CHAPTER 11

CLIMATE-SMART ENTERPRISE DEVELOPMENT AND THE ROLE OF SMALL AND MEDIUM-SIZED ENTERPRISES

A. Issues

Despite the apparent impact of climate change as well as the urgent need to adopt and implement CSTs and related initiatives, many SMEs do not consider climate change to be an immediate concern. Therefore, they do not have any form of low-carbon strategy at present, unless they are an energy-intensive business or wish to present a clean and green image. Yet climate change offers many opportunities for SMEs and start-up enterprises to increase their competitiveness, both in the domestic market and overseas, by developing unique and innovative CSGTs. Such indifference could be due to one or more of the following three reasons: (a) the presence of other immediate business concerns; (b) no requirement demanded or imposed by their clients with regard to undertaking strategic moves to go clean and green; and (c) going clean and green is deemed to be a costly affair (Lee, 2010). In addition, in the absence of clear and stricter government regulations, many SMEs do not have any incentive to adopt “green” business practices (Harris, 2010).

Given the breadth and diversity of the millions of SMEs across the Asia-Pacific region, it is impossible to say whether climate change factors would indeed drive costs up. While it is true that there would be an ever-increasing rise in costs for inputs such as fossil fuels, there may well be cost savings when new CSTs are made available on a wider basis (World Bank, 2010). It is also true that there may be a rise in costs due to compliance with new “green” regulations but, equally, governments may also provide financial incentives for SMEs to reduce their carbon footprint and implement best practice models (e.g. in the form of industry grants to purchase energy-efficient process equipment and make the necessary adaptations to building facilities). Timely attention to these matters in strategic management would help SMEs to ensure long-term competitiveness and turn them into business leaders (ESCAP, 2008).

In any case, enterprises can no longer ignore the need for a commitment to balancing environmental and financial performances. More critically, climate change poses a genuine threat, especially to SMEs, when taking into consideration the fact that these smaller enterprises are, by and large, less well-equipped than large enterprises, including TNCs, and do not have the necessary financial muscle and technology know-how to meet the requirements of a clean and green economy. However, by virtue of their smaller size, SMEs can be quicker and more flexible in their responses than larger companies. Promoting innovation and quick adoption of CSTs would enhance the competitiveness of SMEs (Keong and Mei, 2010). Furthermore, the adoption of “green” practices does not have to be expensive. It is not always a matter of just adopting CSTs but also an issue of “good housekeeping” and being energy-efficient.
Enterprises that anticipate government regulations, and adopt climate-smart practices and technologies, are likely to emerge as stronger competitors and business leaders in the longer term.

Another reason why SMEs should adopt climate-smart strategies is the rising awareness, both among their immediate customers (such as TNCs and other large enterprises) and end-consumers (i.e. the public), of the impact that products have on the environment in general, and on global warming in particular. As demand for “green” products is rising and becoming more sophisticated, TNCs are responding with implementing their own eco-labels. As TNCs are often important customers of SMEs, these enterprises feel compelled to follow suit and adapt their products and processes to meet the new quality requirements. Even when SMEs sell directly to the public, more sophisticated and environmentally-aware consumers will drive a similar process. Such consumers are likely to recommend and spread the word about businesses that have a reduced carbon footprint, engage in clean and green practices, supply environmentally-friendly products and otherwise practice the principles of CSR.

More importantly, more sophisticated end-consumers are willing to spend a little extra or, in some cases, much more in order to obtain climate-smart goods and services as well as purchase from clean and green businesses. This process is driving the emergence of climate-smart and “green” global value chains, led by TNCs that derive their competitiveness from adopting climate-smart business practices and producing CSGTs, and which demand a similar approach from their suppliers all through the value chain (see chapter 7).

There can be no doubt that climate change does offer the prospect of numerous new business opportunities. At the same time, the prime issue facing businesses, big or small, is the direct and indirect impact of new legislation that may be passed by their governments. Ultimately, businesses – including SMEs – will have to adapt to the new legislative regime or risk exposure to higher operating costs. Businesses that adapt early will find the cost of changing operating practices manageable, compared with acting later. For example, if and when a particular government imposes a levy to improve energy efficiency, SMEs with significant energy inputs to their production process will face greater exposure to the impact of higher pricing. If their competitors (in other countries that do not impose a similar levy) do not face similar cost increases, the operations of these SMEs will be severely affected. This will result in the cost of compliance being passed down from buyers to sellers (and from large to small enterprises) throughout the value chain, ultimately affecting every entity in the chain. All businesses will then be affected by such regulatory measures in response to climate

115 A good example of helping SMEs adopt climate-smart practices to be effective suppliers in global value chains is the assistance provided by Better Factories Cambodia, an International Labour Organization programme for garment factories in Cambodia, to make them more energy efficient. The assistance is provided in cooperation with the Garment Manufacturers Association of Cambodia (GMAC) and the International Finance Corporation (IFC). The first step was the conducting of a benchmarking survey of energy performance in the Cambodian garment manufacturing sector (survey results available at www.betterfactories.org/content/documents/1/Energy%20Performance%20in%20the%20Cambodia%20Garment%20Sector.pdf).
change. However, those businesses that pre-empt and anticipate such legislation by adopting RE or energy efficiency practices at an early stage may well be in a better position to compete. In addition, some studies have shown that RE and energy efficiency creates more jobs per unit of energy than fossil fuel (Copenhagen Climate Council, 2009). As SMEs are principal providers of employment in any given economy, the contribution of SMEs to “green” job creation is also potentially substantial.

A practical way for SMEs to achieve energy efficiency and conservation apart from “good housekeeping” is through the adoption and utilization of CSTs. Many SMEs perceive CSTs to be expensive and only practical for larger enterprises, in particular TNCs. In fact, many larger companies and corporations have already begun to assess, through application of CSTs, ways to reduce their energy consumption and thereby reducing their overall costs of doing business (Australian Information Industry Association, 2009).

Although recycling technologies and other clean and green innovations are often too costly and price-prohibitive for SMEs, inventive products and new production techniques together with government support have made it achievable and cost-effective for SMEs and micro-enterprises to adopt clean and green production processes. It is therefore expected that more SMEs will follow suit sooner or later, even if it means that the initial investment in CSTs may lead to higher initial costs. One way to create synergies is to create eco-industrial parks linking larger enterprises with SMEs. SMEs could use waste from one production facility as a production input for another facility – and even to capture heat for energy for the whole park. This way they can also produce their energy locally from biogas, rather than electricity from the mains supply.

All businesses will be affected by climate change in one way or another, and they should factor such impacts into their risk planning. In the manufacturing and energy sectors, it is anticipated that economic competitiveness will increasingly be determined by carbon intensity and resource efficiency. Responses by governments, civil society and businesses will affect the way businesses operate in the future.\textsuperscript{116}

### B. Policy recommendations

Virtually all developing Asia-Pacific economies support their SMEs in one way or another, including through financial assistance (not only by improving SME access to funding, but also by lowering the cost of finance) and through assistance in the form of training for workers and entrepreneurs, technology extension services, marketing assistance and business development services. However, Asia-Pacific economies do feel a compelling need to provide critical support to their SMEs in overcoming key barriers for their transition towards a green and climate-smart economy. Often, businesses rather than governments help create environmental awareness of other businesses and strengthen their competitiveness in CSGTs. One example is Singapore (box II.13).

In addition to current initiatives, the following additional initiatives could be considered for promoting climate-smart business development, particularly SME development. These initiatives, which are part of wider efforts aimed at the “greening” of business in general, include:

(a) Promoting climate-smart entrepreneurship and providing comprehensive support to new and promising climate-smart SMEs through incubation programmes. Governments could strengthen an enabling “green business environment for promoting entrepreneurship and firm creation, i.e. for businesses oriented towards green innovation and development and application of CSTs. Policies should aim at minimizing entry barriers and exit-market costs and setting up “green” business incubator programmes, which are already being implemented in Western markets, such as Europe (Business Green, 2011). As the term suggests, incubator programmes\(^{117}\) are designed to help

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\(^{117}\) Not every young enterprise/SME, particularly in Asia, prefers to be attached to clusters or incubators, despite the apparent economies-of-scale and value-added inputs that may available. This may be because, in being located so close to other firms of a similar type, a high staff turnover rate or the risk of commercially sensitive information leaking out in common areas are more likely.
young enterprises/SMEs make it through the first but yet critical stages of business development, as they seek to graduate to the level of a sustainable business. Once new firms are formed, it is important to raise their awareness of climate-smart business opportunities, and available CSGTs and climate-smart services by connecting them to existing knowledge networks. Such a move would strengthen the overall role of SMEs in the low-carbon economy – either as end-users, producers, innovators, and/or integrators of skills and technologies;

(b) Linking climate-smart TNCs with domestic enterprises through SME integration into regional and global value chains, and the formation of industry clusters. It is important to forge linkages between climate-smart TNCs and domestic SMEs as local suppliers and subcontractors of parts and components for climate-smart production processes or assembly of final products. The challenge is that many domestic SMEs may not have the required capacity; however, a successful link with a climate-smart TNC may go a long way in developing such capacity. The goal is to integrate domestic SMEs into regional and global climate-smart value chains. This goal can be achieved through substantive enterprise development policies (see below) that are closely linked and coordinated with investment (and trade) policies. In this regard, the SEZs mentioned in chapter 7 can also contribute to this goal to the extent that domestic SMEs are located and integrated in such zones.

A related policy is the establishment of industry clusters consisting of SMEs working in industries that are either supporting or related to climate-smart TNCs. SEZs or CleanTech parks are useful modalities for setting up industry clusters, which can be quite sophisticated, bringing together manufacturers, suppliers and R&D centres. The relationship can also work in reverse. In China, for example, leading domestic companies producing wind power turbines in the Binhai New Area, near Tianjin, have been able to attract foreign investors in parts and components as well as domestic suppliers.\(^{118}\) A CleanTech park exists in Singapore. The integration of domestic enterprises into climate-smart value chains is both an enterprise development policy from the domestic SME perspective and an investment policy from the foreign investor’s perspective, as the availability of local suppliers is a major determinant of climate-smart FDI (particularly the efficiency- and market-seeking types);

(c) Enforcing consistent and predictable climate-smart rules and regulations. Governments should take proactive action to put clean and green-driven growth on a level-playing field with conventional growth through the implementation and enforcement of appropriate “green” legislation. Not only would such legislation send out unambiguous market signals, which are essential to the creation of market certainty for businesses to plan their long-term investments, it would also provide clear directions and incentives for potential new market entrants. In general, regulatory reforms and standards can strengthen emerging

\(^{118}\) See UNCTAD, 2010 (box IV.11).
green markets and open new ones. Policies should aim at removing barriers to SMEs’ participation in expanding global and regional green markets, and value chains;

(d) Establishing climate-smart government procurement schemes for SMEs. For example, India procurement rules stipulate that certain goods must be purchased from SMEs even if prices are up to 15 per cent higher than those offered by the competition (WSP Group plc, 2010);

(e) Improving access to credit for climate-smart SMEs. Adequate access to credit is a chronic problem for SMEs in general and even more so for those that adopt green practices or want to produce green products, as their track record in this area is often even worse and the risks are high. However, the availability of credit allows firms, especially SMEs, to seize opportunities provided by technologies and innovation. In this regard, governments – either directly or through their SME development banks – could provide special tax incentives or financial assistance to those SMEs investing in CSGTs. They could also provide credit guarantees for bank loans.

Many governments, given their potential for overcoming the lack of collateral among SMEs, have normally supported credit guarantee schemes (ADB, 2009c). The attraction of foreign venture capital funds and the development of government-backed domestic ones is also useful in mobilizing risk capital for investment in climate-smart SMEs. Many countries of the region provide financial assistance to climate-smart enterprises, particularly those investing in the RE sector. India, Malaysia and the Republic of Korea are among Asian countries that have special financial incentive schemes for “clean” SMEs;

(f) Providing climate-smart technology support (see chapter 10). Businesses are key players in the process of structural transformation (i.e. the process through which an economy engaged in the production of traditional, low value-added and low productivity goods and services, moves to producing a more diverse set of modern, high-productivity and greater value-added goods and services). After all, it is firms that undertake production and make decisions on modifying fabrication processes, improving product qualities, constructing new products, applying new marketing methods and tapping new markets.

These decisions are deeply interconnected with issues of technological capability and incentives to invest in innovative efforts. Limited technological capability and a lack of information on markets and products are key constraints for SMEs. In the Asia-Pacific region, most governments have put in place a variety of programmes and services to help their SMEs improve their knowledge about, and gain access to promising technologies, production methods and markets (including export markets) (ADB, 2009c). In some cases, governments have also subsidized the development of low-cost production technologies for use by smaller enterprises;
(g) Promoting climate-smart human resources development. Of course, a properly educated and trained workforce would be critical to helping SMEs make the transition to climate-smart activities and production methods relatively easily. In this regard, skills development and training policies at the national and industry levels will play a key role in facilitating the structural adjustment required by the transition to climate-smart growth. In particular, there is a need to consolidate the training efforts provided by institutes of higher learning (such as universities and polytechnics) and vocational technical training institutes to address such needs. It is also important that skills development matches the needs of climate-smart enterprises;

(h) Promoting CSR. While the adoption of CSR goes beyond the concept of the climate-smart enterprise, the idea that enterprises should adopt inclusive and sustainable practices, and contribute to inclusive and sustainable development would also mean that enterprises are climate-smart. Short of legislation, governments could encourage enterprises to adopt CSR principles and become a signatory of the global compact that comprises principles on environmentally sustainability as well. The adoption of such principles would not have to lead to higher costs. Instead, it should give businesses a competitive advantage in times when consumer sentiments are changing and consumer awareness of environmental problems is rising. Again, early mover advantages apply.