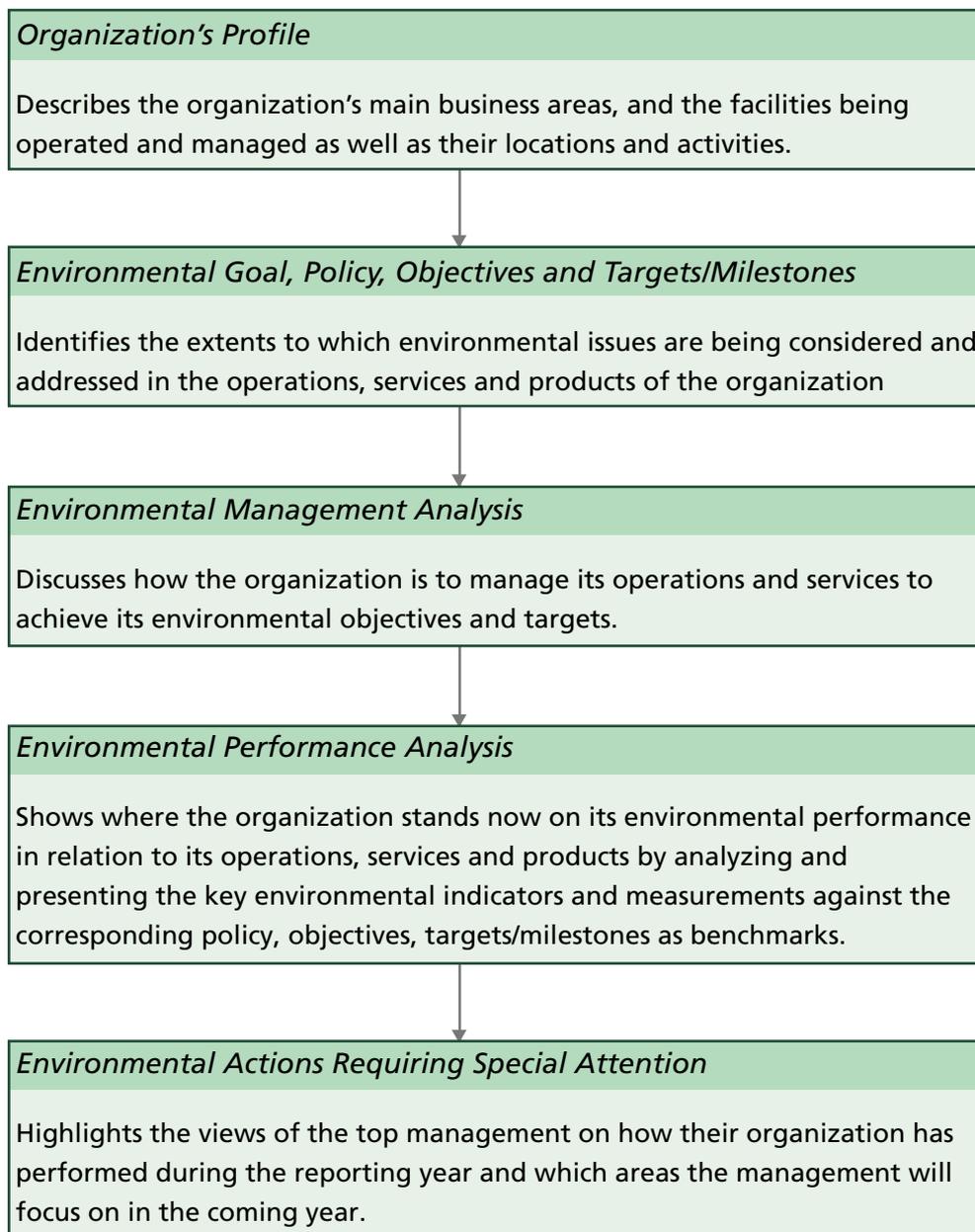


Chapter 3

Report Framework and Contents

Organizations can follow the general report framework suggested below as to what content to include in the report, and how it could be organized. Each element of the framework is discussed in the following sections and illustrated with selected examples.

Report Framework



1. Organization's Profile

The organization's profile is to help readers understand the activities of the organization and have a clear idea as to which of these are being covered in the report, including :

- the major business, products or services provided;
- the organization's size (eg. financial turnovers, number of employees, number of offices occupied, subsidiaries, etc.);
- facilities operated or managed; and
- information on production or operational processes.

This section should be concise and focused but with sufficient details to relate to the other content elements such as environmental policy, objectives and targets, and environmental management analysis that follow. The organization could also report on any major operational changes that may affect environmental

performance, for example, the commissioning of new plants and facilities.

2. Environmental Goal

An environmental goal is a statement about the organization's overall commitment on responsible care for the environment.

The top management of an organization could set the environmental goal by taking into account the following :

- the activities undertaken and services and products provided;
- the key environmental impacts of the activities, services and products; and
- the capability of the organization in tackling these environmental impacts.

Some local examples of environmental goals are given below:

Swire Properties Ltd. (Property development)



"We recognize and accept that we have a responsibility to the community both now and in the future, to maintain and improve upon our current environmental standard. Swire Properties is committed to ensuring that environmental considerations are an integral part of our decision-making, management and culture."

Hotel Nikko Hongkong (Hotel service)



"Hotel Nikko Hongkong is an environmentally conscious hotel which not only aims to provide quality services for its guests, but is also committed to taking appropriate measures for pollution prevention and resources conservation."

MTR Corporation (Transport service)



"The MTR Corporation Limited is committed to the protection of Hong Kong's environment and the responsible management of all impacts arising from its activities in Hong Kong."

Elec & Eltek Co. Ltd. (Manufacturing industry)



"We are committed to protect the environment and pursue continual improvement of our environmental performance in the printed circuit board manufacturing business."

3. Environmental Policy

Through the formulation of an environmental policy, an organization can establish the overall strategic direction for it to achieve its environmental goal and set out the key areas for action. All environmental responsibilities and performance of the organization could then be evaluated against statements set forth in the environmental policy.

To demonstrate top management commitment, the Senior Executives of the organization should be responsible for developing the environmental policy and to make sure it is properly implemented and regularly reviewed. When formulating the environmental policy, the top management could consider the following issues :

- is it in line with some of the environmental guiding principles developed by international bodies? (see examples in [Annex 1](#))
- is it in line with the organization's vision, mission, core values and beliefs?
- does it address the key environmental impacts of the activities and services of the organization?
- does it provide a framework for setting and reviewing environmental targets?
- has it been documented and communicated to all staff? and
- has it been made known to the external stakeholders of the organization?

Possible elements that could be included in the environmental policy :

- top management commitment;
- environmental management;
- energy and resource use;
- pollution prevention initiatives (emissions, effluents and wastes);
- compliance with environmental legislation, regulation and standards;
- purchase and contract management practices;
- staff training and education;
- communication and reporting;
- continual improvement (audit and management review); and
- contribution to sustainable development.

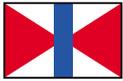
Examples of local environmental policies are provided in Figures 3.1 - 3.4 below and more overseas examples of environmental policies are provided in [Annex 2](#).

It is good practice to make clear to the reader what major impacts the organization's activities, services and production processes may have on the environment. [Annex 3](#) sets out the steps on how to identify the relevant environmental aspects and impacts. [Annex 4](#) provides a simple checklist to facilitate those key environmental impacts that may be relevant to the organization to be outlined with respect to four different areas:

- offices and facilities being managed;
- operational activities;
- planning and execution of the organization's services and production processes; and
- other activities, e.g. that of subsidiaries, business partners, etc.

Figure 3.1 - Swire Properties Ltd. - Selected example for property development sector

(Extracted from Swire Properties Ltd. website, <http://www.swireproperties.com>)



Environmental Policy

Swire Properties takes a positive view of the environmental challenges facing the Company. We recognize and accept that we have a responsibility to the community both now and in the future, to maintain and improve upon our current environmental standard. Swire Properties is committed to ensuring that environmental considerations are an integral part of our decision-making, management and culture. Accordingly, Swire Properties in line with the Swire Group Corporate Environmental Policy, has adopted the following environmental principles :

- *Integrate environmental considerations into the planning, design, construction, operation and maintenance of all Swire Properties facilities and services.*
- *Maintain environmental policies and standards that meet or exceed legal requirements and our customers' expectations.*
- *Promote the use of environmentally acceptable materials and technology in the design, construction, operation and maintenance of all Swire Properties premises.*
- *Develop or adapt procedures and technologies to the benefit of both the environment and wider community.*
- *Identify environmental impacts associated with Swire Properties activities and set targets to continually improve them.*
- *Encourage staff, contractors, suppliers and customers of Swire Properties to accept responsibility for their actions and to comply with their environmental obligations.*
- *Communicate the company's environmental policy and management strategy to staff, contractors, suppliers and customers.*
- *Take suppliers' environmental performance into account in our purchasing strategies.*

Figure 3.2 – Hotel Nikko Hongkong - Selected example for hotel service sector

(Extracted from Hotel Nikko Hongkong: "Environmental Report 1999", p.4)



Environmental Policy

Hotel Nikko Hongkong is an environmentally conscious hotel which not only aims to provide quality services for its guests, but is also committed to taking appropriate measures for pollution prevention and resources conservation. To fulfil the requirements of ISO 14001 Standard, the environmental policy statement for Hotel Nikko Hongkong is as follows.

- *The hotel is committed to complying with all local environmental legislation and continuously seeks to improve its environmental performance.*
- *The hotel management and staff understand and support the Environmental Policy and are committed to continuous improvement of environmental performance by identifying ways to minimize both wastage of natural resources and pollution to the environment.*
- *The "Green Innovator Award" will be presented to employees who devise the most innovative and practical environmental improvement initiatives. These initiatives will be reviewed and included in the environmental management programme.*
- *The hotel will continuously identify ways to minimize waste arising at source and develop and implement resource and waste management strategies that conform to its 6R policy – Reduce, Reuse, Replace, Repair, Refill and Recycle. The hotel will also adopt best environmental practices to control and minimize all wastewater discharges.*
- *The hotel will identify and implement practices to optimize energy and water usage without affecting the quality of services provided to its guests.*
- *The hotel will take appropriate measures to eliminate environmental, occupational and health risks and is prepared to respond to emergencies at all times.*
- *The hotel will support purchasing initiatives that are committed to sustainable environmental development, and continuously seek environmentally-friendly products and services that represent genuine value for money. The hotel will encourage and influence its suppliers to take part in the environmental protection initiatives, and to understand its purchasing policy, and to provide products and services that have the minimum adverse impact on the environment.*
- *The hotel will carry out regular internal programmes of education and training to enhance environmental awareness amongst staff. The hotel will also actively participate in external environmental activities, as well as various training and development programmes, to broaden its horizon.*
- *The hotel will share its environmental experience with other organizations in the community, raise the interests of its stakeholders by explaining the hotel's environmental philosophy, and seek their co-operation in improving their own attitude towards environmental concerns.*

Figure 3.3 - MTR Corporation - Selected example for transport service sector

(Sourced from MTR Corporation)



Corporate Environmental Policy

MTR Corporation Limited is committed to the protection of Hong Kong's environment and the responsible management of all impacts arising from its activities in Hong Kong.

The Corporation will:

- 1. Comply with all relevant environmental laws or, in the absence of legislation, seek and observe accepted best international practice as appropriate.*
- 2. Employ a corporate-wide Environmental Management System (EMS) to continuously monitor and manage environmental impacts, and to conduct regular reviews on the range of environmental issues that require monitoring.*
- 3. Conduct Environmental Impact Assessments for new projects, where required by law and suggested by best practice, and implement the recommendations.*
- 4. Ensure that contractors and partners will implement any recommendation to achieve acceptable environmental standards, train and encourage all our suppliers to adopt environmentally acceptable practices in the products and services provided.*
- 5. Educate and train staff in environmental matters and raise their environmental awareness.*
- 6. Educate passengers, legislators, opinion makers and the general public on the environmental benefits of railways.*
- 7. Set environmental performance goals, arrange regular third-party environmental audits and publish the results with the aim of continuous improvement.*

Figure 3.4 – Elec & Eltek Co. Ltd. - Selected example for manufacturing sector

(Extracted from Elec and Eltek Co. Ltd.: “Environmental Performance Report 1998”, p.4)



Environmental Policy

We are committed to protect the environment and pursue continual improvement of our environmental performance in the printed circuit board manufacturing business with the following principles:

- *to comply with all applicable environmental legislation and other subscribed requirements;*
- *to monitor and control the significant environmental impacts associated with our business activities;*
- *to reduce water consumption, air emission and hazardous waste generation in our manufacturing processes;*
- *to prevent pollution and conserve resources in every aspect of our business activities;*
- *to provide training and support to enhance environmental consciousness amongst all levels of employees;*
- *to share environmental experience with our customers, vendors and other interested parties; and*
- *to support public environmental programmes and activities.*

4. *Environmental Objectives, Targets and Milestones*

Environmental objectives are the key areas of action identified through the formulation of the environmental policy whilst environmental targets and milestones represent the detailed performance requirements that an organization sets out to achieve. All targets and milestones should be measurable actions and should, in the longer term, provide benchmarks against which the organization's performance can be assessed.

When establishing its environmental targets and milestones, the organization could consider:

- legal requirements under existing environmental legislation;
- significant environmental impacts;
- technological options;
- financial and operational requirements; and
- views of interested parties.

As a general rule, the targets and milestones should be:

- set with specific timescale, usually on a calendar year basis;
- as specific and measurable as possible;
- set for both short and long terms; and
- consistent with the environmental policy.

Figure 4.1 shows the interrelationship between environmental policy, objectives and targets.

More examples of environmental targets/milestones are provided in [Annex 5](#) for reference.

Figure 4.1 – Environmental policy, objectives and targets set under operational activities

Policy	<ul style="list-style-type: none"> • We will promote reuse, recycle and recover. The disposal of remaining wastes will be done in an environmentally safe manner.
Objective	<ul style="list-style-type: none"> • Resources savings and wastes reduction
Long-term target	<ul style="list-style-type: none"> • By 1997, to reduce the amount of waste disposal to landfill sites by 60% of 1990 level.
Short-term target	<ul style="list-style-type: none"> • Reduce solid waste disposal by 25% of last year's level. • Compile data on photocopier paper use and volume of paper recycled and have these figures published every six months. • Move to exclusive use of recycled and environmentally preferable paper.

5. Environmental Management Analysis

Environmental management within an organization involves having the systems for managing and monitoring environmental performance to ensure that environmental impacts arising from the day-to-day operations, services and production processes are being addressed in an environmentally responsible manner. The organization can report on their performance of environmental management system as measured against three important elements:

- commitment (for example, formal responsibility and accountability), see figure 5.1
- capability (for example, technology, programmes, procedures and training), see figure 5.2
- mechanisms for continual improvement (for example, a system of measurements, reviews/audits, reporting), see figure 5.3

Figure 5.1 – Responsibility and accountability

We are directing our efforts on environmental issues at many levels. A committee of directors was established to oversee our policy and performance in the environmental area. The committee meets at least four times a year.

At each operation, local management is accountable for the implementation of the environmental policy. Facility managers are also accountable for compliance with all of the laws and regulations pertaining to the environment and occupational safety at the operation.

Figure 5.2 – Training and emergency response

Our policy and environmental regulations require that all our facilities have comprehensive emergency preparedness programmes. Included in these programmes are risk/hazard identification and assessment, emergency response planning and reporting, and staff training.

Emergency response plans are developed in cooperation with, and distributed to, local emergency response agencies, such as the police, fire and health departments. Staff are trained to serve as firefighters and emergency rescue personnel at facilities where that is appropriate. In addition, we maintain teams of specially selected and trained staff who are on call 24 hours a day to respond to spills or other emergencies. Other staff training programmes address issues such as environmental regulations, handling, storage and transportation of materials, new or revised environmental programmes.

Figure 5.3 – Environmental audit programme

Our environmental audit programme is a systematic, internal review of operations to verify compliance with our environmental policy and programmes and environmental regulations. At the conclusion of each audit, a report listing audit findings is provided to division managers who then prepare action plans to address the findings. The action plans are reviewed and approved by senior management; significant findings are reported to the directors.

Some deficiencies were noted from the results of the 1998 environmental audit and they are being corrected. Action plans are now in place to improve our spill prevention and response, training, chemical storage assessments and waste recycling. Progress against plans is reviewed quarterly.

6. Environmental Performance Analysis

The parameters chosen to quantify and track environmental performance of organizations are called environmental performance indicators. The following factors might assist on how to define such indicators :

- figures that report the most significant impacts;
- figures that could be quantified;
- figures that could best be normalized to allow for changes in volume of work or production; and

- figures that are commonly adopted in the respective profession, trade and business.

These indicators could cover both internal green housekeeping measures as well as the activities, services and production processes of the organization. Figure 6.1 provides some examples of typical environmental performance indicators under different key environmental aspects.

Figure 6.1 – Examples of performance indicators

Environmental Aspects	Typical Environmental Indicators
Energy and Resource Use <ul style="list-style-type: none"> • Material, water, other renewable resources • Energy 	<ul style="list-style-type: none"> • Weight of raw materials used per unit of production • Amount of recycled or reused materials used in the production process • Volume of water conserved per head of staff compared to the previous year • Reduction in materials per unit of production • %substitution by sustainable or non-damaging materials • Amount of energy consumption per year, per head or per unit of product • Fuel consumption per vehicle in fleet • Amount of energy saved due to energy conservation programmes
Pollution Prevention <ul style="list-style-type: none"> • Water Pollution 	<ul style="list-style-type: none"> • Volume of discharge per year or per unit of production • Weight of effluent of a specific substance per year, per service or per unit of production • Amount of energy released to water • Volume of specific emissions (e.g. carbon dioxide, nitrogen oxides) per year, per service or per unit of production
<ul style="list-style-type: none"> • Air Pollution 	<ul style="list-style-type: none"> • Total weight of particulates emitted • Quantity of air emissions having ozone-depletion potential
<ul style="list-style-type: none"> • Waste (toxic, hazardous and solid wastes) 	<ul style="list-style-type: none"> • Total volume of waste • Weight or amount of a specific waste per unit of production • % of waste recycled, treated and disposed • Toxicity rating • Quantity of hazardous waste eliminated due to material substitution
<ul style="list-style-type: none"> • Others 	<ul style="list-style-type: none"> • noise level measured at a certain location • amount of heat or light emitted • quantity of radiation released

Environmental Aspects	Typical Environmental Indicators
Environmental Management <ul style="list-style-type: none"> Environmental audits Environmental management system 	<ul style="list-style-type: none"> Number of environmental targets achieved Number of environmental initiatives implemented Ranking of effectiveness of environmental programmes implementation Number of sites or contractors/suppliers with environmental management system in place with reference to any international standard (e.g. ISO 14001) Frequency of carrying out audit (internal/external) Number of sites/divisions included under the environmental audit programme
Operations or Services <ul style="list-style-type: none"> Land and renewable resources disturbed, restored Population and wildlife affected 	<ul style="list-style-type: none"> Number of emergency events (e.g. explosion, chemical spillage) per year Population protected through the operation or service Total land area used for the operation or service provided % of parts of product designed for easy disassembly, recycling and reuse Energy consumption rate during use of product
Purchasing and Contracting	<ul style="list-style-type: none"> % of organization's supplier base that has a written environmental policy % by value of organization's total dollars spent which is placed with suppliers with pre-contract environmental information Amount of hazardous materials used by contractors or suppliers Amount of recyclable and reusable materials used by contractors or suppliers Quantity of different types of wastes generated by contractors or suppliers
Education and Training <ul style="list-style-type: none"> People trained or educated 	<ul style="list-style-type: none"> Number of staff attended environmental training courses Number of staff that have environmental requirements in their job descriptions Level of staff knowledge of the organization's environmental issues Number of emergency drills conducted Number of environmental educational programmes or materials provided for the community
Compliance <ul style="list-style-type: none"> Compliance situations Non-compliance situations 	<ul style="list-style-type: none"> Percentage of compliance Number of non-compliance situations Volume of spills Average time to solve non-compliance issues Percentage of days on which discharge consent was exceeded Costs attributable to fines and penalties
Environmental Expenditures	<ul style="list-style-type: none"> Total dollars spent on environmental related activities Resources applied to support of community environmental programmes Research and development funds for project of environmental significance
Technology <ul style="list-style-type: none"> Investment Waste reduction 	<ul style="list-style-type: none"> Dollars spent on improved technology (infrastructure/equipment) to address pollution problems Effectiveness of new systems (e.g. comparative emissions performance before and after investment) Level of investment to meet higher specification of products % of vehicles in fleet with pollution-abatement technology
Communication <ul style="list-style-type: none"> Internal communication External communication with interested parties 	<ul style="list-style-type: none"> Number of environmental improvement suggestions from staff Number of products with instructions regarding environmentally safe use and disposal Number of press releases on the organization's environmental performance Number of public inquiries or comments on environmentally related matters

With reference to each performance indicator, the environmental performance analysis compares environmental performance against the environmental policy, objectives and targets/milestones through the use of financial, operational, scientific or other relevant statistics and data. When objectives or targets are not met, reasons for the failure and proposed corrective action plans might need to be discussed. The environmental performance analysis might include one or more of the following dimensions:

- an analysis of performance against certain benchmarks which could range from what have been set under the environmental policy, targets/milestones to trend analysis or even compliance with laws and regulations. (See examples in figures 6.2 and 6.3);
- an analysis of performance by line of business and/or by location;
- the number and extent of environmental incidents and corrective actions;
- discussion of activities that offset environmental damage (including regeneration of renewable resources and restoration of sites); and
- environmental programmes with staff, suppliers, contractors and other stakeholders.

As reference, [Annex 6](#) provides more examples to illustrate how environmental information could be reported against various policy areas, objectives and targets.

When it is not possible to provide data to support performance claims, full narrative disclosure is encouraged. (See example in figure 6.4)

[Annex 7](#) shows a summary table that could be used to present the linkages among the various environmental impacts, their related targets and the performance reported against those targets.

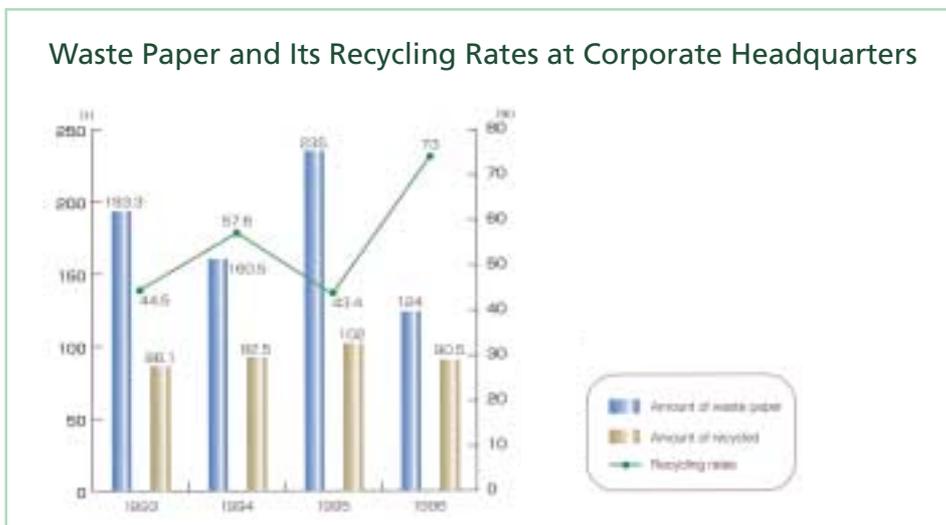


Figure 6.2 – Analysis of performance against environmental policy areas and targets

Environmental Policy Areas	1999 Targets	Performance
Waste management	<ul style="list-style-type: none"> Reduce waste going to landfill by 5%, based on landfill tax paid, for the year 1999/2000 Increase total recycling in terms of weight by 10% between April 1999 and March 2000. Phase out the portable Halon fire extinguishers by March 2003 	<p>COMPLETED The amount of waste sent to landfill was 103,900 tonnes in 1999/2000 against 110,000 tonnes in the previous financial year. This represents a reduction of 5.6%.</p> <p>COMPLETED The total increase at 31 March 2000 was 19.5%</p> <p>ON GOING A database is being established to record the number and locations of all Halon portable fire extinguishers installed within the company. This work will be completed by July 2000.</p>
Energy/water consumption	<ul style="list-style-type: none"> Reduce water consumption at metered sites across its estate by 5% over a three-year period from April 1999 to March 2002. Reduce energy consumption by 11% over the five year period from April 1997 to March 2002 (1997 target) 	<p>ON GOING Consumption in the financial year ending 31 March 2000 was down by 0.02%</p> <p>SUPERSEDED Working towards a reduction of 11% by March 2002, we are currently on target, with overall consumption down by 9.24%. However, in line with the current international trend to separate reporting the impact of the business processes from premises, we have decided to supersede this target with two new energy targets for 2000/01 covering our energy consumption for process and premises.</p>
Procurement	<ul style="list-style-type: none"> Ensure that the revised environment procurement specification GS13 is fully and effectively deployed throughout the company's procurement activities by 31 March 2000. This will be monitored in June 1999 and again September 1999. 	COMPLETED
Communications	<ul style="list-style-type: none"> By March 2000 to design and implement an environmental complaint handling process in order to provide base-line data to enable analysis and development of improvement plans. 	<p>COMPLETED The process to gather data on environmental complaints received has been put in place and analysis is underway, with quarterly reports provided to Aspect Owners for information/action as appropriate.</p>

(Extracted from British Telecommunications plc : "Environmental Performance Report 2000")

Figure 6.3 – Analysis of performance against historical data to show general trend



(Extracted from Kirin Brewery Company Limited, Japan : "1997 Kirin Brewery Environmental Report", p.24)

Figure 6.4 – Narrative disclosure of performance progress towards sustainable development

... It has been built with a number of innovative environmental features and where possible used recycled materials in its construction. The windows have an inner frame of wood made from sustainable forests and the distance between the two panes of glass has been increased to maximize the use of daylight. Excess heat generated in the day is absorbed into a dense slab of concrete in the ceiling, then during the evening when people have left the office, the heat is expelled and windows open automatically to regulate the temperature ...

(Extracted from British Telecommunications plc: "Environmental Performance Report 2000", p.65)

... Cathay Pacific is also aware that the adhesives used in interior fitting work are other sources of indoor air pollutants. It is company policy to procure furniture and interior furnishing materials with low Volatile Organic Compound emission, especially formaldehyde and phenols. As a result, formaldehyde was almost undetected in a recent air quality testing. Man-made marble fixtures are used at Cathay Pacific City to avoid radon emission from marble. Organic solvents from correction fluid, paints, thinner could be carcinogenic and detrimental to health. If possible, the airline intends to substitute traditional points with water-based paints. The use of any benzene-based material is forbidden inside the building. ...

(Extracted from Cathay Pacific Airways Ltd. : "Environmental Report 1998 & 1999", p.33)

7. Environmental Actions Requiring Special Attention

The Chief Executive Officer or the Managing Director, as top management of an organization, might wish to give his views on how well the organization has performed in the current year and which specific areas they would focus their efforts on in the coming year. In this part of the report, it might be worthwhile for the top management to consider the possible challenges likely to be faced by the organization with regard to :

- changing environmental legislation;
- changing expectations and requirements of target audiences;
- changes in the activities, services and production processes of the organization;
- recent advances in technology; and
- review of last year's achievements.