Business Industrial Associations fostering the Access to Finances for Energy and Resource Efficiency

Conceptual Material[1]

[1] The booklet was based on the booklet "ACCESSING 2 FINANCE FOR ENERGY & RESOURCE EFFICIENCY A guide for SMEs", which was developed by the SWITCH-NETWORK FACILITY (To be published online in august 2011: http://www.switch-asia.eu/

Content

Overview

The Small and Medium Size Enterprises (SMEs) represent a significant component of Pakistan's economy in terms of value addition and employment generation. SMEs constitute 90 per cent of businesses in Pakistan, playing a critical role in the manufacturing sector by providing 80 per cent of industrial employment, contributing to for about the 30% of GDP, and generating one-fourth of the sector's export earnings. SMEs create jobs, entrepreneurial spirit, innovation and competition. Their actions strongly affect production and consumption practices in the entire supply chain. Upstream the chain, SMEs can influence the local environmental and social impacts.

In Pakistan a challenging economic and socio-cultural environment for entrepreneurship and the state of small business is hampering the development and capacity building of the all sector. Some problems are institutional (micro-level), represented by absence of a focused and supportive policy or framework or access to appropriate financial services; others are endemic to the manufacturing sector as a whole, caused by difficulties in the transformation from a low-technology, low-skill environment, personalized and inefficient management, and management systems and organization structures out of tune with knowledge based economies of the 21st century.

Furthermore, little knowledge of productivity and quality enhancement, standardization and innovation, environment-friendly practices are hampering the competitiveness of Pakistani SMEs on the international markets. Pakistan has been facing natural resource degradation and pollution problems. The unsavoury spectacle of air pollution, water contamination and other macro environmental impacts such as water logging, land degradation and desertification, are on rise. All this, in conjunction with rapid growth in population, has been instrumental to the expanding tentacles of poverty. Pakistani SMEs' environmental unawareness has several reasons:

- Lack of human resources needed to investigate their environmental performance or access to tailored consultancy
- Insufficient know-how of environmental regulations and technological developments
- Low level of technical skills and lack of knowledge on environmental regulations and innovative technologies
- Lack of knowledge of the potential economic savings directly linked to environmental sounded technologies
- Lack of access to financial resources to support the implementation of E&RE-oriented strategies and achieve the appropriate upgrade of environmental-sound technologies.

The following document presents indications to Pakistani Business and Industrial Associations (BIAs) to address the last bullet.

Enable Access to E&RE finance

Access to finance still represent one of the major burdens to economic development of SMEs sector in Pakistan. Higher commercial power tariffs for small SMEs as compared with other industries; low access/low availability of financial resources, high transaction costs; complex and unfriendly labour, tax, and industry legislation and implementation procedures, which can encourage official abuse, push up the cost of starting or running an enterprise, and discourage the SMEs from joining the formal economy. This combined with an internally focused trade regime that protects import substituting and capital-intensive industries has hampered the business development of the SME sector.

Furthermore, a number of key sustainability challenges have become areas of intensive investor concern as it has become widely recognised that the activities of any enterprises deeply affect the local communities in economic and environmental terms. This has consequently leads to the integration of environmental and social governance (ESG) into investors 'decisions. They require disclosure of environmental, health and social information that is comprehensive, consistent and robust. As result, the demand from banks and investors for quality corporate reporting has grown. This demand has manifested itself through activities ranging from shareholders engagements with enterprises, to encouraging regulatory bodies, to enhancing ESG disclosure requirements. [2]

Financial institutons and investors require a combination of data and analysis of how environmental related issues influence the strategy of the company. Enterprises increasingly face the need to comply and report about their economic, environmental and social impacts of their daily operations. Igniting the application process for obtaining E&RE funding requires a series of complex data collection and analysis that in turn requires the provision of economic and human resources. Accordingly, SMEs that lack those basic resources, for the production of necessary information for banks and investors, also miss the opportunity to access E&RE finance. With respect to this, BIAs can again provide the necessary support and services to enable SMEs to access adopt the following steps:

[2] *Gettingmorevalue out ofSustainiability Reporting,* Global Reporting Initiave, International Finance Corporation, pp:4.

Throughout the following document BIAs and SMEs will be able to identify the best financial instruments in order to:

- Augment of operational performance and productivity through the production process by achieving E&RE-sound technologies
- Reduce administrative costs related to the production process
- Develop an effective and quality financial reporting through the ellaboration of sustainable-oriented business plans

Likweise, the booklet seeks to provide hints and advices to SMEs on how to integrate SCP and E&RE issues, into the development process of a strategic planning when appliying to financial instruments.

The guide is divided in three sections. The first one presents the different fields where SMEs can implement E&RE strategies. The second part provides a description of different financial instruments (products & services) offered by different kinds of financial institutions in Asia to help SMEs implement E&RE strategies. The third one explains relevant aspects that SMEs need to consider when aiming to access to a financial instrument for E&RE.

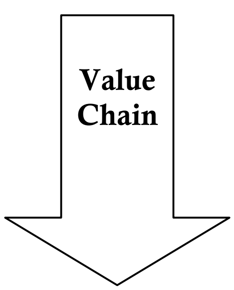
First part

Opportunities to implement E&RE in SMEs

Daily, big and small business carry out a wide range of internal and external activities that comprise several processes with different actors. They can be summarized in a life cycle perspective (Graphic 2):

Graphic 2: The lifecycle of a product[3]

As graphic 2 shows, SMEs performe in-house operations but also develop relations and activities with other actors involved in their value chain:



- Raw materials acquistion, transportation of raw materials to the enterprise
- In-house operations such as production process and waste management systems

[3] Source: http://www.nist.gov/el/msid/dpg/lifecycle.cfm

- Transportation through commercializing channels, relationship with consumers and management of the product or service after their end of life.

In every of these activities, SMEs have the opportunity to uptake E&RE initiatives when:

- Raw materials produced under E&RE parameters are purchased. This strategy entails market and revenues benefits for the SME, since the market of sustainable goods is increasing rapidly and consumers are more aware of their purchases.
- Efficient transportation systems are used to transport the raw materials to the enterprise's facilities. SMEs might acquire or improve their transportation instruments (e.g. cars, buses, motocicles, etc.). In the middle and long run, this E&RE uptake will be also reflected in cost-saving opportunities. Nonetheless, turn to partner companies specialized in transportation services is also a valid tool to increase logistic efficiency.
- Low- energy and resource consuming equipment - for the design and production process - is possible through the upgrade of existing machinery or the purchase of new equipment and appliances. The SME can achieve this goal in two ways. First, by developing „tailored" technologies that meet the specific needs of the production process itself. It can be in cooperation with other organizations (e.g. universities, industry and equipment manufacture companies). Secondly, by purchasing and adapting foreign technologies. It can happen through commercial cooperations with foreign partners.
- Techniques to manage and handle equipment, facilities and appliances are improved. An efficient machine is not very efficient if the employeed do not know how to operate it properly. To increase the lifespan and productivity of the equipment the SME should pay attention to issues such as: optimization of operational times of the assets, taking care of the machines, use of complementary inputs such as water, oils, etc.
- Equipment and techniques are implemented to carry out effective waste management systems. Eventhough the SME operates with high-efficient equipments, waste will be always generated (gas, liquid, solid). To avoid the dumping of waste in-house –of course, depending on the kind of process- different techniques or equipments are required (e.g. a compostage system, a sewage treatment plant).
- Low- energy and resource consuming appliances are acquired and organizational systems are implemented. Not only operational processes influence the E&RE of the SME, but also administrative activities in the facilities. Conceiving a SME that runs saving energy and water in the

facilities, where the employees use low- energy consuming computers, where the consumption of paper, carton, soup, and other materials is low can help the enterprise save money.

- The facilities are constructed, rebuilt, or designed in a way that the consumption of energy and resources is optimized. For instances, the size of the windows can be widened in order to take more advantage of sun light; or the floors can be improved in a way that they do not get dirty very often and consequently the use of water or detergents for cleaning is reduced.
- Efficient transportation systems are used to transport and enable the commercialization of finalized products or services.
- Equipment and techniques are implemented to manage with products after their end of life. SMEs can develop take-back strategies to repair, re-use, or recycle the sold products. Of course such kinds of strategies would demand the use of specific tehcniques or technologies.

E&RE can be implemented better when counting with skilled and trained employees. It happens at every level and in every activity of the SME. Motivating, training and empowering the staff to innovate technologies, techniques, processes, products and services can increase the chances of achieveing E&RE goals and take economic advantages out of it.

Second part

Existing financial instruments for E&RE in Asia

Before entering to explain in detail the range of financial products and services existing in Asian markets to help SMEs implement E&RE initiatives along the value chains operations, it is necessary to provide a quick overview of the type of financial needs to be met by the SMEs.

Asian SMEs face two major challenges when it comes to implement E&RE strategies in each or several fields of work (see section 1). On the one hand, SMEs face limitiation of liquidity to meet short- and middle-term commitments and investment plans. On the other hand, there is a lack of sufficient resources to implement middle- and long-term investment initiatives. Likewise, some SMEs need to increase their capacities to approach financial institutions to apply or request for funding on a project finance basis (section 3).

For the *short-term,* SMEs need to meet commitments to cover the range of production and administrative expenditures and costs that are needed for the daily run of the business (e.g. payroll, the payment of rent and complementary services of the production process such as water, energy). Besides these, *working capital* is also needed by SMEs to achieve E&RE improvements such as:

- Development of capacity building activities for selected members of the staff (director of the production department and product design department, responsible for waste management activities)

- Acquisition of and maintenance of adequate stock of sustainable inventories (specially unprocessed raw materials)

- Purchase of efficient office appliances (lamps, computers, etc.)

In the *middle-term*, the access to adequated *equipment and machinery finances* could lead SMEs to achieve E&RE advances. Eventhough the purchase, maintainace or reparation of industrial equipment and machinery could be some times very expensive, substantial cost savings can be achieved when investing in efficient equipments that reduce energy, water and other inputs consumption.

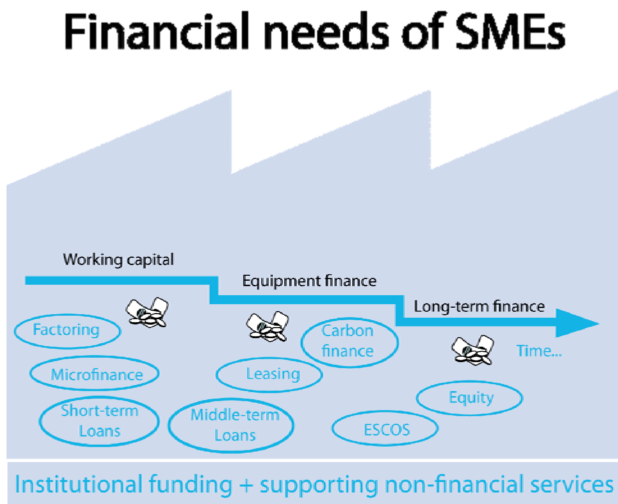
Finally, ***long-term finance*** refers to two issues: First, the ***investments*** that the SME plans to do, when positive market chances are expected and second, when improvements in the enterprise with an expected E&RE positive impact want to be achieved. For instance, the enterprise might want to expand its facilities to increase its production volume, or open new subsidiaries in other regions because of the attractiveness of new market opportunities. Thus, financial resources to ***innovate efficiently the construction, adequation, or upgrade of facilities*** are important in order to develop these goals in efficient ways. Typically, the magnitude of such investments is high and the returns on these investments are –in most of the cases- long-term projected and consequently demanded for the investor or lender. Having this picture of temporal financial needs, now it is time to show a generic offer of suitable financial instruments (products and services) in Asian markets.

Financial products and services

Financial instrumenst are mainly divided into six categories[4], each instrument could meet one or several financial needs of SMEs. They target SMEs' short-, middle- and long-term needs covering also the operations taking place along the supply chain activities. They are mainly[5]:

1. *Debt financing*: commercial loans, consessional loans, microcredit
2. *Equity financing*: Private equity, venture capital, mezzanine finance
3. *Institutional funding*: Public grants, tax incentives, loan guarantees
4. *Other financial instruments*: Leasing, factoring
5. *Tailored financial instruments for E&RE*: Energy and Service Companies (ESCOs), Carbon Finance (CDM)
6. *Supporting non-financial services*: network facility

[4] Annex 1 presents an explanation of each instrument.
[5] Annex 2 shows the relevance of different financial instrument depending on each country case



Graphic 3: Financial needs

Debt financing: It comprises lending activities to SMEs, where the SME signs a contract with a bank to receive a certain amount of money with the compromise of paying the borrowed amount to the bank back, plus additional market interest rates for the time span of the contract. The life span can be short-, middle-, and long-term. Particularly, three specific instruments fit in this category:

- Commercial loans usually demand collateral, such as a specific property (mobile: a car; immobile: a house) to be pledged as a security for the repayment of the loan.
- Islamic banking (two-three lines)
- Consessional loans are subsidized by public credit lines ("public/ soft loans") or grants, which reduces the cost of interest. Generally they do not require collateral and target SMEs at early stage of development. Soft loan programs allow deferred repayment until such time that the SME reaches the operation and revenue-generating stages.
- Micro-credits are small-scale loan products for micro-enterprises that normally have limited access to formal financial institutions and therefore mainly address the financial needs of the bottom end of the SME sector. They do not require physical collateral for the loan.

Equity financing: Private equity is capital provided by private and/or institutional investors by assuming an ownership stake in growing SMEs for a limited time span (comonly 5 to 10 years). Generally, private equity serves as a lever for conventional debt financing by fulfilling commercial banks' equity requirements. Depending on the stage of development of the technology and the degree of risk associated, three types of private equity financing can be distinguished:

- Private equity investments are ownership stakes in established SMEs with mature technology, which are characterized by merely little risk to the investor because of their market consistency and proved performance in the past.

- Venture capital is a long-term financing instrument leveraged with management and business development support (“incubation”) to unlisted, innovative, and potentially high growth enterprises in an early development stage. Investments are characterized by a high risk of failure, but in turn, equally high rates of return.

- Mezzanine capital combines characteristics of debt and equity financing. With the investment process resembling equity financing, the decisive difference is that investors are not granted ownership in the SME, which strengthens the debt component of mezzanine finance. Mezzanine loans are usually of shorter duration and more expensive for SMEs.

Other financial instruments:

Factoring is a receivables management and financing mechanism, which is designed to improve short-term cash flows of SMEs, which face severe working capital shortages in case of delayed payment or bad debt on the part of their customers.

Leasing is broadly defined as a contract between two parties where one party (the lessor) provides an asset (machinery, equipment, vehicles, and/or properties) for usage to another party (the lessee) for a specified period of time, in return for specified payments. Leasing is based on the proposition that profits are earned through the use of assets, rather than from their ownership. It focuses on the lessee’s ability to generate cash flow from business operations to service the lease payment, rather than on the balance sheet or past credit history. SMEs being lessee derive also tax advantages since the ownership of the asset remains by the lessor. Leasing services are available at banks, leasing companies, equipment producers or suppliers and non-bank financial institutions.

Tailored financial services for E&RE:

Carbon Finance is a funding opportunity that helps reducing pollution and greenhouse gas (GHG) emissions by investing in renewable energy or energy efficiency improvements. Carbon projects have become increasingly important since the implementation of the Clean Development Mechanism (CDM) under the Kyoto Protocol. The CDM encourages energy conservation and the adoption of renewable energy by issuing certificates for verified and recorded emissions reductions ("Certified Emissions Reductions (CER)") that can be sold to governments, large-scale companies and carbon funds to meet project investment costs or enhance project revenues.

In order to be eligible for certification, emissions reduction projects have to be registered in advance in the CDM Designated National Authority. One important factor in realizing carbon value is the requirement of "additionality", which implies that the project must demonstrate that it is additional to market activity that would have occurred anyway. Then, only after completing the project cycle, CERs can be issued and later on sold to international governments or companies wishing to compensate their emissions with emissions reductions. In order to close the financial gap during project development, international funds increasingly provide up-front funding for carbon projects.

Carbon finance is a suitable financing tool especially for renewable energy projects, such as wind, solar, small hydro, biomass, and biogas. Projects have also been developed for a wide variety of other emissions reductions, such as reforestation, fuel switching, carbon capture and storage, and energy efficiency. Despite their emissions reductions potential, up to now just a small portion of emission reduction credits stems from energy efficiency projects, even fewer from small and end-use energy efficiency measures. Small-scale community-based or SMEs' CDM projects could be bundled in order to be cost effective and sufficiently attractive with CER revenues. After all, the impact of additional project revenues through CERs can be significant for small-scale projects and may be able to substitute for early stage development capital.

Ammar , do you want to include anything here in this section linked to the training on CDM that IHT conducted?

Institutional funding:

Grants are financial contributions provided by governments, development financial institutions, and international organizations directly to SMEs for the development, purchase, or implementation of certain technologies. The technologies funded under the grant scheme are generally specified in advance, as well as requirements that have to be met in order to be eligible for funding. By covering the costs incurred by the applicant, grants aim at facilitating investments in resource and energy efficient technologies. Grants are often program based and have a limited duration.

Tax incentives seek to give special conditions to SMEs to boost the purchase of specified E&RE equipment and technologies. Similar to grants, tax relief increases returns for SMEs by decreasing costs associated with taxation. Accompanying costs of equipment purchasing are indirectly lowered which boosts demand and encourages more SMEs to invest in equipment and machinery for cleaner production. There are different ways in which tax incentives can promote investment in energy and resource efficiency:

1. Tax Deductions and Reductions

   By taking advantages of tax deduction incentives, SMEs are allowed to deduct some or all of the investment costs in E&RE technologies from their annual profits. The savings accrued to the SME are equivalent to the amount of tax the company would have otherwise paid.
   When talking about tax reduction incentive, taxes paid on the purchase of equipment, such as value-added tax or import duties, are reduced, or remitted. Reduction of import duties can be significant, as domestic sources of E&RE technology may be limited, and standard duties on imported equipment may be a substantial barrier to their use.

2. Accelerated Depreciation Please check if this applies for the Pakistani context

   These types of incentives allow SMEs to more rapidly depreciate the costs of their investments in E&RE technologies. A company's taxable income is reduced during the depreciable life of the equipment purchased, so that turnover of the capital stock is facilitated for new cleaner technology compared to conventional technologies. Additionally, closing of out-dated equipment and machinery is incentivized.

3. Tax Credits

   Tax credit systems allow SMEs to reduce their total tax liability by some or all of the cost of an investment in E&RE. Tax credits typically generate more savings to SMEs than tax deductions or accelerated depreciation, because they represent an absolute reduction in the amount of taxes paid, while tax deductions and accelerated depreciation only reduce the amount of taxable profit and therefore reduce taxes only by a percentage of the cost of the investment.

Loan guarantee is a financial product available to SMEs for a charge as a partial substitute for collateral and track records. It serves as a security to the bank that the guarantor will (fully or partly) assume the debtor's loan obligation in the case of default.
Typically, E&RE projects are denied credit because of high-perceived credit risk on the part of the banks. The role of a guarantee is to mobilize domestic lending for such projects by sharing in the credit risk.
Guarantee funds may be issued by state-owned or commercial SME loan guarantee agencies, by national development banks as well as independent agencies. Furthermore, companies, commercial banks, and international organizations increasingly engage in providing guarantees to SMEs ("enterprise-oriented

guarantee”). Loans, however, may be guaranteed as well from non-governmental institutions or microfinance institutions (“institution-oriented guarantee”).

In terms of guarantee delivery, two schemes can be distinguished for guarantee funds. Under the individual guarantee scheme, each client is screened, evaluated and eventually approved by the guarantor. Whilst, a portfolio guarantee scheme pools individual clients providing banks a guarantee for the group of clients.

Guarantees are usually partial which means they cover about 50 to 80 percent of the loan value. The fee paid by the loan recipient to the guarantor typically amounts to 1 to 3 percent of the total outstanding balance of the loan and is paid semi-annually or annually.

Generally, guarantee funds support to entrepreneurs should be merely temporary. By the time the guaranteed loan is repaid, the entrepreneur should have built up the necessary track records and collateral to access financing without further help.

Supporting non-financial services:

E&RE-Network can be defined as “inter-organisational collaborations between more than two actors that follow a certain sustainable objective” (Kirschten, 2002) – act as effective catalysts to increase E&RE in SMEs by facilitating capacity building, technology innovation and access to finance.

Networks engage in **capacity building** for E&RE by raising awareness for and providing information on both issues and showing up possible solutions. Networks help to find and understand solutions by engaging different members in discussions and encouraging the exchange of experiences, both successful and unsuccessful. The cooperation between network members is essential for sustainable learning. Training courses and workshops offered by networks contribute greatly to the creation of capacity of E&RE within SMEs. External coaches and experts, which would be too costly to hire for a single company can be brought to the whole network. Capacity building addresses processes within the production phase, but also those activities aim to improve the use of products.

To address the issue of **technology innovation**, networks support SMEs to see and understand which technologies are needed, available, or beneficial to develop. By bringing together experts and different stakeholders from inside and outside the network, technology innovation is fostered. With high levels of cooperation, networks themselves can develop important technologies for E&RE. By establishing a coordinated division of labour, partners can focus on their core activities and increase overall efficiency. Products can be optimised by jointly developing new designs and new value adding models.

Networks can also support SMEs in gaining **access to finance**. By providing information on financial services, which are available for SMEs, they help overcome one main barrier. Additionally, networks can provide help and advice in meeting criteria of financial institutions, which would otherwise be too challenging for SMEs. Finally, networks can establish a direct link between financial institutions and SMEs and create trust and cooperation.

Do you have anything additional to include here?

Third part

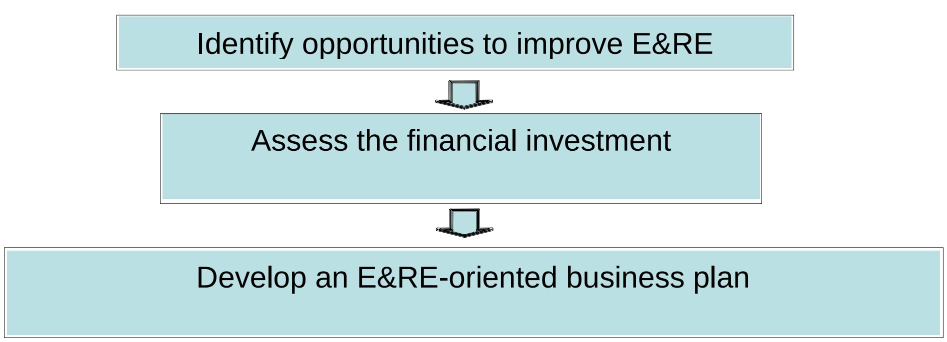
Approaching financial institutions to get A2F for E&RE

This section provides indications to SMEs to increase the likelihood of success when carrying out procedures to access to financial resources for E&RE uptakes. This part is divided in two sections. First, a general explanation on how to integrate the E&RE benefits for debt financing, equity financing, and other finance instruments (leasing and factoring) will be given. Secondly, extra recomendations for SMEs related to „tailored financial instruments for E&RE“ and „institutional funding and support instruments“ will be also presented.

1. *Integrating E&RE when applying to financial instruments*

Financial institutions and investors who offer debt financing, equity financing, leasing and factoring instruments are mainly interested in doing business with SMEs that show operational and market consistency and of course lower risk of default. Basically, to succed in getting financial resources, SMEs need to communicate to financial institutions the business case of E&RE by showing them the competitive advantages of implementing E&RE strategies in their operations (see introduction).

Venture capital funds address young SMEs' lack of capital and expertise and therefore are especially suited to support the development of E&RE technology by taking it from research and development phase to demonstration phase.



- *Identify opportunities to improve E&RE*: A way to do this assessment analysis could be:
    - Carry out an inventory of the appliances, equipment, and facilities. Assess the quantity of energy (Kw/h) and resources (water, other inputs) needed in specific time basis (a day, a week, a month).
    - Screen out E&RE appliances and equipment in the local or foreign markets and compare the costs that could be saved in the same time basis, if those equipments would be applied operationally.

> *The SME may still be unable to access conventional debt financing for a lack of equity. Mezzanine debt can fill this gap, lowering the bank's equity requirement while allowing the project developer to preserve ownership interests in their project or company.*

- Define your priorities by giving relevance to investments or upgrades that reflect major cost savings due to E&RE improvements in the middle and long-term.

- *Assess the financial investment* required to acquire the assets prioritized.
    - What is the acquisition cost of the assest?
    - How much money is available in the company and how much is needed to leverage the purchase?
    - Make a comparative analyis of the future operational cash flows with the current assets and the E&RE assets and conclude whether they can cover paybacks or satisfy investors expectations.

> Besides the tax advantages of accessing to equimpent through leasing contracts, designing E&RE programs based on this instrument could also give you the opportunity of transforming the technological components of your SME more often, always acquiring the most E&RE technologies available in the market.

- Develop a ***E&RE-oriented business plan*** to capture the attention of the financial institution or investor. Regardless the instrument offered by financial institutions and investors, these actors commonly want to see the business plan of the enterprise when assessing applications. Before writing the business plan, pay attention to the following issues:
    - Investors and financial institutions base their financing decision on the expectation that the investment will bring about positive process, organizational and market impacts, which of course will be reflected in cost reductions and revenues increases.
    - Therefore, you can present your business plan as a „*target-performance comparison*" document. It, of course will keep the format of a traditional business plan, but addittionaly will highlight the expected improvements of the business if finance resources are awared.
    - Depending on the expected impact of your E&RE investment, you can give more weight to some parts of the business plan than to others. Here three different examples: if the investment is mostly related to equipment machinery, you might need to focus more on the section production process; or if you plan is to buy new vehicles to transport your finalized products, you will have to highlight marketing strategies (Promotion and sell of your product/service through commercializing channels); or finally, if you just plan to upgrade your operational facilities, then the expected impact will be reflected mainly in the administrative cost strategies.
    - However, regardless of the field of relevance for the E&RE investment, try to present all the sections of the document in a way that they will emphasize direct or indirect positive impacts of the action.
    - Talk the language of financial institutions and investors. Most of the time, they pay attention to the financial statements when assessing applications for the instruments. All qualitative explanations given in other sections of the document will need to be reflected in the financial statements through projections showing the cost saving benefits or other economic gains after the implementation of the E&RE strategy.

The following is a suggestion of a business plan format. It provides guidelines and relevant aspects to take into account when it comes to communicate to investors the benefits of an envisioned E&RE-business.

The E&RE- business plan: Highlighting the advantages of E&RE for your business

a. **Executive summary:** Resume in 1 ½ pages the overall business plan. Essential here is to highlighting the fact that the implementation of energy and resource efficiency (E&RE) strategies[6] will represent a competitive advantage for your business. Notice that the document will present a qualitative explanation on how E&RE can increase the value of your enterprise and also the way in which this will be reflected in the financial statements of the company in the future.

b. **Concept of the business:** Mention the idea on which your business is based (is it a product, a service, a mix of both of them?) Highlight the main characteristics of your *business model*:

   → Value Proposition: How is the company creating value to different stakeholders? What are the opportunities to improve this value through your product, process, and operations once E&RE strategies are implemented?

   → Supply Chain Innovation: When interacting with actors at different stages of your supply chain, take into consideration possible alternatives, strategies, or activities after the implementation of the E&RE investment? How does the delivery system of your product or service occur and how will be improved through the E&RE investment?;

   → Target Customers: Whom are you going to approach with your offer and how? What is the geographical coverage of the business? To which extent will the E&RE strategies, you are applying for, affect your customers?

c. **Mission and Vision:** Mention the "reason to be" of your enterprise by pointing out its contribution to economic, environment and social sustainability. In other words, the future that you imagine for your company. Also, highlight the market and sustainability goals that you want to achieve in three, five, ten, and/or twenty years.

d. **The team:** Financial institutions and investors pay a lot of attention to the people behind the business. Therefore highlight: the experience of the management team in the business, success achieved, academic background and formation, motivational factors to make the enterprise economically, environmentally and socially sustainable.

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[6] To the strategies belong mainly technological innovation (technologies and techniques) capacity building measures, stakeholder engagement measures.

e. **Concept of the product and service:** Describe the reasons why your product or service can be considered more successful in the market and also sustainable[7] after having implemented E&RE strategies. Likewise, explain the physical characteristics[8] of it and explain how it contributes to satisfying the customer's/beneficiaries' need. What aspects need the consumer consider when using the product? How can it be re-used, recycled, or disposed? Does the enterprise count with recycling and management of products after their life cycle?

   Also important: what is the added value that your E&RE strategy brings about in comparison to the current status quo?

f. **Market analysis:** Quantitative and qualitative information is needed in this section.

   → **Quantitative:** According to their size (micro, small, medium and large) list enterprises making up the sector, in the country; number of companies operating from a geographic focus (local, regional, national); annual turnover of the whole sector in the last three years in local currency (domestic and international); volume of product units sold in the last three years (national and international); what has been the creation or retirement rate of enterprises in the last three years?

   Also important (impact): what is the number of people/beneficiaries impacted with the E&RE strategy? Here it is important to formulate the argument in a way that you can show the investor that (s)he will have also a positive reputational impact before his/her stakeholders due to support of your E&RE initiaitve

   → **Qualitative:** What have been the achievements of other enterprise operating in the sector in E&RE terms? Which sectors along your supply chain influence your business development? and What are the main reasons why enterprises are willing to enter the market or leave it?

   Name and describe the companies that compete in the market with products and services with similar characteristics according to: characteristics of the product or

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[7] Sustainable products and services are characterized by being designed in a way that represents more value to costumers, made out of low-energy and resource intensive raw materials and produced based on an E&RE process; it can be used and reused as many times having a long life span.

[8] If the product comprises packaging, Name the physical reasons why the packaging of your product is an environmentally friendly product (reasons such as low use of the material, use of inks that can be removed and subsequently treated, the possibility of recycling or reuse by supporting her functionality, low water and energy use for production and recycling process).

service, added value to the consumer, price, why has positioned itself in the market. List the three major competing brands: Describe their pattern of sales and distribution companies (channels used). How does the production process of those companies look like? What is their financial capacity? What is the proportion of the market that they cover? How can your enterprise be distinguished from them after the E&RE strategy and how does it represent a competitive advantage?

→ Technological innovations: Name the major and outstanding technological innovations or techniques that exist in the sector in terms of (list at least three for each category): product/service, production processes, organizational processes. In addition, explain how the E&RE strategy will help to close the gap between the current state of your enterprise and the competitors for each category.

g. Definition of the fraction market and sales volume: Present numerically the current fraction market on which your business focus and compare it with the expected one after the E&RE investment strategy.

h. Marketing strategies: Briefly, you just need to describe how you will develop marketing actions and the aspects that will contribute to improve the effectiveness of them when applying the investment. Focus on the following fields:
   → Promotion and sell of your product/service through commercializing channels
   → Definition of price
   → Acquisition of raw materials and relevant inputs for the production process
   → Provision of customer service that fulfills what the marketing promises

i. Production strategy: Describe the entire production process without using technisisms. List the necessary resources for carrying out the production process: materials, human knowledge, technologies, and physical space. List the main activities of the operational process and explain how the E&RE strategy would augment productivity and therefore reduce operational costs. If possible, present this information numerically.
   Likewise, try to project the kind of, and how much waste is generated and therefore minimized through the E&RE initiative during the production/development, distribution, consumption and disposal processes of the product/service (solid, liquid, gas).

j. **Administrative strategy:** Besides organizational issues such as structure, legal and tax issues, give specific focus to the potential cost savings of implementing the E&RE initiative when expanding and upgrading facilities or acquiring efficient appliances. You can also remark that the E&RE initiative produces also positive effects on the strategy of personal management, as it is expected that the personnel will increase its productivity and motivation at work place due to the improvements.

k. **Financial strategy:** Calculate the cost savings and expected monetary gains achieved after the implementation of the E&RE strategy. Basically, present the last three years financial performance of the business and project the financial statements (balance sheet, income statement, cash-flow statement) for the next years time. Of course, if the E&RE initiative attempts the building of new facilities the expected benefits are also envisaged to be achieved in the long-term. Differently, if the initiative focuses on appliances purchases or equipment.

l. **SWOT Analysis:** Describe the strengths, weaknesses, opportunities, and threats around the company, its operations, and relations with stakeholders after the E&RE initiative. Remember that strengths and weaknesses refer to situations within your company and within your control, whereas opportunities and threats are external factors.

2. Make the application

And approach the investor…Gather the necessary documents for the loan application. Financial institutions require similar type of documentation to evaluate your loan application. They need documentation of the SME in order to assess mainly the business operations risks and its feasibility in the market, as well as the credit worthiness. These documents are:

- Satutory documents: business registration, business licence of operation
- Financial & management documents: 2 to 3 years audited accounts (certified), disclosure of all borrowings with other FIs (statement of loans repayments), business & cash flow projections (at least for the time span of the loan contract), major suppliers and buyers list, list of business creditors and debtors.

- Collateral documents: copy of relevant sale & purchase agreements (completed and potential contracts), documents showing proof of ownership of assets.

Character, Capacity, Conditions, Capital and Collateral are factors for success that banks and other financial institutions consider when assessing loan applications.

Character: Normally, lenders start analysing whether the SME board is willing and has the expected worthiness to repay the loan. Aspects such as business experience, educational background and payment history will be assessed and considered as an indicator of creditworthiness.

Capacity: Lenders like banks want to be sure that you are financially able to meet loan payments. Lenders will analyse the SME's financial performance in the past by assessing financial statement and also the projected ones in order to define whether the SME can accomplish the paybacks.

Conditions: They are factors related to the intended purpose and scope of the loan. Why and for what reasons do you need the requested amount? What are the expected impacts of the requested resources on your business? Keep in mind that there will be some questions that lenders will ask you during the appliction process. Likewise, external factors such as macro- and sectorial performance will influence the approval decision process.

Capital: Lenders want to make sure that borrowers are commited with the business. An indicator to prove this, it is the amount of money invested by the SME owners. For that, the debt-to-equity ratio is commonly used. Depending on this, lenders can also estimate how much risk is the entrepreneur willing to take.

Collateral: it is considered by lenders as a form of security in order to avoid the risk of loan default. Institutional programmes offer guarantee services for those SMEs that lack of collateral.

Adapted from: Agency for SME Development, Ministry of Planning and Investment of Vietnam

Annex 1

Presentation of the business model

→ Value Proposition

Your business proposal needs to be viable. Your product/service will succeed if it creates value. For your value creation check you should take the most common target groups (stakeholders) into account in order to see how they will be affected:

- Nature: Can your product/service have a positive impact on the environment, or does it dramatically reduce the negative environmental impact?
- Customer: Does your product/service fulfil the customers' needs with functional products/services? Is it more attractive than those offered by your competitors?
- Community: Does your product/service include social benefits? Examples of social benefits can be improved access to infrastructure services, reducing waste, eliminating health-damaging pollution and generation of employment etc.
- Suppliers: Do your business strategies contribute to improving your suppliers' own offering and expand their business?

It also has to be taken into account that the more stakeholders your product/service creates value for, the stronger your network will be. The stronger your network is, the easier it will be to find an investor who is interested in your business.

→ Supply Chain Innovation

Improving the processes along your supply chain, along with the relationships with different stakeholders who play a role in it, can offer great opportunities for success in the market and also allow you to save money. Innovating your supply chain means considering alternatives in order to make the different processes at every stage of the lifecycle of your product/service more energy and resource efficient. Take into account the following aspects to achieve innovations along your supply chain:

- Get in touch with suppliers of raw materials produced sustainably.
- Make a balance between price and quantity of raw materials acquired. Sometimes savings because of price offers lead you to over-purchasing and therefore increase storage or transport costs.

- Consider and reconsider the most efficient way to deliver your concept to your customers. Ask yourself:
  - How am I selling it? For instances, what is the best option form a business.: an online platform, a “point of sale” local, or maybe using a network of sellers?
  - When do I sell it? Should I produce and then sell or on the contrary, should I receive the order, sell, and produce afterwards?
- What additional services can be further offered to the customers after they’ve purchased the product/services?; for example:
  - Help them to use the products properly.
  - Help them to get rid of the products once they no longer works, by either collecting their used products (that you can fix and sell again) or make sure that the products are appropriately recycled or disposed of.
  - Keep in touch with them and listen to their complaints and ideas.

→ Target Customers

When making the business plan it is important to decide whom you want to sell the product/service to. The more specific you are, the better will your strategies be. As it is recommendable to be specific, it makes also sense to design your product/service so that it can be adapted to other target groups as well. For example if you choose to produce a series of ladies’ handbags made of recycled materials, you can consider using the same materials and similar designs for making backpacks for university students or suitcases for business-men.

Conclusion

Taking into account the complexity of instruments and procedures necessary to plan and implement E&RE solutions, it appears clear that SMEs are often not engaging in the implementation of such environmental projects because of several financial constrains, basically the access to finance resources. Daily, SMEs carry out their in-house operations without being aware of the untapped possibilities that these activies imply in terms of uptaking E&RE initiatives. Lack of awareness of fnancial services; resource constraints including financial, time and personnel; inappropriate tools and techniques and a lack of skills; lack of guidance and support on how to adopt E&RE solutions, all constitute significant hindrances for SMEs.

Nonetheless, the financial burden is one of the most difficult to overcome as SMEs need to design and implement operational strategies in the short-, middle- and long-term to uptake E&RE solutions. This from a business point of view entails the definite planning of economic short-term commitments to cover production and administrative expenditures, the arrangementn of middle-term costs and profits, and the setting up of long-term investements. Specifically, E&RE often involved high initial investments and long-term returns. Consequently, it seems to be crucial for SMEs to clearly understand which financial products are available and which best suit their needs.

This booklet has been thought as a practical guide that will help Asian SMEs concering the uptaking of E&RE along their entire operational chain. First, a description on how SMEs can include E&RE solutions into their in-house operations has been presented. Secondly, economic considerations have been taken into account thorough SMEs lenses. Third, due the complexity of application procedures for financial loans, an entire section has been devoted to the explanation of tailored financial instruments for E&RE solutions. Furthermore, advices on procedures that SMEs should follow in order to be successful when carrying out such applications have been put forward.

What has emerged from the analysis is not a lack of financial instruments for uptaking E&RE projects, but rather a lack of awarness from SMEs side of the financial services available, and on how to access and best employ them. Accordingly, providing indications to SMEs would increase the likelihood of a significant uptaking of E&RE in Asian SMEs clusters. Hopefully, this booklet will contribute by helping SMEs in augmenting their knowledge and skills concering customized financial instruments for E&RE solutions.

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