



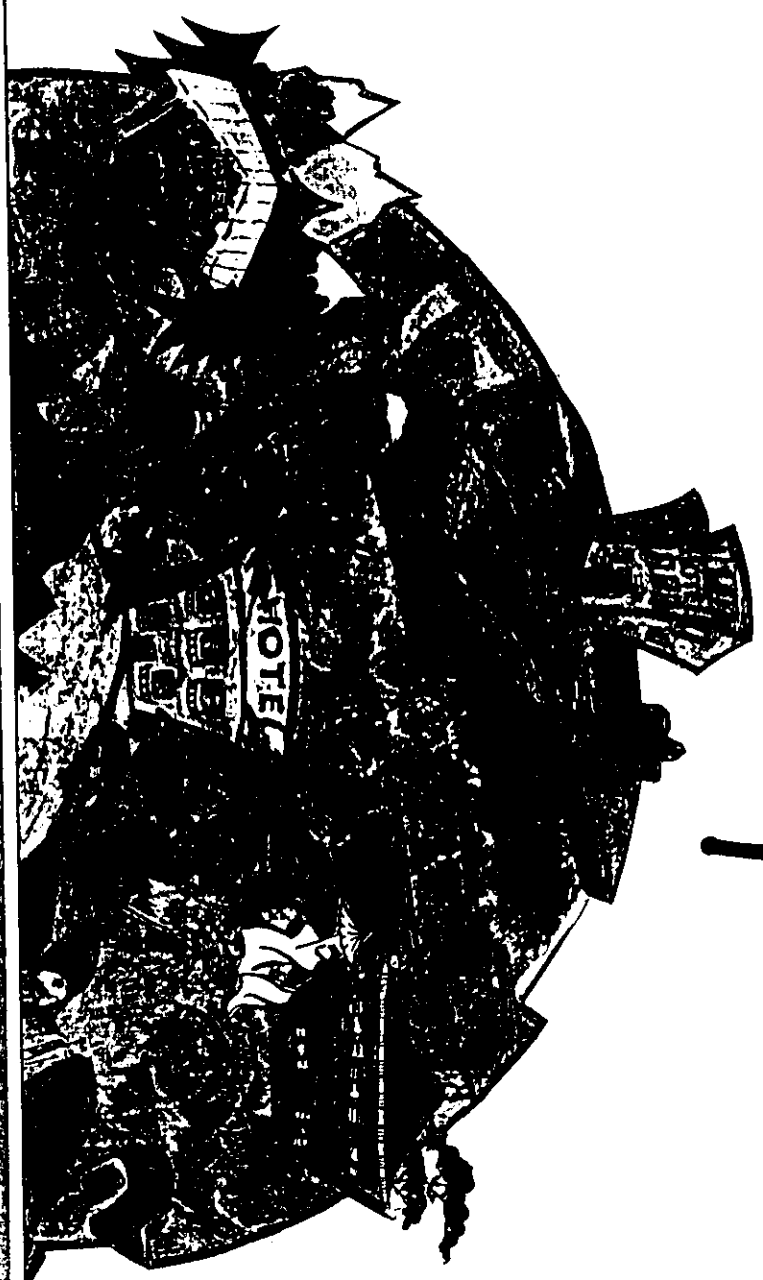
الجمهورية اللبنانية  
مكتب وزير الدولة لشؤون التنمية الإدارية  
مركز مشاريع ورشات القطاع العام



Republic of Lebanon  
Office of the Minister of State for Administrative Reform  
Center for Public Sector Projects and Studies  
(C.P.S.P.S.)



# ENVIRONMENTAL ACTION PACK for Hotels



Practical Steps to benefit Your Business and the Environment

# Acknowledgements

THE ENVIRONMENTAL ACTION PACK FOR HOTELS WAS PREPARED BY TOUCHE ROSS MANAGEMENT CONSULTANTS. ITS PREPARATION INVOLVED EXTENSIVE CONSULTATION WITH INDUSTRY ORGANISATIONS AND EXPERTS AROUND THE WORLD.

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# About the Authors

## THE INTERNATIONAL HOTEL ASSOCIATION (IHA) is the only

organisation that exclusively represents the interests of the hotel industry worldwide.

Its mission is to lobby at international level on behalf of the hotel industry; to provide networking opportunities for the global hotel community; and to provide information services to members.

Its core membership is composed of international and national hotel chains, national hotel associations, independent hotels, schools and product and service suppliers to hotels.

## THE INTERNATIONAL HOTELS ENVIRONMENT INITIATIVE (IHEI) is an

international network of hotel companies which exists to promote the continual improvement in environmental performance in the hotel industry worldwide.

The IHEI is core-funded and its activity coordinated by an International Council of hotel groups: Accor, Forte Plc, Hilton International, Holiday Inn Worldwide, Inter-Continental Hotels and Resorts, ITT Sheraton, Mandarin Oriental Hotel Group, Marriott Corporation, Omni Hotels International, Renaissance Hotels International, and The Taj Group of Hotels.

The IHEI is a programme of The Prince of Wales Business Leaders Forum which aims to promote the long-term benefits of good corporate citizenship and sustainable development as a natural part of successful business operations.

## THE UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP) is the United Nations Environmental Conscience.

It acts as a "catalyst for change" and for sustainable development.

## UNEP INDUSTRY AND ENVIRONMENT

(UNEP/IE) brings together industry, governmental and non-governmental organisations to work towards environmentally sound forms of industrial and tourism development, especially in developing countries.

Given the importance of tourism, and the key role hotels have to play for sustainable development of this sector, UNEP/IE decided to join forces with IHEI and IHA to promote environmental management of hotels and build capacity on this important issue.

# Sponsor's Foreword

**Diversey Corporation has sponsored the production of the Environmental Action Pack. We are delighted to be associated with such a valuable initiative.**

Diversey Corporation is the leading global supplier of cleaning and sanitising products, together with water management products and systems.

We meet the cleaning needs of hotels and restaurants in dishwashing, kitchen cleaning, housekeeping, laundry and water management.

Within all the Diversey businesses and wherever in the world those businesses are trading, sensitivity to the environment is part of the corporate culture. We recognise the need to balance high standards of cleanliness with environmental responsibility.

Environmental neutrality is a key objective for us:

- ❶ the products we make must represent the most efficient use of resources
- ❷ products must be worker-safe and minimise the threat to the environment in manufacturing and shipping

Partnership with our customers is a key issue.

We work with our customers to ensure that:

- ❶ the product being used provides the desired result in the gentlest manner
- ❷ procedures and equipment are optimised to ensure efficiency without over-cleaning
- ❸ employees understand the appropriate use of products, equipment and the need for accurate dosing.

# CONTENTS

WHY GO GREEN ? .....	6
HOW TO USE THE ACTION PACK .....	7
<b>PART ONE: GETTING STARTED .....</b>	<b>8</b>
THE GREEN HEALTH CHECK .....	9
<b>PART TWO: ACTION CHECKLISTS .....</b>	<b>14</b>
ACTION CHECKLISTS FOR KEY DEPARTMENTS .....	15
<b>PART THREE: OPERATING YOUR BUSINESS ENVIRONMENTALLY .....</b>	<b>24</b>
INTEGRATING ENVIRONMENTAL MANAGEMENT .....	25
MOTIVATION .....	26
PLANNING ACTION .....	27
MAKING IT HAPPEN .....	28
REVIEWING PROGRESS .....	29
<b>PART FOUR: DEVELOPING THE ACTION .....</b>	<b>30</b>
ENERGY .....	32
SOLID WASTE .....	36
WATER .....	40
EFFLUENTS & EMISSIONS .....	44
CONTRACTORS & SUPPLIERS .....	48
BUSINESS ISSUES .....	52
REVIEWING PROGRESS .....	57
<b>PART FIVE: FURTHER HELP .....</b>	<b>62</b>

# The Hotels' Environmental Charter

“ WE RECOGNISE THAT OUR BUSINESS HAS AN IMPORTANT ROLE TO PLAY IN PROTECTING AND ENHANCING THE ENVIRONMENT FOR FUTURE GENERATIONS, AND TO HELP SECURE THE LONG-TERM SUSTAINABILITY OF THE TOURISM INDUSTRY.

TO THIS END OUR HOTEL IS COMMITTED TO TAKING ACTION:

- TO ACHIEVE SOUND ENVIRONMENTAL PRACTICES ACROSS OUR ENTIRE OPERATION
- TO COMPLY FULLY WITH ALL ENVIRONMENTAL LEGISLATION
- TO MINIMISE OUR USE OF ENERGY, WATER AND MATERIALS
- TO MINIMISE OUR WASTE AND TO REDUCE, RE-USE AND RECYCLE THE RESOURCES CONSUMED BY OUR BUSINESS WHEREVER PRACTICAL
- TO REDUCE OUR POLLUTION TO A MINIMUM AND, WHERE APPROPRIATE, TO TREAT EFFLUENTS
- TO INVITE OUR CUSTOMERS, SUPPLIERS AND CONTRACTORS TO PARTICIPATE IN OUR EFFORTS TO PROTECT THE ENVIRONMENT



- WHERE WE CAN, TO WORK WITH OTHERS IN THE TOURISM INDUSTRY, IN PUBLIC AGENCIES AND THE COMMUNITY TO ACHIEVE WIDER ENVIRONMENTAL GOALS
- TO PROVIDE ALL EMPLOYEES WITH THE TRAINING AND RESOURCES REQUIRED TO MEET OUR OBJECTIVES
- TO OPENLY COMMUNICATE OUR POLICIES AND PRACTICES TO INTERESTED PARTIES
- TO MONITOR AND RECORD OUR ENVIRONMENTAL IMPACTS ON A REGULAR BASIS AND COMPARE OUR PERFORMANCE WITH OUR POLICIES, OBJECTIVES AND TARGETS ”

# Let's Get Going . . .

**The protection of the environment is the greatest challenge of our generation. It is a challenge in which we all, whether in government, business or as individuals, have a part to play.**

**More and more companies, both large and small, are now bringing environmental management into the daily running of their business.**

The results are really worthwhile — not just in environmental terms, but also in terms of real business benefits, such as reduced costs and liabilities, greater service quality and customer satisfaction and improved corporate image.

Hotel and tourism organisations around the world are also taking action. They too use natural resources — energy, water and materials — which are increasingly threatened. Moreover, an unspoilt environment is the basis on which the industry is built. Tourists are drawn to a destination by its climate, natural landscapes, the quality of its beaches, water cleanliness, local culture and the built heritage. As experience shows, take away these qualities and the tourists will not come back. The needs of environmental protection vary from hotel to hotel and from location to location. There is no one answer and weighing up the environmental benefits with the business benefits is often a process of experience.

This Action Pack is part of a strategy to help hotels set up their own individually tailored environmental programme and form part of a wider regional and world-wide network to share experiences and take joint action as necessary. We are sure that if we all work together we can face the challenge of improving our environmental performance.

The IHA, UNEP and the IHEI invite you to commit to the principles of the Hotels' Environmental Charter. It will bring you new friends, the benefits of sharing best practice and the business benefits of joint effort.

**WELCOME AND GOOD LUCK!**



# Why Go Green?

Have you considered the business benefits that environmental management can bring:

## REDUCED CONSUMPTION AND THEREFORE REDUCED COSTS

Many environmental measures are aimed at reduced consumption (energy, water, office materials, etc.), which will also serve to reduce your business costs.

*A recent survey of hotels suggests that energy savings can be upwards of 5% for good-housekeeping measures and about 10% for low-cost measures.*

## CUSTOMER LOYALTY AND ENHANCED PUBLIC IMAGE

Hotel guests are increasingly taking an interest in the environment. If you can show you care for the environment as well as their comfort, you will gain their respect and customer loyalty. They will also spread the word about your hotel.

*A hotel in Italy which was developed and marketed as 'eco-friendly' saw business increase by 30% while its competitors' business decreased in the recession.*

## ATTRACTING AND RETAINING DEDICATED STAFF

If staff see that you care about the environment without threatening the success of your business, they will feel they are employed by a more caring, yet fully commercial organisation. This will increase motivation, loyalty and staff effectiveness — all leading to reduced staff turnover.

*A hotel in Canada collected all its cardboard and sold it for recycling. The money was split: 50% to a local charity; 50% to the staff social fund.*

## LONG-TERM BUSINESS BENEFITS

By working with others in the industry and demonstrating good practice, you will help secure the protection of the local environment on which the long-term future of your business depends.



## IMPROVED COMPETITIVE POSITION.

Think:

- ❑ Are your competitors taking environmental action?
- ❑ Are your guests increasingly environmentally aware?
- ❑ Do you derive business from environmentally active tour operators/carriers?
- ❑ Are environmental problems threatening your local tourism industry?

**REMEMBER: GOING GREEN IS GOOD FOR BUSINESS**





# How to use the Action Pack

**The aim of this Action Pack is to help you introduce environmental management as an extension to the daily running of your business – it does not need considerable additional time or money.**

**The Action Pack seeks to help you immediately start planning and taking simple practical action. It recommends a straightforward approach, with good planning and regular monitoring, and contains a range of checklists and forms. They are essential for you to set and achieve your own goals.**

**Use the Action Pack, adapt it, copy it, add to it. Above all, don't forget it!**

This ACTION PACK is in five main parts:

**PART ONE: GETTING STARTED** shows you how you can start on a workable environmental programme for your hotel, identifying the areas where actions are most needed and will be most beneficial to you.

**PART TWO: ACTION CHECKLISTS** presents simple ideas in the form of checklists for key departments which you and your staff can start to try out immediately.

**PART THREE: OPERATING YOUR BUSINESS ENVIRONMENTALLY** sets out how you can introduce a programme of continuous improvement into your hotel. It introduces the concept of environmental management and explains the steps that your hotel needs to take to make it part of your daily operation. It includes sections on:

- ❑ Motivation
- ❑ Planning Action
- ❑ Making it happen
- ❑ Reviewing progress

**PART FOUR: DEVELOPING THE ACTION** focuses on six major areas of environmental concern where you can take action:

- ❑ Energy
- ❑ Solid waste
- ❑ Water
- ❑ Effluents & emissions

❑ Contractors & suppliers

❑ Business issues

In each of these areas a description is given of the main issues affecting hotels. Forms are provided, where necessary, for you to photocopy and use as often as you like in order to:

❑ Carry out a detailed review of the chosen priority action areas

❑ Prepare a plan of action

❑ Monitor progress.

Guidance on how to fill in the forms is given on the transparent overlays.

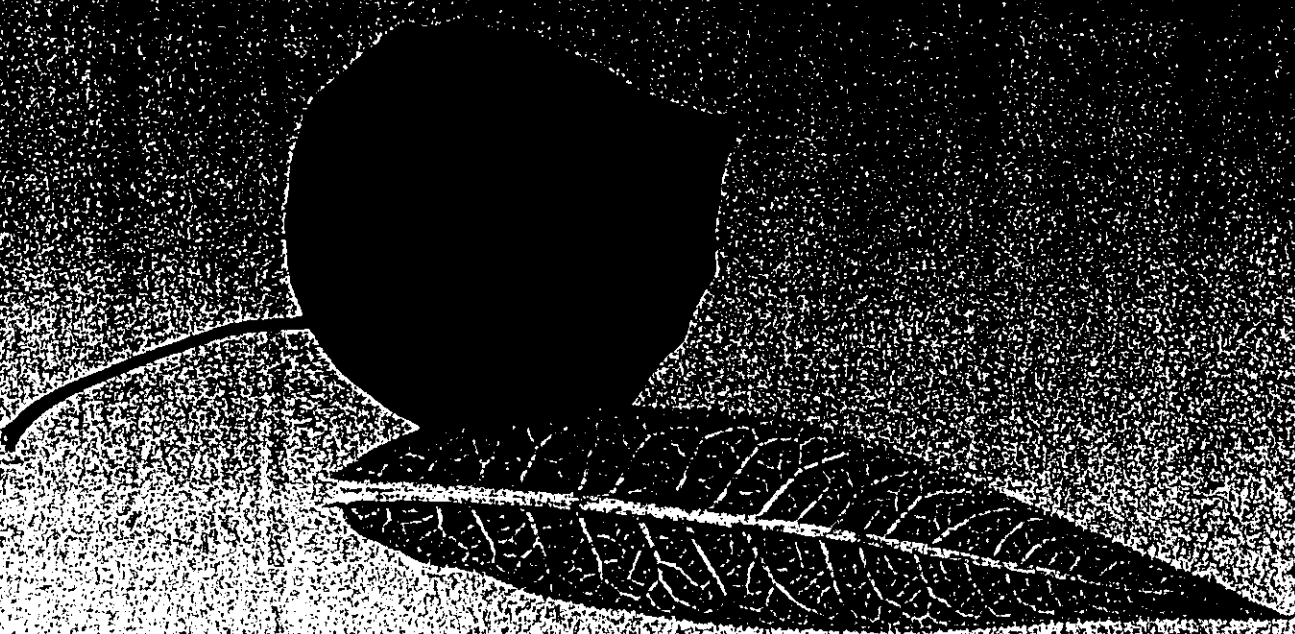
**PART FIVE: FURTHER HELP** gives sources of further information and technical assistance.



# **PART ONE GETTING STARTED**

The Green Health Check is designed to help you decide what matters to your hotel. It will help you to quickly get an idea of the environmental issues affecting your business and of your current environmental performance.

The Health Check should take no more than two hours to complete. Use only existing information which is to hand.



# The Green Health Check

**All hotels, no matter how small, place a burden on the environment. They consume water, energy and materials in providing services to guests. They use harmful substances (such as CFCs, which are used in refrigerators, and chlorine bleaches); they generate waste, and release effluents and air emissions which pollute; and many of the goods they buy have environmental impacts associated with their manufacture, use and disposal.**

There are many actions that hotels can take to help protect the environment and save money. The problem is knowing where to start — how to define the best areas for action which will bring real benefits to the environment and also to the business. This varies from one hotel to another because of differences in:

- ? Operational characteristics and customer base
- ? Starting points — some hotels have already taken environmental actions
- ? Legislation from one country to another
- ? Local and regional environmental priorities (e.g. water pollution may be a key priority in your locality)

The Green Health Check covers the following areas:

- ? Energy
- ? Solid waste
- ? Water
- ? Effluents and emissions
- ? Contractors and suppliers
- ? Business issues

Use the tables on the following pages to score your Green Health Check, according to the instructions on

each page. Then transfer the scores to the Summary of Results table on page 13 to see how your hotel is performing and which areas could be tackled as a priority.





## Environmental Checklist Energy

YES / NO

Do staff switch off appliances and lighting when not in use?

Are energy services shut down when and where parts of the building are unoccupied?

Have temperature settings, timers, lighting levels etc., been adjusted to ensure minimum energy use for given comfort levels?

Is hotel energy use regularly monitored?

Is consumption of energy going down year on year?

Have targets for reducing energy consumption been set?

Has energy use been compared with energy benchmarks?

Have you checked that the cheapest fuel/tariff is being used for each purpose?

Is all of your energy plant/equipment less than 10 years old?

Have low-energy lights been fitted where cost-effective?

Has an energy audit been undertaken in the last three years?

NUMBER OF YES'S

PREPARED BY

DATE

NEXT REVIEW DATE

For these two tables answer YES or NO to each question. If you do not know the answer, put NO. Add up the number of YES answers.

If you have scored:

? 5 or more YES answers — you are performing well in that area

? 4 or less YES answers — you may need to consider that area as a priority for action.



## Environmental Checklist Solid Waste

YES / NO

Do you know what happens to the waste from your hotel?

Are the types and amount of waste generated by the hotel monitored?

Are opportunities to reduce wastage identified and acted upon?

Do systems exist to minimise waste, reduce and recycle where possible?

Do you recycle or reuse most:

- bottles
- waste paper?
- cans?
- batteries?

Is organic waste composted?

Does the hotel use reusable toiletries and toiletry containers?

Is all solid waste safely disposed of to an official site?

Is a register kept of hazardous wastes?

NUMBER OF YES'S

PREPARED BY

DATE

NEXT REVIEW DATE

# Reviewing progress

4.

## REVIEWING PROGRESS

- MONITOR PROGRESS
- ANNUAL REVIEW

The old adage 'You cannot manage what you do not measure' applies as much to environmental management as to other areas. This is the major ongoing role of the **Champion** and involves two tasks:

### MONITOR PROGRESS

You need good monitoring procedures to know that your plan is working and achieving its objectives. Monitoring should be regular — how regular depends on the subject being monitored. But it should be sufficiently frequent to enable corrective action to be taken if there is a major change from targeted performance (due, for instance, to a thermostat setting being changed accidentally). Energy and water consumption should be monitored on at least a weekly basis. This need not take a member of staff more than 10 minutes a week. Monitoring forms for each action area are provided in **PART FOUR**.

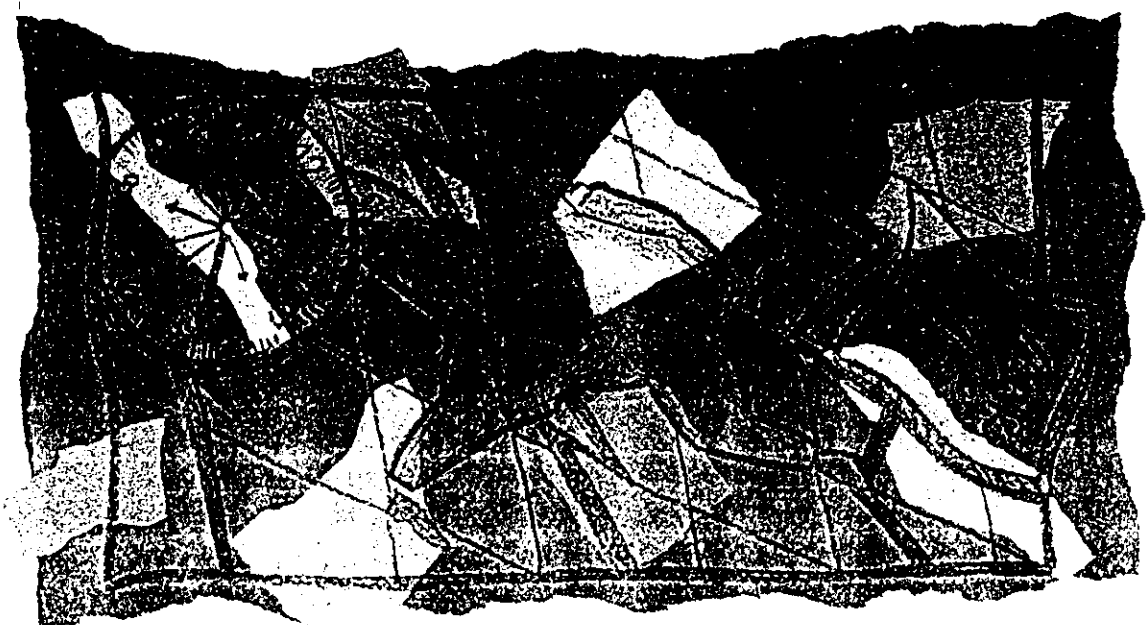
Especially in the early days when progress will be patchy, and difficulties will arise, you might find it useful to hold short meetings say on a fortnightly or monthly basis with relevant individuals to review the progress made, and to help sort out problems as they arise.

### ANNUAL REVIEW

Once a year you will need to step back and check your progress. The review might best be undertaken by the **Champion** and might take the form of a short report attaching completed targeting and monitoring forms of the initiatives undertaken. Alternatively you might prefer to use independent consultants if you do not have the resources or expertise in house to do this. The review should cover your environmental management capabilities as well as your progress with specific environmental actions. It should entail:

- ❑ a repeat of the **Green Health Check** to assess what progress has been made, and to help re-prioritise action
- ❑ a summary of measured achievements against set targets and objectives
- ❑ discussions with relevant staff to identify the difficulties that have arisen, and the successes, and their recommendations for future action.

This review process is invaluable. It will highlight problem areas as well as help you to identify the most appropriate environmental management approach for your business. You can then begin to plan for the coming year — but this time on the basis of your experience of going green to date.



## Environmental Checklist Water Usage

Have any specific actions been taken to save water in the last 12 months?

Is water use monitored?

Is the water system regularly checked for leaks or surges in consumption?

Are staff encouraged to save water?

Are guests encouraged to save water?

- Answer NO if the hotel has:
- a swimming pool
  - a garden which is watered regularly
  - a laundry

Are towels and bed linen in guest rooms only changed on request?

Have spray taps been fitted in the guest bathrooms?

Have flow restrictors been fitted to water pipes?

YES / NO

NUMBER OF YES'S

DATE:

NEXT REVIEW DATE:

PREPARED BY:

For these two tables answer YES or NO to each question. If you do not know the answer, put NO. Add up the number of YES answers.

If you have scored:

5 or more YES answers — you are performing well in that area

4 or less YES answers — you may need to consider that area as a priority for action.

## Environmental Checklist Effluents & Emissions

Do you know how your sewage and waste effluents are treated?

Are you aware of all legislation pertaining to hotel emissions and effluents?

Is sewage from the hotel treated before being discharged to fresh water?

Have necessary discharge licences been obtained?

Have options for reducing CFC use been researched and implemented?

Has your hotel been free of complaints about noise, odours and pollution in the last year?

Is the hotel building free of asbestos?

Do all hotel vehicles have catalytic converters?

Are air and water quality in your locality considered to be good?

Does a register of hazardous substances used in the hotel exist?

Do you have automatic metering to minimise use of products?

YES / NO

NUMBER OF YES'S

DATE:

NEXT REVIEW DATE:

PREPARED BY:



# Environmental Checklist Contractors & Suppliers

Does the hotel have a policy of purchasing environmentally friendly products where possible?

Do you buy recycled or recyclable products where possible?

Do you avoid (where alternatives exist):

- products made with tropical hardwoods?
- CFC-based products (fridges, air-conditioning, aerosols)?
- chlorine bleaches or bleached linen?
- heavily packaged products?
- leaded petrol?
- halon fire extinguishers?

Does the hotel purchase mainly fresh food — as opposed to frozen or heavily packaged food?

Do you take environmental considerations into account when deciding to employ a contractor?

Have you ever evaluated the performance of eco-friendly contractors?

YES / NO

NUMBER OF YES'S

PREPARED BY:

DATE:

NEXT REVIEW DATE:

► For the table on the left answer YES or NO to each question.

If you do not know the answer, put NO.

Add up the number of YES answers.

If you have scored:

► 5 or more YES answers — you are performing well in that area

► 4 or less YES answers — you may need to consider that area as a priority for action.

For the table on the ► right answer YES or NO to each question.

If you do not know the answer, put YES. Add up the number of YES answers.

► 5 or more YES answers, there are strong business reasons for investing in environmental action.



# Environmental Checklist Business Issues

Are environmental problems threatening the future of the local tourism industry?

Are you associated with a carrier or tour operator who is taking environmental action, and may expect you to in the future?

Are your guests environmentally concerned?

Are members of your staff concerned about the environment?

Would a good environmental reputation improve the hotel's standing in the community?

Are you planning to apply for permission to extend an existing hotel or build a new one?

Are your direct competitors taking environmental action?

Have there been any complaints about poor environmental practices at the hotel?

Would your business benefit from a recognised award scheme?

Has the hotel been fined or cautioned by the pollution enforcement authorities for a breach of legislation?

YES / NO

NUMBER OF YES'S

PREPARED BY:

DATE:

NEXT REVIEW DATE:

# Green Health Checklist Summary of Results

## GREEN HEALTH CHECKLIST SUMMARY OF

### RESULTS

Once you have completed all the checklist, copy the final scores to this Summary of Results.

Enter the lowest score in the lowest priority for

the highest priority for

Remember, do not try to take action on everything at once. Choose just one or two areas:

In which it is easy to take practical action.

Where real environmental and business benefits can be achieved.

When you have achieved real progress in these areas, and are motivated by their achievements and ready to try something new, then move on to the next priority area.

At the end of the year conduct a Health Check again.

Use the progress you've made and help re-prioritise action.

SELECTED ACTION AREA

	YEAR 1		YEAR 2		YEAR 3	
	SCORE	PRIORITY RANKING	SCORE	PRIORITY RANKING	SCORE	PRIORITY RANKING
ENERGY	3	1				
SOLID WASTE	4	3				
WATER	4	2				
EFFLUENTS & EMISSIONS	5	5				
CONTRACTORS & SUPPLIERS	4	4				
BUSINESS ISSUES	5	6				
TOTAL SCORE	25					
ENERGY						

PREPARED BY:

Fred Champion

DATE:

December '95

NEXT REVIEW DATE:

December '96

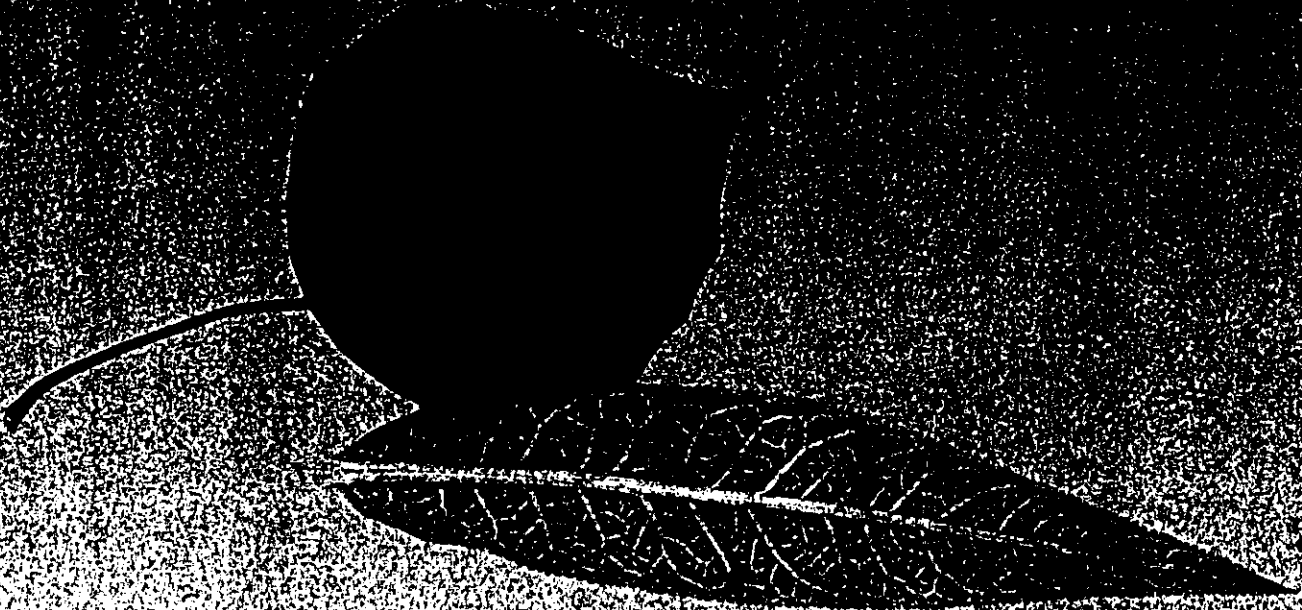
**EXAMPLE**



Green Health Council						
Summary of Results						
	YEAR 1		YEAR 2		YEAR 3	
	SCORE	PRIORITY RANKING	SCORE	PRIORITY RANKING	SCORE	PRIORITY RANKING
SELECTED ACTION AREA						
PREPARED BY:		DATE:		NEXT REVIEW DATE:		

# **PART TWO ACTION CHECKLISTS FOR KEY DEPARTMENTS**

**This section will help you  
begin to take action.**



# Action checklists for key departments

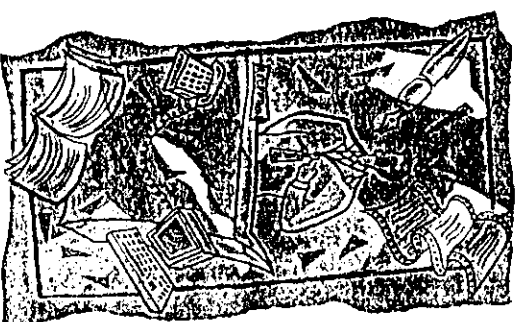
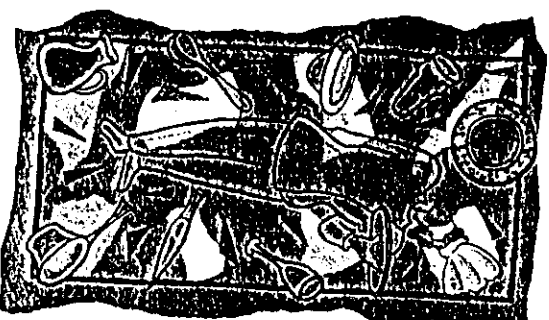
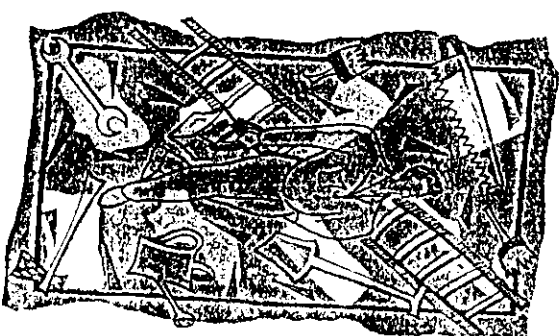
The following pages contain examples of immediate practical environmental actions which the different staff in your hotel can begin to take.

Don't try to do them all at once.  
Select a few to start with.  
Draw up an action list.

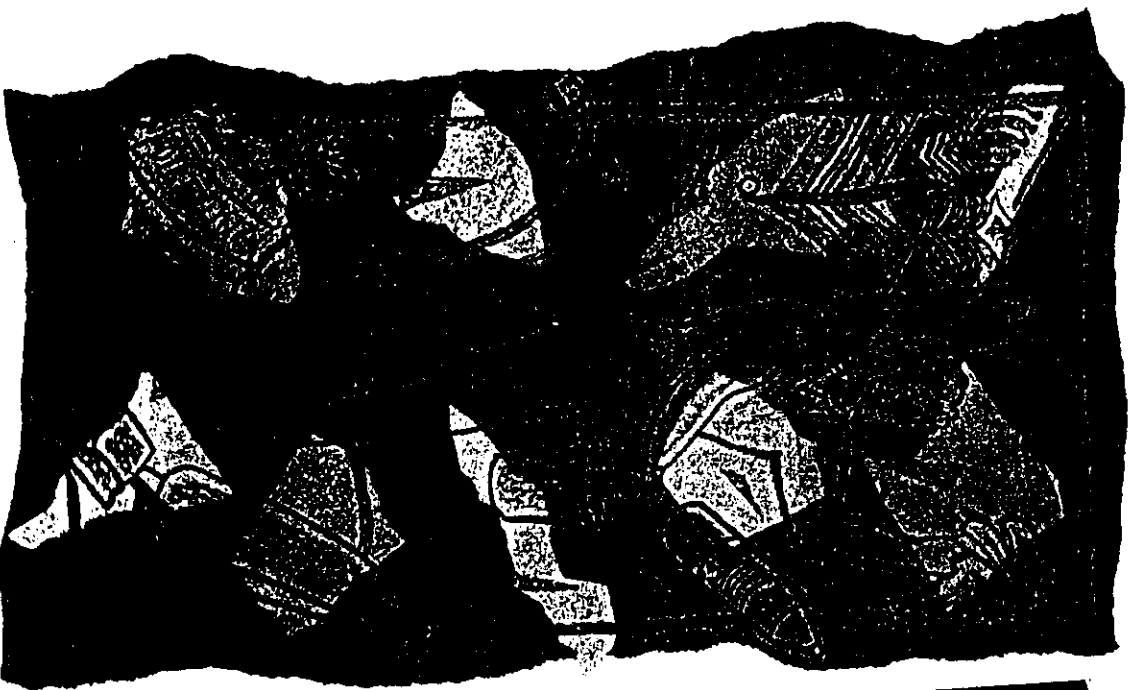
The action list should be kept simple and can be put up on the staff notice board. At the next staff meeting tell staff about the new actions they need to take.

We also present a few examples of what other hotels have done to date to give you more ideas.

**REMEMBER:**  
**EVERY LITTLE ACTION HELPS!**



# Action Checklist: Housekeeping



## WHAT WE DID. . . .!

"We changed to a non-toxic, biodegradable, multi-purpose cleaner/disinfectant. It was as good as our previous product in cleaning and rinsing; could be used in cold water (energy conservation); and was price-competitive as it could be diluted for use."  
(160-bedroom unit)

"We send used guest soap to the Salvation Army for use in hostels for homeless people."

"We found that making bedrooms no-smoking areas cut down on the amount of cleaning necessary."

"The extra money we spent on changing to biodegradable toiletries, was more than offset by the savings we made on water and electricity bills."

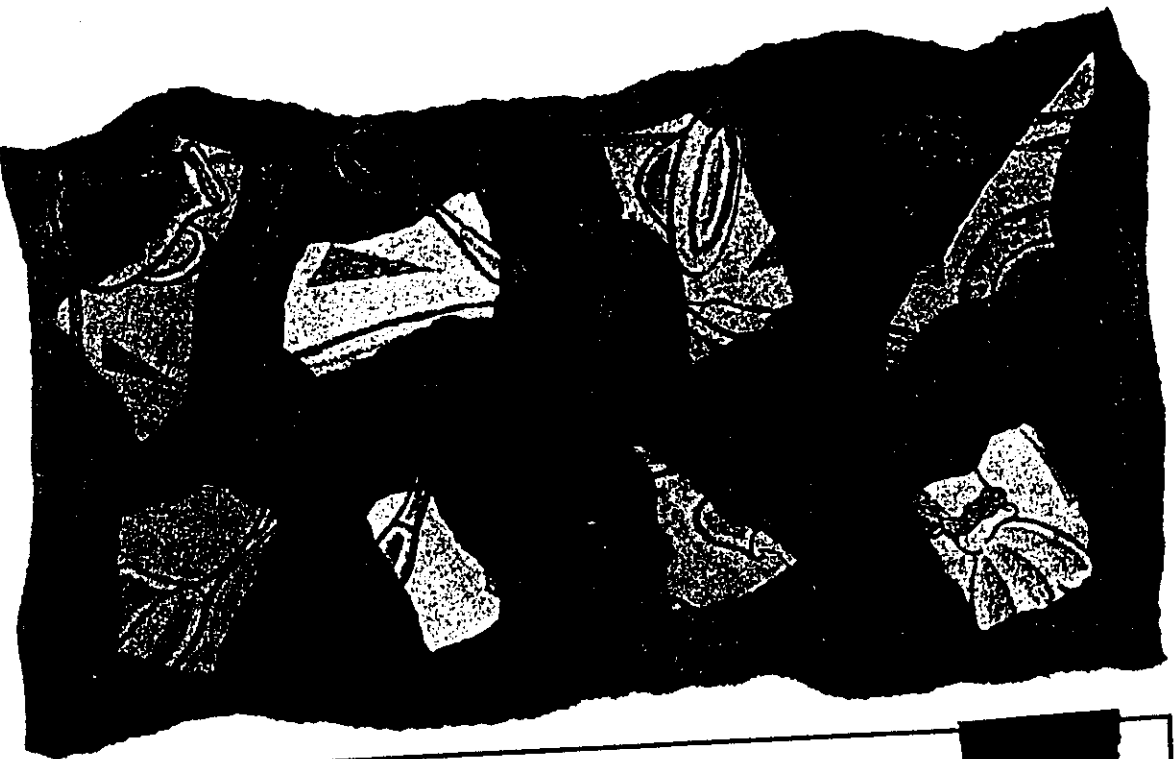
# Environmental Action Checklist Housekeeping Station

GOAL / ACTION		GOAL / ACTION
<p><b>REDUCE WASTE</b></p> <p>COLLECT EMPTY COSMETICS CONTAINERS FOR REFILL</p> <p>SORT WASTE FROM GUEST-ROOMS FOR RECYCLING</p> <p>COLLECT FLOWERS AND TAKE TO COMPOST HEAP</p> <p>TAKE ALL RETURNABLE EMPTY MINIBAR BOTTLES TO KITCHEN STORE</p> <p><b>CONSERVE WATER</b></p> <p>REMOVE ONLY TOWELS THROWN ON FLOOR FOR LAUNDERING</p> <p>CHECK IF BEDLINEN CAN JUST BE REPLACED EVERY THREE DAYS</p> <p>DO NOT LEAVE TAPS RUNNING WHILE CLEANING</p> <p>USE STATED AMOUNTS OF DETERGENT/WATER SOFTENERS IN LAUNDRY</p> <p>GET LEAKING OR DRIPPING TAPS AND TOILETS FIXED</p>		<p><b>SAVE ENERGY</b></p> <p>WHEN LEAVING GUEST BEDROOMS</p> <ul style="list-style-type: none"> <li>▶ TURN ALL LIGHTS OUT</li> <li>▶ SWITCH TELEVISION OFF</li> <li>▶ CLOSE WINDOWS</li> <li>▶ CLOSE CURTAINS TO REDUCE SOLAR GAIN</li> <li>▶ IF ROOM IS NOT BOOKED, TURN HEATING/AIR CONDITIONING OFF</li> <li>▶ IF ROOM IS BOOKED, TURN ROOM CONTROLS TO MINIMUM COMFORT LEVEL</li> <li>▶ ENSURE FURNITURE IS NOT PLACED IN FRONT OF HEATERS</li> </ul>
<p>PREPARED BY</p> <p>Fred Champion</p>	<p>DATE:</p> <p>December '95</p>	<p>COMPLETED DATE:</p> <p>December '96</p>

**EXAMPLE**

[illegible]

# Action Checklist: Food & Beverage



## WHAT WE DID...

"Our chefs have finally broken the habit of turning on all the ovens first thing in the morning. Now the kitchen is cooler to work in — which needs less air-conditioning and costs less."

"Our restaurant now serves organic food — grown without the use of harmful pesticides and herbicides — and this has won us a local restaurant award."

"Checking that all the refrigerator and freezer door seals were working properly cut down on the need to defrost as often (and probably saved us money)." (Hotel in Thailand)

"We fitted an automatic dispenser to detergents and found the usage significantly decreased."

# Environmental Action Checklist Food & Beverage Staff

GOAL / ACTION		GOAL / ACTION
<p><b>REDUCE WASTE</b></p> <p>SEPARATE AND TAKE ALL ORGANIC WASTE TO COMPOST HEAP</p> <p>SEPARATE AND STORE BOTTLES, GLASS, TINS AND CANS FOR COLLECTION AND RECYCLING</p> <p>PURCHASE MATERIALS IN BULK WHEREVER POSSIBLE</p> <p>SERVE CONDIMENTS SUCH AS PRESERVES IN REFILLABLE CONTAINERS</p> <p>DO NOT USE DISPOSABLE NAPKINS, CUTLERY OR CROCKERY</p> <p><b>SAVE ENERGY</b></p> <p>ENSURE ALL APPLIANCES ARE SWITCHED OFF WHEN NOT IN USE</p> <p>KEEP DOORS TO FRIDGES, FREEZERS AND COLD ROOMS CLOSED</p> <p>ONLY SWITCH ON LIGHTS IN BAR AND RESTAURANT WHERE NATURAL LIGHT IS INSUFFICIENT</p> <p>KEEP OVEN PREHEATING PERIOD TO MINIMUM</p> <p>USE CORRECT RING, PAN SIZE AND QUANTITIES FOR COOKING</p>		<p><b>CONSERVE WATER</b></p> <p>DO NOT LEAVE TAPS RUNNING</p> <p>WASH VEGETABLES IN CONTAINERS</p> <p>USE DISHWASHER WITH FULL RACKS ONLY</p> <p>DO NOT USE WATER TO DEFROST FROZEN FOODSTUFFS</p> <p>LIMIT 'REFRESHING' USING COLD WATER</p> <p><b>CONTRACTORS &amp; SUPPLIERS</b></p> <p>AVOID BUYING OVER-PACKAGED GOODS</p> <p>BUY ONLY WHAT YOU NEED</p> <p>PURCHASE FRESH FOOD WHERE POSSIBLE</p> <p>BUY LOCALLY PRODUCED GOODS</p> <p>ENCOURAGE SUPPLIERS/CONTRACTORS TO DO THE SAME</p>
<p>DESIGNED BY</p> <p>Fred Champion</p>	<p>DATE</p> <p>December '95</p>	<p>NEXT REVIEW DATE</p> <p>December '96</p>

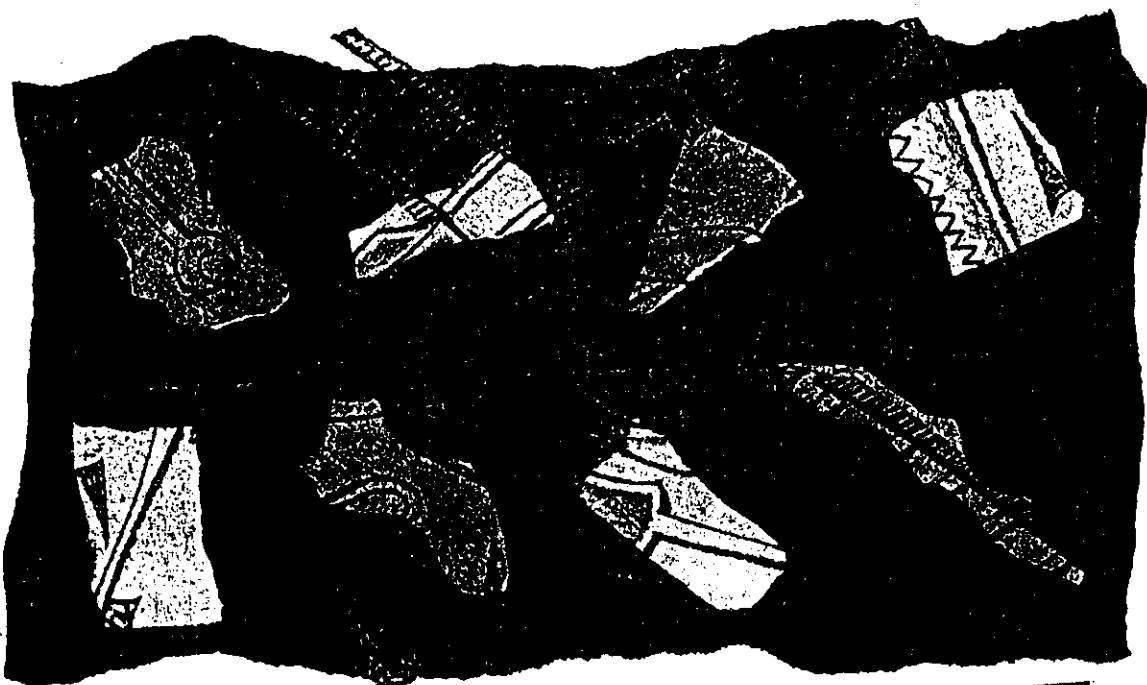
**EXAMPLE**



# Environmental Action Checklist Food & Beverage Staff

GOAL / ACTION	GOAL / ACTION
PREPARED BY:	<div> <div>DATE:</div> <div>NEXT REVIEW DATE:</div> </div>

# Action Checklist: Maintenance



## WHAT WE DID...

"We changed existing light bulbs to energy-saving bulbs, choosing areas where the payback time is one year or less, such as in hotel guest rooms, back of the house and areas on 24-hour operation time."

"Where possible, we used reduced lighting at night time to 50% capacity between 24.00 hrs and 06.00 hrs by employing the use of timers."

"One area where maintenance plays a key role is in water conservation. We have begun to use flow restrictors in guest rooms showers, taps and automatic valves in public lavatories."

# Environmental Action Checklist Maintenance Staff

GOAL / ACTION		GOAL / ACTION
<p>MAXIMISE EFFICIENCY</p> <p>NETWORK &amp; SUBSCRIBE TO INFORMATION SERVICES TO KEEP UP WITH BEST AVAILABLE TECHNOLOGY</p> <p>RECOMMEND SUBSTITUTE TECHNOLOGIES WHICH MINIMISE HOTEL'S CONSUMPTION OF ENERGY, WATER AND GENERATION OF WASTE</p> <p>BRAINSTORM WAYS TO REDUCE AND REUSE ENERGY, WATER, AND WASTE THROUGHOUT HOTEL</p> <p>RECOMMEND BENCHMARKS AND MEASUREMENTS IN EACH DEPARTMENT FOR MONITORING WASTE, WATER AND ENERGY CONSUMPTION</p> <p>MAINTAIN EQUIPMENT REGULARLY</p> <p>CONSERVE WATER</p> <p>INSTALL LEAK-DETECTION EQUIPMENT</p> <p>FREQUENTLY MONITOR TAPS, EFFLUENT AND VENTILATION SYSTEMS</p> <p>INSTALL FLOW RESTRICTORS INTO ALL WATER OUTLETS</p> <p>RECOVER WASTE WATER FROM LAUNDRY RINSE CYCLES/DRY CLEANING COOLING CYCLES FOR REUSE (E.G. FOR GARDEN WATERING, FLUSHING)</p>		<p>SAVE ENERGY</p> <p>INSTALL ENERGY-SAVING EQUIPMENT (E.G. ENERGY-EFFICIENT LIGHTS, MOTION DETECTORS)</p> <p>DETERMINE AND IMPLEMENT OPTIMAL TEMPERATURE SETTINGS FOR SPACE HEATING AND COOLING</p> <p>SHUT OFF HEATING/COOLING/LIGHTING TO UNOCCUPIED AREAS</p> <p>INSTALL DEPARTMENTAL METERS</p> <p>CONTROL EFFLUENTS &amp; EMISSIONS</p> <p>IDENTIFY AREAS OF EFFLUENTS AND EMISSION, MONITOR QUALITY OF DISCHARGES AND INSTALL LEAK DETECTION EQUIPMENT</p> <p>REPLACE ANY HAZARDOUS SUBSTANCES IN USE WITH BEST AVAILABLE NON-HAZARDOUS ALTERNATIVES</p> <p>REDUCE WASTE</p> <p>INSTALL COMPACTOR TO REDUCE VOLUME OF WASTE</p> <p>SET UP ORGANIC WASTE DISPOSAL AND COMPOSTING SYSTEM WITH THE KITCHEN</p>
<p>PREPARED BY:</p> <p>Fred Champion</p>	<p>DATE:</p> <p>December '95</p>	<p>NEXT REVIEW DATE:</p> <p>December '96</p>

**EXAMPLE**

# Environmental Action Checklist Maintenance Staff

GOAL / ACTION		GOAL / ACTION	
<p>PREPARED BY:</p>		<p>DATE:</p>	<p>NEXT REVIEW DATE:</p>

# Action Checklist: Admin & Reception



## WHAT WE DID...

"Our staff started saving stamps from all mail and sent them to a local charity to help in their fundraising campaign."

"We made up a 'Green Ideas' box which we kept in the lobby area for staff and guests."

"We use both sides of a fax header sheet before sending it to recycling — which saves paper."

"We gave all new staff information on our green programme and a reusable mug as a welcome present."

"One staff member calculated that, because we now recycle all paper in the hotel, we have so far recycled enough to save 200 trees."

# Administration & Reception Sheet

## Environmental Action Check

GOAL / ACTION		GOAL / ACTION	
<p><b>REDUCE WASTE</b></p> <p>USE RECYCLED PAPER FOR STATIONERY</p> <p>USE SCRAP PAPER FOR NOTES</p> <p>CANCEL JUNK MAIL</p> <p>COLLECT WASTE PAPER FOR STORAGE</p> <p>USE CHINA CUPS</p> <p>PHOTOCOPY ON BOTH SIDES OF THE PAPER</p> <p>PURCHASE ONLY MATERIALS FROM APPROVED LIST</p> <p>USE REFILLABLE PENS AND TONER CARTRIDGES</p> <p>TAKE OLD FLOWERS TO THE COMPOST HEAP</p> <p>ASK GUESTS WHEN THEY WOULD LIKE LINEN CHANGED (E.G. AT 1 OR 3 DAYS)</p>		<p><b>SAVE ENERGY</b></p> <p>SWITCH OFF LIGHTS AND APPLIANCES WHEN NOT IN USE</p> <p>USE NATURAL LIGHT AND VENTILATION WHERE POSSIBLE</p> <p>ENSURE THERMOSTATS ARE CORRECTLY ADJUSTED</p> <p>USE RECHARGEABLE BATTERIES FOR CALCULATORS ETC.</p> <p>ENSURE HOTEL DOORS ARE CLOSED IF CENTRAL HEATING/AIR CONDITIONING IS ON</p> <p><b>CONTRACTORS &amp; SUPPLIERS</b></p> <p>AVOID PRODUCTS CONTAINING ENVIRONMENTALLY HARMFUL MATERIALS</p> <p>BUY ONLY WHAT YOU NEED</p> <p>BUY GOOD QUALITY REPAIRABLE GOODS</p> <p>BUY LOCALLY PRODUCED GOODS</p> <p>BUY RECYCLED AND RECYCLABLE PRODUCTS</p> <p>BUY ENERGY-EFFICIENT EQUIPMENT</p> <p>CHECK EQUIPMENT IS MAINTAINED REGULARLY</p>	
<p>DATE: December '95</p>		<p>DATE: December '96</p>	

Fred Champion

**EXAMPLE**


# **Environmental Action Checklist** **Administration & Reception Staff**

GOAL / ACTION	GOAL / ACTION

PREPARED BY:

DATE:

NEXT REVIEW DATE:



# **PART THREE OPERATING YOUR BUSINESS ENVIRONMENTALLY**

This section introduces you to the concept of environmental management and explains the steps that your hotel needs to take to make it an integral part of your operation.



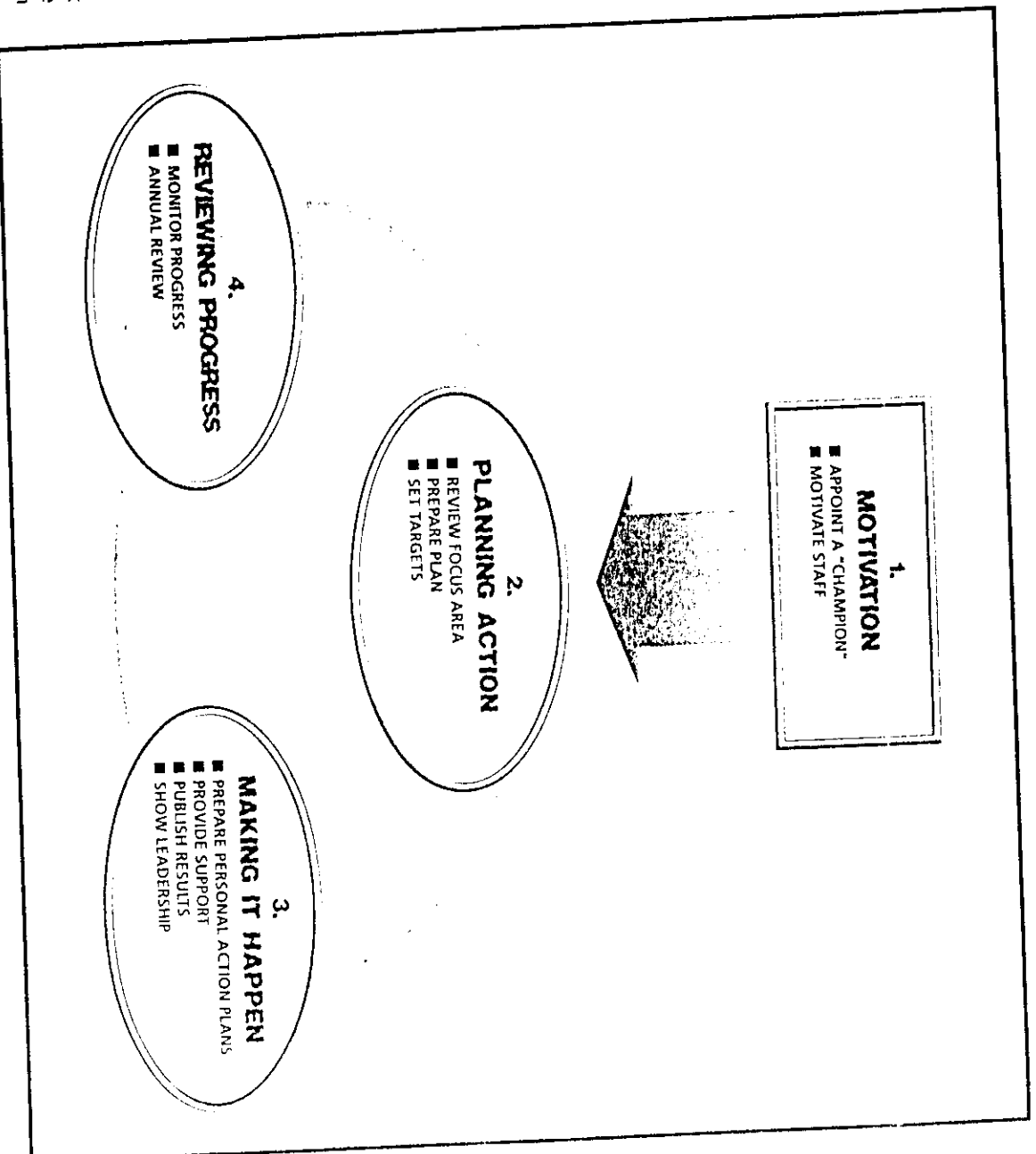
# Integrating Environmental Management

"Going green" is not a challenge that can be met overnight. It is a long-term commitment: a continuous process of improvement. Manage it at a pace which is right for your hotel, and bring it into your normal working schedules from now on.

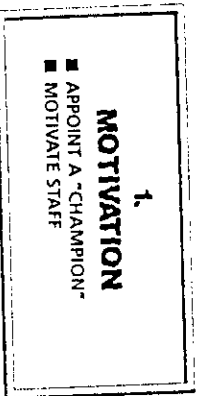
The diagram (right) illustrates the four key steps that are involved in integrating effective environmental management within your business:

1. **MOTIVATION** — in which you begin to integrate the initiative into your business by appointing a "Champion" to co-ordinate it and communicate your aims to your staff.
2. **PLANNING ACTION** — in which a detailed review is carried out of the priority areas chosen for action to identify measures to be taken, and prepare an action plan and timetable.
3. **MAKING IT HAPPEN** — in which staff commitment is gained for the action plan, responsibilities are allocated, and the plan is implemented.
4. **REVIEWING PROGRESS** — in which progress is monitored against set targets and objectives, and an annual review of overall progress is conducted to assess the successes and failures and set priorities for the coming year.

These steps form a yearly environmental management cycle. Each year you will go back through this cycle again, beginning with the review phase to learn from the previous year's successes and failures.



# Motivation



## APPOINT A "CHAMPION"

From the outset you will need a person to take responsibility for co-ordinating and implementing the programme. The person should have a good operational knowledge of the hotel, the respect of other staff, a commitment to the project, and your full support as owner/manager. The **Champion** will be the person who keeps your programme on line who ensures good business results are achieved and that everyone enjoys joining in.

## MOTIVATE STAFF

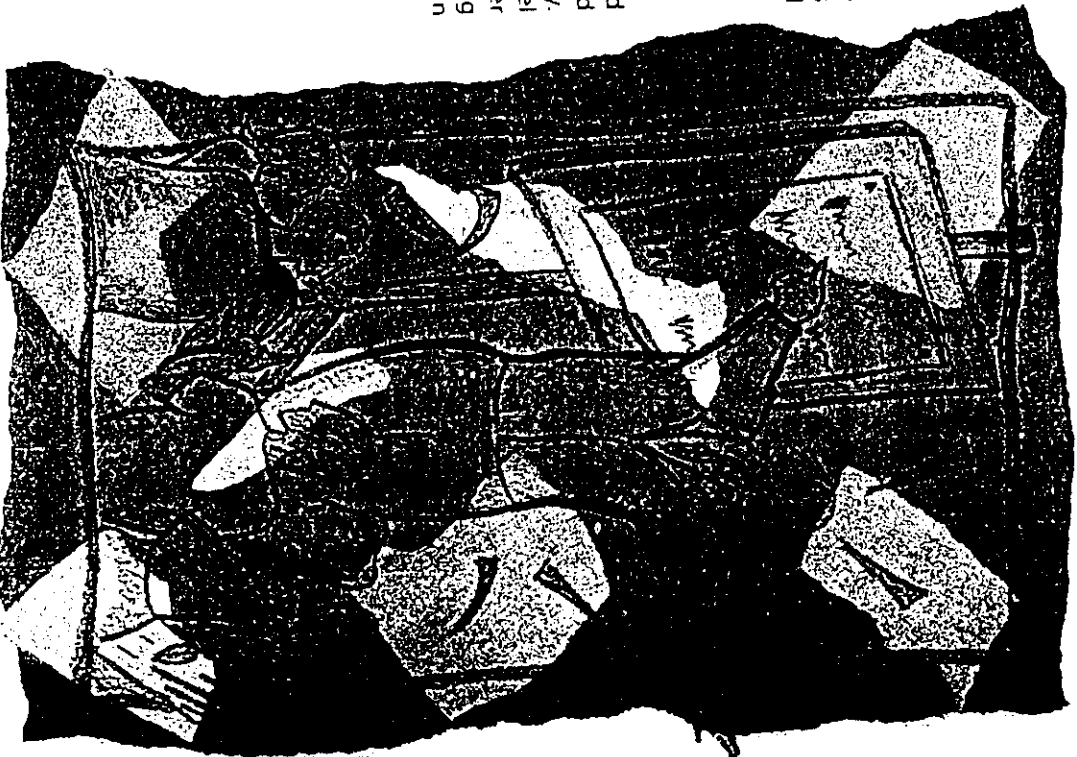
Use a staff meeting to tell your staff of your objectives, and get their ideas and support. Put up a copy of The Hotels Environmental Charter or your own environmental policy statement, if you have one, on the staff notice board. (You may also wish, perhaps later when you have taken some action, to put up a framed copy of this document in the hotel lobby where guests can see it. This can also help gain the respect and support of staff, who recognise how serious the initiative is). Show leadership — at every opportunity show them how to take environmental action — switch off lights, save water, write your notes to them on scrap waste paper.

## INVOLVE STAFF

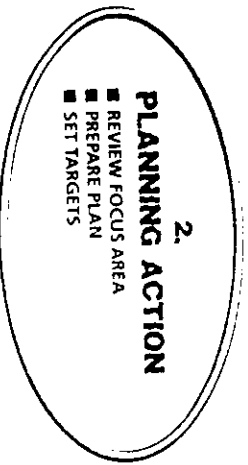
This not only helps gain their commitment to the initiative, but they often have their own ideas about actions that can be taken to, for instance, reduce waste, and how most practically to carry out a policy. The **Champion** can do this by enlisting support in gathering information and ideas on actions from colleagues who have specific responsibility for functions such as reception, housekeeping, food and beverage, sales and marketing and administration.

## PARTICIPATE IN EXTERNAL ACTIVITIES

Get involved in local and national initiatives, attend events, subscribe to environmental magazines and discuss the issues with colleagues in the industry. Promote 'networking' of good ideas through your hotel association. This will all help you to gain a deeper understanding of the issues and how others are tackling them. It will also help to enhance your reputation in the industry.



# Planning action



Now is the time to begin to plan action. There are three basic steps involved in this process, and there are forms in **PART FOUR** to assist with each of these steps. The steps are:

## REVIEW FOCUS AREA

Conduct a review of each priority action area to:

- *Assess current performance:* This information may be to hand in the form of fuel bills. If not, new measurements will need to be taken. This assessment is very important, and will provide the benchmark against which progress will be measured.

- *Identify improvement options:* You will need to identify what is already being achieved in order to gain an idea of where improvements can be made without sacrificing other operational criteria. This is where discussion with key staff in each area is not only very useful (they often understand best where and how improvements can be made) but also essential if they are to be committed to the process.

The Review Forms contained in **PART FOUR** provide examples of the outputs of this process, and guidance is given in each section on how to go about finding the information required. Completing these forms will take a little time.

## PREPARE PLAN

The Action Plan Forms illustrate the outputs of this task. The preparation of the action plan involves four important steps:

- *Decide* which of the actions identified by the review should be pursued first
  - *Define* the steps to implement each action
  - *Allocate* responsibility for these
  - *Set* target dates for action
- The action plan should prioritise:
- Actions needed to meet legislation
  - Good management practices which are simple and will bring a combination of environmental and business benefits
  - Investment measures which have a rapid payback
- The task of working up the plan of action may involve testing the performance, cost and operational implications of an option. It may be wise to try out an idea before fully implementing it.

## SET TARGETS

The purpose of setting targets is to provide clear benchmarks against which to measure the success of the programme. Typical targets are shown in the worked example forms. Some may seem modest. This is deliberate. Changing environmental practice takes time and effort. Better to set targets which are achievable and which can provide real satisfaction once achieved, than to set over-ambitious targets which only lead to failure and staff demoralisation.

# Making it happen

3.

## MAKING IT HAPPEN

- PREPARE PERSONAL ACTION PLANS
- PROVIDE SUPPORT
- PUBLISH RESULTS
- SHOW LEADERSHIP

This is the hardest part of all. Experience shows that successful implementation depends on four factors. The first three of these are discussed below. The fourth, reviewing progress, is the subject of the next section.

### PREPARE PERSONAL ACTION PLANS

Staff need to be clear that responsibility for minimising waste, recycling materials, monitoring progress, and so on is part of their job, that they will be recognised if they carry out these responsibilities successfully, and noticed if they do not. The key to achieving this is to translate the overall action plan into personal action plans for staff detailing the specific and general actions expected of them. Examples of personal action plans are provided in **PART TWO** for key departments.

### PROVIDE SUPPORT

Experience shows that when hotels are first tackling environmental issues there is a great deal of trial and error: ideas have to be refined, as better ways of doing things are uncovered, and it is clearer what is achievable with your resources. Provide support to staff with their action plans. This may take the form of an on-the-job training session for staff on energy and waste management practices, or the provision of technical information (e.g. on alternative cleaning materials

which can be used) or advice. The Champion will need to provide this ongoing support and keep up to date with environmental matters (see **FURTHER HELP**).

### PUBLISH RESULTS

Staff want to know the results of their endeavours. Put up the results of monitoring on the staff notice board. Remember to congratulate success, and consider rewarding individuals or departments that have done well.

### SHOW LEADERSHIP

Achieving staff commitment is an ongoing task — if enthusiasm is to be maintained, staff need to be constantly reminded of the objectives and targets which have been set. Show continued commitment and leadership. Demonstrate that you care, notice when action is being taken, and when not, and continually refresh enthusiasm in the challenge of going green. Good environmental practice needs to become part of the culture of management, like customer care.

The IHEI has prepared a booklet of communication tips for hotels entitled *Striving for Excellence: Communicating Environmental Quality in The Hotel Industry* (see **FURTHER HELP** for contact address).

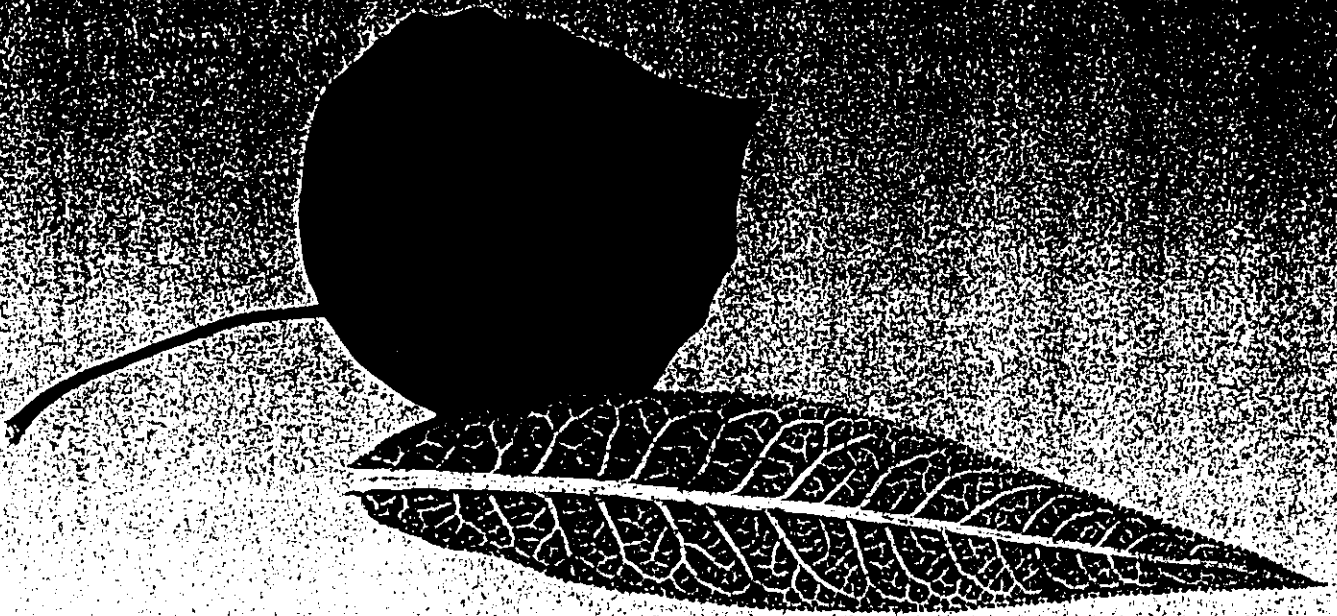
### BEST PRACTICE TIP

#### KEEPING STAFF INFORMED OF PROGRESS

Many hotels put up energy and water consumption monitoring results on their staff notice boards. The results for the current month are displayed in a simple graphic format and compared with the previous month and the same month in the previous year. Staff take a great interest and pride in these results.

#### EFFECTIVE UTILITIES METERING WILL PAY BACK VERY RAPIDLY

Some hotels have installed separate utility metering for different parts of the hotel. This enables them to better identify where energy or water wastage is occurring. Typically the costs of installing new meters will be met from utility cost savings in the first year.



**PART FOUR**  
**DEVELOPING**  
**THE ACTION**

**This section presents the six main areas of environmental concern where you can take action.**

**It discusses the main issues facing hotels and provides guidance on reviewing current practice, preparing an action plan, setting targets and monitoring progress. Forms are included for you to photocopy and use in your own hotel, with examples of how the forms can help control an environmental management campaign.**

<b>ENERGY .....</b>	<b>page 32</b>
<b>SOLID WASTE .....</b>	<b>page 36</b>
<b>WATER .....</b>	<b>page 40</b>
<b>EFFLUENTS &amp; EMISSIONS .....</b>	<b>page 44</b>
<b>CONTRACTORS &amp; SUPPLIERS .....</b>	<b>page 48</b>
<b>BUSINESS ISSUES .....</b>	<b>page 52</b>



# ENERGY

## THE ISSUE

Hotels use substantial amounts of energy in the form of heat and power. The main uses of energy generally are:

- ❖ Heating, ventilation, and air conditioning
- ❖ Laundry and dry cleaning
- ❖ Lighting
- ❖ Facilities such as swimming pools
- ❖ Cooking and refrigeration
- ❖ Fuel for vehicles

This energy comes primarily from fossil fuels (coal, gas and oil), either burnt directly or used to generate the electricity which is imported from the grid. Burning fossil fuels is the principal contributor to global warming, acid rain, and other air pollution problems. By reducing energy use, your hotel can therefore achieve real environmental benefits. You can also make significant reductions in operating costs.

Studies have shown that most hotels use energy inefficiently, and can make real savings through better energy housekeeping practices and by investing in low-cost energy efficiency measures.

The following table, taken from the IHEI publication *Environmental Management for Hotels: The Industry Guide to Best Practice* (see **FURTHER HELP**), provides industry energy efficiency benchmarks. These should be used with caution as they may not be applicable to your circumstances.

ENERGY EFFICIENCY RATING IN HOTELS

Kwh/m <sup>2</sup> /year	GOOD	FAIR	POOR
ELECTRICITY	<65	65-85	>85
FUEL GAS	<185	185-220	>220
TOTAL	<250	250-305	>305

## CONDUCTING THE REVIEW

The object is to understand how energy is used in the hotel and grounds, and where the best opportunities for savings exist. To fill out the Review Form on the facing page you will need to:

- ❖ Collect usage data, costs, and hotel occupancy statistics
- ❖ Estimate how much of the total each department takes. Ultimately the only way to do this accurately is through the installation of sub-meters — you may decide to do this later
- ❖ Identify the main opportunities for saving energy and estimate the costs and savings that each is likely to achieve. We have given you a list of ideas and you and your staff will be aware of others. You may need to obtain technical literature and costings to do this task fully.

## GOOD MANAGEMENT PRACTICE

### NO-COST MEASURES

- ❖ Optimise temperature settings for space and water heating
  - ❖ Check and adjust operating times of all energy equipment
  - ❖ Check and adjust lighting levels
  - ❖ Check cooker burners and review production practices
  - ❖ Shut off equipment not required
  - ❖ Stop simultaneous cooling and heating
  - ❖ Shut off heating/cooling/lighting to unoccupied areas
  - ❖ Reset guest-room temperature during housekeeping, and close/open curtains to reduce/increase solar gain
  - ❖ Adjust settings to maximise efficiency — seek technical advice if not available in-house
- MEDIUM-TO-LOW-COST MEASURES
- ❖ Install better controls: sub meters, and real-time monitoring energy management system, timers, photoelectric cells, thermostatic radiator valves
  - ❖ Fit pipe insulation and tank lagging
  - ❖ Substitute translucent shades in bedrooms
  - ❖ Install energy-efficient light bulbs where lights are on for more than eight hours per day
  - ❖ Install key switches in guest bedrooms
  - ❖ Draft proof old doors and windows
  - ❖ Operate heat recovery in laundry/swimming pool
  - ❖ Replace old equipment with new more efficient plant, using renewable energy where cost-effective



# Review of Energy Use

FUEL TYPE	PERIOD	UNITS	CONSUMPTION	COST £	MAIN USES	EST. SPEND £	% SPEND	CURRENT ACTION TO SAVE ENERGY	OPPORTUNITIES FOR SAVING ENERGY	EST. COST £	EST. SAVING PER YEAR £
ELECTRICITY	1/94-1/95	KWH	750,000	3,500	GUEST ROOMS	20,000	33	NONE	INSTALL KEY SWITCHES IN ROOMS	10,000	4,000
					KITCHEN	5,000	8			0	150
					LAUNDRY	5,000	8			1,500	350
					OTHER AREAS	5,000	8		INSTALL EFFICIENT LIGHTS IN HALLS	1,500	2,000
GAS	1/94-1/95	KWH	1,500,000	2,500	HEATING VENTILATION & AIR CONDITIONING	15,000	25	NONE	ADJUST SETTINGS/ MAINTENANCE	500	1,000
					WATER HEATING	2,500	4	TANK LAGGED		0	200
					COOKING	1,500	3	NONE	COVER POOL AT NIGHT	3,000	100
					SWIMMING POOL	2,000	3			3,000	100
TOTAL					LAUNDRY	4,000	7	NONE	INSTALL HEAT RECOVERY	3,000	2,000
						6,000					

PREPARED BY

Fred Champion

DATE

December '95

REVIEW DATE

December '96

EXAMPLE



[illegible]

## PREPARING THE ACTION PLAN

The form on the facing page provides a format for doing this. From the list of options identified, prioritise those which are easy to implement, and which are likely to be the most cost-effective. Some actions will be one-off actions (e.g. changing light bulbs to an energy-efficient kind), in which case a target date for achieving them should be set. Others will be on-going (e.g. switching off when equipment is not in use), and will require on-going monitoring. Some actions may require investment in new equipment — in which case a final decision may depend on a fuller technical and financial appraisal. Set clear responsibilities — project management and monitoring should be the responsibility of one person; everyone should be responsible for good housekeeping.

## SETTING TARGETS AND MONITORING

Use last year's bills to set your targets, and do not be over-ambitious — look to achieve no more than say a 5% reduction year-on-year. Remember that seasonal fluctuations in external temperature and guest numbers will alter consumption. Use the Monitoring Form on pages 58–59 in *Reviewing Progress*



# WHAT WE DID...!

"Checking that all the refrigerator and freezer door seals were working properly cut down on the need to defrost as often (and probably saved us money)."  
(Hotel in Thailand)

"After looking into the costs, we changed all our light bulbs, on an on-going basis, to low-energy bulbs. This cost us quite a bit initially, but they last 8–9 times longer, so overall it costs us less and cuts down on staff time changing bulbs!"

"We installed a zone heating system which ensured co-ordination between rooms lettings and space heating, and we had recouped our investment through energy savings in three years."

"We looked into buying solar heating units. They paid for themselves through reduced bills in five years and now we have 'free' hot water."

"The cost of putting automatic door closers on external doors and constructing a draught lobby was repaid in two years because of savings on our fuel bills."

"Our hotel in Thailand changed to coloured linen, instead of white, which allowed us to wash it at 60°C instead of 90°C."

# Action Plan Form Energy

## SAVE IT CAMPAIGN

- PREPARE POSTER AND TRAINING MATERIAL
- STAFF TRAINING SESSION
- ACTIVATE CAMPAIGN
- MONTHLY MONITORING RESULTS PUBLISHED

DS

20/12/95

20/12/95

ALL

01/01/96

06/01/96

DS

05/01/96

06/01/96

DS

05/01/96

## INSTALL ENERGY-EFFICIENT LIGHTS IN HALLWAYS/CORRIDORS

- RESEARCH OPTIONS
- PILOT INSTALLATION ON TOP LANDING
- REVIEW PILOT RESULTS
- INSTALL THROUGHOUT
- REVIEW IMPACT ON ENERGY CONSUMPTION

FR

JAN

21/01/96

FR

FEB

06/02/96

FR

MAR

20/03/96

FR

APRIL

01/04/96

## INSTALL KEY SWITCHES IN ROOMS

- RESEARCH OPTIONS
- PREPARED COSTED PROPOSALS
- CARRY OUT WORK
- REVIEW IMPACT ON CONSUMPTION

FR

FEB

FR

FEB

FR

MARCH

FR

MARCH

## WEEKLY MONITORING

FR

PREPARED BY

Fred Champion

LEAD

December '95

NEXT REVIEW DATE

December '96

**EXAMPLE**



# SOLID WASTE

## THE ISSUE

Most hotels dispose of large quantities of solid waste. This normally includes:

- ❑ Bottles, cans and jars
- ❑ Kitchen and garden waste
- ❑ Old furniture and equipment
- ❑ Potentially hazardous wastes such as asbestos, old paint tins, solvents, etc.

Solid waste is a huge environmental issue worldwide. Waste impacts on the environment, both because it takes energy and materials to produce in the first place, and because it leads to pollution problems when disposed of to landfills, incinerators, etc. or simply dumped illegally. If, in your locality, waste is being dumped (for instance in the sea), this may well be damaging to the image of your neighbourhood and lose you business. In many countries producers of waste have a legal "duty of care" to ensure that the waste is safely disposed of. Breach of this duty may lead to fines and heavy clean-up costs. Does this apply in your country?

The challenge for hotels is to reduce to a minimum materials used in the first place, to recycle and reuse waste materials where practical, and to safely dispose of residual wastes.

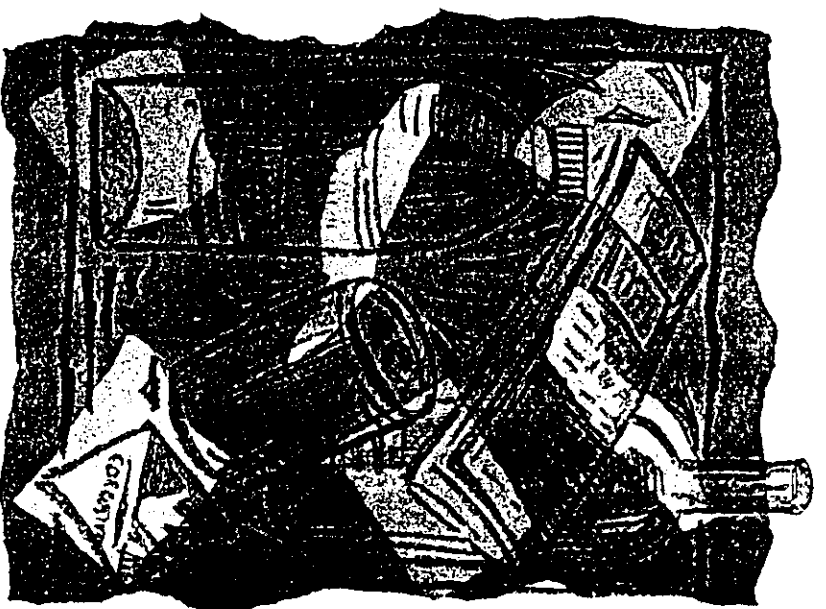
These waste management principles might also make sound business sense. *All waste costs money* — to buy the materials in the first place, and often to dispose of. For this reason hotels are normally careful to reduce waste to a minimum. But experience shows that

improvement opportunities always exist and that significant savings are not hard to achieve through simple good practice measures.

## CONDUCTING THE REVIEW

The Review of Solid Waste form on the facing page shows the kind of information you will need to collect to review what waste is generated by your hotel, and to seek ways to improve waste management. The steps you need to undertake are as follows. First list the items you dispose of, the disposal method and cost, and estimate the yearly quantities involved. If you do not already have one, draw up a list of the hazardous substances you use — establish this as a separate register. Secondly identify for each item whether it is possible to:

- ❑ Reduce the amount used. Is it a necessary item (especially think about this if it is hazardous)? Can the order amounts be reduced? Can more efficient use of it be made?
- ❑ Re-use all or some of it. If so, for what purpose? If not, could the item specification be changed so that it can be reused — for instance by switching to refillable cosmetics bottles in guest rooms, or to reusable transit packaging.
- ❑ Recycle it. Is there someone willing to buy the product? Are you generating the waste in sufficient quantities to make it worthwhile? Can you join forces with other hotels and businesses in your area to pool recyclable products? Can the waste item be sorted and stored on site pending collection? If the product is non-recyclable, could you purchase a recyclable variety?



- ❑ More safely dispose of the residual waste: Meeting legislation must be the first goal. Check the law, especially on disposal of your hazardous wastes. Take action promptly.

Examples of good waste management practices are shown on this page.

Finally, work out how much money could be saved by carrying out the most practical options. These savings can come from:

- ❑ Ordering less originally
- ❑ Lower disposal costs
- ❑ Revenue from sale of waste materials.



# Review of Solid Waste

	APPROXIMATE QUANTITY PER YEAR	CURRENT DISPOSAL ROUTE	CURRENT DISPOSAL COSTS £	OPTIONS FOR IMPROVEMENT	ESTIMATED ACTION	ESTIMATED YEARLY SAVINGS £
WASTE NEWSPAPER	3 TONNES	DISPOSED TO LANDFILL	PART OF MAIN CONTRACT	SELL TO RECYCLED PAPER MANUFACTURER	NONE	300
OTHER PAPER	1 TONNE	---	---	REUSE SCRAP PAPER	NONE	---
PACKAGING CARD	1 TONNE	---	---	GRABBER TO TAKE BACK REUSABLE PACKAGING FOR FOOD	NONE	50
BEVERAGE BOTTLES	20 TONNES	50% RETURNED 50% DISPOSED	NONE MAIN CONTRACT	SWITCH TO RETURNABLE WHERE POSSIBLE RECYCLE RESIDUAL AS CULLET	NONE	50
COSMETICS BOTTLES	100KG	DISPOSED	---	SWITCH TO RECYCLABLE	NONE	200
ALUMINUM CANS	1 TONNE	DISPOSED	---	SELL TO SMELTER	NONE	50
ORGANIC WASTE	10 TONNES	DISPOSED	---	SELL FOR COMPOSTING	NONE	200
PLASTIC LAUNDRY BAGS	50KG	DISPOSED	---	REPLACE WITH COTTON BAGS	100	50
MISCELLANEOUS	20 TONNES	DISPOSED	---	INTRODUCE NO WASTE CAMPAIGN	NONE	SAY 1,000
HAZARDOUS WASTE	VARIOUS (SEE SEPARATE LIST)			ESTABLISH NEW PROCEDURES APPOINT DISPOSAL CONTRACTOR	150	---
TOTAL	56 TONNES		1,000		250	1,900

PREPARED BY

Fred Champion

DATE

December '95

REVIEW DATE

December '96

**EXAMPLE**



# Review of Solid Waste



WASTE ITEM	APPROXIMATE QUANTITY PER YEAR	CURRENT DISPOSAL ROUTE	CURRENT DISPOSAL COSTS £	OPTIONS FOR IMPROVEMENT	COST OF ACTION £	ESTIMATED YEARLY SAVINGS £
				DATE:	NEXT REVIEW DATE:	
PREPARED BY:						

## WHAT WE DID...!

"When we revised our purchasing and started sorting our waste for recycling, we reduced the amount of our non-reusable waste by 50% and saved on the cost of refuse collection." (Swedish hotel)

"Our small hotel (26 bedrooms) collected all the aluminium cans used and sold them for a small income."

"Guest room laundry bags — previously plastic and disposable — are now made from old sheets and reusable."

"When guest towels and sheets are damaged, we cut them up to use as cleaning cloths."

"One unexpected benefit of recycling is that we keep finding valuable items which have accidentally been thrown out — particularly restaurant cutlery."

## PREPARING THE ACTION PLAN

The Solid Waste Action Plan Form illustrates how to put together a plan. Prioritise one or two actions which are easy to implement and will bring real benefits. A "NO WASTE" campaign will help to introduce a culture of waste minimisation into the business if properly handled. However, the actions which staff are being expected to take need to be clearly stated if the campaign is to work, and be measurable. An example of how to do this is shown in the Action Plan. The steps needed to implement an action need to be thought through carefully. Remember to allocate responsibilities clearly, including those for monitoring.

## SETTING TARGETS AND MONITORING

Progress should be monitored both on one-off actions and for ongoing actions. You need to define key monitoring checks which are crucial to success for each action, as well as how often it needs doing. Initially it may be useful to monitor more frequently (say weekly). Thereafter monthly checks may be enough. The checks should be carried out by the Champion. Corrective action should be taken as necessary and recorded. The Monitoring Form is on pages 60-61 in *Reviewing Progress*

## GOOD PRACTICE MEASURES

- ❖ Introduce a "NO WASTE" campaign — provide training and install posters throughout the hotel (kitchen, housekeeping front office, sales and administration areas) providing guidance on correct action
- ❖ Introduce scheme for sorting, storage and recycling glass, aluminium, steel, paper, card and plastic wastes where possible
- ❖ Adjust order quantities so that wastage is reduced
- ❖ Use reusable and/or natural materials (e.g. for transit packaging for food, beverage, etc.)
- ❖ Re-use worn towels, sheets, etc. for cloths, laundry bags, and aprons
- ❖ Reduce paper use through double-sided photocopying, re-use of scrap paper, avoiding unnecessary paperwork, etc.
- ❖ Keep register of all hazardous substances used (including bleaches, cleaners, acids, pesticides/ insecticides, solvents, wood preservatives, adhesives, oils/fuels) and provide guidance to staff on use and disposal
- ❖ Sell back partially used soaps to manufacturer or give to charities for making candles
- ❖ Phase-out use of hazardous materials where possible
- ❖ Use reusable food containers, cleaner containers, etc.
- ❖ Install compactor to reduce volume of waste
- ❖ Compost or sell organic wastes
- ❖ Use cloth/canvas bags for laundry, etc.
- ❖ Collect and recycle motor oil





# Action Plan Form Solid Waste

GOALS TASKS	BY WHOM	TARGET DATE	
TO RECYCLE NEWSPAPER WASTE	SH	20/02/95	20/02/95
RESEARCH BUYERS	DS	25/02/95	25/02/95
CHOOSE BUYER AND AGREE TERMS	SH	25/02/95	27/02/95
SORT OUT STORAGE AND COLLECTION	DS	26/02/95	26/02/95
INFORM STAFF OF NEW ARRANGEMENTS	MAIDS	28/02 ON	
IMPLEMENTATION	SH	28/02 ON	
MONITORING	SH	30/12/95	
ANNUAL REVIEW			
NO WASTE CAMPAIGN	SH	20/01/95	
DISCUSS OPTIONS WITH STAFF	SH	05/02/95	
PREPARE POSTERS AND BRIEFING MATERIAL	DS	05/02/95	
CHECK INFORMATION	SH	10/02/95	
BRIEF STAFF AT STAFF MEETING	DS	10/02/95	
ACTIVATE CAMPAIGN	ALL	10/02 ON	
IMPLEMENTATION	SH	28/02 ON	
MONTHLY MONITORING	DS	05/05 ON	
THREE-MONTHLY REMINDER MEMOS	SH	31/12/95	
ANNUAL REVIEW			
HAZARDOUS WASTE DISPOSAL	SH	20/03/95	
COMPILE HAZARDOUS SUBSTANCES REGISTER	SH/DS	25/03/95	
AGREE LIST OF HAZARDOUS SUBSTANCES TO BE PHASED OUT	SH	05/04/95	
DRAW UP PROCEDURES FOR THEIR COLLECTION AND DISPOSAL	SH	10/04/95	
BRIEF STAFF AND DISTRIBUTE PROCEDURES	SH	10/04/95	
MONITOR	SH	31/12/95	
ANNUAL REVIEW			

NEXT REVIEW

December '95

December '96

Fred Champion

EXAMPLE



# Action Plan Form

## Solid Waste

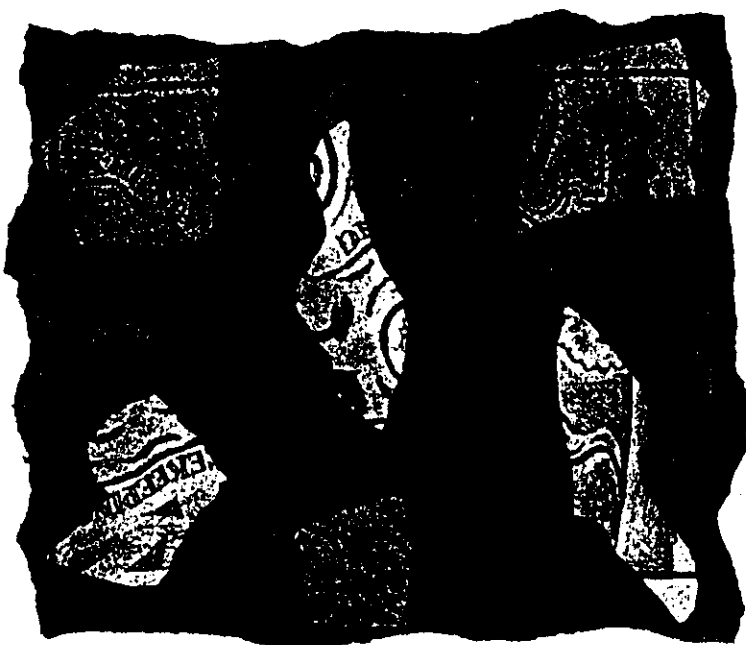
GOALS / TASKS	BY WHOM	TARGET DATE	ACTUAL DATE
PREPARED BY:	DATE:	NEXT REVIEW DATE:	

# WATER

## THE ISSUE

Hotels can consume large quantities of water — from 60-220 m<sup>3</sup> (cubic metres) per bedroom per year, depending on the facilities provided, and whether good conservation practices are in place. The main uses are:

- ❑ Guest usage for washing
- ❑ Housekeeping



## ❑ Cooking

## ❑ Laundry

## ❑ Watering gardens and plants

## ❑ Swimming pools

Water is a scarce resource in many parts of the world — and tourism-related uses can critically affect supply for other local needs, such as agriculture. Water conservation and protection of freshwater quality are very important environmental goals in these locations. Does this apply in your region?

Hotels often give little thought to conserving water supplies. Yet water costs money, and conserving it properly can bring real savings, as well as environmental benefits. The table below provides an industry benchmark for water usage. It is taken from IHEI guide *Environmental Management for Hotels: The Industry Guide to Best Practice* (see **FURTHER HELP** on page 60).

WATER USAGE EFFICIENCY RATING IN HOTELS			
m <sup>3</sup> /bed/year	GOOD	FAIR	POOR
4-50 bed hotels	<120	120-140	>140
50+ bed hotels	<160	160-185	>185

(These figures — showing typical water usage figures, per bedroom, for hotels without in-house laundry facilities and a swimming pool — should be used with caution as they may not be applicable to your circumstances. The figures are in cubic metres. A cubic metre represents about five full baths.)

## CONDUCTING THE REVIEW

The first step is to audit how water is currently used, and to establish what the significant opportunities are for making savings. The overlay and Review Form on the facing page show a worked up example of how to do this. To fill out this table you will need to:

- ❑ Collect historical usage data, costs, utility contracts, hotel occupancy statistics, equipment specifications
- ❑ Estimate how much of the total each major end-use takes. Ultimately the only way to do this accurately is by installing sub-meters — you may decide to do this later
- ❑ Identify the main options for saving water, and estimate the costs and potential savings of implementing them. There is a list of ideas shown and you and your staff will be aware of other options. Think about the ideas to reduce usage: by guests (without reducing convenience); by housekeepers (who can account for 30% of total use); in kitchens for cooking and washing; for special facilities such as swimming pool, laundries, and garden watering; from leaks.

# Review of Water Usage

1995		TOTAL CONSUMPTION: 7,040 CUBIC METRES			TOTAL SPEND: 5,000		
	ESTIMATED CONSUMPTION M <sup>3</sup>	PERCENTAGE OF TOTAL CONSUMPTION	CURRENT ACTION TO SAVE WATER	OPPORTUNITIES TO REDUCE WATER USAGE	ESTIMATED COST £	ESTIMATED YEARLY SAVINGS £	
GUEST ROOMS	2,200	32	NONE	FLOW RESTRICTORS BUCKETS FOR CLEANING	300 30	500 50	
POOL	200	3	NONE				
PUBLIC TOILETS	1,000	14	SPRAY TAPS				
STEAM GENERATOR	220	3	NONE		RECOVER CONDENSATE	3,000	30
LAUNDRY	720	11	NONE		FULL LOADS ONLY	0	20
COLDROOMS	400	6	NONE	GOOD PRACTICE GUIDE	0	100	
KITCHEN	1,200	17	NONE				
HVAC	100	2	NONE				
GARDENING	1,000	14	NONE	REDUCE WATERING	0	200	
TOTAL	7,040	100%					

DATE

December '95

DATE

December '96

EXAMPLE

Fred Champion

Fred Champion

DATE

December '95

DATE REVIEWED

December '96

**EXAMPLE**

# Review of Water Usage



PERIOD:

TOTAL CONSUMPTION:

TOTAL SPEND: £

MAIN USES

ESTIMATED CONSUMPTION  
M<sup>3</sup>

PERCENTAGE OF TOTAL CONSUMPTION

CURRENT ACTION TO SAVE WATER

OPPORTUNITIES TO REDUCE WATER USAGE

ESTIMATED COST  
£

ESTIMATED YEARLY SAVINGS £

PREPARED BY:

DATE:

NEXT REVIEW DATE:

## PREPARING A PLAN OF ACTION

The form on the facing page will help you set out tasks, responsibilities, and timetable for action. From the list of options identified in the review, prioritise those which are easy to implement, and which are likely to be the most cost-effective. Some actions will be one-off actions, in which case a target date for achieving them should be set. Others will be on-going, and will require long-term on-going monitoring. Some actions may require investment — in which case a final decision will require a fuller technical and financial appraisal. Set clear responsibilities — project management and monitoring should be the responsibility of one person. Everyone should be responsible for good housekeeping.

## SETTING TARGETS AND MONITORING

Regular monitoring is essential to success. Use the Monitoring Form provided on pages 58–59 in **Reviewing Progress**. This will enable corrective action to be taken if there is a major deviation in water use due to a leak, etc. Use last year's consumption to set your targets. Be realistic. Attempt no more than 10% reduction on last year's consumption. You will be pleasantly surprised at what you achieve.

DID YOU KNOW . . . ?

A dripping tap can waste up to 36,000 litres of water each year, the equivalent of filling around 180 baths.

## WHAT WE DID . . . !

"The Royal Princess Hotel in Bangkok installed flow restrictors in piping to all guest bedrooms, greatly reducing consumption of water for washing and cleaning at no inconvenience to guests, and saved several times the installation cost in the first year."

"Our golf course now has wild flowers planted in certain areas instead of bedding plants. This creates a more natural environment which needs less watering."

"We installed steam yards in the hotel laundry. This was expensive, but has cut the operating cost of our laundry by over half."

## GOOD MANAGEMENT PRACTICES

- ❖ Use bowls/buckets for washing/cleaning — don't leave the tap running
- ❖ Reduce flow/hours of garden watering
- ❖ Ensure full laundry/dishwasher loads
- ❖ Give guests the option of changing linen and towels say every 3 days
- ❖ Check system for leaks
- ❖ Install spray taps/flow restrictors
- ❖ Put water-filled bottles in cisterns to reduce flush volume
- ❖ Install water meters on key uses
- ❖ Recover waste water from rinse cycles/dry cleaning cooling cycle for reuse (e.g. for garden watering, flushing)
- ❖ Collect rainwater from roof for watering.

"We fitted water-saving devices (aerators) to our shower heads. This maintained the force of the shower but reduced the volume of water used by 30%." (Hotel in Italy)

# Action Plan Form

## Water Usage

ACTUAL  
DATE

### SAVE IT CAMPAIGN

PREPARE POSTER AND TRAINING MATERIAL  
STAFF TRAINING SESSION  
ACTIVATE CAMPAIGN  
MONTHLY MONITORING RESULTS PUBLISHED

DS	20/12/95	20/12/95
ALL	05/01/96	06/01/96
DS	05/01/96	06/01/96
DS	05/01/96	

### FIT FLOW RESTRICTORS

RESEARCH OPTIONS  
PILOT INSTALLATION IN 3 BEDROOMS  
REVIEW PILOT RESULTS  
INSTALL THROUGHOUT

FR	JAN	31/01/96
FR	FEB	06/02/96
FR	MAR	20/03/96
FR	APRIL	01/04/96

### REDUCE WATERING OF GARDEN

PILOT REDUCED HOURS OF WATERING  
CHECK RESULTS  
PRODUCE GUIDELINES  
IMPLEMENT

FR	FEB
FR	FEB
FR	MARCH
FR	MARCH

### MONTHLY MONITORING

FR	JAN ON
----	--------

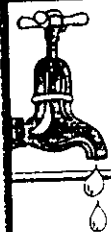
NEXT REVIEW DATE

Fred Champion

December '95

December '96

EXAMPLE



# Action Plan Form

## Water Usage

GOALS / TASKS	BY WHOM	TARGET DATE	ACTUAL DATE
PREPARED BY:	DATE:	NEXT REVIEW DATE:	



# EFFLUENTS & EMISSIONS

## THE ISSUE

This section focuses on releases (to land, water, or air) of liquid or gaseous substances which are potentially a hazard to health or bad for the general environment. The main sources of such emissions and effluents in hotels include:

- ❑ Discharges of untreated sewage to fresh or sea water sources
- ❑ Emissions from fossil fuel boilers
- ❑ Discharges of hazardous chemicals down the drain
- ❑ Vehicle emissions
- ❑ CFCs from refrigeration and air-conditioning systems
- ❑ Spills of fuels or hazardous chemicals to land or water
- ❑ Odours from kitchens and laundries
- ❑ Noise from discotheques or vehicles at night

In many parts of the world pollutant discharges are strictly controlled by law. Failure to comply with legislation can lead to fines, and lost reputation. However, even where no controls exist, it often pays to minimise emissions and safely dispose of hazardous liquids and gases — it can result in lower usage of materials, and will protect your reputation and, most importantly, the local environment which your guests have been attracted to visit. If water pollution resulting from the discharge of untreated effluent is a big issue in your locality and threatening the long-term viability

of your business, you may decide to start to tackle this problem early on. Investment in sewage treatment facilities is a big step — but it may be one you wish to take with other polluters and public agencies.

Note that this manual does not cover health and safety issues. However, your review should identify where accidental discharges of pollutants might cause a health risk.

A list of typical measures taken by hotels in this area is provided in the table (right).

## CONDUCTING THE REVIEW

The Review of Effluents and Emissions form on the facing page illustrates the information which needs to be collected. The review needs to:

- ❑ Identify the sources, types and, if readily available, quantities of current emissions and discharges
- ❑ Establish whether necessary authorisations exist
- ❑ List any hazardous substances used or stored by the hotel, which have the potential to cause harm if accidentally discharged (this issue is also a waste disposal issue — see **WASTE** above)
- ❑ Identify the key options for reducing current discharges or the risk of accidental discharges to the environment, and assess the costs and benefits of implementing these
- ❑ In the absence of local treatment, identify options for dealing with untreated effluents from the hotel.

## GOOD MANAGEMENT PRACTICES

### LOW-COST

- ❑ Establish procedures for monitoring spills/leakage of hazardous chemicals, especially fuels in underground tanks
- ❑ Monitor quality of untreated water before discharge
- ❑ Ensure that CFCs are recovered from discarded equipment
- ❑ Review potential sources of noise pollution and take appropriate action
- ❑ Switch to lead-free petrol
- ❑ Prepare an asbestos management plan covering removal, encapsulation, enclosure.

### INVESTMENT MEASURES

- ❑ Install activated carbon filters to kitchen extractors
- ❑ Replace chlorine bleach in swimming pools with a non-toxic ionisation process
- ❑ Install pump-down containers to enable maintenance of air-conditioning equipment without venting to the atmosphere
- ❑ Replace refrigerant gases with less ozone-depleting types
- ❑ Replace halon fire extinguishers
- ❑ Install leak detection equipment on existing fuel tanks
- ❑ Ensure new fuel storage tanks are constructed to a high safety specification (e.g. double skinned)
- ❑ Install water treatment facility
- ❑ Purchase vehicles with catalysts.

# Review of Effluents & Emissions

EFFLUENT / EMISSION	RELEASED TO	SOURCE	AMOUNT (IF KNOWN)	LEGAL CONTROL	CURRENT ACTION	OPTIONS FOR IMPROVEMENT	ESTIMATED COST	BENEFITS OF TAKING ACTION
CFC II	AIR	AIR CONDITIONING MAINTENANCE	10KG IN 1994	NONE	NONE	INSTALL PUMP DOWN CONTAINER		PROTECTION OF OZONE LAYER
UNTREATED EFFLUENT	SEA WATER	BATHROOMS, KITCHENS ETC.	VERY LARGE	NONE, BUT NEW REGS IN 1996	NONE	WATER TREATMENT	50,000	CONSERVATION OF COASTAL WATERS
CHLORINE	SEA WATER	CLEANING/ LAUNDRY	30KG IN 1994	NONE	NONE	USE SUBSTITUTE	20 PER YEAR	WATER QUALITY
NITRATES	LAND	FERTILISATION	50KG IN 1994	NONE	NONE	USE ORGANIC FERTILISER	50 PER YEAR	WATER QUALITY
PHOSPHATE DETERGENTS	SEA WATER	CLEANING	80KG IN 1994	NONE	NONE	SWITCH TO BIO-DEGRADABLE DETERGENTS		WATER QUALITY

PREPARED BY:

Fred Champion

DATE:

December '95

NEXT REVIEW DATE:

December '96

**EXAMPLE**



# Review of

[illegible]

NEXT REVIEW DATE:

## PREPARING THE ACTION PLAN

The Action Plan form shown on the facing page provides an illustrative action plan. The main objectives of action on effluents and emissions should be to:

- 1. Ensure that all effluents and emissions are in compliance with regulations
- 2. Introduce proper procedures for the monitoring and control of emissions
- 3. Reduce effluents and emissions to a practical minimum by phasing out the use of hazardous substances, substituting technologies, filtration, establishing proper procedures for the storage, use and disposal of hazardous substances
- 4. Install effluent treatment facilities where no general sewerage treatment is available
- 5. Install equipment/measures to reduce emissions where these are harmful to the environment or cause a nuisance to guests and neighbours.

## SETTING TARGETS AND MONITORING

Good practice in controlling effluents and emissions depends upon effective ongoing-monitoring following the taking of action. The form that this monitoring needs to take will depend on the measures implemented. It may be checking that new procedures are being followed, or checking purchase orders (e.g. to see how much CFC is being used during maintenance). The relevant form is on pages 60-61 in *Reviewing Progress*

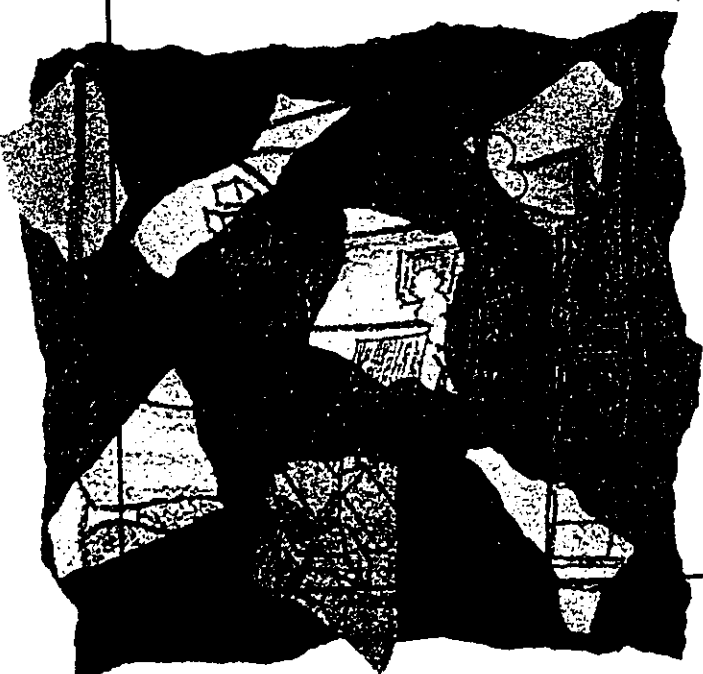
# WHAT WE DID...!

"The Royal Orchid Sheraton Hotel in Bangkok invested to modernise its waste water treatment unit, which discharges into the highly polluted Chao Phraya river. The new facility was expensive but now enables all waste water to be treated before discharge. The hotel believes the investment has given it a positive image, and will contribute to business success in the future."

"We found that making bedrooms no-smoking areas cut down on the amount of cleaning necessary."

"We changed to a non-toxic, biodegradable, multi-purpose cleaner/disinfectant. It was as good in cleaning and rinsing; could be used in cold water (energy conservation); and was price-competitive as it could be diluted for use" (160-bedroom unit)

"Our hotel receptionists promoted local bus services to guests to reduce car pollution. There was no cost involved and the holidaymakers appreciated the help and the experience!"



# Action Plan Form

## Effluents & Emissions

BY WHOM

### ONLY USE NON-CHLORINE BLEACHES

RESEARCH OPTIONS

TEST IN LAUNDRY AND DRY CLEANING

DECISION

ORDER STOCKS

SH  
LAUNDRY  
SH  
DS

30/01/95  
15/01/95  
28/02/95  
15/03/95

07/02/95  
25/02/95  
27/02/95  
28/02/95

### INSTALL PUMPDOWN CONTAINER

DISCUSS WITH ENGINEER

DESIGN INSTALLATION

OBTAIN ESTIMATES

INSTALL

REVISE MAINTENANCE PROCEDURES

MONITOR CONSUMPTION AT EACH SERVICE

SH  
DS  
DS  
ENGINEER  
SH  
SH

20/01/95  
05/02/95  
28/02/95  
15/03/95  
20/03/95

### SWITCH TO ORGANIC FERTILISERS

RESEARCH ALTERNATIVES

TEST ALTERNATIVES

IMPLEMENT PREFERRED SUBSTITUTE

SH  
PS  
DS

20/01/95  
20/03/95  
05/04/95

### SWITCH TO BIODEGRADABLE DETERGENTS

RESEARCH ALTERNATIVES

TEST ALTERNATIVES

IMPLEMENT SUBSTITUTE

SH  
SH  
SH

20/01/95  
20/03/95  
05/04/95

EXAMPLE


PREPARED BY

Fred Champion

December '95

NEXT REVIEW DATE

December '96



# Action Plan Form Effluents & Emissions

GOALS / TASKS	BY WHOM	TARGET DATE	ACTUAL DATE
PREPARED BY:	DATE:	NEXT REVIEW DATE:	

# CONTRACTORS & SUPPLIERS

## THE ISSUE

The products which your hotel buys have environmental effects associated with their manufacture, distribution, use and disposal. Similarly, there are environmental impacts associated with the activities that the contractors you use conduct for you. There are often improvements which can be made to products and services which can bring environmental and business benefits. As the buyer of these products and services, you are in a position to make environmental improvements. Supplier and contractor target areas in your hotel include:

- ❑ Cleaning and laundry
- ❑ Food and beverage
- ❑ Equipment and vehicles
- ❑ Office supplies (e.g. stationery)
- ❑ Furniture and bedding
- ❑ Cosmetics in guest bathrooms

A successful environmental purchasing policy achieves improvements in environmental performance, without sacrificing other performance criteria, or incurring significant extra costs. Changing your purchasing practices in certain areas which are highly visible to guests (e.g. stationery, cosmetics, and bed linen), can also bring you marketing benefits.

This is one of the main opportunities to demonstrate your environmental good practice to guests — many will recognise and respect your efforts. Informing your suppliers of your environmental concerns will

encourage them to find environmentally friendlier alternatives, and so extend the benefits of your initiative up the supply chain. Nonetheless it may be unwise to focus on these high-profile improvements until you have achieved more fundamental improvements in your own waste management and energy use.

## CONDUCTING THE REVIEW

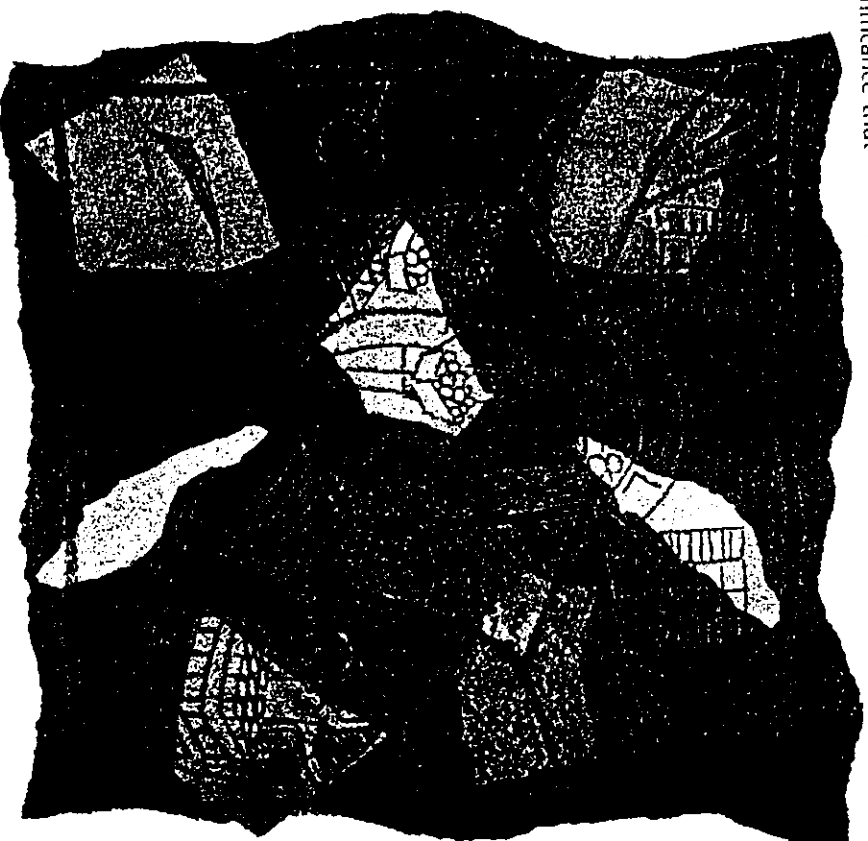
Your hotel purchases hundreds of different products. There will be little of environmental significance that can be done about many of these. The aims of the review should be to identify what you can achieve relating to:

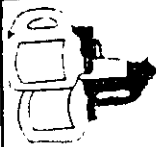
- ❑ Major purchases (e.g. cleaning materials, food and beverage)
- ❑ Purchases which are highly visible to guests (stationery and printed material, towelling and linen, bathroom cosmetics)

Do not attempt to research the performance and cost of alternatives at this stage. The form on the facing page and the overlay illustrate the approach. In looking at alternatives, remember the following basic principles of good environmental purchasing:

- ❑ Avoid products made with, or containing environmentally harmful materials
- ❑ Buy in bulk only what you really need

- ❑ Avoid over-packaged goods
- ❑ Buy good quality repairable goods
- ❑ Buy locally produced goods
- ❑ Buy energy-efficient equipment
- ❑ Buy recycled and recyclable products
- ❑ Consider renting instead of buying





# Review of Contractors & Suppliers

ITEM	ENVIRONMENTAL CONCERNS	CONTRACTOR SUPPLIER	SPEND IN 1993 (YEAR)	IMPROVEMENT OPTIONS
PHOTOCOPY PAPER	NOT RECYCLED CHLORINE BLEACHING	PAPERMAKER LTD.	350	SWITCH TO RECYCLED PAPER
LETTERHEAD PAPER	NOT RECYCLED	PAPERMAKER LTD.	400	SWITCH TO RECYCLED PAPER
CLEANING LIQUID	PHOSPHATES	CLEARCARE LTD	900	BUY PHOSPHATE FREE
HOTEL BROCHURES	NOT RECYCLED	AGAIN LTD	650	SWITCH TO RECYCLED
BREAKFAST CONDIMENTS	NON-RECYCLABLE CANS	SPREADIT LTD.	870	SERVE IN REUSABLE CUPETS
MINIBAR DRINKS	USE OF BLEACHES, DETERGENTS ETC.	SOFTDRINKS LTD.	1,300	RETURNABLE BOTTLES
LAUNDRY SERVICE		HOMWASH LTD.	2,000	SPECIFY MATERIALS IN CONTRACT TERMS

DATE

December '95

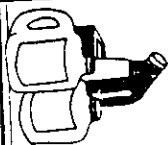
DATE RECEIVED

December '96

Fred Champion

**EXAMPLE**





# Review of Contractors & Suppliers



ITEM	ENVIRONMENTAL CONCERNS	CONTRACTOR SUPPLIER	SPEND IN 1993 (YEAR)	IMPROVEMENT OPTIONS
PREPARED BY:	DATE:	NEXT REVIEW DATE:		

# CONTEMPORARY SUSTAINABLE

## WHAT WE DID...!

"The extra expense we spent on changing to biodegradable toiletries was more than offset by the savings we made on water and electricity bills."

"We looked around for energy-efficient appliances when we were refitting our kitchens. The cost of buying the more technically advanced equipment was less than the energy saved in the first year of use."

"Dry cleaned shirts and uniforms are no longer wrapped in disposable plastic but reusable covers. All hangers are returned to the dry cleaners."

"We helped our paper supplier test out the different types of recycled paper and now he finds lots of other businesses are changing, too."

## PREPARING THE ACTION PLAN

Changing your purchasing practices is not easy to achieve and will take time to put in place. Do not attempt to change many purchase areas at once. Rank your priorities and tackle them one at a time. For each product or service that you address you will need to go through the same process of:

- ❑ Informing your supplier of your desire to improve the environmental quality of the product line, and asking him whether he is able to supply a suitable alternative at a similar cost
- ❑ Researching other alternatives available
- ❑ Obtaining samples of the products and testing them to see whether they perform as well as the original on all criteria
- ❑ Deciding on your preferred product, and ordering.

Don't order reams of recycled photocopying paper until you have tested it on your photocopier!

## SETTING TARGETS AND MONITORING

Improving your purchasing practices is a process of continuous improvement. Next year a new, better performing substitute may become available locally. It is as important to keep abreast of developments in the market for environmentally friendly goods and services, as it is to monitor progress being made within the hotel. You may find it useful to start a file to keep information on suppliers of alternatives. The Monitoring Form is on pages 60-61 in *Reviewing Progress*

## GOOD PRACTICE IN PURCHASING

- ❑ Use non-phosphate, fully biodegradable detergents
- ❑ Change to oxygen bleaches
- ❑ Purchase less packaged alternatives
- ❑ Purchase fresh food where possible
- ❑ Purchase non-disposable napkins, cups, cosmetics
- ❑ Buy drinks in returnable bottles
- ❑ Buy organic fertilisers, and biocides
- ❑ Avoid CFC aerosols
- ❑ Avoid furniture made with tropical hardwoods
- ❑ Avoid net-fished tuna
- ❑ Avoid oil-based paints
- ❑ Use rechargeable batteries
- ❑ Buy vehicles with catalysts and low fuel consumption
- ❑ Check the power consumption of electrical goods before choosing which to buy.

# Action Plan Form Contractors & Suppliers

**EXAMPLE**

GOAL TASKS	BY WHEN	TARGET DATE	ACTUAL DATE
SWITCH TO NON-CHLORINE BLEACHES			
RESEARCH INTO OPTIONS/COSTS		30/01/95	07/02/95
TESTING PERIOD BY HOUSEKEEPING		FEBRUARY	25/02/95
DECISION		08/02/95	27/02/95
ORDER STOCKS		15/03/95	28/02/95
LAUNDRY SERVICES			
MEETING WITH LAUNDRY TO DISCUSS NEEDS		15/03/95	
RESEARCH INTO OPTIONS/COSTS		APRIL	
AGREE WAY FORWARD		MAY	
WRITE INTO CONTRACT		JUNE	
SWITCH TO RECYCLED PAPER			
OBTAIN SAMPLES OF OPTIONS/COSTS		05/02/95	
TEST PREFERRED OPTIONS		FEBRUARY	
IF SUCCESSFUL, CHANGE ORDER		05/05/95	
BREAKFAST CONDIMENTS			
RESEARCH OPTIONS/COSTS		05/02/95	
BUY CONDIMENTS AND SERVING BOWLS		20/01/95	
TRIAL PERIOD/OBTAIN GUEST FEEDBACK		APRIL	
IF SUCCESSFUL, EXPAND		05/04/95	
PREPARED BY:	DATE:	NEXT REVIEW DATE:	
Fred Champion	December '95	December '96	



# Action Plan Form Contractors & Suppliers

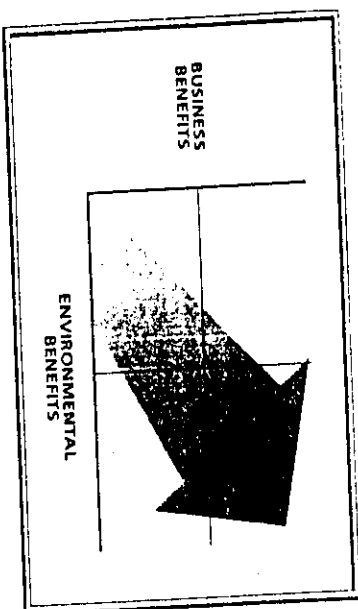
GOALS / TASKS	BY WHOM	TARGET DATE	ACTUAL DATE
PREPARED BY:	DATE:	NEXT REVIEW DATE:	

# BUSINESS ISSUES

## THE ISSUE

It is important that your initiative achieves environmental improvements which bring business returns in the short or longer term. The initiative should take you into the top right hand corner of the diagram below. The environmental action areas discussed above can all help do this by bringing operational savings, improved risk management and so on. However, there may be wider business benefits to be derived from your initiative in terms of:

- ❑ *Customer loyalty and new business opportunities:* if you are located in an area of outstanding natural beauty which tends to attract environmentally aware visitors, you may benefit more than expected from a high-profile environmental policy
- ❑ *Trading relationships with tour operators, etc.:* an association with a travel agency or tour operator who has introduced an environmental policy and who may be giving preference to suppliers, like your hotel, who are themselves demonstrating environmental good practice



❑ *Corporate reputation in the community:* past fines for non-compliance with environmental legislation may be damaging your hotel's reputation in the community, and prospects for future expansion

❑ *Staff retention and motivation:* members of your staff may be more aware of these issues than you might think, and may become highly motivated to participate.

This section helps you to identify some of these potential benefits and to plan and take action to realise them.

## CONDUCTING A REVIEW

You need to focus the review on each question in the Green Health Checklist on the facing page to which the answer was YES, prioritising those issues which you feel are the most important. The review should involve:

- ❑ Simple research into the expectations of customers/tour operators/etc. as appropriate. You can treat this research as a marketing exercise. When you are next talking to one of the tour operators which send you guests, mention that you are "going green", then ask them what they are planning to do in this area — whether they will, for instance, advertise the hotel's registered under the WTT's Green Globe scheme. Similarly if you are seeking customer opinions you can use a questionnaire, such as the one on page 54.
- ❑ Defining the practical and cost-effective options for taking action to meet these expectations. A list of typical actions which other hotels have successfully taken is provided below.

## GOOD PRACTICE MEASURES

### CUSTOMERS

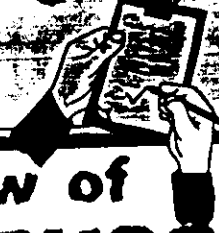
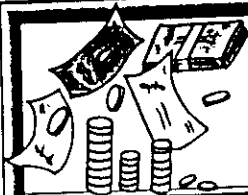
- ❑ Offer the option of only renewing towels dropped on the floor
- ❑ Offer the option of only changing bedclothes on alternate days
- ❑ Provide a vegetarian alternative on all menus
- ❑ Put a framed copy of the hotel's environmental policy in reception
- ❑ Provide advice about the local environment — water quality for drinking, bathing, and how to protect it as a tourist
- ❑ Hang pictures of local beauty spots and flora and fauna

### TRADING PARTNERS

- ❑ Inform them of your environmental policy
- ❑ Suggest that they advertise your environmental policy in brochures

### THE COMMUNITY

- ❑ Become involved in local initiatives to protect the environment
- ❑ Sponsor local environmental projects — e.g. participate in clean-up campaigns
- ❑ Participate in local environmental events
- ❑ Send a press release to the local media about your environmental initiatives



# Review of Business Issues

YES / NO

*Are environmental problems threatening the future of the local tourism industry?*

*Are you associated with a carrier or tour operator who is taking environmental action, and may expect you to in the future?*

*Are your guests environmentally concerned?*

*Are members of your staff concerned about the environment?*

*Would a good environmental reputation improve the hotel's standing in the community?*

*Are you planning to apply for permission to extend an existing hotel or build a new one?*

*Are your direct competitors taking environmental action?*

*Have there been any complaints about poor environmental practices at the hotel?*

*Would your business benefit from a recognised award scheme?*

*Has the hotel been fined or cautioned by the pollution enforcement authorities for a breach of legislation?*

NUMBER OF YES'S

PREPARED BY:

Fred Champion

DATE:

December '95

NEXT REVIEW DATE:

December '96

22/05/1993 10:00

# PREPARING AN ACTION PLAN

The form on the facing page will help you to plan action in this area. Experience shows that in the early days the focus of your actions should be on making operational improvements. At the same time, however, you should be sure that the potential marketing and publicity benefits of your efforts are realised. But beware of the pitfalls. Great care should be taken not to make false or misleading claims. If you want to publicise your initiative in the early days be modest and strictly factual in doing so. If your hotel has a major adverse environmental impact that you do not want widely disclosed (e.g. the discharge of untreated effluent), avoid publicity until you have at least planned action to alleviate this problem.

## MONITORING

Monitoring in this area is about keeping in touch:

- Be aware of how the views and expectations of your customers, trading partners, and the community are developing with time
- Make sure that the initiatives that you have taken are well thought out, and respond promptly and effectively to questions and negative feedback.

Dear Guest,

In this hotel, we are committed to protecting the environment, whilst providing you with a top quality service. We are already taking a number of actions to save water and energy, and to reduce waste, and are looking to make further improvements. To do this we would be grateful for your views and suggestions:

PLEASE TICK BOX YES NO

- Do you prefer to stay in a hotel which is environmentally conscious? ☐ YES ☐ NO
- Are you concerned about the quality of the local water or air? ☐ YES ☐ NO
- Would you like the option to:
  - have your bed linen changed, say every two to three days (to save energy and water) ? ☐ YES ☐ NO
  - not have your toiletries renewed every day? ☐ YES ☐ NO
  - have the heating/air conditioning left off when you are not in the room ? ☐ YES ☐ NO
- Would you like advice and information about the local environment, and how to help protect it? ☐ YES ☐ NO
- Are there other actions which you feel the hotel should be taking to protect the environment? ☐ YES ☐ NO

Please add other comments or suggestions on the reverse side of this letter. If you would like to discuss any issues please contact Fred Unsell, our hotel's 'environmental champion'.

We thank you for your co-operation.

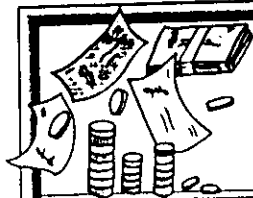
# Action Plan Form

## Business Issues

**EXAMPLE**

	BY WHOM	TARGET DATE	ACTUAL DATE
<b>RESEARCH GUEST EXPECTATIONS</b>			
PREPARE GUEST QUESTIONNAIRE		30/01/95	20/02/95
DISCUSS OPTIONS WITH SELECTED GUESTS		FEBRUARY	25/02/95
REVIEW RESULTS AND DECIDE WAY FORWARD		28/02/95	27/02/95
<b>STAFF SUGGESTION SCHEME</b>			
HOLD MEETING TO INTRODUCE SCHEME		10/02/95	
REVIEW SUGGESTIONS		15/03/95	
IMPLEMENT BEST IDEAS AND REWARD STAFF		20/03/95	
RENEW SCHEME ON THREE-MONTHLY BASIS			
<b>FREE GUEST COLLECTION FROM STATION</b>			
INFORM TRAVEL AGENTS OF SERVICE		FEBRUARY	
MODIFY BROCHURE AS REQUIRED		APRIL	
INTRODUCE SERVICE		FEBRUARY	
REVIEW SUCCESS		DECEMBER	
DATE		NEXT REVIEW DATE	
Fred Champion		December '95	
		December '96	





# Action Plan Form

## Business Issues

GOALS / TASKS	BY WHOM	TARGET DATE	ACTUAL DATE
PREPARED BY:	DATE:	NEXT REVIEW DATE:	

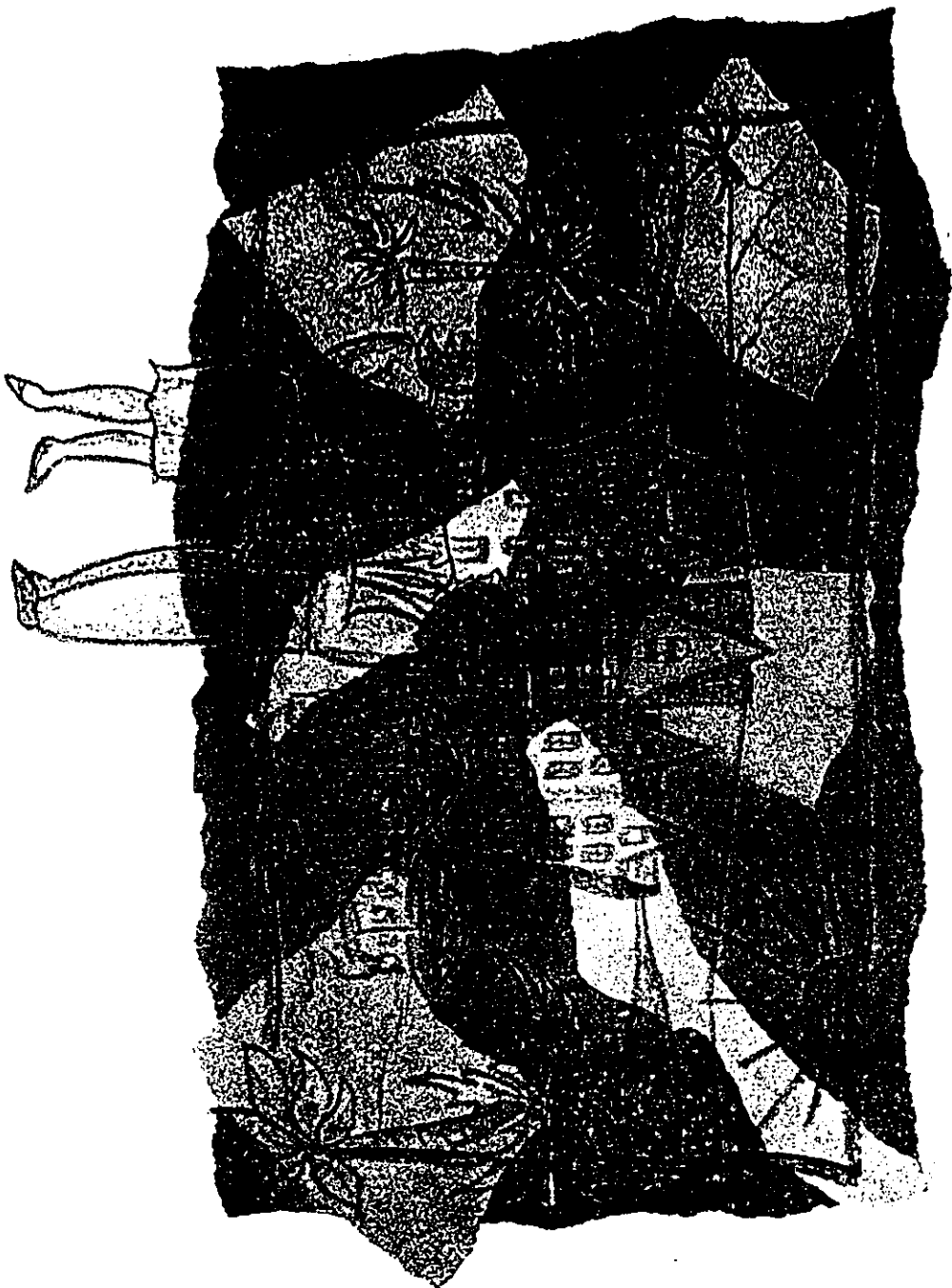
## WHAT WE DID...!

"Our staff started saving stamps from all mail and sent them to a local charity to help in their fund-raising campaign."

"We made up a 'Green Ideas' box which we kept in the lobby area for staff and guests."

"Our hotel provided guest information on our environmental programme. This encouraged them to participate in switching off lights, re-using their towels and generally wasting less." (Hotel in Stockholm, Sweden)

"We have joined with other local businesses to lobby the government for a new sewage treatment plant to protect the sea from pollution."



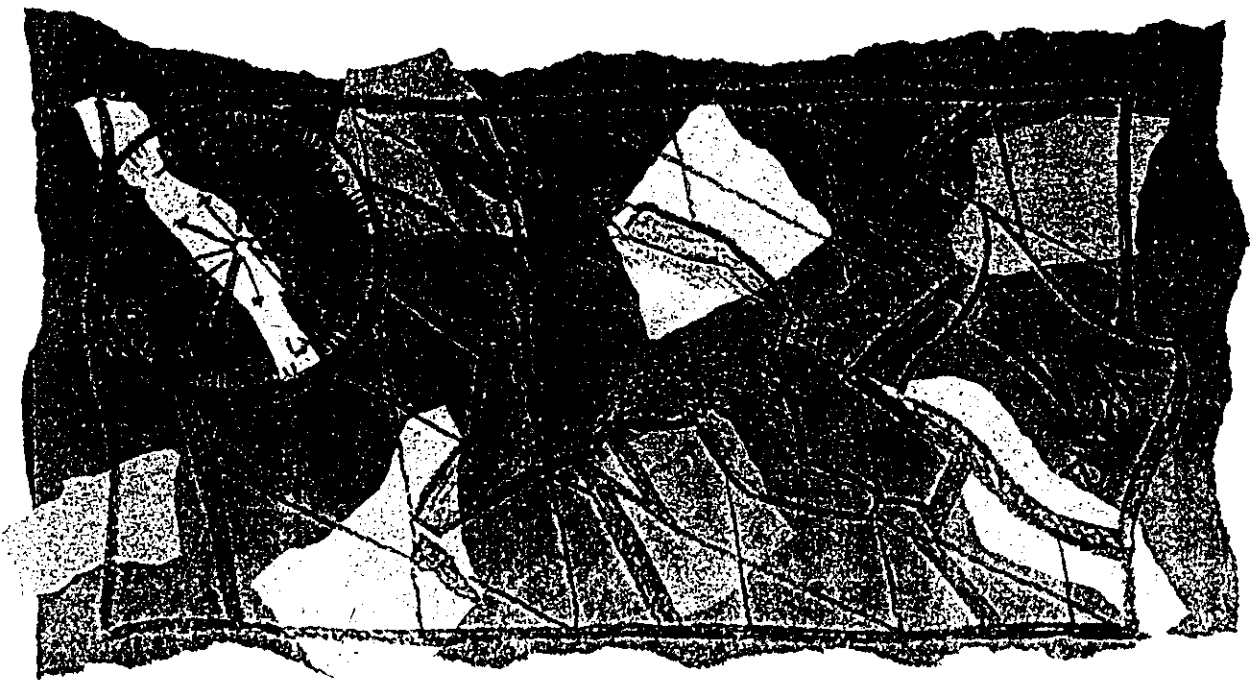
# Reviewing progress

**"You cannot manage what you do not measure", as the old saying goes.**

**Use the forms on the following pages as part of your monitoring procedures to ensure that your plan is working and achieving its objectives.**

Monitoring should be regular — how regular depends on the subject being monitored. But it should be sufficiently frequent to enable corrective action to be taken if there is a major change from targeted performance (due, for instance, to a thermostat setting being changed accidentally). Energy and water consumption should be monitored on at least a weekly basis. This need not take a member of staff more than 10 minutes a week.

Use the forms and the worked-up examples on the following pages. You will need to photocopy the forms and then fill in the title for the relevant action area.



# Ongoing Monitoring Form

ENERGY

ELECTRICITY

UNITS: KWh

COST PER UNIT: £

DATE	METER READINGS	ACTUAL CONSUMPTION	TARGET CONSUMPTION	% VAR.	COMMENTS/ CORRECTIVE ACTION
02/01/95	12222				
09/01/95	23345	11123	11000	1.1	SAVE IT! CAMPBELL STAKES
16/01/95	34567	11222	11000	2.0	
23/01/95	46756	12189	11000	10.8	WATER HEATER WORKING SET
30/01/95	58002	11246	11000	2.2	
06/02/95	68736	10754	11000	-2.2	ENERGENT EFFICIENT LIGHTS IN
13/02/95	78998	10242	11000	-6.9	EMPTY FLOOR SHUT DOWN
20/02/95	891774	10719	11000	-2.0	
27/02/95					
06/03/95					
13/03/95					
20/03/95					
27/03/95					
03/04/95					
10/04/95					
17/04/95					
24/04/95					
TOTAL CONSUMPTION FOR PERIOD					
TOTAL EXPENDITURE		£			
PREVIOUS CONSUMPTION FOR PERIOD					
TOTAL EXPENDITURE		£			
SAVING		£			

PREPARED BY:

Fred Champion

DATE:

NEXT REVIEW DATE:

EXAMPLE

# Ongoing Monitoring Form

WATER

UNITS: M<sup>3</sup>

COST PER UNIT: £

DATE	METER READINGS	ACTUAL CONSUMPTION	TARGET CONSUMPTION	% VAR.	COMMENTS/ CORRECTIVE ACTION
23/01/95	1430	566	500	12.1	SAVE IT! CAMPBELL
24/02/95	1990	540	500	12.0	PILOT FLOW RESTRICTORS
24/03/95	2450	460	500	-9.0	NEW WATERING REGIME
21/04/95	2850	400	400	0.0	RESTRICTORS IN ALL ROOMS
19/05/95	3250	400	400	0.0	
16/06/95	3700	450	400	12.5	GARDEN HOSE ON ALL NIGHT
14/07/95	4100	400	400	0.0	
11/08/95	4531	431	400	7.8	
08/09/95	4920	389	400	-2.8	VERY HOT MONTH
06/10/95	5300	380	400	-5.0	
03/11/95	5697	397	400	-0.8	
01/12/95	6090	393	400	1.8	
29/12/95	6480	390	400	-2.5	
TOTAL CONSUMPTION FOR PERIOD		7,040			
TOTAL EXPENDITURE		£ 3,989			
PREVIOUS CONSUMPTION FOR PERIOD		5,616			
TOTAL EXPENDITURE		£ 5,000			
SAVING		£ 1,011			

PREPARED BY:

Fred Champion

DATE:

NEXT REVIEW DATE:

September '95

December '96

EXAMPLE

## Ongoing Monitoring Form

[illegible]

# Ongoing Monitoring Form SOLID WASTE

DATE	TYPE OF CHECK				ACTION TAKEN
	NEWSPAPER STORAGE	COLLECTION OF NEWSPAPERS	NO WASTE ACTIONS	HAZARDOUS SUBSTANCES	
30/03/95	DONE	DONE	SOME ACTION	GOOD	SENT ON
16/04/95	DONE	DONE	MUCH IMPROVED	GOOD	MEMO SENT
13/04/95	DONE	DONE	GOOD	GOOD	
20/04/95	DONE	DONE	GOOD	GOOD	
27/04/95	DONE	DONE	GOOD	GOOD	
27/05/95	DONE	DONE	KITCHEN TOOK	GOOD	TALKED TO HEAD LOOK
27/06/95	DONE	NO	GOOD	GOOD	PHONED COLLECTOR
27/07/95	DONE	DONE	GOOD	GOOD	
27/08/95	DONE	DONE	FAIR	GOOD	RESULTS ON NOTICE BOARD
27/09/95	DONE	DONE	GOOD	GOOD	TR. CAUTIONED
27/10/95	DONE	DONE	KITCHEN	OLD PAINT TIN IN BIN	MEMO SENT
27/11/95	DONE	DONE	FAIR	GOOD	CONTRACTS SENT
27/12/95	DONE	DONE	GOOD (KITCHEN VERT. GOOD)	GOOD	

PREPARED BY: Fred Champion

DATE: December '95

NEXT REVIEW DATE: December '96

**EXAMPLE**

# Ongoing Monitoring Form EFFLUENTS & EMISSIONS

DATE	TYPE OF CHECK					ACTION TAKEN
	USE NON-CHLORINE BLEACH	WATER TREATMENT	SWITCH TO GAS REFRIGERANTS	SWITCH TO NO. 1 REFRIGERANTS		
01/03/95	NO ACTION	NO ACTION	NO ACTION	NO ACTION		
29/03/95	NO ACTION	NO ACTION	NO ACTION	NO ACTION		AWAITING DELIVERY
29/04/95	DONE	NO ACTION	NO ACTION	NO ACTION		DELATED DECISION
29/05/95	DONE	DONE	DONE	NO ACTION		
29/06/95	NOT 100%	DONE	DONE	DONE		SUPPLY DIFFICULTY
30/07/95	DONE	DONE	DONE	DONE		
20/08/95	DONE	DONE	DONE	DONE		
21/09/95	DONE	DONE	DONE	DONE		

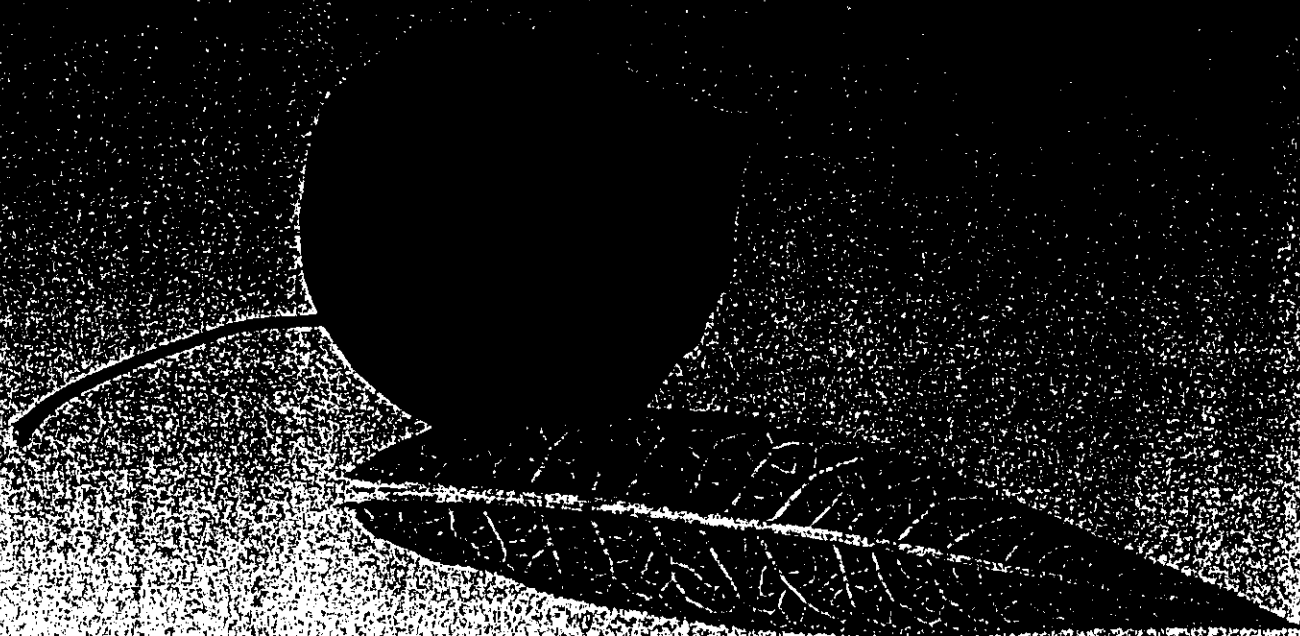
DATE	TYPE OF CHECK					ACTION TAKEN
	SWITCH TO NON-CHLORINE	LAUNDRY SERVICES	SWITCH TO RECYCLED PAPER	RECYCLED PAPER	CONTRACTS	
30/03/95	NONE	NONE	NONE	NONE	NONE	DECISION DELAYED
29/04/95	NONE	NONE	NONE	NONE	NONE	MATERIALS ON ORDER
29/05/95	DONE	NONE	NONE	NONE	NONE	ORDER PLACED
30/06/95	DONE	NONE	DONE	DONE	PART	CUP APPROVED FOR TIERED ? ORDER PLACED
10/07/95	DONE	DONE	DONE	DONE	PART	
28/08/95	DONE	DONE	DONE	DONE	DONE	
29/09/95	DONE	DONE	DONE	DONE	DONE	SPECIAL STOCK FOR RECYCLES NOT AVAILABLE - RECYCLED
30/10/95	DONE	DONE	DONE	DONE	DONE	
20/11/95	DONE	DONE	DONE	DONE	DONE	
20/12/95	DONE	DONE	DONE	DONE	DONE	

PREPARED BY: [Signature]

**EXAMPLE**

## 5

[illegible]



**PART FIVE**  
**FURTHER**  
**HELP**





## IHEI

International Hotels Environment Initiative  
c/o The Prince of Wales Business Leaders Forum  
5 Cleveland Place, St. James's  
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U.K.  
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+44 (0)171 925 2933 (switchboard)  
Fax: +44 (0)171 321 6480

The International Hotels Environment Initiative publishes a number of guides and education materials specifically aimed at the hotel industry.

- *Environmental Management for Hotels*: the industry guide to best practice
- *Striving for Excellence*: Communicating Environmental Quality in the Hotel Industry
- *Green Innovations*: International Directory of Environmental Resources for Hotels
- *Going Green Makes Cents*: environmental management video for managers
- *Green Hotelier*: the magazine of the International Hotels Environment Initiative



## IHA

The International Hotel Association  
80 Rue de la Roquette  
75544 Paris, Cedex 11, France

Tel.: (33 1) 47 00 84 57 Fax: (33 1) 47 00 64 55

Publications available from IHA:

- *Pollution Solutions* (1995)
- *Energy Savers* (1992)

الجمهورية اللبنانية  
مكتب وزير الدولة لشؤون التنمية الإدارية  
مركز مشاريع ودراسات القطاع العام

Republic of Lebanon  
Office of the Minister of State for Administrative Reform  
Center for Public Sector Projects and Studies  
(C.P.S.P.S.)



UNEP

## UNEP IE

The United Nations Environment Programme  
Industry and Environment  
Tour Mirabeau, 39-43 quai André Citroën,  
75739 Paris, Cedex 15, France  
Tel.: (33 1) 44 37 14 50 Fax: (33 1) 44 37 14 74

UNEP / IE carries out a clearing house function, providing access to practical information and developing on-site action and information exchange backed by regular follow-up assessment. It also facilitates technology transfer and the implementation of practices to safeguard the environment through promoting awareness and interaction, training and diagnostic studies.

Some recent UNEP / IE publications:

- *Environmental Codes of Conduct for Tourism* (TR 29) ISBN 92 807 1470 (1995)
- *Partnerships for Sustainable Development — the Role of Business and Industry*, a joint UNEP/Prince of Wales Business Leaders Forum/Tufts University publication ISBN 18 991 5900 (1994)
- *Company Environmental Reporting* (TR 24) ISBN 92 807 1413 9 (1994)
- *Industry & Environment Quarterly Review*, Sustainable Tourism Development Vol. 15, No. 3/4 (1992)
- *From Regulations to Industry Compliance, Building Institutional Capacities* (TR 11) ISBN 92 807 1342 X (1992)
- *Guidelines: Development of Parks and Protected Areas for Tourism*, a joint UNEP/World Tourism Organisation publication (TR 13) ISBN 92 844 0026 0 (1992)
- *Companies' Organisation and Public Communication on Environmental Issues* (TR 6) ISBN 92 807 1304 3 (1991)