



Green and Sustainable Businesses from a Local Government Perspective

Fostering Business Partnerships for Environmental Sustainability

United Nations Environment Programme
Division of Technology, Industry and Economics

Urban
Environmental
Management

**INTERNATIONAL ENVIRONMENTAL
TECHNOLOGY CENTER**

The UNEP-International Environment Technology Centre (IETC)

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Fostering Business Partnerships for Environmental Sustainability

UNEP-IETC Urban Environment Series on
Introductory Guides for Decision-makers

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UNITED NATIONS ENVIRONMENT PROGRAMME
INTERNATIONAL ENVIRONMENTAL TECHNOLOGY CENTRE

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Green and Sustainable Businesses from a Local Government Perspective

Fostering Business Partnerships for Environmental Sustainability

Introduction

What exactly are business partnerships? For the local or city government, it is an opportunity to provide an appropriate and enabling environment where economic activities can take place, and participation of the private sector in public projects is facilitated. For the private sector, it is increased business opportunities for providing better products, better services, and sustainable technologies.

In the context of the conference, a business partnership can be seen as a forum for dialogue between the local business community and the local government. The objectives of these partnerships are to enhance the flow of information and to promote business opportunities and joint activities between local governments and the private sector.

Business partnerships are alternatives to full privatization in which local governments and private sector companies assume initiative and co-responsibility in focussing on the sustainability and environmental effect of the private firms. Through effective and equal partnerships, the advantages of the private sector - dynamism, access to finance, knowledge of technologies, managerial efficiency, entrepreneurial spirit - are combined with the social responsibility, environmental awareness, local knowledge and job generation concerns of local governments.

Partnerships are a central feature in any project, from development of the idea to the actual implementation. As a result, business partnerships ensure the build-up of a body of expertise on the issues, which in turn allow functions to be carried out efficiently, reliably, and profitably. There are certain circumstances in which it is advantageous to have local governments, communities and the private sectors play active roles, thus bringing to bear the strengths of each sector in resolving urban and larger environmental problems.

The above discussion is in line with the current trend to place emphasis on the civil society at large, with local governments, businesses, and the community forming its three 'legs' that support it. Active involvement and participation of all the three components are essential for the success of any local/urban initiative.

Successful business partnerships have built on existing schemes of cooperation, without creating 'new bureaucracy' and have helped create clearer lines of communication to prevent duplication of effort and meet new locally defined needs. Existing groups such as chambers of commerce, guilds, business associations have played an important role in sustaining partnerships.

The conference looks at the intersection of two critical themes that have emerged recently - growing concern for a **sustainable local environment**, and focus on **stronger local governance**. Both are intrinsically linked together in the urban areas of today. Recognising this, the conference looks at these two issues specifically from the view point of partnerships between local businesses and the local government aiming towards sustainability of the local environment.

Sustainable Local Environments

'Environment' means different things to different people. For some, it means separating the garbage into burnable and non-burnable items. To others it means saving on electricity or using less water. The term 'environment' may be associated with restoring the vitality of tropical rain forests, maintaining biodiversity and arresting desertification. Developing healthy, sustainable and safe communities becomes important to yet others. The environment also means agricultural and industrial production that is sound and 'green'. Some associate man-made chemical and nuclear hazards with concrete environmental policies. All of these views are right in their own way, and are united in its concern for the effects that the environment has on the day-to-day lives of current and future generations.

The concern and problems associated with the environment have placed such issues high on the agenda of many bilateral and multilateral meetings. The 1992 Earth Summit held in Rio de Janeiro managed to highlight and channel global efforts in understanding and acting on environmental problems, making it a key issue to be tackled in trade and commerce, in economic and social development, and in science and technology. Subsequent summits and congresses such as the Social Summit and the Beijing Conference on Women in 1995, the City Summit/Habitat II in 1996, not to mention innumerable regional, national and local meetings, all have had the larger global environment as a key common denominator in its action plans.

It is only in the last two decades that a better understanding of the effects of changing environments and ecosystems have been developed. Interconnectedness of these factors has forced particular attention on human lifestyles and living conditions that has had a profound effect on its surroundings. Most, if not all, environmental problems that we currently face can be traced back to the legacy of lifestyles that we are inheriting and leading as human beings. Nowhere is this more true than in concentrations of gregarious urban lifestyles that are becoming the option of choice for the majority of humanity.

Urban lifestyles and consumption patterns have far-reaching and long-term effects not only on its immediate boundaries, but also on the entire region in which it is positioned. Cities and towns in most countries around the world have been gaining considerable attention due to the large number of households migrating to cities and its consequent effects. It has also been due to the centrality of goods and services that cities offer, emerging over the last few decades as the major form of settlement.

By the turn of this century, we will be witness to a ubiquitous scenario where more people will live in and around cities than in rural areas. Proximity to decision-makers and financial markets, large

pools of skilled and unskilled workers, and other advantages have made such urban areas the engines of growth for the countries and regions where they are situated. For example, despite the environmental and social problems that it is facing, Bangkok's contribution to the national GDP has been estimated to be more than the combined output of all other cities in Thailand.

The result of this has been the explosive growth of urban areas, bringing with it a host of negative effects. Population concentration in increasingly smaller land masses has caused a drastic decline in the quality of living both in the residential and work fronts. Cities have, in effect, become a barometer of humankind's progress into the 21st century, whether this is an upward or downward trend. Such a scenario has had ripple effects on a variety of sectors such as education, health, labour/job markets, and economic activities.

The growth and effect of an urban area should be seen not only in terms of its immediate boundaries, but also in terms of the resources necessary to sustain its population. An illustrative example is that of the Greater London area. The land mass that generates the resources necessary to sustain the population of London, called the 'urban footprint,' is actually slightly less than the entire land area of UK! This illustrates the complex interrelationship and interdependence of urban areas and their surrounding hinterland.

According to the Earth Council's report, "Ecological Footprints of Nations" Japanese lifestyles generate a demand for 6.25 hectare per capita (for resources such as energy, arable land, pasture, forest, built-up area, etc.). But the supply has been only 1.88 hectare per capita. This leaves a 'ecological deficit' of 4.37 hectare per person that has to be met from outside the country. The conurban region of Tokyo had a 1995 population of 26.8 million. For Tokyo alone, this ecological deficit is equal to 116,242,000 hectare or 3.07 times the total land area of Japan. This becomes 9.2 times the land area of Japan if only habitable land is taken into account (excluding mountains, water bodies etc.)

The effects of urban activities have in many cases outweighed the relative advantages of agglomeration and centrality that they offered. Thus, along with the benefits of urbanization come environmental and social ills, including lack of access to drinking water and sanitation services, pollution and carbon emissions etc. A wide variety of urban problems can be observed, grouped under two broad contradictory classes, those associated with poverty and those associated with economic growth and affluence.

Urban areas present a series of trade-offs – for example, between greater convenience and higher costs, between proximity and congestion, between better communications and busier lives. Balancing and bringing together these different issues to aim at sustainable local environments remains a key challenge that has many regional and global repercussions.

Stronger Local Governance

Simply put, governance is the science of decision-making. The concept of governance refers to the complex set of values, norms, processes, and institutions by which society manages its development and resolves conflict, formally and informally. It involves the state, but also the civil society (economic and social actors, community-based institutions and unstructured groups, the media etc.) at the local, national, regional and global levels.

Governance refers to the process whereby elements in society wield power and authority, and influence and enact policies and decisions concerning public life, and economic and social

development. Governance is a notion that is broader than government, whose principal elements include the constitution, legislature, executive and judiciary. Governance involves interaction between these formal institutions and those of civil society. Governance has no automatic normative connotation. However, typical criteria for assessing governance in a particular context might include the degree of legitimacy, representativeness, interdependence, popular accountability, compliance, transparency and efficiency with which public affairs are conducted.

There is no alternative to working together and using collective power of disparate actors and objectives to create a better world. Governance is the sum of the many ways individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and co-operative action can be taken. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions either have agreed to, or perceive to be in their interest.

Examples of governance at the local level include a neighbourhood co-operative formed to install and maintain a standing water pipe, a town council operating a waste recycling scheme, a multi-urban body developing an integrated transport plan together with user groups, a stock exchange regulating itself with national government oversight, and a regional initiative of state agencies, industrial groups, and residents to control deforestation. At the global level, governance has been viewed primarily as intergovernmental relationships, but it must now be understood as also involving non-governmental organizations (NGOs), citizens' movements, multinational corporations, and the global capital market. Interacting with these are global mass media of dramatically enlarged influence.

Thus, a strong local governance system lies at the root of local urban development, working as a common denominator for a variety of urban functions. It is important to understand the broad nature of the concept of governance, and the interconnectedness of the issues and actors involved.

Bringing the environment and governance to the local level

"Little drops of water make the mighty ocean"

To have a lasting and effective impact on sustaining the global environment, action starts at 'home' – at the local level. The above discussion clearly points to the importance of merging good governance and localizing environmental action (this was indeed the goal with which the Local Agenda 21 initiative was launched at the 1992 Rio Summit¹)

There is a need to initiate a process that aims to involve local people and communities in the design of a way of life that can be sustained and thus protect the quality of life for future generations. This calls for integrating the social, environmental and economic aspects of development in order that all future development is 'sustainable'. It requires all of us to consider the effects - on the local economy, the local environment and the local community - of every policy, programme and project, and then to seek a solution that achieves a realistic balance.

¹ Local Agenda 21 is a local-government-led, community-wide, and participatory effort to establish a comprehensive action strategy for environmental protection, economic prosperity and community well-being in the local jurisdiction or area. This requires the integration of planning and action across economic, social and environmental spheres. Key elements are full community participation, assessment of current conditions, target setting for achieving specific goals, monitoring and reporting.

This has to be done in a highly democratic, consensus-building and empowering process. It should seek to strengthen the role of all major groups in society, including children, youth and women – setting out to develop and build on partnerships between groups in the local community and to make linkages between parallel processes such as social needs and health for all policy work.

Bridging sustainable environment and good governance at the local level requires a refocusing on 'quality of life' - which is perhaps a more friendly term to describe its primary goal. It is a process that asks those in local government to work in partnership with the local businesses and the local community to develop a strategy that will work towards the goal of sustainable development in the twenty-first century and beyond.

The conference focuses on bringing these two issues together – by highlighting the role of local governments in fostering partnerships with businesses to achieve environmental sustainability. A working framework has been developed that positions the various actors, issues, and themes into three distinct clusters and interlinks them.

A Working Framework for Business Partnerships

Developing a working framework for business partnerships requires the promotion of greater cooperation and networking between Asian local governments and businesses in Asia and other regions. The objective is to (a) share and transfer success stories and good practices in developing partnerships for urban development, (b) utilize appropriate and sustainable technologies and practices, (c) foster research and development in business partnerships, and to identify information dissemination strategies.

Partnerships do not simply happen. There is a clear need for a macro level framework to be developed, which will bring together disparate resources and stakeholders working towards sustainable urban areas.

Based on a review of good practices and case studies from different cities, the framework was developed with three 'clusters' of issues in mind (*see attached Figure 1*) –

1. Command and Control/Measure and Manage Cluster covering legislation, rules, manufacturing, subcontracting etc.
2. 'Hardware' Cluster covering infrastructure provision and special incentives
3. Knowledge Management Cluster covering research, education and training, and business support services.

Emphasis of these clusters have been placed on the role that local governments have to play in fostering broader and deeper participation of businesses in urban development and management for environmental sustainability. The framework presents a broad picture towards which local governments need to aim. It is also useful to use the framework to monitor the existing conditions in urban areas, evaluate the potential environment for business partnerships and work on areas and issues that are missing or lacking.

It is important to understand the issues covered in the clusters, and the actors that will activate them. This is due to three reasons:

- in order to emphasize the importance of *linkages and interrelationships* between the various issues and actors;
- the need for a broad range of *interventions and inputs* that foster partnerships; and
- the criticality of a *holistic view* that needs to be taken in developing sustainable business partnerships.

Partnerships inherently entail recognition that no one actor at the local level can carry out all the functions and provide all the inputs necessary; and a proactive is necessary approach to develop and sustain a partnership.

Command and Control/Measure and Manage Cluster

This cluster covers three issues of legislation, rules etc.; financing; and manufacturing/subcontracting.

(a) Legislation and rules need to be put in place to support and foster business partnerships - local government policies, acts and similar legal provisions should be provided for. A campaign to educate businesses in local/national environmental standards, ISO standards². Means to highlight good practices by a system of awards, fees, fines etc. can also be used. Besides local, regional and national governments' role in promulgating the legislation, universities and research institutions, chambers of commerce etc also have a role to play in generating greater awareness.

(b) Financing – respecting the 'bottom line' approach of businesses, it is necessary to have a supportive financial system that incorporates instruments such as tax incentives, special/targeted and low-interest loans, microfinance for SMEs, subsidies and grants for capital investment etc.

(c) Manufacturing and subcontracting – while it is difficult to play a direct role in influencing the manufacturing process of local industries and businesses, local governments do have a role to play in educating and campaigning both manufacturers and consumers in environmental issues throughout the lifecycle of a manufactured product. Besides voluntary initiatives of the industry or firm itself, chambers of commerce, industry associations, consumer groups, co-ops etc. have an important role to play in this process.

Hardware' Cluster

The 'Hardware' cluster focuses on providing necessary and adequate network and social infrastructure facilities for the industry. It also includes making available special incentives.

(a) Infrastructure Provision – This involves the provision of various infrastructure facilities such as proper transportation (roads, public transport, etc.), electricity and water, gas, telecommunications etc. Many actors have a role to play here - besides local governments themselves, the private sector, urban planners, commercial banks, multilateral institutions have a stake in providing adequate urban infrastructure facilities

² Of particular importance and relevance is the ISO 900 and ISO 14000 series in Environmental Management.

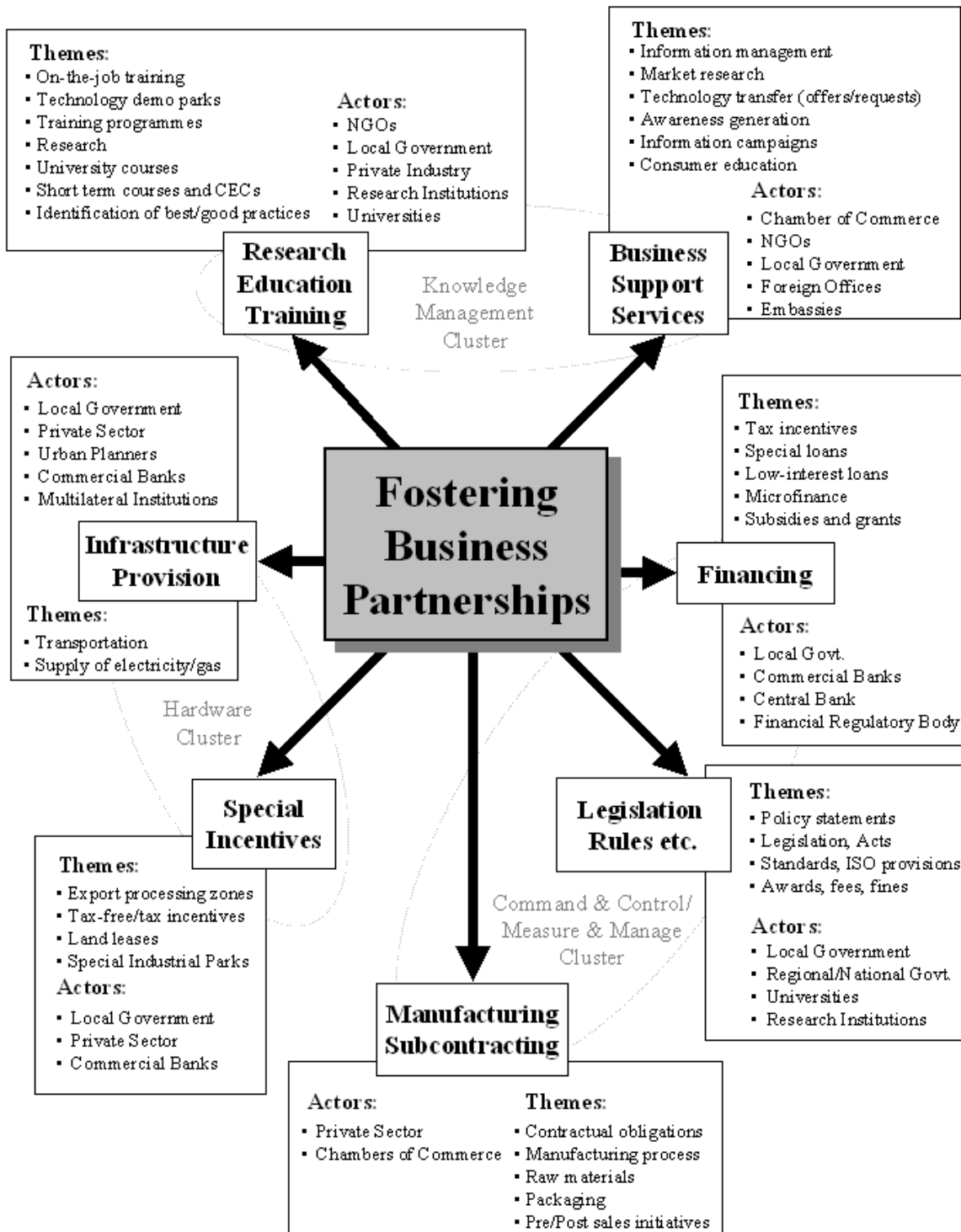
(b) Special Incentives – This involves the setting up of special facilities such as export processing zones, tax-free zones, special land leases, industrial parks etc. that also double as showcases for environmental friendly industries.

Knowledge Management Cluster

The Knowledge Management cluster focuses on the 'software' part of the framework, by enabling research education and training, information dissemination, awareness building, and other business support services.

(a) Research, Education and Training – This issue cuts across a broad spectrum of actors and activities, and covers targeted on-the-job training, demonstration projects, vocational training, research and learning, good/best practices documentation etc. With education and awareness building being the key activity, a wide range of actors from NGOs and community groups, universities and research institutions, industry associations and chambers of commerce, have a role to play in facilitating greater participation for environmental action.

(b) Business Support Services – These services are targeted directly at businesses and industry, and provides key information, market research, new technology information, consumer information etc. in order for businesses to make an informed choice towards environmentally friendly manufacturing and business practices.



Macro Policy Framework for Sustainable Businesses

Appendix 1: Green Business Practices in Japan

Green business practices that maintain and sustain good environmental quality are increasingly becoming a vital component of economic competitiveness. Consumer awareness of detrimental effects of products on the environment, both direct and indirect, have prompted many companies to incorporate environmental measures in the manufacturing, administration, purchase, sale and other stages. Measures have concentrated on an expanded and inspired version of the original 3Rs: reduce, reuse and recycle.

Design for Environment

Design and development of environmental products essentially aim to reduce the use of restricted substances, minimize environmental impact, and increase the recyclability of the products. Companies have achieved these goals by working closely with their customers and suppliers to exchange information regarding the environmental performance characteristics of their products. Such programmes incorporate environmental considerations, including facility design materials selection, energy consumption, manufacturing, product use and operation, and final disposition, early in the product development process.

Energy Efficiency

There are many issues that are generally covered under 'energy efficiency'. These include:

- *Utility Cost Reduction*
Companies aim to reduce energy usage and therefore utility costs to the greatest extent possible. Such aims cover, for example, heating, cooling and ventilation, lighting levels and water conservation.
- *Energy Conservation*
Companies first perform an energy audit, covering loads, devices etc. Enabling future improvements, such audits focus on time-of-use, conservation measures possible etc. and propose measures that are both operational and technological in nature. Measures include cost, ease of implementation, energy saved, as well as cost reduction in general.
- *Water Conservation*
Water conservation efforts included the conversion of water cooling systems to closed-loop systems, recirculating the water instead of piping in public-supply water, and the elimination of nonessential processes and modification of piping and timer systems.

Employee awareness and participation are an important contribution to efforts in achieving energy efficiency.

Environmental Building Design

There are many ways in which efficient building design can lead to efficient energy use. Such measures are taken both in the architectural design of the building itself, as well as in the various infrastructure and services that are installed in it. These include: proper building to site orientation, high efficiency lighting, optimized daylighting, oversized low restriction ducts, variable speed drives in the HVAC units, increased building insulation, heat mirror glass, reflective roof coating, occupant sensors throughout the building, and efficient office equipment.

Environmental Management Systems

Environmental Management Systems are tailored to each company's own needs. While the results can vary, self-audit programs focus on company-specific environmental issues, enabling among other things, a high awareness of environmental issues. Implementation of EMS covers areas such as policy, organizational restructuring, marketing identity and standards etc. Companies achieve this by developing checklists, marking realistic environmental compliance targets, encouraging transparency and accountability, and similar measures. Effective communication of such measures, internally and externally, remains critical to better understanding, acceptance and compliance. It also serves as a focus to challenge all involved to develop new approaches to environmental improvements

Environmental Philanthropy

A committed approach to environmental improvement goes beyond mere cost-benefit analyses and concerns broader, universal issues. Many companies do not rule out philanthropy as a means to achieve environmental consciousness. Companies favouring this typically take measure such as access to environmental technology, access to engineering support, free educational classes, staff volunteering in community programmes, information dissemination of activities and measures, and assistance in publishing research and promotional materials. Besides supporting existing environmental efforts and actions, companies are also directly involved in activities such as tree-planting.

Packaging

Packaging issues have come to the fore due to increasing quantities of municipal waste, with a significant portion coming from consumer goods packaging. This has highlighted the need to both increase recycling and minimize the amount of material used in packaging. This would reduce waste and decrease the use of virgin/new materials.

Most efforts to streamline packaging have focussed on three aspects: (a) using as little packaging material as needed; (b) using recycled material wherever it is environmentally and economically sound; and (c) making packaging as recyclable as possible.

Air Pollution Prevention

Air pollution prevention efforts of companies have generally focussed on both source and waste reduction, and on reuse and recycling. Preventing air pollution within a company's manufacturing processes remains the key approach. Cleaning and processing, switch to non-polluting technologies and materials, reduced generation of waste water, converting hazardous by-products to non-threatening forms, etc. have been attempted in this regard.

Indirect air pollution prevention measures by companies also cover transportation. Examples of such measures include: providing company transportation to employees; offering commuting information and selling public transit passes; and encouraging employees to carpool and use public transportation. Companies have also initiated successful programmes such as the use of bicycles to commute to work, telecommuting, and work-at-home etc. to reduce pollution due to commuting.

Water Pollution Prevention

Measures to prevent water pollution essentially strive to conserve and protect water quality - in terms of its use reduction and disposal, waste water treatment, procedural changes and recycling.

Water conservation programmes have also included the substitution/reduction of hazardous materials and the generation of hazardous wastes. Employee awareness, education and training in pollution identification and reduction is critical in achieving successful results.

Recycling and Waste Reduction

Recycling and waste reduction is a recurring theme that is an integral part of most of the above environmental measures taken by companies. Most popular and tangible among these measures have targeted paper. Efficient use of paper, streamlining processes and tasks that need excessive paper, paper source sorting and disposal systems (both in-house and external systems), are covered here. Other wastes such as glass, aluminum, cardboard, wooden pallets, polyurethane and polystyrene foam, furniture etc. have similarly been targeted for source sorting and disposal systems. Besides cost consideration, companies have included waste disposal methods and techniques, recycling efforts etc. as criteria to select trash contractors.

Another measure incorporated by companies is the purchase of recycled materials for office supplies. Products with higher percentages of post-consumer content, reused copy/printer toners cartridges, recycled tissue and napkins etc. have been incorporated in purchasing decisions. Online internet and intranet networks have been used as an alternative to inter-office memos and conventional communication methods. Centralized information, leadership, and a corporate commitment have been found to be critical in developing a culture for the 'reduce, reuse, and recycle' corporate environment.

Resource Conservation

Water, electricity, office supplies, manufacturing and production materials, building materials etc form resources that a company uses. Conservation of such resources is an important environmental measure taken by companies. These include restrictions and reductions in the use of resources, recovery of (re)usable resources from waste products, recycling of resources after adequate processing. Companies also resort to the use of certified products that have had minimum environmental impact, and have been included in a comprehensive resource recovery cycle, including post-production processing. Thus company purchasing decisions are increasingly including environmental concerns in their choice of supplies, materials and refills.

Resource conservation measures have also covered maintaining regulatory compliance, chemical source reduction, emissions control, equipment review and construction support, and product stewardship. Increased 'returnable' content in a product or its packaging has also been used in conservation efforts.

The UNEP - DTIE International Environmental Technology Centre

Established in April 1994, the International Environmental Technology Centre (IETC) is an integral part of the Division of Technology, Industry and Economics (DTIE) of the United Nations Environment Programme (UNEP). It has offices at two locations in Japan - Osaka and Shiga.

The Centre's main function is to promote the application of Environmentally Sound Technologies (ESTs) in developing countries and countries with economies in transition. IETC pays specific attention to urban problems, such as sewage, air pollution, solid waste, noise, and to the management of fresh water basins.

IETC is supported in its operations by two Japanese foundations: The Global Environment Centre Foundation (GEC), which is based in Osaka and handles urban environmental problems; and the International Lake Environment Committee Foundation (ILEC), which is located in Shiga Prefecture and contributes accumulated knowledge on sustainable management of fresh water resources.

IETC's mandate is based on Agenda 21, which came out of the UNCED process. Consequently IETC pursues a result-oriented work plan revolving around three issues, namely: (1) Improving access to information on ESTs; (2) Fostering technology cooperation, partnerships, adoption and use of ESTs; and (3) Building endogenous capacity.

IETC has secured specific results that have established it as a Centre of Excellence in its areas of specialty. Its products include: an overview on existing information sources for ESTs; a database of information on ESTs; a regular newsletter, a technical publication series and other media materials creating public awareness and disseminating information on ESTs; Local Agenda 21 documents developed for selected cities in collaboration with the UNCHS (Habitat)/UNEP Sustainable Cities Programme (SCP); training needs assessment surveys in the field of decision-making on technology transfer and management of ESTs; design and implementation of pilot training programmes for adoption, application and operation of ESTs; training materials for technology management of large cities and fresh water basins; and others.

The Centre coordinates its activities with substantive organisations within the UN system. IETC also seeks partnerships with international and bilateral finance institutions, technical assistance organisations, the private, academic and non-governmental sectors, foundations and corporations.

For further information, please contact:

Osaka Office: 2-110 Ryokuchi Koen, Tsurumi-ku, Osaka 538-0036, Japan Tel: 81-6-6915-4581 Fax: 81-6-6915-0304	Shiga Office: 1091 Oroshimo-cho, Kusatsu City, Shiga 525-0001, Japan Tel: 81-77-568-4580 Fax: 81-77-568-4587
Email: ietc@unep.or.jp Web: http://www.unep.or.jp/	

www.unep.org

United Nations Environment Programme
P.O. Box 30552 Nairobi, Kenya
Tel: (254-2) 621234
Fax: (254-2) 623927
E-mail: cpinfo@unep.org
Web: <http://www.unep.org>



UNITED NATIONS ENVIRONMENT PROGRAMME – DIVISION OF TECHNOLOGY, INDUSTRY AND ECONOMICS
INTERNATIONAL ENVIRONMENTAL TECHNOLOGY CENTRE (UNEP – DTIE – IETC)

Osaka Office

2-110 Ryokuchi koen, Tsurumi-ku, Osaka 538-0036, Japan
Telephone: +(81-6) 6915-4581
Telefax: +(81-6) 6915-0304

Shiga Office

1091 Oroshimo-cho, Kusatsu City, Shiga 525-0001 Japan
Telephone: +(81-77) 568-4581
Telefax: +(81-77) 568-4587

URL: <http://www.unep.or.jp/>
Email: ietc@unep.or.jp