/RE investments for SMEs is new for the financial sector in Cambodia. Low levels of awareness of FIs on financing SMEs to invest in EE and RE are an issue. Furthermore, most FIs do not understand the potential benefits for the business, not least in terms of cost savings and improvement of profitability and competitiveness when investing in EE/RE equipment.

The Cambodian banking industry has improved over the last few years
Source: Kiensvay / CC / Flickr.com

Many energy-related projects have been implemented by various organizations in Cambodia, but those projects have focused primarily on rural areas at the household level. Most energy-related projects, such as SNV's Waste to Energy for Rice Millers programme or AFD's recent credit line of €19 million to finance privately owned water and power providers to supply rural areas, were targeted to households rather than businesses. Some FIs mentioned that partnerships with clean technology suppliers were considered to be high risk, as they were not familiar or experienced themselves with clean technology products or equipment. When asked about their interest in financing EE/ RE equipment, risk and loan security were raised as key concerns. Some financial institutions try to establish partnerships with clean technology suppliers, such as the solar panel sector, however their experience had not been favourable, a main challenge being the quality of EE and RE products. FIs have no possibility to self-assess the quality, and not wanting to rely on the supplier alone, certification by a third independent party would be helpful. Since this is not yet in place, a certain level of scepticism exists regarding these partnerships, unless the potential benefits are self-evident.

MEET-BIS Cambodia expert consultations
Source: MEET-Bis Cambodia

SME access to finance challenges

Not only do FIs not understand the potential benefits for the business in terms of cost savings and improvement of its profitability and competitiveness when investing in EE/RE equipment, but SMEs also face many formal challenges to obtain loans. These include most SMEs not operating as registered companies (only 8% of Cambodian businesses are registered), SMEs lacking good quality business records and reliable financial statements, a lack of collateral or hard titles for land/ property, a low level of financial education of potential borrowers in order to produce financial statements, cash-flow forecasts, business plans, etc. and there being no market for EE equipment resale.

According to the International Finance Corporation, the World Bank Group report[1] from 2010, "SMEs are unable or discouraged from taking out loans due to high collateral requirements, high interest rates, and delays in processing loans." The report continued, "Despite high liquidity in Cambodia's banking system, banks find it difficult to lend to SMEs due to their poor financial records."

About

MEET-BIS Cambodia project

The overall objective of the SWITCH-Asia project MEET-BIS Cambodia is to promote economic prosperity and poverty reduction in Cambodia with reduced adverse environmental impact of SMEs in selected sectors. The specific objective is to improve the competitiveness of SMEs in selected sectors in Cambodia throughcommercially viable and scalable business innovation packages enabling SMEs to effectively invest in clean technologies for their business.

1) *International Finance Corporation, 2010, Understanding Cambodian Small and Medium Enterprise Needs for Financial Services and Products*
www.ifc.org/wps/wcm/connect/70858880474dce1595069f11d57e6c63/Cam+SME-Financial+Services+and+Products.pdf?MOD=AJPERES

What should MEET-BIS Cambodia do?

Despite the many challenges facing SMEs to obtain green loans and FIs not considering providing green loans or creating green credit products as a priority, opportunities still abound by developing these partnerships. MEET-BIS will address this challenge through various actions.

Firstly, MEET-BIS Cambodia will build capacity with Financial Institutions by extolling the benefits of EE and RE lending to SMEs.

Secondly, MEET-BIS Cambodia will develop pilot financial models together with FIs for market testing. These pilot models include: Pilot 1: products-based financing, a pilot with a leasing firm, who leases the EE equipment to the SMEs until they have paid the full amount and then the SME owns the equipment. This model emerged from MEET-BIS Vietnam where lease construction was defined as an effective option. Pilot 2: ESCO model, meaning that the supplier pre-finances the investment in EE equipment and the SME pays the monthly savings on their electricity bill to the supplier until they have paid the full amount. Pilot 3: end user finance, direct finance to SMEs from a bank or micro financing institution. Pilot 4: a revolving fund, which can be done through crowd funding. We will be exploring this final option to see if crowd funding is a viable option for setting up a revolving fund. Our current talks with Financial Institutions show that there is already interest in Pilots 1 and 2; we therefore feel confident that we can implement these pilots next year. Finally, the successful pilot models will be scaled up for roll-out in Year 3 to reach the MEET-BIS goal on A2F, of having 50 SMEs investing in EE and RE through Access to Finance support.

MEET-BIS will keep sharing experiences about how we progress with the pilots and different financing models, as we are keen to share experiences with all Switch projects working in green finance in other countries, and we would welcome any feedback or suggestions.

MEET-BIS Cambodia expert consultations
Source: MEET-Bis Cambodia

MEET-BIS Cambodia expert consultations
Source: MEET-Bis Cambodia

About

Mayte de Vries

Mayte de Vries is the project manager for MEET-BIS Cambodia, and has a background in Energy and Business Development. She has worked with the ETC Foundation for five years focusing on projects with private sector partners and NGOs on developing self-propelling market mechanisms in the energy sector. She previously worked with MEET-BIS Vietnam, as well as on various other projects with different energy equipment and technologies, such as solar, biogas, cookstoves and briquettes in Nepal, Uganda, Afghanistan, Vietnam, Indonesia, Ethiopia, Mali, Kenya and Senegal.

Are Asia's SMEs the hidden champions needed to transform the region's economy?

Promoting SME "green finance" with the aim of delivering low-carbon, climate resilient and Green Growth to Asia

by Jessica Robinson and Lydia Guett

Impressions of ASrIA'S Climate Business Forum 2014
Source: ASrIA

In many Asian countries, SMEs play a critical role in the growth and success of their economies. Yet, for many SMEs, access to finance can sometimes be challenging and is often restricted. This is particularly relevant for SMEs attempting to access finance to fund environmental improvements at an operational level, such as reducing carbon footprints or water consumption; implementing Environmental Management Systems or cleaner production techniques; or developing waste management strategies.

Where SMEs play a central role in driving economic growth in the region, surely SMEs can and must play a central role in ensuring that this economic growth is green? By encouraging SMEs to improve productive and operational processes, we can also encourage SMEs to be an engine of low-carbon, climate resilient and environmentally sensitive growth. In this context, access to 'green finance' for SMEs – the finance required to facilitate and support these improvements – could hold an important key to transforming Asia's growth.

Why focus on SMEs?

SMEs are the driving force behind a diversified and resilient economy – but access to finance is limited.

Job creation, innovation and diversification are some of the important features that SMEs provide to broader economies. However, restricted access to finance can present a major obstacle to their survival and growth. Small and medium sized firms have diversified finance needs and often struggle to access much needed financial support. While most financial institutions offer different financing options, such as bank loans, overdrafts and leasing schemes, SMEs are often not granted access. In some instances, banks are reluctant to provide finance on the basis that SMEs may lack sufficient collateral, or have limited business experience or inadequate business plans, often resulting in higher risk calculations and transaction costs.

According to a report by the International Finance Corporation (IFC) on 'Scaling-Up SME Access to Financial Services in the Developing World'[1], in many low-income countries chances of access to loans for small firms (<50 employees) are about one third of a medium sized company (<250 employees) and less than half of a large company (>251 employees). Other options, such as more innovative finance solutions like crowd-funding, a practice of rising small amounts of money from a large group of people, which would allow SMEs access to funds outside traditional bank lending, are only slowly gaining ground in Asia. These challenges become even more evident when considering access to 'green finance' or green-themed financial products for SMEs.

What is SME 'green finance' and how does it fit into the climate finance spectrum?

SME finance is a broad term that refers to all aspects of Small and Medium Enterprise funding. Within this, SME 'green finance' specifically refers to the finance and capital required by SMEs for environmental improvement projects and activities to enhance the sustainability of the SME's business practices and operations. For example, this may include the bank's provision of a 'green loan' to finance the upgrade of a factory's current production process to a more efficient and environmentally friendly one.

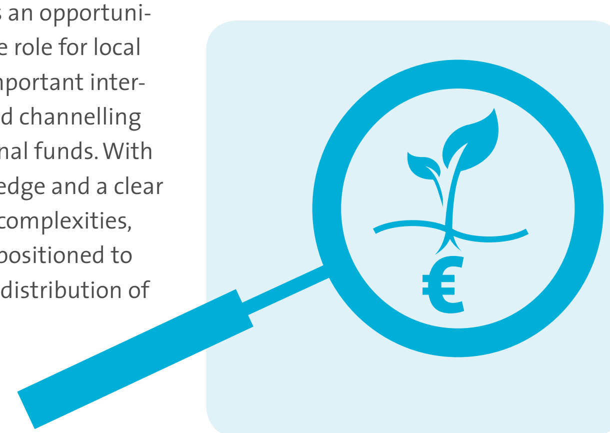
SME green finance sits within the broader concept of climate finance, which refers to public and private finance that is channelled towards climate change mitigation and adaptation projects. Asia's need for climate finance is immense. However, many of the complexities and disputes over what climate finance entails and how the capital and financial markets are leveraged remain unresolved. Whilst translating climate change objectives into locally actionable programmes and initiatives has been slow to progress, overcoming this challenge through the enhanced provision of SME green finance may be central to transforming Asia's economy. By focusing specifically on SME finance, there is an opportunity to identify a proactive role for local commercial banks as important intermediaries for raising and channelling national and international funds. With in-depth market knowledge and a clear understanding of local complexities, these actors are better positioned to ensure a more efficient distribution of funding.

Introducing ASrIA-SWITCH-Asia SME green finance research project

Recognising the extensive opportunities that expanding SME green finance presents, the Association for Sustainable and Responsible Investment in Asia (ASrIA) is excited to be partnering with SWITCH-Asia in an important research project exploring different solutions to the SME green finance challenge.
As a first step, there is an urgent need for improved information – why?

- Firstly, to assist local financial institutions in both capacity and expertise building, in particular to facilitate more informed decision-making in the financing and lending process; and
- Secondly, to support SMEs in understanding better what types of financing solutions and products exist and how to apply for and secure such funds successfully.

Addressing this information asymmetry is therefore a core part of this project that will focus on, in the first instance, selected countries in Asia – being Malaysia, Indonesia, Thailand, Sri Lanka, and the Philippines. Research will involve building a database containing practical and current information that can then assist and support SMEs in accessing finance for projects and



1) Source: Scaling-Up SME Access to Financial Services in the Developing World, International Finance Corporation, October 2010. Available from: www.ifc.org/wps/wcm/connect/bd1b060049585ef29e5abf19583b6d16/ScalingUp.pdf?MOD=AJPERES

„We are really excited to be involved in this project because SME 'green finance' could hold the key to rapidly transforming Asia's development path."

– Jessica Robinson, Chief Executive of ASrIA

activities that are dedicated to improved environmental performance.

Jessica Robinson, Chief Executive of ASrIA, commented, "We are really excited to be involved in this project because SME 'green finance' could hold the key to rapidly transforming Asia's development path. The project will focus on how to open up channels to green finance – how to assist SMEs in accessing the capital investment required to improve their environmental performance, whether this is to improve existing production facilities or to expand production facilities for reduced environmental impact."

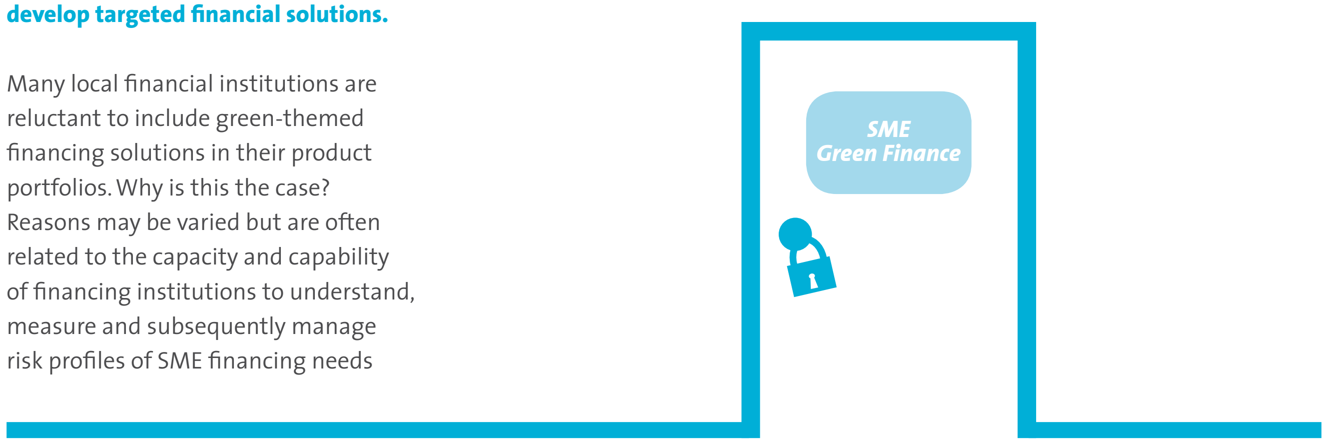
SME 'green finance' – why is it restricted?

Despite the potential that unlocking SME green finance may hold, financial institutions in Asia are reluctant to develop targeted financial solutions.

Many local financial institutions are reluctant to include green-themed financing solutions in their product portfolios. Why is this the case? Reasons may be varied but are often related to the capacity and capability of financing institutions to understand, measure and subsequently manage risk profiles of SME financing needs regarding environmental improvement projects. In many instances, this is related to a lack of experience, expertise and knowledge across the financial institution's lending and risk management staff, with limited training and tools available for financing and lending managers to develop, promote and manage relevant commercial products.

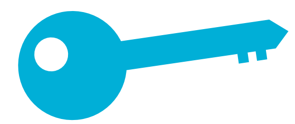
The risk perceived by lenders may appear higher for green-related products due to the products' unknown features. In order to develop viable SME business services, financial institutions need specific expertise to assess the creditworthiness and risks related to SME green finance. Pricing and managing new exposures within financing and lending portfolios therefore require not only new products, but also the systems, processes and policies to roll out such products. Specifically, understanding how products such as green loans are placed within the traditional lending portfolio may represent a challenge for credit officers from local bank branches. For example, structuring a loan based on the energy savings generated by replacing an old machine with a new environmentally-friendly one requires a much more comprehensive technical understanding than in traditional loan applications. This is compounded by the challenge of information asymmetry, whereby obtaining reliable and coherent information on SME credit histories, as well as track records based on past projects, is challenging, causing some reluctance to lend among financial institutions.

Many SMEs are not aware of the types of finance that can be leveraged for improved environmental performance (e.g. finance for cleaner production methods, improved product design for sustainability, enhanced waste management, eco-labelling and so on). Educating and facilitating SMEs in the region is an important part of the equation that needs to be addressed in order to ensure that there is sufficient demand for green financing and lending products. In many instances, SMEs are now aware that finance can be sourced to provide the much-needed capital for certain environmental improvements. Education and knowledge sharing must form an important part of improving the SME green finance landscape.



What is role of financial regulation and supervision?

It is important to note that there is also a role for financial regulation and supervision in the SME green finance landscape – in terms of facilitation of key actors and providing security to the market. In many Asian countries, financial regulators are looking for levers to encourage and facilitate more lending activities at a reasonable cost, to both the lender and recipient. As an overarching goal, it is important that policies foster transparency, data reliability and capacity building for an improved financial infrastructure, and in particular to consider SME finance in the broader climate finance landscape.



Promising developments in Asia – examples of emerging solutions

Despite the challenges that lie ahead, a number of interesting and innovative emerging solutions are emerging – from both financial institutions and governments. Examples include:

- **Techcombank – Vietnam**: offers an Energy Efficiency Loan programme. Supported by the IFC and other partners, Techcombank received a € 20 million long-term loan to facilitate lending to SMEs for cleaner production and energy efficiency projects. The agreement also includes a performance bonus for the bank to encourage an active portfolio growth to € 40 million. Efforts are complemented by structured capacity building through advisory and audit services that build in-house expertise in project and credit risk. It is hoped that the initiative will have knock-on effects on other banks in Vietnam, as Techcombank is one of the largest institutions in the country.
- **ESCO Fund – established by Thailand's Department of Alternative Energy Development and Efficiency:** supports SMEs that develop renewable energy and energy efficiency projects through a broad range of mechanisms, such as equipment leasing, technical assistance and credit guarantees. Funds are not distributed through local banks, but with the help of two fund managers: the Energy Conservation of Thailand Foundation and the Energy for Environment Foundation. A small enterprise interested in applying for funding needs to submit their application directly to either fund manager, who then initiates the approval process.

Risk sharing (partial credit guarantees or first loss arrangements) is also among the tools already employed in some parts of Asia. For example:

- **Thailand – the Thai Credit Guarantee Corporation (TCG)** provides guarantees for SMEs that lack collateral to access credit from financial institutions. Eligible small firms need to be registered in Thailand, operate locally, and their net fixed assets must be below 200 million baht (about € 4 million). Charges include about 1.7 percent per annum of the guaranteed amount, which has to be paid to local lenders that facilitate the transaction. Different guarantee schemes are offered by the TCG; the Productivity Improvement Loan, for example, assists SMEs in renovation, development or improvement of machines and equipment.
- **China – the International Finance Corporation (IFC) together with the Bank of Shanghai** established the China Utility-based Energy Efficiency Finance Small and Medium Enterprises (CHUEE SME), a risk-sharing facility and advisory service. It supports energy-efficiency and renewable-energy projects undertaken by SMEs. The programme helps financial institutions better understand these sectors and provides not only financial support, but also technical assistance. Banks therefore become familiar with new technologies, related risks and are able to build in-house expertise to take the next steps of independent lending offers.

About ASrIA

The Association for Sustainable and Responsible Investment in Asia (ASrIA) is the leading industry association in Asia dedicated to promoting sustainable finance and responsible investment across the region. Together with financial institutions, ASrIA has been working for over 13 years to facilitate the integration of environmental, social and governance considerations into investment and financing policy and practice. SMEs are a critical part of the development of sustainable financial markets and systems in Asia, for which ASrIA has provided leadership, helped to build capacity and leveraged expertise.

For further information, please contact: *Lydia.Guett@asria.org*

Concluding Comments: What needs to be done to promote better access to green SME finance?

Whilst select solutions are being explored throughout Asia, the SME market requires a greater awareness of policy and private sector driven financing programmes and initiatives. The purpose of the ASrIA-SWITCH-Asia project is to facilitate dialogue and prepare matchmaking between policy makers, financiers and the SME sector to support the development of more targeted finance solutions that positively contribute to advancing green finance for Asia's SME sector. The initial stage of the project forms only the first step towards creating an enabling environment for SME green finance. In order to impact change on a much broader scale, a more holistic approach is required that focuses on changing industrial production patterns, changing consumer behaviour and changing the role that financial institutions can play in facilitating this shift.

About

Jessica Robinson

Jessica Robinson is Chief Executive Officer at ASrIA, responsible for directing the strategy and activities of ASrIA.

Lydia Guett

Lydia Guett is Project Manager at ASrIA as a Project Manager, responsible for executing and managing projects of ASrIA as well as of the Asia Investor Group on Climate Change (AIGCC), an ASrIA initiative, which focuses on risks and opportunities related to climate change.

Case Study
Indonesia

Indonesia has large potential to facilitate growth in SME green finance. Indonesia's current and planned initiatives and programmes promoting green finance for SMEs provide a number of interesting case studies that could be replicated in other Asian countries. A positive political environment in terms of climate policy has also led to the creation of incentive and support mechanisms such as the Green Industry Award scheme. The programme educates and incentivises businesses to use more environmentally friendly production technologies. With a different focus, on educating service providers, the Indonesian Cleaner Production Centre was established to facilitate and implement cleaner production and energy efficiency measures. Another example is the Global Climate Partnership Fund (GCPF), which channels investments to countries such as China, Indonesia, the Philippines, and Vietnam. Funded by the German development bank KfW and partners, the fund offers long-term loans to local financial institutions, who distribute finance to SMEs and other beneficiaries. Investments are targeted at energy efficiency improvements and renewable energy installations. Indonesia's well-developed infrastructure for SMEs coupled with the government's drive to foster economic growth and mitigate climate change vulnerabilities, suggest that the ASrIA-SWITCH-Asia project is a critical link between existing bottom-up and top-down activities, which together form decisive action for more inclusive economic development.

Co-financing green development with crowds

Exploring the potential of crowdfunding for Asian SMEs

By Xiaochen Zhang[1] & Dr. Patrick Schroeder

"Crowdfunding" has moved to the forefront in the discussion on access to finance, resulting from the economic crisis and the associated market failures of the incumbent financial services industry, which provides financing to SMEs. It has also been proposed as one potential solution for SMEs to gain access to green finance. This article explores the current state of crowdfunding in Asian countries, its potential for promoting sustainable consumption and production (SCP) in Asia and opportunities it might offer for SWITCH-Asia grant projects as part of their sustainability and scaling-up strategies. Will it be the game changer for financing sustainable development that we are all waiting for?

We still lack data to demonstrate the share of crowdfunding in financing today's green investment. At the same time, crowdfunding is already more than a niche market: the largest single project to date collected more than €10 million in funding and one of the largest crowdfunding platforms, the US based 'Kickstarter', attracted more than €1 bn. Crowdfunding is also on the political agenda of the European Union, which established an expert group in June 2014, the European Crowdfunding Stakeholders Forum.

1) The findings, interpretations, and conclusions expressed in this article are those of the author and do not reflect the official policy or position of any organization that the author is associated with or the countries they represent. I would like to express my sincere thanks, gratitude and appreciation to all friends and colleagues who have helped me to go deep on this topic. If you have any questions, please contact Xiaochen Zhang at cmyidea@gmail.com

Whilst the main markets are in the US and Europe, crowdfunding in Asia is definitely on the rise, particularly in India, Singapore and China, and especially Hong Kong. The recent "Crowdfunding Asia Summit 2014" event in Singapore attracted over 300 individuals from around the world interested in this new mechanism for the region. In its 2013 crowdfunding report[2], the World Bank estimated that the crowdfunding market in China could grow to almost €40 billion by 2025.

It is predominantly the investment crowdfunding industry which is developing quickly, with many new platforms, products and services, involving wider audiences of business and stakeholders. At the same time, a number of barriers still hinder the scaling-up of most crowdfunding initiatives, particularly in developing countries. According to internal research undertaken by the World Bank, these barriers include:

- **Lack of Crowdfunding infrastructure:** Existing policies and regulations make it difficult to enter into and conduct crowdfunding operations.
- **Lack of business model knowledge:** As crowdfunding is still in an early stage of development in emerging markets, entrepreneurs face considerable challenges designing and using crowdfunding business models due to a lack of experience.
- **Barriers to successful platforms:** The growth of successful platforms is hindered by the lack of investment and the information gap between projects and platforms, platforms and their field partners, etc.
- **Lack of knowledge, tools and data:** The knowledge gap and missing data for policymaking and industry to analyze current situations also pose challenges for scale-up.
- **Lack of risk management skills and tools** is a key barrier to the scaling of crowdfunding.

Given the challenges, is it worth it?

Looking at the mechanism, several types of crowdfunding have developed over recent years (see Textbox 1). For SMEs and start-ups, different models can be used to meet their specific strategic positioning and funding needs. If the social dimension of the project far exceeds the economic one, crowdfunding may help to reach the social goal with their donation. If it is a pre-order business model, a reward-based model may be the most cost-effective way to reach customers. This also dramatically reduces the inventory, improves the margin and keep the company competitive in the market.

The four main types of crowdfunding

1. ***Equity-based Crowdfunding***
   Investors receive a stake (usually common or preferred shares or units) in the company (issuer). The idea being that the investor is either looking to make a return from dividends or capital gains on the growth in value of their stake in the company.
2. ***Donation-based Crowdfunding***
   Contributions go towards a charitable cause. For example, you pay for a charity in a poverty-stricken area to receive much needed medication. In donation based Crowdfunding, funds are collected from a community for a publicly disclosed initiative, but there is no financial return to the people putting money in. The return for contributors is usually the satisfaction that comes with helping others in need.
3. ***Lending-based Crowdfunding***
   Investors are repaid for their investment in a business over a period of time and receive a stipulated return (interest) for the use of their money.
4. ***Reward-based Crowdfunding***
   Contributors receive a predefined product or service in return for their funds provided to the company or individual. A contributor advances funds with the promise of receiving a prescribed reward at a later date (i.e., paying now for the development of a new smart phone and receiving the phone after it is developed, manufactured, tested and shipped).

Source: Equity Crowdfunding 101: The Global Guide to a Financial Revolution
http://cfasia.org/download/Crowdfunding_Asia.pdf

2) www.infodev.org/infodev-files/wb_crowdfundingreport-v12.pdf

Action speaks louder than words: Crowdfunding stories in green energy development

If "Bottom of Pyramid" consumers cannot afford the products and do not have access to loans, lending-based crowdfunding can help them to buy them and pay back the crowds in installments. It can also help in borrowing money under much better terms compared with commercial banks or other types of institutional lenders. Equity-based crowdfunding offers investors and companies, as well as non-professional investors, new options for investing in and funding new business ventures and innovative ideas. After the pilot is tested using crowdfunding, the successful story can help the enterprise to leverage funding opportunities, such as grants and loans from institutional investors, to scale it up.

All models could be potentially used in advancing SWITCH-Asia projects. For example, donation-based crowdfunding could be an option to explore, particularly for those projects that address poverty reduction, gender issues or community development. The platform Indiegogo focuses on crowdfunding projects for developing country-specific projects, for instance a post-typhoon reconstruction project in the Philippines or a social initiative against the destruction of mangrove forests on Bali, Indonesia. Indiegogo has not only US and European-based sponsors, but also donors from Hong Kong in China and Singapore.

Crowdfunding can contribute to starting a green business idea or providing project finance for a social project, as demonstrated by the following examples. Sustainable energy solutions and technologies, such as cleaner-burning stoves and solar lights, are still the most suitable projects for attracting green crowdfunding, as demonstrated by the first Renewable Energy Crowdfunding Conference, held in London on October 30, 2014.[3]

Let us suppose that a company has developed an innovative distributed renewable energy solution, which represents a €40 billion global market annually. After being rejected by all venture capital investors, the company decided to try an equity-based crowdfunding platform and in three months, raised €200 000 from 50 crowd investors through a campaign. With this start-up capital, the company had the first version of the kit launched one year after the campaign. Initially, the company planned to pilot the kit in a village in Africa. The costs of the pilot were around €100 000 – double the capital remaining. Without sufficient collateral and track record, commercial banks rejected the company's loan application. After being introduced to a reward-based crowdfunding platform, the company was able to raise €60 000 in completing the pilot. In the pilot village, however, many farmers could not afford the installation fee and could not get loans from local banks, which became a huge barrier for the adoption of the kit in the village. Working with a lending-based crowdfunding platform, the company was able to help these farmers to launch many crowd-lending campaigns which enabled them access to finance for renewable energy. After the pilot, the company wanted to scale-up its project and offer the kit to the whole region, which would require a €1 million investment. Most of the venture capital investors did not have sufficient technical expertise or appetite to enter this business. The ones who were interested to provide equity wanted 51% of the company. Having exhausted all of the other options, the company went back to the equity crowdfunding platform and raised €1 million within two months from 80 crowd investors. After 10 years, the company became an industry leader and helped millions of people to access clean energy.

For some, this story might read like a fantasy; for others it is experience, as they themselves have already been touched by the magic hands of the crowds and turned their dream into reality. In the following sections, more examples are given on how crowds have co-financed green development around the world.

Taking another example, Rang De[4] is a not-for-profit organization committed to fighting poverty by providing access to affordable micro loans to underserved communities in India. It also initiated a debt-based crowdfunding platform for rural electrification in India. The majority of India's poor still depend on moneylenders with interest rates of 100% and above. Only about 10 per cent of adults in India have savings or borrowings; the majority have no access to credit from a formal financial institution. Rang De is India's pioneering peer-to-peer micro-lending platform launched in 2008 and offers a solution to this challenge. In six years, Rang De has been able to raise more than Rs.230 million (€2.9 million) from

3) www.recrowdfunding.eu/#intro

4) www.rangde.org

6380+ individuals and corporate social investors and have extended credit to nearly 29 000 borrowers in 16 states of India. Investments can be as low as Rs.100 (€1.3). Another example is Questsol[5], a start-up company that aims to offer a cheaper alternative to improve lives dramatically for the 1.3 billion people who do not have access to electricity. Through sustainable energy sources and an efficient distribution model, Questsol "Pay As You Go" service offers clients the flexibility to consume energy based on hourly, daily, weekly, or monthly installments. They required additional capital to expand the business, so in 2014, Questsol launched an equity-based crowdfunding campaign to raise €550,000 to advance its global market penetration. Capital raised through crowdfunding enabled Questsol to offer a cheaper alternative for power around the world.

Disruptive or transformative? The global response to crowdfunding

The rise of web 2.0 has made it possible for the emergence of a new kind of economic and social interaction. Beyond consuming information and completing transactions, individuals are enabled to share and collaborate with others without being constrained by time or space. This has fundamentally changed the ways in which we get things done. Through crowdsourcing, work can be done by a large group of people who do not belong to any specific unit, through which such a relationship is typically defined. We have already seen its impact in multiple corners of the society.

Crowdfunding, as a new industry, might impact all other industry sectors and traditional financial institutions. A strategy needs to be developed for the traditional and the new to coexist and advance the world economy. Traditional industries are facing tremendous challenges to reach the bottom of the market and to deliver products or services in a cost-effective and efficient manner. A BBVA research report warns that "lending and equity-based crowdfunding are disruptive technologies for the banking industry".[6] The paper sees the power of crowdfunding in reaching the bottom of the market at a much lower cost compared to that of commercial banks. If crowdfunding platforms become the primary source of funding for personal and small business loans, it will revolutionise the global banking industry – if adequate protection of investors can be ensured. Protection of investors will require registration of crowdfunding platforms as financial service providers, and consequent sector regulation will reduce their flexibility, but also will raise the profile of this type of financing and the projects seeking it. As recently as July 2014, the Finnish Financial Supervisory Authority developed more precise legal guidelines on securities crowdfunding (e.g. equity and bonds).

Is the financial industry the only sector which may be disrupted by the emergence of crowdfunding? The likely answer is no. As concluded by several studies, similar to crowdsourcing, crowdfunding has the potential to transform the global economy. Traditional industries have only two options: to embrace it or be disrupted by it. The latest lawsuits between Uber and traditional taxi companies are a good example of such disruption. We will see more cases in the near future reflecting similar dynamics between crowdfunding and traditional industries.

In the last three years, many traditional industries have started paying more attention to this new mechanism. As pointed out by a crowdfunding strategist, Ronald Kleverlaan, traditional charities can increase donor involvement, gain trust via (financial) transparency, gain direct support, connect donors to beneficiaries, and increase return on involvement through crowdfunding. This understanding also largely holds when it is applied to government agencies, development banks and international development agencies. For the private sector, crowdfunding can potentially be employed as a powerful vehicle to reinvent their competitive advantages and outperform the industry benchmark.

Of course, crowdfunding is not a panacea. As shown in Figure 1, on its own, crowdfunding is only fit for projects below $1 million (€785,000) in scale. As noted in the infoDev report, "both donation-based and equity-based crowdfund investing campaigns present perceived and actual risks to investors. These risks broadly fall into the categories of failure, fulfilment, fraud, and money laundering".[7] In addressing these risks, a number of market players have started working on initiatives addressing different aspects of the crowdfunding ecosystem. Here are a few examples of such initiatives:

Community Banks and larger commercial banks: studies and pilots

Viewed as a double-edged sword, crowdfunding has received far less attention from both community banks and larger commercial banks than the market expected. However, some early movers have started concrete actions in recent years, particularly in the developed and emerging markets. These actions can be grouped into three categories: strengthening their core business; enhancing institutional understanding of the mechanism; and pilot crowdfunding programmes. Here are a few examples:

- Strengthening core business: In China, commercial banks have launched a new round of financial innovation strengthening their business in mobile banking, internet financing and e-commerce that may pave the way for potential adoption of a crowdfunding mechanism.
- Enhancing institutional understanding: Deutsche Bank and BBVA Compass Bank published their first crowdfunding studies which addressed several key questions.
- Crowdfunding pilot: Though its Dialogues Incubator Programme, ABN AMRO Bank, launched their crowdfunding platform, SEEDS.NL, to learn about crowdfunding and potentially grow into new services for the bank.

International development agencies' initiatives in support the development of crowdfunding

Crowdfunding has the potential to transform how international development is undertaken and financed in both short and long term. To scale-up crowdfunding in developing countries and integrate it into existing business models may generate innovative models that will help to achieve Millennium Development Goals and the post-2015 Development Agenda at an accelerated speed with reduced costs. Supporting the scaling of crowdfunding in developing countries requires a multi-pronged approach that international development agencies are uniquely positioned to provide through collaboration of all parties. Though such initiatives are still at their early stage, we are seeing the first concrete impact of such initiatives on the crowdfunding market in developing countries.

Conclusions & Outlook for crowdfunding for Asian SMEs

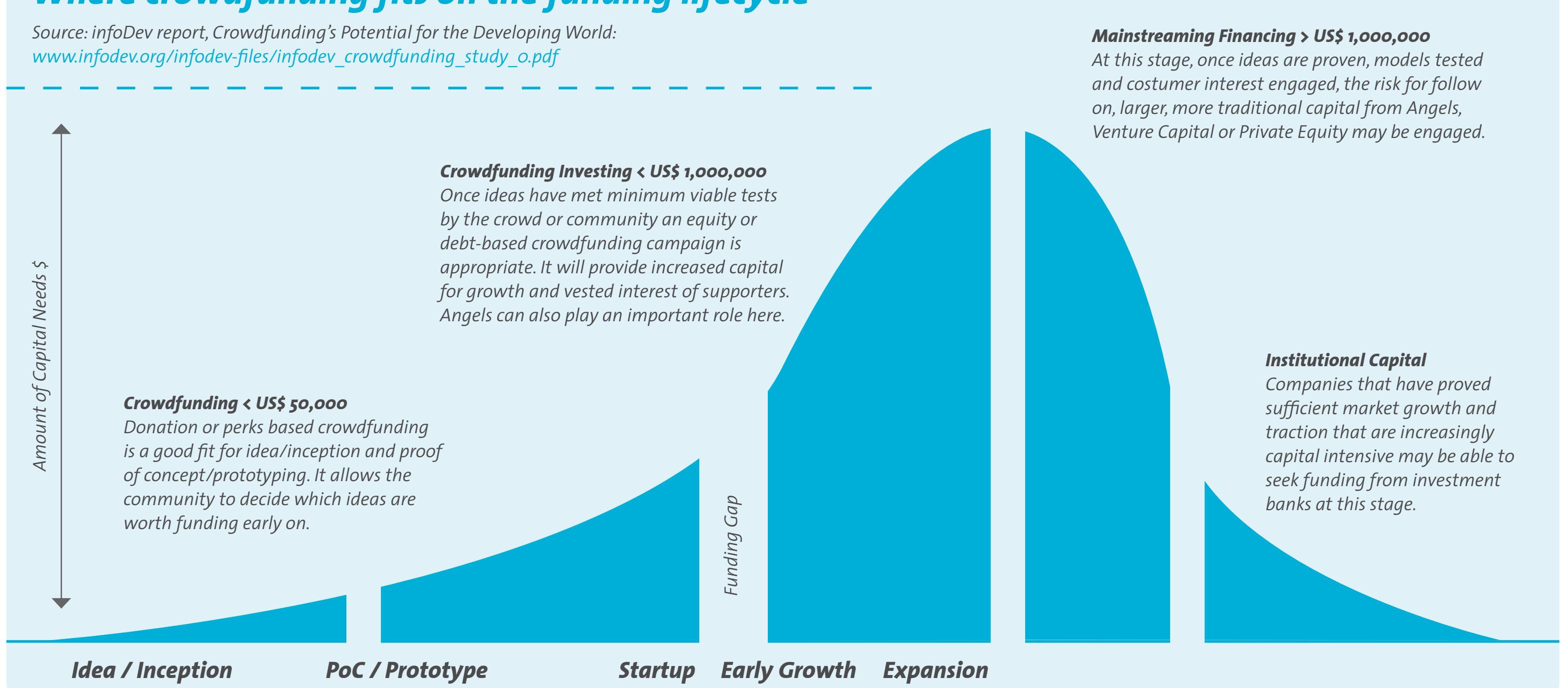
Access to finance is still highly constrained for SMEs in developing countries. As we have discussed in this article, based on the evidence from the last ten years, crowdfunding constitutes an enormous opportunity to leverage and scale up finance for small and medium-size enterprises, including those in Asia. SWITCH-Asia projects can consider crowdfunding as an option to leverage additional funding and investments for SMEs, or as element within the project's sustainability strategy.

This opportunity may also exceed and enrich the set of financing tools of traditional institutions, if current investment security concerns, misconceptions and fears can be addressed adequately. While crowdfunding is already reasonably well developed in the US and Europe, it has been much slower to develop in Asia's emerging economies. If crowdfunding is added as a complementary funding instrument for development cooperation on a broader scale, it may indeed become a lever to support funding of development initiatives – including those that may contribute towards solving the key green development challenges of our time.

Figure 1:

Where crowdfunding fits on the funding lifecycle

Source: infoDev report, Crowdfunding's Potential for the Developing World: www.infodev.org/infodev-files/infodev_crowdfunding_study_0.pdf



5) www.quetsol.com

6) BBVA Compass Bank Crowdfunding report: www.crowdfundingofferings.com/wp-content/uploads/2013/12/BBVA-Compass-Report-with-Comments-2013.pdf

7) infoDev report, Crowdfunding's Potential for the Developing World: www.infodev.org/infodev-files/infodev_crowdfunding_study_0.pdf

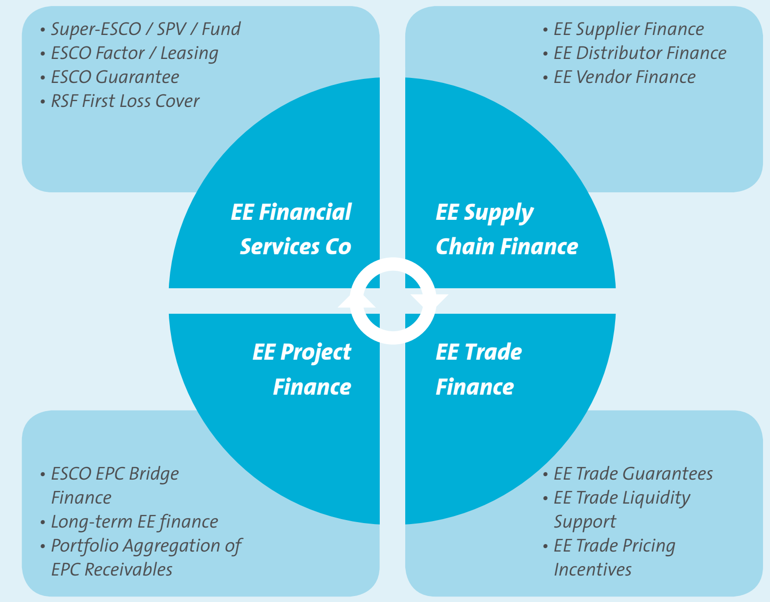
Mobilisation of private sector capital toward green finance in Asia

By Alexander Ablaza

In terms of green private sector capital, energy efficiency (EE) definitely outperforms most renewable energy and other mitigation options. About € 6.5 trillion investments in energy efficiency will need to be made in the global market between now and 2035. Southeast Asia, especially Indonesia, Thailand, Malaysia, Vietnam and the Philippines, will need almost 9 billion Euro in EE investments for the region to meet short-term energy demand reduction targets, mainly in the three key sectors of industry, transport and buildings. The International Energy Agency estimates that Southeast Asia will need to invest at least 9% of total energy investments, or € 11 billion per year, in EE projects by 2035. To date, EE credit facilities are mainly implemented with the traditional structure of asset-based lending. Some specific cases of programmatic interventions in the finance sector include the Thailand Energy Efficiency Revolving Fund, an interest buy-down scheme involving eleven commercial banks sourcing concessional debt from revolving government funds. The IFC's global Sustainable Energy Finance programme in Southeast Asia supported local financial institutions in their roll-out of EE and RE lending lines through risk sharing facilities, portfolio loans and capacity building advisory services. Furthermore, the Malaysia Green Technology Financing Scheme (GTFS) offers guarantee and interest rebates to over 20 local banks for green projects. Finally, the SDCL Singapore EE Finance Programme is a government initiative that allows about € 130 million of private funds to be invested in ESCO capex for industrial EE improvement projects.

However, market gaps are in the way of a massive scale-up objective. Financial products do not meet the needs of ESCOs and EE supply chain. Commercial funders have not mainstreamed EE financial products and services.

The available green facilities crowd out EE with RE and non-CC mitigation. Development investors are unable to achieve scale, especially in end-use EE. SME access to EE finance remains limited. The finance sector still prefers to invest in larger EE technologies. EE investment decisions by end-users cannot compete with business priorities. Energy supply and demand-side policies and targets are still often decoupled.



As energy efficiency technology markets mature in emerging economies, a suite of innovative financial products and services will need to be introduced by existing and new channels.
Source: Alexander Ablaza

The solutions proposed include:

- the design and roll-out of innovative financial products and services that address the credit gaps, tenor mismatches and risk profiles of SMEs, ESCOs and other players in the EE supply chain;
- to create a new class of project aggregators which are able to attract portfolio investors and funds targeted at EE and greenhouse gas (GHG) impacts;
- to design portfolios that capture the higher inefficiencies of smaller EE technologies widely used by low credit-risk sectors;
- to scale up government catalytic investments in EE Finance (such as fund equity, first loss cover, interest buy-down, etc.);
- to bolster EE regulations toward accelerated investment decisions and integrated energy supply-demand strategies.

Four growth models for markets to structure as they aspire to achieve meaningful scale are the following:

1. EE risk-sharing facilities with governments, climate funds or even private sector providing first loss cover;
2. ESCO-leasing company partnerships that can enable the market to grow rapidly for savings-based equipment leases;
3. the factoring of ESCO receivables by special purpose financial institutions and investment funds which can quickly recapitalize smaller ESCOs; and,
4. the establishment of a „Super ESCO" which can play the dual role of a specialized financial institution for private sector ESCOs and a dedicated ESCO for public facility EE projects.

Furthermore, new financial products and services that cater to the needs of ESCOs, EE supply chain players, EE technology importers/exporters and long-term EE project developers will have to involve the active participation of governments, the finance sector and the business sector. In conclusion, new EE financial structures with aggressive policy measures, catalytic high-risk investments by governments, climate funds and development agencies, and project pipeline generation and equity from the private sector can efficiently leverage private sector capital into EE finance, thereby sustaining a low-carbon path for Southeast Asian economies.

About

Alexander Ablaza

Alexander Ablaza is operating as a Principal Advisor, focusing on Sustainable Infrastructure Finance and Investments.

Network for Eco-Innovation Investment

Introducing INNEON: The Network for Eco-Innovation Investment in Europe

By Susanne Salz

While it is well known that bringing the economy, the environment and society into balance is at the core of sustainability, it is less well known that one way of doing so is eco-innovation. In its broadest sense, eco-innovation is any form of innovation aiming at significant and demonstrable progress towards the goal of sustainable development[1], usually related to a product or service and its use of natural resources and release of harmful substances throughout its whole lifecycle[2].

The UN Environment Programme (UNEP) adopts a more precise and comprehensive working definition: "Eco-innovation is the development and application of a business model, shaped by a new business strategy that incorporates sustainability throughout all business operations based on life cycle thinking and in cooperation with partners across the value chain. It entails a coordinated set of modifications or novel solutions to products (goods/ services), processes, market approach and organizational structure which leads to a company's enhanced performance and competitiveness."[3] While the concept is usually applied to individual innovative goods, services or business processes, it can also be applied to the whole company as is the above case.

Eco-innovation can – and in fact should – be present in each and every economic sector, although investment in green technologies has so far been focusing predominantly on renewable energies. It can also occur at any point of the value chain: research and development, procurement, design, marketing, packaging, logistics, retail, consumption or end-of-life.

SMEs and entrepreneurs are often key actors for any kind of business innovation, including eco-innovation, due to their smaller size and typically higher flexibility and adaptability. Yet entrepreneurs and SMEs often face significant hurdles in bringing innovative ideas to the market not least because of a lack of financing options. Investors tend to use the same rationale for eco-innovation as for any other investment, i.e. the same expected returns and same level of accepted risks. While this may in some cases be feasible, supportive policy mechanisms are helpful or even required to increase the availability of funding available for all types of eco-innovation.

> ***"SMEs and entrepreneurs are often key actors for any kind of business innovation, including eco-innovation, due to their smaller size and typically higher flexibility and adaptability."***

INNEON is an emerging network of on the one hand entrepreneurs and SMEs with eco-innovation propositions and on the other hand investors, in order to bring these two groups together and thereby accelerate the commercialization of eco-innovative products, services and processes in Europe and beyond.

INNEON is funded by the European Commission and is being implemented by 10 partner organizations[4] based in eight European Union Member States, who between them bring profound expertise and experience on innovation, business strategy, sustainability and investment.

Since January 2014, INNEON partners have been preparing to offer the best available service to innovators and investors. Innovators can access a range of self-help tools via www.inneon.eu, where they can also apply to join the carefully selected network of INNEON innovators, who benefit from the following exclusive opportunities:

- Bespoke coaching support from INNEON partner organizations,
- Exclusive online and in-person networking with peers, experts and investors, and
- Potential access to business angels, venture capital and corporate investors.

Investors can join INNEON in order to access pre-screened, high-quality investment propositions, sector-specific market intelligence, opportunities to syndicate with like-minded investors and to identify potential exit opportunities.

To facilitate interaction between innovators and investors, an exclusive, dedicated online platform has been developed. Once a prerequisite number of suitable innovators and investors has joined the recently established network, the members will be invited to exclusive networking and matchmaking events to be held in a number of locations in Europe in the coming months and years.

> ***„Eco-innovation is the development and application of a business model, shaped by a new business strategy that incorporates sustainability throughout all business operations based on life cycle thinking and in cooperation with partners across the value chain."*** *– UNEP Definition*

They are expected to result in enhanced eco-innovation dealflow in the region. Results and success stories will be regularly presented to the public, demonstrating the environmental, social and economic benefits realized as part of the INNEON catalyzation of eco-innovation in Europe[5].

The innovations which will be supported by the INNEON network could be equally relevant for Asia, and intercontinental financing and business deals could be highly interesting for both sides. The INNEON partners are actively seeking opportunities, such as mutually beneficial ways to bring INNEON-supported innovations to Asia by cooperation agreements between European and Asian SMEs. The SWITCH-Asia programme and INNEON could potentially share resources to make progress in this field, for instance, through joint matchmaking events.

Mr. Janez Potocnik, the European Commissioner for the Environment, said that "Eco-innovation is making resource efficiency a reality by helping to decouple our consumption of resources and its impact on the environment from growth."[6] Given Asia's economic growth rates, eco-innovation is thus at least as relevant in Asia as it is in Europe and both regions stand to benefit from cooperating in this important domain, as well as advancing within their own economies and societies towards ever more successful eco-innovation.

For further information about INNEON please visit www.inneon.eu

About

Susanne Salz

Susanne Salz is project manager at the Collaborating Centre on Sustainable Consumption and Production (CSCP) with a focus on translating sustainability policy into concrete action on the ground in the public and private sector. Prior to joining CSCP, Susanne managed the involvement of local governments in the UN Rio+20 summit in her role as head of the secretary general's office at ICLEI – Local Governments for Sustainability.

1) As stated on the website of the European Commission at http://ec.europa.eu/environment/eco-innovation/faq/index_en.htm
2) Adopted from another frequently used definition: „Eco-innovation is the introduction of any new or significantly improved product (good or service), process, organisational change or marketing solution that reduces the use of natural resources (including materials, energy, water and land) and decreases the release of harmful substances across the whole life-cycle." > www.eco-innovation.eu/index.php?option=com_content&view=article&id=22&Itemid=23:

3) www.unep.org/ecoinnovationproject
4) Please refer to www.inneon.eu for a list and detailed description of the project partners.
5) Please refer to www.inneon.eu for continous updates.
6) Cited from "Eco-innovation. Greener business through smart solutions" > http://ec.europa.eu/environment/eco-innovation/files/docs/publi/brochure_eco-innovation_a42013.pdf

Green SME finance in India – experiences from the ground

By Sanjay Banka and Dr. Patrick Schroeder

In common with many countries across the globe, India has a plethora of programmes and policies to support SMEs in different sectors and industries, manufacturing and services. Various ministries and governmental bodies – national and provincial – "aim" to promote these SMEs through mandatory public procurement of SME goods and services and by providing finance. The same is the case for enterprises promoting the green economy – clean technology, renewable energy, waste management, etc. Unfortunately, often the agencies which implement the policies do not administer them, so many SMEs expend precious energy in finding the support that they need. Financial institutions require non-business tangible securities in order to provide credit. Immense time is thus wasted in documentation and processes and the enterprise has to devote significant resources, including time, in order to gain adequate financial support.

Recently, many venture capital (VC) firms have come to the rescue of these green SMEs. Traditionally, VC firms in India have not invested much in the micro SME (MSME) sector. As in most other countries, due to the traditional structure and small size of MSMEs, Indian VC and Private Equity Players are reluctant to invest in them due to higher transaction costs, high risks and difficulties in exits from such investments. The VCs increasingly invest in early stage businesses to scale up and grow, though at times the terms are too onerous for the green entrepreneur. For instance, IFCI's Green India Venture Fund made investments in Titan Energy Systems, a solar PV module manufacturer. Another example is Infuse Ventures, which invests in scalable, innovative cleantech companies that can grow into tomorrow's cleantech superstars. Some technologies that have received financial support are solar solutions for irrigation, small-scale e-waste management solutions and thermal energy storage solutions.

> ***"However, a small enterprise finds it tough to get this tailored support and financing. It often takes a huge effort and repeated requests to the institutions to get the financial support that is required."***

The Indian government has institutions and schemes for SME financing, but nothing specific for green businesses. Likewise, the government has policies, incentives and tax benefits for industrial sectors such as power generation from renewable sources (e.g., solar and wind), but there is not much of an overlap – green SME financing. Small enterprises within the green sectors do not attract specific financing support. The financial institutions lack interest in SMEs as customers as they behave in a very traditional manner – focusing on pure number crunching of economic benefits, and not keen to understand environmental and social impacts.

There are institutions, such as the Small Industries Development Bank of India (SIDBI), that are supposed to nurture SMEs and support their financing. SIDBI has developed financing schemes for sustainable development, including energy efficiency and cleaner production, for MSMEs planning to invest in energy saving solutions in plant and machinery or production processes in order to reduce the overall carbon footprint. Cleaner production and emission reduction measures, waste management and Common Effluent Treatment Plant (CETP) facilities are also covered by the scheme. In addition, SIDBI works with the Japan International Cooperation Agency (JICA) and the KfW Development Bank to offer MSME financing schemes for energy efficiency and cleaner production. Similarly, the national government has a Trust that guarantees the credit provided by banks to SMEs. The Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), which was set up by the Indian government and SIDBI already in 2000, guarantees a certain percentage payment to the bank in case of default by the SME. However, a small enterprise finds it tough to get this tailored support and financing. It often takes a huge effort and repeated requests to the institutions to get the financial support that is required.

Despite the gloomy scenario, we have many enterprises that have received financing, both equity and debt – be it credit facility from bank(s) or growth capital from private equity and venture debt firms. Banka BioLoo, a Hyderabad, southern India based SME, is a case in point. The company provides environmentally friendly sanitation solutions, for retail and institutional users. Banka's bio-toilets system disposes of human waste in 100% eco-friendly manner, saves energy, conserves water and produces biogas. The founders and promoters infused initial capital that helped give a foundation to the business, spent largely on the infrastructure set-up. As it grew, the enterprise needed working capital and other support. The banks either refused the finance or spent too long deciding, so Banka BioLoo approached a venture debt firm, IntelleGrow, which provides customized loans to SMEs lacking access to debt responsive financing. IntelleGrow loaned INR 7 million (about € 90,000) to meet immediate requirements, and another INR 6 million (about € 78,000) a couple of months later on receipt of more orders. At the same time, Banka was keen to have a bank credit line as the cost of capital is lower compared to non-bank finance. At the time of going to press, HDFC Bank, a major Indian bank, sanctioned a credit line of INR 10 million (€ 130,000), some of which was to repay a private loan. The company is also in talks with venture firms for further equity infusion; equity infusion having been raised from family and friends in June-July 2014, providing a cushion until further funding.

Banka's bio-toilets system disposes of human waste in 100% eco-friendly manner, saves energy, conserves water and produces biogas.
Source: www.bankabio.com

Bangalore-based SustainTech is an SME in the green energy sector. It created the sales, marketing and servicing network for a range of fuel efficient and virtually smokeless wood burning stoves for commercial and institutional kitchens. The stoves were developed at the Technology Informatics Design Endeavour (TIDE), a non-profit partner organization. When SustainTech felt investment-ready, they sought funds from international investors and were successful via a consortium of three investors. The process was lengthy; at that point, SustainTech was just an idea and investors would have been wary of investing large sums. SustainTech strategically conceived its business plan so that the amount of investment required was low and this helped in obtaining investment for such an early stage enterprise. SustainTech was also incubated by Villgro, which added credibility to both the company and the business plan. It also enabled SustainTech to access high quality resources as an incubatee organization. Without this enabling environment, it would have been difficult to access further investments.

As we grow and develop, our consciences should dictate a move towards the green economy, in principle and in spirit. In practice, enterprises find it challenging to obtain the financing and credit support, as envisaged in

> ***"There is a dual need today in India: help as many green SMEs get finance as possible, and help green SMEs scale up from where they are now, through additional financing support."***

the policies and programmes. Many resources, and much time and effort are consumed before an SME is able to get the help that they require. A dedicated and committed team that understands green SMEs is needed at key financial institutions, with skill sets beyond the normal officers. They need to have adequate knowledge of the green economy, and to be able to understand that the socio-environmental parameters are more than mere profit and loss statements or the balance sheet. In the absence of such a route, the SMEs that promote and provide green products and services tend to be treated as any other SME. There should be special desks at the financial institutions that encourage green SMEs to approach and discuss their financing needs, resulting in a decent solution. As the focus towards the green economy grows, these institutions will surely have schemes and policies in place that will truly touch green SMEs and enhance their well-being by providing adequate financing support.

There is a dual need today in India: help as many green SMEs get finance as possible, and help green SMEs scale up from where they are now, through additional financing support. Many SMEs associated with SWITCH-Asia projects will find themselves in similar positions. As in India, the opportunities for green SMEs to get loans through institutional investors and development banks are still limited. At the same time, many new innovative finance initiatives specializing in green finance and SMEs are emerging in India. The examples show that gaining access to green finance is not a straightforward process. Even if banks refuse to provide finance, there are private venture capital firms that might provide the necessary funding to scale up businesses at critical points and to boost production output.

SustainTech created the sales, marketing and servicing network for a range of fuel efficient and virtually smokeless wood burning stoves for commercial and institutional kitchens.
Source: www.sustaintech.in

About

Sanjay Banka

Sanjay Banka is Director at Banka BioLoo, an Indian social enterprise that manufactures and promotes biodigester toilets for use in parts of the country where the lack of infrastructure prevents the use of more conventional sanitation facilities.

Dr. Patrick Schroeder

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Green SME finance – where does Asia stand

Interview with ADFIAP Secretary General, Mr. Octavio B. Peralta

For many years, the banking and financial sector remained unaffected by the "greening of industry". Being in the "non-polluting" service sector in contrast to the traditional "smokestack" industries, banks and financial institutions generated less controversy on the issue of environmental responsibility. But this situation has since changed dramatically. Mr. Octavio Peralta, Secretary General of ADFIAP, explains the changes that are happening in different Asian countries.

SWITCH-Asia Network Facility: To start off, could you explain in some more detail what "Green Finance" actually means?
Green finance, though a broad term, in the context of ADFIAP and its member-development banks, it refers to lending programmes that take into account the environmental impact and sustainability of the project or business being financed. Examples of green finance lending programmes range from funding energy efficiency and renewable energy climate adaptation and mitigation projects by micro, small and medium enterprises (MSMEs) to pollution abatement projects of large industries. It also includes financing the manufacture of products, equipment, or systems which, in general, (a) minimize degradation of the environment (b) have zero or low greenhouse gas (GHG) emissions (c) safe for use and promotes a healthy and improved environment for all forms of life (d) conserve the use of energy and natural resources or (e) promote the use of renewable resources.

Why are financial institutions in Asia changing their approaches to environmental responsibility and offering "Green Finance" instruments?
With legal and stakeholder concerns, like lender liability on environmental "miscues", plus a growing social and ethical focus on investments, as well as the onset of new business opportunities in this field, the banking and finance sector subsequently acted towards embracing the principles and practices of environmental risk management and due diligence and are

About *ADFIAP*

ADFIAP (Association of Development Financing Institutions in Asia and the Pacific) is the focal point of 120 development banks and other financial institutions in 42 countries and territories engaged in the financing of sustainable development in the Asia-Pacific region.

www.adfiap.org

ADFIAP financing sustainable development now developing a wave of innovative products and services that cater to "green" businesses. Also, national environmental policies are changing the behaviour of financial institutions.

Can you give us some concrete examples of how national policies influence the banking sector?

For instance, the banking sector in the Philippines has started to ride on the wave of Green Industry Laws such as the Philippine Clean Air Act, the Philippines Water Act, the Biofuels Act and the Renewable Energy Act, which provide support and incentive packages to environment-friendly businesses. In Sri Lanka, there are currently ample policies to support green growth, such as the National Cleaner Production Policy and Strategy, the National Energy Policy, the National Solid Waste Management Policy and the National Climate Change Policy. While all these policies are in place, what is lacking is their effective implementation due to various challenges and obstacles faced by the business sector. Compliance to the above laws requires green investments, which in turn require green finance – the focus of ADFIAP's environmental governance advocacy. Together with government policies on green growth and low carbon economy in many countries, the banking and finance sector considers green finance a key factor towards this end.

Which financial institutions in Asia are moving particularly fast to provide innovative green finance options for SMEs? What type of 'green finance' trends for SMEs are you seeing? What will be the situation in the next 5 to 10 years?

In the context of ADFIAP, most of our members provide green finance through lending programmes funded by government and/or bilateral and multilateral financial institutions. To cite a few examples, in Malaysia, our member Credit Guarantee Corporation administers the country's Green Technology Financing Scheme that promotes investments in green technology, a sector that is envisaged to be one of Malaysia's emerging drivers of economic growth. The Small Industries Development Bank of India has a financing facility for energy-saving projects in the MSME sector. In Thailand, the SME Development Bank provides loans for natural gas-fuelled public transportation. The Development Bank of the Philippines has a green financing programme that provides long-term funds to local governments and industries to mobilize, encourage, and support activities and investments in environment-friendly projects. With the green advocacy and capacity enhancement interventions provided by ADFIAP to its members, it is foreseen that green financing activities will continue to grow and diversify into other sectors of the economy even at the level of microfinance. Development Finance Institutions (DFIs) in the region, which comprise the majority of ADFIAP's membership, are envisaged to take the lead in this "green finance" trend, with the other banks following suit.

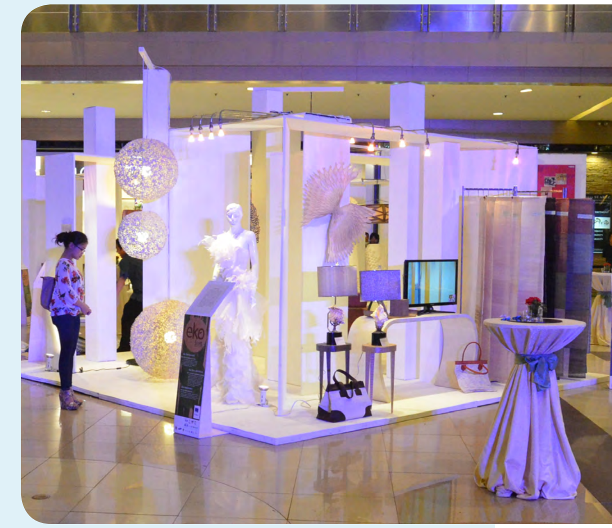
What are common and persistent challenges in Asia's SME lending?

There continues to be a mismatch between the demand for and supply of finance, especially in green finance. The common barriers on the demand side, i.e., from the SME side, are inadequacy of technical expertise, financial management skills and financial transparency; perceived high cost of financing; limited knowledge of financing options due to lack of communication and dialogue between banks and entrepreneurs; and lack of proven markets – all of which are necessary to establish bankability and stability of loan repayment. On the other hand, among the barriers on the supply side, i.e., the bank's side, are the realities that SMEs lack collateral and proper financial accounting and are unfamiliar with financing solutions provided by banks. As a consequence, banks consider SME lending as high risk and not such a profitable business. Therefore, banks need to understand SMEs more and better and to develop new and innovative financial products and delivery mechanisms to address the financing needs of SMEs.

From the perspective of ADFIAP, what are your views on the innovative SME solutions towards sustainability in the region being spearheaded by SWITCH-Asia?

ADFIAP's work and advocacy focus on advancing sustainable development in the region via the development and delivery of financing solutions for green initiatives of SMEs. This complements and augments SWITCH-Asia's thrust of promoting sustainability in the region through capacity-building of environmentally and socially-responsible institutions and their projects. Both finance and capacity-building are vital factors leading to sustainable development in the region.

SMART Cebu



SWITCH-Asia SMART Cebu project activities
Source: SMART Cebu project

What can SWITCH-Asia projects do to overcome these challenges and support their SMEs to access green finance?

As mentioned earlier, there needs to be constant communication and dialogue between SMEs and financial institutions to close the gap between project viability and bankability and the resolve to provide SMEs with adequate and timely access to finance. There is also a need for policymakers to provide an enabling environment and business case for banks to lend to green SMEs. Specifically, SWITCH-Asia projects need to document their successes (and failures too as lessons learned), develop a business plan, and approach an ADFIAP member in their country for consultation and technical assistance on how to get financing for their projects.

What role has ADFIAP played in SWITCH-Asia projects? How did ADFIAP contribute to optimising project implementation and in setting up long-term sustainability strategies?

ADFIAP served as a link, a trainer and a catalyst for SWITCH-Asia projects. As a link, ADFIAP had put together in one forum SMEs and its member-development banks in a business matching session (SMART Cebu project). As trainer, it conducted workshops and briefings on sustainable consumption and production (SCP) and green finance for banks and SMEs (SMART Cebu and SMART Myanmar projects). As a catalyst, ADFIAP has encouraged a member bank to develop a Green Financing Programme that catered specifically to the financing requirements of the SMART Cebu Project beneficiaries.

ADFIAP and partners recently completed the SMART Cebu project. What made the Project successful in its strategy on access to finance?

In the case of SMART Cebu, financing was "mainstreamed" into the project activities with the involvement of ADFIAP as a partner. As such, the SME finance gap was addressed from the outset through activities and campaigns like awareness raising among SMEs on financial options available; providing financial literacy and individual coaching to the members of chambers of commerce and industry; SCP awareness for banks via advocacy, study tours, workshops; business match-making; development and launching of green credit facilities by two ADFIAP member banks to support the investment requirements of the SMART Cebu project beneficiaries; and signing of a tripartite agreement amongst the Development Bank of the Philippines, the European Chamber of Commerce of the Philippines and ADFIAP to promote the financing of green investments in the country.

Did SMART Cebu encounter any unexpected difficulties? If yes, what were they and how were they solved?

While there were successes, there were also some difficulties. SMEs were at first reluctant to engage with banks and to address this, ADFIAP conducted meetings and workshops to prepare dialogue sessions between SMEs and the banks. SMEs also lacked knowledge of financial solutions that were available from banks, which was addressed through financial literacy activities towards the members of targeted business membership organizations, such

Case Study

Development Bank of the Philippines' Environmental Development Credit Facility/Green Financing Programme

The Development Bank of the Philippines (DBP) was one of the first Philippine banks to integrate environmental considerations in all aspects of its operations, providing financing as well as technical assistance to projects that are environmentally sound. Called as a "Bank for the Environment", concern for the preservation and natural resources and pollution prevention cuts across all of its financing programmes. The bank promotes clean technologies, renewable energy, solid waste management, clean water and projects that address climate change. These are in line with the DBP Environmental Policy Statement and Environmental Management System that have earned the bank the distinction of being the first Philippine bank to be ISO 14001 certified.

The Green Financing Programme is the umbrella programme of the bank for the environmental sector covering new and renewable energy, solid waste management, clean alternative transport fuel financing, climate change and carbon financing, water supply and sanitation services, and tree plantation financing.

The programme is designed primarily to assist the industries and local government units (LGUs) in the integration of environment-friendly processes and technologies in their operations and projects. The programme focuses on greening the industries and LGUs to foster resource efficiency and low-carbon operations and to ensure that their operations would not further contribute to environmental degradation. Eligible projects include the greening of the manufacturing sector and other industries, green building/property management projects including hotels, resorts and restaurants, green transport projects, greening the LGUs through energy efficient lighting, urban greening, eco-tourism projects, resource conservation projects, pollution control projects and solidwaste management projects, and other greening initiatives/projects that promote and contribute to low carbon and green growth strategy

To ensure the success of the Green Financing Programme, DBP partnered with four institutions: the European Chamber of Commerce of the Philippines for programme assistance; ADFIAP for the training of clients in green operations; Asia Society for Social Improvement and Sustainable Transformation for joint promotional activities and identification of potential projects for funding; and the Environmental Management Bureau of the Department of Environment and Natural Resources for guidance on compliance.

As one of the first countries in South East Asia to have a comprehensive legal framework promoting renewable energy development as early as 2008, the Philippines has long waited for its implementation which happened only in July 2012 when the long-awaited feed-in-tariff rates were finally approved by the Energy Regulatory Commission. Immediately, DBP added three renewable energy projects (two hydro and one wind power projects) in its renewable energy portfolio which resulted in an increase in the total renewable energy capacity from 177.40 MW to 240.89 MW for a total loan amount of P9.562 Billion or about €175 Million. In 2012, Forty-seven projects totalling P6.551 Billion or €120 Million were financed under the Green Financing Programme.

About Development Bank of the Philippines (DBP)

The Development Bank of the Philippines is the country's most progressive development banking institution. Through the years, DBP has been a key player in nation-building by assisting critical industries and sectors, promoting entrepreneurship, particularly in the countryside, helping build more productive communities, advancing environmental protection and contributing to the improvement of lives of Filipinos across the nation. In January 2002, DBP became the first Philippine bank to be ISO 14001 certified. For the past 10 years, DBP has been banking for the environment, doing its share in curbing soil, water and air pollution by funding projects that promote resource conservation and make use of cleaner technology. As of end 2012, the bank's total assets stood at P362 Billion or €6.6 Billion with total loans and receivables amounting to P153.4 Billion or €2.8 Billion.

as chambers of commerce and industry that were also part of the project. SMEs did not also know what technical upgrades were necessary for their operations leading to under/over estimation of required additional investments. The SMART Cebu partners conducted cleaner production audits and provided recommendations to increase environmental performance, including the specification of necessary investments. Subsequently, ADFIAP offered coaching services on how to prepare a business plan and a project proposal for the required technical upgrade.

What "new lessons" did ADFIAP learn by implementing the SWITCH-Asia project? Did you experience the regular challenges, difficulties or opportunities that you usually come across in your "regular work" or did you identify new potential scenarios, etc.?

Implementing a SWITCH-Asia project gave ADFIAP the opportunity to actualize and further deepen its work and advocacy on sustainability issues 'on the ground' level. From a financial institution standpoint, better understanding of environmental risks and the realization of the lack of diagnostic tools to evaluate green SME loan requests for resource efficiency and cleaner production are important lessons for further work and development. There is also a realization of a great potential to further improve the banks' risk management systems and processes with regard to green SME projects, such as the formulation of a green scoring system to complement their credit scoring system and design of a green banker's certificate programme.

SWITCH-Asia project SMART Myanmar
Source: SMART Myanmar project

Case Study

DFCC Bank Sri Lanka's Energy Services Delivery (ESD) and Renewable Energy for Rural Economic Development (RERED) Programmes

DFCC Bank took the lead in financing renewable energy projects in the late 1990s even at the time when the necessary regulatory and environmental frameworks in Sri Lanka were not yet in place. Based on its pioneering role in renewable energy financing and commitment to environmentally sustainable development, DFCC Bank became the partner of choice for managing the Energy Services Delivery (ESD) and the Renewable Energy for Rural Economic Development (RERED) programmes, Sri Lanka's prime private sector-driven projects for electrification of the country through non-conventional renewable energy sources.

The Government of Sri Lanka, in consultation with the World Bank, appointed DFCC Bank as the Administrative Unit (AU) for the World Bank/ Global Environment Facility-funded Energy Services Delivery (ESD) project (1997-2002) and Renewable Energy for Rural Economic Development (RERED) project (2002-11). These programmes transformed the renewable energy landscape in Sri Lanka and firmly established Non-Conventional Renewable Energy (NCRE) as a viable option for power generation in the country. In the words of the World Bank, "the project(s) contributed to the creation of a world-class renewable energy industry in Sri Lanka (in particular for small hydro power) comprising investors, private developers, financiers, engineers, designers, planners, operators, equipment manufacturers, etc."

DFCC Bank's developmental work in financing the renewable energy sector has been instrumental in the development of the small hydro power sub-sector in Sri Lanka. This has been recognized internationally and by agencies such as the World Bank. While several foreign delegations have visited Sri Lanka to study the success of the sector, the Bank's officers have also conducted training programmes and consultancies in other countries.

The innovative features of ESD and RERED programmes include: market-based approach, mandatory community participation, involvement of partners with proven rural outreach, high environmental and quality standards, ensuring consumer protection, use of local know-how and engineering expertise, tailoring of operating guidelines to adapt to the changes in the market, and creating an alliance of a wide range of stakeholders including industry partners such as Solar Industries Association, Village Hydro Developers Association and Grid Connected Small Power Developers' Association.

The achievements of the ESD and RERED projects are as follows:

On-grid

- Seventy seven mini-hydro projects with a total capacity of 181.6 MW have been commissioned and six mini-hydro projects totalling 13.9 MW are under construction;
- One 10 MW wind farm was commissioned and another 10 MW wind farm is under construction;
- One bio-mass project of one MW was commissioned;
- ESD and RERED funded projects constituted 64.7% of the total commissioned NCRE capacity in Sri Lanka.

Off-grid

- Electricity has been provided to 139 480 households in remote off-grid areas;
- Solar Home Systems have been installed in 131 528 households;
- Village Hydro projects have supplied electricity to 7 913 households;
- Biomass-based projects have provided electricity to 39 households.

Both ESD and RERED projects are regarded as model projects for private sector driven renewable energy development. Based on this experience, DFCC has hosted study teams from many countries including Cambodia, Ghana, India, Mozambique, Nepal, Philippines and Uganda for knowledge and experience sharing. In addition to the thermal cost savings attributed to NCRE energy projects, an important benefit is the carbon emissions avoided in the generation of electricity. For instance, in the RERED project alone, it was estimated that emissions amounting to 2.15 million tonnes of CO_2 were prevented from polluting the atmosphere, thus making the environment a large beneficiary of DFCC's Renewable Energy initiatives.

About DFCC Bank

DFCC Bank, Sri Lanka's pioneering Development Financial Institution, was established in 1956 by an Act of Parliament with the mandate to encourage and support the private sector in industry, commerce and agriculture. It has since played a pivotal role in national economic development and pioneered a number of innovations in Sri Lanka's financial sector. Today, DFCC is a blue chip financial conglomerate providing a range of products and services with group assets exceeding Rs. 95 billion (€580,000). The World Bank in its publication titled "DFCC Bank: One among the Successful Few" (2007) states "The DFCC is one among a small number of DFIs that not only has continued to remain viable, but also has been successful in transforming itself into a multi-product and robust financial institution in a changing international and local environment". DFCC is quoted on the Colombo Stock Exchange and has over 7 900 shareholders.

SWITCH-Asia Network Facility: ADFIAP is now involved in the SMART Myanmar project. What is happening with the "capital" developed by the SMART Cebu project upon its conclusion? How has it been taken further ahead?

The lessons learned from the SMART Cebu experience are now being further enhanced in the SMART Myanmar project. For example, SCP awareness and financing solutions are being introduced simultaneously with cleaner production audits so that once green investment requirements are identified, the matching financing solution is likewise identified and proposed at that stage. SCP advocacy and green finance workshops have also been conducted for the Myanmar Bankers Association early on to guide the banks in coming up with green financing options to address the requirements of the project beneficiaries. ADFIAP is also assisting in the visibility and communications aspects of the project through design and development of the project website, an e-newsletter, a CSR manual, posters and other PR activities.

In the SMART Myanmar project, how do you reach out to the SMEs (e.g., through SME cooperatives or associations, etc.) and what are the specific conditions you are encountering?

ADFIAP initially thought that this 'greening' project was premature for a developing Myanmar, considering its recent adoption of market liberalization and discipline. However, ADFIAP realized at the start of the project that the conditions were ripe for such an initiative to further improve the efficiency and competitiveness of the country's garment industry sector and SMEs, in general. Through the project partners in Myanmar, the Republic of the Union of Myanmar Federation of Chambers of Commerce & Industry (UMFCCI) and the Myanmar Garment Manufacturers' Association (MGMA), ADFIAP was able to reach out immediately to as many stakeholders as possible, including government ministries, banks and banking regulators, and the SME sector at large. With such a cohesive public-private cooperation, ADFIAP is confident of the project's success.

About Octavio B. Peralta

Bobby, a Filipino, is presently the Secretary General of the Association of Development Financing Institutions in Asia and the Pacific (ADFIAP), the focal point of 131 development banks and other financial institutions engaged in the financing of sustainable development in 45 countries and territories in the Asia-Pacific region. ADFIAP is a non-profit, non-governmental organization in consultative status with the United Nation's Economic and Social Council. He was the Secretary General from January 1, 2010 to December 31, 2012 of the World Federation of Development Finance Institutions (WFDFI), an umbrella organization of 328 development banks in 154 countries in Africa, Asia-Pacific, Latin America and the Middle East.

The new SWITCH-Asia Programme **Call for Proposals** has been published on 3 December 2014.

Date for the **submission of concept notes** is 9 February 2015.

SCP

The global objective of this Call for Proposals is to promote sustainable growth, to contribute to the economic prosperity and poverty reduction in Asia and to mitigate climate change. The specific objective of this Call for Proposals is to **promote sustainable production and sustainable consumption** patterns and behaviours in Asia.

The amount of **funding** available has been increased to EUR 22 307 123. Grants requested under this Call for Proposals must fall between the minimum amount of EUR 800 000 and the maximum amount of EUR 2 500 000.

Types of **activities** implemented by projects include design for sustainability, stimulating sustainable consumption, sustainable usage, cleaner production, greening supply chains and support SMEs in the uptake of SCP practices and the access to finance.

Eligible **countries** for actions to take place include Afghanistan, Bangladesh, Bhutan, Cambodia, China, Democratic Republic of Korea, Indonesia, India, Lao PDR, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Vietnam.