

**Making FDI Work for  
Sustainable Development**  
(Executive Summary)

United Nations Conference on Trade and Development

and

Sustainable Business Institute  
at the European Business School



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## **Message from the Secretary-General of UNCTAD**

The subject matter of this study is at the heart of two key policy objectives of our times: promoting foreign direct investment (FDI) in developing countries, and achieving sustainable development.

Cross-border environmental management by transnational corporations (TNCs) plays a decisive role in pursuing these objectives. However, this role is perceived in different, and sometimes opposite, ways. Pessimists keep testing the “pollution haven” hypothesis; optimists tend to put a premium on TNCs as a vehicle for promoting environmentally sound technologies and management systems. The truth lies somewhere in-between. The various private and public interests in economic development and environmental protection are far from converging. At the same time, there is no doubt that TNCs have great – and largely unexplored – potential to contribute to sustainable development in “host countries”.

It is important to realize that environmental management is not just about traditional concerns over pollution. It is also about scale. A lot of environmental problems, actual and potential, have to do with the sheer size of TNCs’ operations rather than merely the way they conduct their business. For the developing countries, the issue of environmental protection is also about time, or rather the lack thereof. The pressure of delivering high growth rates and securing FDI means that policy decisions often have to be taken in response to immediate output and employment objectives. The lack of resources and expertise in monitoring and enforcement, and sometimes the inability to work collaboratively with TNCs, adds to the problem.

Cross-border environmental management tends to be seen as a difficult balancing act for TNCs and host countries, an act that requires the right mix of policies and goals in terms of investment, output, job creation and environmental protection. It is nonetheless important not to lose sight of the fact that home countries, too, have

an important role to play through their laws, regulations, policies and guidelines.

Regulatory and ethical considerations are, and always will be, important. However, they are no longer the only major determinants of the interface between FDI and the environment. The focus of attention – and action – has shifted to market-based approaches and measures. Simple strategies of compliance are giving way to eco-performance considerations, a lifecycle approach to products and production processes, and the internalization of environmental costs.

Managing environmental risks has become a standard feature of corporate behaviour as TNCs seek to improve their competitiveness and environmental performance. How responsible – and how successful – are TNCs in cross-border environmental management and the transfer of environmentally sound technologies? What lessons can we learn from their success stories and failures? Does ownership matter? What can policy makers do to accentuate the positive contribution of TNCs and reduce their negative effects? Finding answers to these questions is important if we are to make an assessment, or reassessment, of the approaches that Governments and TNCs take to the links between environment and development.

Since this study focuses on TNCs with a high level of environmental sophistication, the answers are, predictably, optimistic. One can argue that the success stories are too few to allow for generalized conclusions. Be that as it may, taken together with a survey of transborder environmental management practices of TNCs conducted under a parallel project by UNCTAD and the Copenhagen Business School, with financial support from the Danish International Development Agency (DANIDA), the stories do provide useful insights leading to some positive conclusions.

The “greening” of consumption and production is changing the way of life and the way of doing business not just in the industrialized countries, but increasingly in developing countries as well. Consumers are becoming more environmentally conscious. TNCs find considerable competitive advantages in being “green” and are increasingly concerned about their environmental image. Environmental policies and regulations of the command and control

type give way to economically adjusted measures, such as “green” procurement.

There is an enormous potential for improving environmental performance along the supply chain, making full use of the purchasing power of consumers, businesses and the public sector – the latter often being the biggest, and sometimes the only, customer of TNCs. “Supply chain management” makes suppliers part of what can be called the “environmental footprint” of firms. In this case, it is not the ownership that matters, but the creation of “green” business and consumer networks across national borders.

“Greening” the supply chain is a matter of shared responsibility and cooperation. There are encouraging signs of TNCs offering their suppliers in developing countries training courses and supporting them in the implementation of environmental management systems. Expanding this practice could greatly improve the environmental impact of FDI. Cooperation between TNCs and their suppliers in the developing countries is also necessary, if only to ensure that introducing environment-related conditions for suppliers does not erect new barriers to trade or detract from the objectives of setting up environmental management systems.

The efficiency of markets depends on transparency, which is also crucial for environmental performance. Environmental reporting by TNCs – internal and external, voluntary and mandatory – can go a long way towards improving management practices and, in turn, environmental performance. In fact, reporting back to stakeholders creates a strong incentive to improve environmental performance. It also makes it easier for civil society to maintain a spotlight on environmental performance, for instance through awards and publicity, as opposed to more conventional regulatory approaches.

“Best practices” bring life to binding legal and administrative regimes. The examples provided in the study show that while there is a general trend towards managing corporate environmental responsibilities, including reporting, on an international scale, there is no single “best practice” describing how to do that. What constitutes “best practice” in one company or country is not necessarily the best, or even good, for another company with a

different organizational make-up, or in a country with a different environmental profile and priorities.

Although most “best practices” tend to be rather specific, they do provide a point of reference for companies operating in a particular industry and country. They also constitute a good starting point for dialogue between government, industry associations, companies, and civic and professional organizations, dialogue that can do a lot for clarifying and sharing expectations concerning environmental performance in terms of guidelines, codes of conduct and standards. Such voluntary measures can be instrumental in ensuring that the operations of TNCs are in harmony with policies in the “home country”, as well as in building mutual confidence between TNCs and “host countries”.

Whether and under what conditions a particular measure or policy is justified depends on circumstances. The challenge is to find an appropriate policy mix capable of reducing environmental tensions without diminishing the opportunities FDI provides to countries to exploit their competitive advantage. Context-specific analysis is therefore required in each and every case to determine whether a response to environmental concerns will be welfare-enhancing or welfare-reducing. This study deals with the issues that need to be taken into account in this type of analysis.

Since some environmental issues defy economic and political geography, it is only natural that measures at the company level and policy action at the national level are accompanied or driven by international initiatives. The concept of cross-border environmental management has already found its way into international commitments. The best example is the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. There are a vast and growing number of multilateral environmental agreements. Environmental clauses are becoming more and more common in bilateral investment agreements. On top of that, increasingly, international business associations are adopting environmental guidelines.

Some of these initiatives may lead to partnerships that could give a practical meaning to the deliverables of the World Summit on Sustainable Development (WSSD) held in Johannesburg. It is very encouraging that the study – and the project that made it possible – has prompted the “EcoChain Initiative”, launched by the Sustainable Business Institute at the European Business School with the support of the German Federal Environmental Agency and the German Industry Association.

“Promoting sustainable development through investment” was one of the priorities at the Summit. Joint action by corporations, private sector associations, Governments, international organizations and other stakeholders is expected in the following areas:

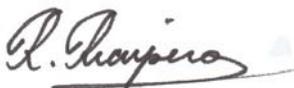
- Exploring ways to ensure that a larger number of developing countries and countries with economies in transition benefit from investment, in particular FDI;
- Promoting the use of environmental management systems in developing countries as well as the transfer of environmentally sound technologies to these countries;
- Encouraging companies to take responsibility for promoting sustainable development by applying best practices and promoting environmentally responsible corporate behaviour and information policies, especially those related to public disclosure procedures;
- Improving environmental performance along the supply chain and in waste management; and
- Exploring the potential role of voluntary guidelines for making investment more broadly supportive of sustainable development.

These recommendations provide a good framework for the EcoChain Initiative, which offers companies an opportunity to “showcase” their best practices and to encourage others to take greater responsibility for sustainable development. With enough support from Governments, businesses, and civic and professional organizations, such an initiative could become a useful extension of the World Summit on Sustainable Development. I would welcome further cooperation with the SBI, other partners in Germany and

other countries with a view to advancing this initiative and giving it a truly international character.

In one of his statements, the Secretary-General of the United Nations spoke of the “environment millennium”, stressing that environmental issues must be fundamentally repositioned in the policy-making and business arenas, that corporations need to recognize that their choices can have significant consequences, and that Governments must not only create environmental agreements but enforce them. I find this study a practical and timely contribution to the ongoing debate on a new era of conservation and stewardship and am grateful to the Government of Germany, in particular the German Federal Environmental Agency, for supporting a project that has made this study possible.

The quality of the study is very much the result of the dedicated work of the SBI and its partners: the Center for Environmentally Sound Technology Transfer in China, the Administrative Staff College in India, the Indo-German Chamber of Commerce and the Centre for Environmental Technologies in Malaysia. I view this partnership as a good foundation for a network of research institutions to promote new and innovative approaches to technological and organizational solutions for the environment, corporate social responsibility and stakeholder relations.



Rubens Ricupero

Secretary-General of UNCTAD

## **Message from Jürgen Trittin and Prof. Dr. Andreas Troge**

Many people consider globalization as key to achieving a high level of development and welfare for all the countries of the world. It is true that there are many opportunities connected with globalization, but there are also quite significant risks. Globalization enables investors and traders to move their capital and to exchange goods and services wherever they choose. But there is the risk of environmental standards being lowered (e.g. to attract foreign investors). To avoid this and to guarantee that globalization will support sustainable development, we need to strengthen our efforts to establish a coherent global, and ecologically responsive, framework of environmental agreements and institutions. The German Government therefore believes that the framework for globalization needs to integrate ecological and social concerns.

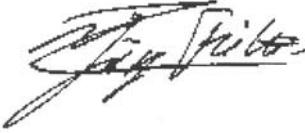
In the field of investment, Governments are seeking to create attractive conditions for business activities. The reduction of tariffs and trade and investment facilitating agreements are good examples. In turn, we also see companies taking on greater responsibility in supporting sustainable development in their foreign investment. We should call on transnational companies to contribute to sustainable development by transferring environmentally sound technologies and using environmental management schemes in all the countries in which they operate, and generally committing themselves to international codes of conduct such as the Guidelines for Multinational Enterprises established by the Organisation for Economic Co-operation and Development (OECD).

This study was commissioned by the German Federal Ministry for the Environment and the German Federal Environmental Agency, in cooperation with the United Nations Conference on Trade and Development (UNCTAD), in 1998. The Sustainable Business Institute at the European Business School was commissioned to undertake empirical research on the practice of environmental management in FDI. The study is based on four company-level case studies which were carried out in cooperation with the following companies: Adtranz, Bosch Siemens Hausgeräte, Aventis Pharma and Burgmann regarding their FDI in China, Malaysia and India.

One of the main results of the study, and an evident one, is that environmental requirements are no obstacle to FDI. On the contrary, environmental management can help develop advantages for front-runners, improve the transfer of environmentally sound technology, “green” the supply chain, minimize environmental risks and raise environmental awareness among consumers and business partners.

Building on this successful study, we initiated a national dialogue process for elaborating guidelines for the integration of environmental aspects into FDI. A working group of representatives from politics, business associations, enterprises, unions and civil society was established to develop operational and voluntary guidance for multinational enterprises in cooperation with UNCTAD and the United Nations Environment Programme (UNEP). The task is to make existing guidelines (such as the OECD Guidelines) and United Nations initiatives (such as the Global Compact and Global Reporting Initiative) more specific by drawing up guidelines for applying best practices when carrying out FDI. Such guidelines would be supported by examples of best practice. The results of the study will feed into the projects and programmes of the various

partnerships established at the World Summit on Sustainable Development in Johannesburg, South Africa in August 2002.



Jürgen Trittin  
Minister for Environment,  
Natural Resources and Nuclear  
Safety



Prof. Dr. Andreas Troge  
President,  
Federal Environmental Agency



# **Integrating environmental requirements into foreign direct investment**

## **Background**

The German Federal Ministry for the Environment and the German Federal Environmental Agency, in cooperation with UNCTAD, commissioned the Sustainable Business Institute at the European Business School to undertake this research project in August 1998. The basic assumption of the project is that FDI can accelerate the diffusion of modern, eco-efficient management know-how, technologies and their spillovers, and thereby contribute to sustainable development. The objective of the study therefore is to identify starting points for an improved integration of environmental considerations into foreign direct investment (FDI) activities from the perspective of German companies investing in developing countries.

The study particularly aims to evaluate the critical success factors in practices of environmental management and communication, as well as in the and diffusion of eco-efficient technologies and management practices. Based on these findings, it will provide recommendations for improved corporate environmental practices in FDI. To examine these questions, based on a review of previous theoretical and empirical work, four company-level case studies were carried out in cooperation with Adtranz-DaimlerChrysler Rail Systems GmbH (Adtranz), Aventis Pharma AG (Aventis), BSH Bosch and Siemens Hausgeräte GmbH (BSH) and Burgmann Dichtungswerke GmbH & Co. KG (Burgmann).

## **Theoretical, empirical and methodological foundations**

### **Globalization and foreign direct investment**

FDI is of special importance for developing countries. Although most of the worldwide FDI flows take place between OECD countries, they accounted for the largest share of capital flows to developing countries in the 1990s. Given that FDI flows, in particular to developing countries, are projected to increase further in the coming decades, while official capital flows (especially aid) are set to fall, it is safe to assume that the nature of the FDI flowing to developing countries will play a significant role in shaping their economies. Since German firms are the third largest investors in developing countries, they have an enormous potential to influence the economic and ecological performance in those countries, not only directly by using modern and environmentally friendly technologies, but also indirectly by providing examples for others to follow.

### **Policy context**

FDI takes place in an institutional context that influences its structure and effects. This context includes:

- International economic agreements and discussions about a multilateral agreement on investment (MIA); the debate shows that worldwide standardization of the treatment of investments and further liberalization (of FDI) is a priority on the political agenda.
- International environmental agreements, especially the Montreal Protocol (1987), the Basel Convention (1989), the results of the United Nations Conference on Environment and Development

(UNCED) in Rio de Janeiro (1992) and the Kyoto Protocol (1997).

- Initiatives on environmental reporting and transparency. Transparency concerning the activities of companies, particularly TNCs, has gained increasing importance. This trend is likely to accelerate in the future. Greater transparency about the activities of companies, and their environmental impact in particular, can be seen as an opportunity for companies: by providing honest and complete information they can gain credibility and improve their dialogue with stakeholders and regulatory authorities. An increasing number of leading companies are already undertaking several voluntary initiatives aimed at greater transparency, which shows that they have recognized the importance of this trend.
- Environmental policy in the home countries of TNCs and the host countries of FDI. A strict environmental policy in the home countries of TNCs can influence the environmental standards such companies use in the host countries. Furthermore, it can give the host countries of FDI valuable information about the conduct of environmental policy. These countries often have fairly modern regulations, but in some cases lack the capacity to enforce them. An exchange of experiences between industrialized and developing countries might also help improve the environmental performance of FDI.

## **Strategies and behaviour of TNCs**

TNCs' behaviour has the most direct influence on the structure and effects of FDI. In managing the environmental problems connected with their activities, many corporations have introduced environmental management systems. Whether the introduction of those systems leads, *a priori*, to a better environmental performance also in the host countries of FDI is not certain; it depends crucially on whether the TNC uses different standards in different countries, or whether it uses an integrated cross-border environmental management policy with company-wide standards, regardless of the location of the plant. This decision of the TNC depends on numerous

factors which may vary from case to case. However, a new empirical study shows that, according to the affiliates of TNCs, the policy of the parent company at headquarters and the local regulatory environment are very important factors in influencing the environmental performance of TNCs and their affiliates (Hansen, 1999 a and b). Similar considerations apply to technology transfer, where many firms face a choice between modern (and more environmentally friendly) or older, and more pollution-intensive, technologies in the host countries.

## **Environmental impacts of FDI**

The discussion about the environmental impacts of FDI has in the past focused mainly on the impact of host-country environmental standards on TNCs' investment decisions. In other words: Does the fact that countries compete internationally for FDI, by trying to offer favourable conditions for companies, lead to a competitive lowering of environmental standards (resulting in a "race to the bottom" or "pollution havens")?

Overall there is not much empirical evidence of "pollution havens" affecting either FDI or trade flows on a systematic basis. The evidence shows that most investment location decisions are not made on the basis of environmental criteria. Environmental costs are typically a small element in these decisions. If anything, the imposition of higher environmental standards seems more likely to generate a technological response, rather than leading to capital flight.

## **Purpose of the research project**

There is little systematic evidence for the "race to the bottom" hypothesis, nor do empirical findings to date prove that FDI necessarily leads to a transfer and diffusion of modern "clean" technologies; the results of studies on this have been inconclusive.

Technology is spread to the host countries through FDI in diverse ways, depending on several factors that differ from company to company and from country to country. In order to draw valid conclusions about the critical factors influencing FDI, and to determine how its environmental and technological effects are shaped, it was necessary to investigate several cases of FDI in detail. For this reason, a case-study approach was adopted that sought to take into account all possible effects of FDI. Using company-level case studies in selected industries and selected countries, the contribution of FDI to sustainable development was analysed. In addition, the hypothesis that FDI can accelerate the diffusion of modern eco-efficient management know-how, technologies and their spillovers, and thereby contribute to sustainable development, was also evaluated.

## **Case study highlights**

Four company-level case studies using a multi-stakeholder approach were carried out together with German TNCs and partner institutes in China, India and Malaysia.

### ***BSH: Technology switch, from CFC to HC refrigerators***

BSH recently switched from chlorofluorocarbon (CFC) to hydrocarbon (HC) refrigerators worldwide. The non-governmental organization (NGO), Greenpeace, was an important external driver of this change. BSH successfully launched the HC-technology in China in early 1999. In the wake of this development a number of BSH's Chinese competitors changed some of their production, and now also offer the HC technology..

### ***HMR: Concern for reputation as a driving factor behind EMS transfer***

The reputation and success of pharmaceutical companies depend, among other things, on continuous improvements in health, safety

and environment. Consequently, HMR has developed a worldwide environmental management system (EMS) to meet the highest expectations. In addition, in order to ensure adherence to good quality and environmental standards, HMR has specific suppliers for key products, whereas for other products the regulations of the pharmaceutical industry are stringent enough. The company also frequently audits its major suppliers.

***Adtranz: Indian Railways push technology transfer with Adtranz***

In order to facilitate the transfer and dissemination of a new eco-efficient railway-technology, Indian Railways (IR) negotiated a unique and unconventional transfer of technology with Adtranz. IR bought the technology and licensed several Indian companies to produce the new technology or components for this technology, and thereby installed a supply oligopoly. One of these Indian companies is Adtranz India.

***Burgmann: High quality ensures environmental protection and technology transfer***

Burgmann has implemented very strong quality standards in Germany and in the host countries. Furthermore, the company also expects its suppliers to implement these standards because the quality of the sealants depends also on the quality of the supplied goods. High quality sealants contribute not only to direct environmental protection, but also to a reduction of energy and resource consumption.

## **Key findings of the project**

### **Globalization is a driver for standardization**

Due to the TNCs' strategies to rationalize organization and production, and due to a further integration of markets, there is a tendency to increase standardization; that means TNCs standardize products and processes worldwide and adapt them to suit local needs.

However, this trend does not necessarily apply to “end-of-pipe technologies”, as these are additional investments that are not automatically linked to the introduction of new processes and products.

All in all, this shows that globalization strategies and technology trends can support technology transfer through FDI. TNCs' overall technology strategies and product strategies, and the degree of innovation, especially with respect to integrated technologies, is critical to the relevance of this trend.

### **TNCs organize their corporate environmental responsibilities internationally**

All TNCs involved in the case studies have organized their own international environmental management, defining responsibilities, management processes and standards, and reporting procedures worldwide. Through these international systems or networks, TNCs push the transfer of management know-how to foreign subsidiaries.

The degree of international centralization relates to such aspects as management responsibilities for investments, technology decisions and compliance. The environmental standards differ in the scope of the aspects covered and the degree of specification. Some of the standards are pure management standards, while others are technical regulations, including material selection or emission standards.

While it appears to be “best practice” to organize corporate environmental responsibilities and reporting systems internationally, there is not one overall best practice on *how* international environmental management is to be organized.

The observed management practices show that TNCs increasingly work on international transparency within their companies and manage their environmental responsibilities globally. This helps to transfer good management practices and environmentally sound technologies through FDI.

### **Management’s commitment to environmental issues is essential; corporate values and training can greatly enhance this commitment**

Implementing environmental management procedures on an international level is not always a straightforward process. The successful implementation of EMS depends on its consistency with the overriding corporate values. In order to overcome conflicts of interest and the obstacles which occur during daily operations, top management’s commitment in both host and home country is crucial.

### **Environmental supply-chain management: a recent trend**

Traditionally, management requirements along the supply chain have been strongly related to quality issues. All TNCs have ongoing training and auditing processes for their suppliers. Especially in sectors where the final product is subject to high technical requirements, the quality of the supplied goods is extremely important.

TNCs have only recently started to work in this direction, and they agree that environmental supply-chain management is an important trend, and a challenge that could have an enormous impact. A critical

factor for the successful integration of environmental requirements into specifications for the suppliers will be whether this will lead to cost reductions and/or whether the market will show its approval of the improved overall environmental efficiency.

### **TNCs' concern for their reputation requires them to operate to strict standards worldwide**

TNCs are expected to operate to high environmental standards worldwide. They are subject to close scrutiny by the international public and NGOs, and are permanently exposed to numerous challenges to their reputation. The magnitude of these challenges seems to be a driving factor for compliance with defined standards. Compliance with national standards of host countries is only the minimum requirement. In practice, operations will have to comply with the TNCs' global standards, which are generally stricter than the local regulations. Depending on the degree of specification, each TNC's standards will be interpreted by the subsidiaries and the management in charge to suit the specific local situation and requirements.

### **Global environmental transparency requires integration of TNCs' foreign subsidiaries into environmental reporting**

In order to document their efforts, TNCs increasingly tend to integrate their foreign subsidiaries' environmental conditions and performance into their international corporate reporting.

### **Cost reduction is an important incentive for energy conservation**

Due to high energy costs or unreliable supplies, energy conservation is one of the main environmental issues for companies operating in

newly industrializing economies or developing countries. It seems to be an important customer requirement too. The transfer of energy-efficient technologies (both for capital goods and consumer goods) has therefore been particularly successful.

### **Public purchasing can play an important role in improving technology transfer**

By setting environmental requirements, public authorities can use their purchasing power to transfer environmentally sound technologies into their country. Even more so, they can encourage the diffusion of technologies by buying licences and/or intellectual property rights for environmentally sound technologies, thus making them accessible to local industry.

### **NGOs can initiate technology transfer**

NGOs – especially international NGOs and those that have technological competence – can have a huge impact on technology transfer and diffusion. Due to NGO activities, corporations may change their technologies and implement advanced environmentally sound technologies.

### **TNCs can be subject to more stringent enforcement of regulations than local companies**

It appears that in some cases TNCs, and their compliance with regulations, are subject to very close scrutiny by the authorities. This could be due to two reasons: first, TNCs are often comparatively large companies; secondly, they are foreign companies. Local environmental authorities seem to enforce TNCs' compliance with regulations more strictly than they do local, especially small, competitors.

## Summary

These findings show that there are important drivers for eco-efficiency influencing the performance of FDI. Globalization can be a driver for eco-efficiency in the industrial sector. Additional external drivers are: market opportunities, stringent enforcement of environmental regulations, energy prices and risks to reputation. Additional internal drivers are cost savings and a change of management attitudes, both at headquarters and in the host countries.

As important general best practices, the following measurements can be defined: international coordination of environmental responsibilities, definition of worldwide environmental (management) standards, external or internal audit, dissemination of up-to-date, eco-efficient technologies and good management practices along the supply chain, and integration of foreign activities into environmental reporting.

The diffusion of eco-efficient technologies to competitors in host countries can be an important side-effect of FDI.

## Conclusions and recommendations of the project

The study does not offer an answer to the question of whether, in general, FDI is a lever for eco-efficiency or contributes to sustainable development. It is difficult to build recommendations on the basis of four company-level case studies, and further empirical research will be needed to corroborate the conclusions. Nevertheless, the case studies hint at two main starting points for the improved integration of environmental aspects into FDI: corporate environmental reporting and “greening” of the supply chain.

An improvement in global environmental transparency, especially through global environmental reporting of TNCs in the host countries, could lead to the dissemination of environmentally sound management practices and technologies in the host countries. Environmental transparency plays an important role in increasing access to technology and knowledge and improving both the environmental performance and reputation of companies. This could inspire other companies to follow their example. FDI can thereby have positive environmental impacts and effects.

The incorporation of environmental standards and performance indicators into purchasing specifications can be an important driver for environmental improvements along the supply chain. A strong environmental policy contributes to a company's environmental credibility and can thus support the transfer of know-how as well as initiating technology transfer and dissemination. The enforcement of this driver certainly is a challenge for both TNCs and host countries. Therefore measures which could help such integration need to be designed and implemented bearing in mind different needs and interests.

## **Outlook: Rio-plus-10 and beyond**

In 2002, governments and business were involved in discussions about which of the objectives of Agenda 21 had been achieved. TNCs and government representatives attending the World Summit on Sustainable Development in Johannesburg reported on their measures and programmes to achieve these objectives.

The 10-year review of UNCED generated much debate about the extent to which FDI and trade liberalization contribute, or can contribute, to sustainable development, and the extent to which this contribution supports the implementation of multilateral environmental agreements. The debate gave an additional impetus to the EcoChain Initiative, which seeks to create a network of institutes to carry out research on FDI, global supply-chain management, eco-efficiency and sustainable development.

This network of research institutes will, *inter alia*:

- Carry out further company- and sector-level case studies;
- Support dialogue between the participating companies and institutions;
- Encourage TNCs to improve the transparency of their global activities concerning their environmental performance and sustainability;
- Identify best practices and critical success factors;
- Accelerate the transfer of technology and know-how along the supply chain; and
- Investigate the efficacy of specific “best practice” guidelines and develop them further.

The German-led EcoChain Initiative will be pursued in cooperation with UNCTAD with a view to giving it a truly international character.



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