China is now the world’s second largest importer of oil, making 70% of all kitchen appliances and 50% of the world’s toys and clothes. Together with their other Asian neighbours they produce 75% of footwear, 90% of sporting goods and 80% of all ceramics in the world. Currently, all of the world’s fastest growing economies are in Asia. Therefore, unless we begin to tackle what is happening in this region no amount of environmental protection in Europe and North America is going to save us from a massive environmental crisis.

Clearly, in the Asia-Pacific region there is a need to identify ways to get business to respond to environmental issues in more than a piecemeal way. There is a need to go much further if the region is to develop in a sustainable way and at the same time retain its competitive advantage in the global economy. In much of the European Union, the United States, and to some extent Japan, many companies have adopted an increasingly sophisticated and comprehensive response to environmental issues that has taken them well beyond the compliance requirements defined in national or local legislation (Hills et al. 2004). Some of these are discussed in this special issue. To some extent this needs to be replicated in Asian countries although we must never assume that just because something works in America, for example, it would necessarily work in countries like China, Vietnam or India.

The Asian environment is both complex and diverse, containing a great variety of terrestrial and marine habitats and ecosystems that extend across a number of climatic zones. This environment is under great pressure and is experiencing many threats to its longer-term viability and sustainability. These threats include population growth, continuing rapid urbanization and industrialization, widespread poverty, abuse and mismanagement of natural resources, and inadequate and ineffective institutional structures and laws for environmental protection and resource management. It is a region of great contrasts possessing some of the least densely populated regions in the world and also many of the world’s largest cities. Amid the poverty of much of Asia there are pockets of great affluence with patterns of consumption matching and sometimes exceeding those found in much of the United States and Europe (Hills and Welford 2002).

Asia includes the two most populous countries in the world — China and India — which together account for 38% of the global population. The region’s population grew from 2.17 billion people in 1972 to 3.51 billion in 2000. In the future, the largest increases in population will occur in the relatively poor economies of South Asia where the population is expected to increase from 1,340 million in 1997 to 1,737 million in 2015. Bangladesh, China, India, Indonesia and Pakistan account for one-half of global annual population growth. Most countries have youthful populations. Some 30% of Asia’s population is below 15 years of age (Welford and Hills 2003). Over the period up to 2015 the region’s population is expected to grow by approximately 700 million, despite a significant reduction in population growth rates during this period.

Over the past 30 years, the region has experienced rapid urbanization. Rapid economic growth — particularly in the period up until 1997 — and structural economic change, associated with industrialization and the growth of the service sector, have been powerful factors driving this urbanization process. It has also been underpinned by continuing rural-urban migration as people move into the cities in search of better economic opportunities. The annual rate of growth in the urban population is expected to average of 2.4% between 2001 and 2015. Japan and the Republic of Korea already have urbanization rates in excess of 75%, while in the city-state of Singapore the figure is 100%. Nine of the 17 megacities in the world with populations exceeding 10 million people are in Asia. These include Beijing, Calcutta, Jakarta, Metro Manila, Seoul, Shanghai and Tokyo. By 2015, 20 cities are expected to have a population greater than 5 million (Welford and Hills 2003).

Although there is significant growth in the urban population, the majority of people in Asia still live in rural areas. At mid-2001, the rural population represented 62% of the total population of the region. However, the rate of growth of the rural population is lower than that of the urban population. While many hundreds of millions of Asians will continue to be rural dwellers for decades to come, Asia will nonetheless become an increasingly urbanized society in the future (Welford and Hills 2003).

With this in mind, environmental protection is both urgently needed in the region but at the same time difficult to achieve. Economic growth has traditionally been put before the environment, and increasing people’s living standards and consumption ahead of achieving real sustainable development. Clearly, as a major actor in societies, businesses have a role to play. Indeed, in some cases businesses might have to take a lead because of inept and corrupt leadership within some governments. Businesses need encouragement and incentive to do this however.
There is a need for policy intervention that can encourage and guide companies to search for new innovations in environmentally beneficial directions and help create a self-reinforcing process in which additional research for new technical solutions follow environmental pathways. There are four policy tools that need to be considered:

1. Direct regulation
2. Economic incentives
3. Voluntary initiatives
4. International standards

**Direct Regulation**

It is true that in many countries in the region the state is strong and in a position to show leadership in the field of environmental improvement. However, it often fails to do so, preferring to promote economic growth strategies. Implementation of the existing policy by underpaid and inexperienced regulators leads to their inevitable failure. There is a need to tackle this major shortcoming. That is not to suggest that regulation does not play a role. Indeed, increasing regulation on environmental reporting and disclosure in China and implementing it at a provincial level is showing signs of success.

**Economic Incentives**

The use of economic incentives in the region is underdeveloped. However, there have been some initiatives that, along with command and control regulations, have begun to show benefits. In the People’s Republic of China economic instruments in the form of pollution charges and favourable terms of investment for environmental technology have led to the adoption of better processes and techniques. Implementation of the existing policy by underpaid and inexperienced regulators leads to their inevitable failure. There is a need to tackle this major shortcoming. That is not to suggest that regulation does not play a role. Indeed, increasing regulation on environmental reporting and disclosure in China and implementing it at a provincial level is showing signs of success.

**Voluntary Initiatives**

We must not assume that there has been little development on environmental issues in the region though. Voluntary cleaner production initiatives have existed for some time in Taiwan, Thailand and China. There have been eco-efficiency initiatives in Taiwan and elsewhere promoted by regional offices of the World Business Council for Sustainable Development. Large Japanese companies such as OKI, Asahi, Fuji, Fujitsu and Sumitomo have led the way in establishing zero-emissions plants. Cooperation amongst companies creating a form of industrial ecology can be found in a number of countries. Nokia-Asia has also begun a ‘Factor 4’ initiative.

However, particular attention in the Asia-Pacific region must be placed on the role of small and medium-sized enterprises. Environmental policy, innovation strategies and research and development efforts aimed at this sector need to be particularly strengthened because such companies often dominate certain sectors and their individual pollution contribution can too often go unnoticed. The SME dominates many of the countries in the region but is most significant in China, India, Indonesia, Bangladesh and Pakistan.

**International Standards**

The policies of opening up countries to inward investment have brought with them an increased attention to international standards and best practice. Leading companies from the developed world are also increasingly pushing this down the supply chain, having an impact on those companies that government regulators have been unable to control. As the environment becomes a bigger and bigger issue worldwide so the competitiveness of the region as a whole will be partly determined by their reputation for sound environmental policies and practices. This means that companies are going to want to adhere to the highest international standards in order to get access to markets.

In conclusion, it must be stressed that environmental protection in the Asian region will not be the same as elsewhere. The political context of this region is different and the environmental situation is arguably more acute. The business sector is diverse, often dominated by SMEs and the institutions that have to implement policy are less well developed and weaker. There is a need to find innovative ways to engage the business sector and encourage them to take a lead when other institutions fail.
Endnote

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References

