sowing the seeds of change

AN ENVIRONMENTAL TEACHING PACK FOR THE HOSPITALITY INDUSTRY
SOWING THE SEEDS OF CHANGE

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Paris, 2001
Foreword

It is with great pleasure that we present “Sowing the Seeds of Change” An Environmental Teaching Pack for the Hospitality Industry. This is a joint initiative of the International Hotel and Restaurant Association (IH&RA), the United Nations Environment Programme, Division of Technology, Industry and Economics (UNEP DTIE) and the International Association of Hotel Schools (EUHOFA International).

The IH&RA and UNEP have an ongoing partnership to promote environmental awareness and good practice in the hospitality industry. A survey conducted by the two organisations identified a lack of information, expertise and practical teaching tools as the major concern when introducing environmental issues into the hospitality curricula. EUHOFA International endorsed these findings.

This Environmental Teaching Pack is designed to fill this gap. Both comprehensive and user-friendly, it includes detailed information for teachers and trainers, exercises and case studies for practical demonstration purposes, and identifies industry best practice. It is intended to help hospitality education centers develop and expand their environmental curricula, thereby introducing environmental issues into the education and training agendas of tomorrow’s hospitality and tourism professionals. Hospitality professionals wishing to develop in-house training programmes to support environmental initiatives in their hotels will find this pack an invaluable resource.

The IH&RA, UNEP DTIE and EUHOFA would like to thank all those people and organisations without whose support the publication of this manual would not have been possible.

John J. Bowen, President, EUHOFA
Ejnar Söder, President, IH&RA
Jacqueline Aloisi de Lardarel, Director, UNEP DTIE
About the Partners

The United Nations Environment Programme

The mission of the UNEP Division of Technology, Industry and Economics is to help decision-makers in government, local authorities, and industry develop and adopt policies and practices that:

- are cleaner and safer;
- make efficient use of natural resources;
- ensure adequate management of chemicals;
- incorporate environmental costs;
- reduce pollution and risks for humans and the environment.

UNEP TIE activities focus on raising awareness, improving the transfer of information, building capacity, fostering technology cooperation, partnerships and transfer, improving understanding of environmental impacts of trade issues, promoting integration of environmental considerations into economic policies, and catalysing global chemical safety.

The International Hotel & Restaurant Association

The International Hotel & Restaurant Association (IH&RA) is a global network representing over 750,000 hospitality operators, associations and suppliers in more than 150 countries. Its mission is to protect, promote and inform the hospitality industry, which it estimates to comprise over 300,000 hotels and 8 million restaurants world-wide, employ 60 million people and contribute US$950 billion to the global economy.

Previous joint environmental initiatives include:

- Launch of the IH&RA’s annual Environmental Award in 1990 to promote environmental awareness among hotels, to recognise the efforts being made to ‘green’ the industry from within, and to identify industry best practice. The award is judged by UNEP DTIE and IHEI, and sponsored by American Express.
- Joint publication of Environmental Good Practice in Hotels (1996) by the IH&RA and UNEP – a compilation of case studies of environmental good practice based on the entries of the IH&RA Environmental Award.

The International Association of Hotel Schools (EUHOFA International)

Founded in 1955, the International Association of Hotel Schools (EUHOFA International) is a non-profit, worldwide association of more than 140 renowned hotel schools, colleges and universities from thirty countries of the five continents.

EUHOFA contributes to the exchange of ideas and experience in the field of professional training and education in the hotel and tourism industries, as well as the constant improvement and progress of hospitality training. It undertakes appropriate action to promote and improve professional education, and maintains regular contact with organisations connected to the industry.
About the Sponsors

Le Ministère de l’Aménagement du Territoire et de l’Environnement (French Ministry of Spatial Planning and Environment)

The French Ministry of Spatial Planning and Environment's mission is to evaluate the problems affecting our environment, to implement research projects and develop concerted action at both the national and international levels.

Fondation Nestlé Pro Gastronomia

Nestlé has been a leading food manufacturer and major purchaser of agricultural raw materials for over 130 years. Food and agriculture are an integral part of the social, cultural, economic and political context of every community. Today, Nestlé is the world's largest and most diversified food company, with nearly 500 factories around the globe, producing healthy, enjoyable food products for every stage of life.

The Company's primary function is the transformation of perishable raw materials into finished products that meet consumers' expectations for safety, quality, convenience and value. Nestlé has always recognised the need to protect the environment in its business activities, a commitment embodied in The Nestlé Policy on the Environment.

Nestlé carries out its global social responsibility, firstly, by taking a long term approach to strategic decision making which recognises the interests of its consumers, shareholders, business partners, and the worldwide economies in which it operates. Secondly, the Group's responsibilities and values are reflected by the commitment of management and employees at all levels, to its Corporate Business Principles, which define standards of behaviour for all companies in the Nestlé Group, and are intended to complement applicable legislation and international recommendations.

P. Brabeck-Letmathe, Chief Executive Officer, Nestlé S.A.

Golden Tulip Hotels

Golden Tulip Hotels is a Dutch-owned international chain of hotels involved in the development, management and marketing of three, four and five star hotels. The chain's portfolio now contains over sixty-five hotels, and more than 400 hotels in over 50 countries are associated with the licensing organisation, Golden Tulip Worldwide. Recently Golden Tulip Hotels merged with the Spanish company NH Hoteles to create a leading European urban business hotel group.

Golden Tulip Hotels’ mission is to combine consistent international standards of quality with the individual character inherent in each hotel. Focusing on this refreshing approach, the chain treats its guests as individuals, all of whom are served by friendly, well-motivated and properly trained staff under the direction of highly-skilled management teams. The perception of hotel guests remains central to the company's philosophy, and is the starting point for every activity. And that is just one reason why Golden Tulip Hotels strongly supports the implementation of a sound environmental policy in hotels.
**Hotel Nikko, Hong Kong**

The 461-room, deluxe Hotel Nikko Hong Kong is situated on the beautiful Victoria Harbour waterfront on the Kowloon Peninsula. Hotel facilities include the Nikko floors with private lounge for VIPs, business centre, swimming pool, health club, shopping arcade, banquet rooms, seven restaurants, bars and lounges, serving international cuisine. Hotel Nikko was the corporate winner of the IH&RA’s Environmental Award in 1995.

Hotel Nikko, Hong Kong, was also instrumental in developing the Hong Kong Polytechnic University’s Environmental Management Manual for Hotels in Hong Kong. This manual is a template for use by hotels in Hong Kong. It forms part of the output from the project ‘Keeping Hong Kong’s Hotel Industry Competitive – Environmental Management Systems for Hotels’, funded by the Services Support Fund administered by the Industry Department, the Government of the Hong Kong Special Administrative Region and supported by the Hong Kong Hotels Association.

Copies of the CD-ROM format of this publication are included in the pack. The Coordinators would like to thank Hotel Nikko Hong Kong for this generous addition to the Teaching Pack.

**The Orchid, Mumbai, India**

The Orchid Hotel, the Kamat Group’s eco-sensitive property, is the first five-star hotel in Asia to be accredited with ECOTEL certification from the world’s leading hospitality valuation organisation, HVS International. Designed from the outset with preservation of the environment in mind, the Orchid is committed to enhancing the guest experience while setting a new standard of corporate responsibility through the conservation of natural resources, education, motivation of staff and cultivation of community relationships. The Orchid was the corporate winner of the IH&RA Environmental Award in 1999.

**PA Consulting Group, USA**

PA Consulting Group is a leading management, systems and technology consulting firm, with a unique combination of capabilities. Established almost 60 years ago, and operating worldwide from over 40 offices in more than 20 countries, PA draws on the knowledge and experience of some 3,700 people, whose skills span the initial generation of ideas and insights all the way through to detailed implementation.

PA’s tourism group is considered a global leader in environmental sustainability and through its in-house staff and extensive network of consultants, offers a wide range of sustainable tourism services to local and national governments, international development agencies and private companies. The group’s sustainable tourism work spans the globe and involves creating public and private partnerships for successful execution and draws on their experience in environmental management programmes, environmental market analysis and policy and institutional development. PA has ongoing sustainable tourism projects in the Middle East, Africa, Europe, the Americas and Asia/Pacific.
Bass Hotels & Resorts

Bass Hotels & Resorts is the most widely distributed hotel business in the world. It owns, manages and franchises more than 3,200 hotels in over 90 countries worldwide. The group’s impressive portfolio of brands includes InterContinental Hotels and Resorts, Crowne Plaza, Holiday Inn, Express by Holiday Inn and Staybridge Suites, which offer a variety of services, amenities and lodging experiences catering to virtually every travel occasion and guest need.

Ecole de Savignac, France

Founded in 1988 by the Chamber of Commerce and Industry of Périgueux, France, the Ecole de Savignac prepares its students for careers in the fields of hospitality and tourism. The programme runs for two years, after which graduates are awarded the prestigious ‘Diploma of International Management Studies’. The partners are especially grateful to the school for translating the pack into French.
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USER’S GUIDE

What can you Expect from this Pack?

This is a complete information pack for developing and expanding the environmental curriculum in hotel schools.

- The pack will enable education professionals to develop a tailor-made environmental curriculum to suit the needs and objectives of each school and education system;
- For students of hospitality management, this pack will serve as an environmental information and resource handbook;
- For hospitality professionals, this pack provides all the necessary information for raising environmental awareness and for developing and implementing Environment Management Systems.

The pack is most suitable for developing syllabuses at the degree and postgraduate level. Sections of the pack, especially unit 2 and unit 4, can be adapted for lower level studies.

- The pack covers a minimum of 45 hours of teaching time – a half-semester module;
- The pack can be used to develop an independent environmental curriculum, or to incorporate environment information into syllabuses such as Front Office and Rooms, Back Office and Administration, Food and Beverage, Kitchen and Tourism Management;
- The pack can also be used by hotel and tourism schools to develop:
  - Environment training programmes for hospitality professionals
  - Short courses on environment management
  - Distance learning programmes on environment management;
- Examples of good practice and case studies have been included to demonstrate theory in practice. It is strongly recommended that teaching be supplemented with additional information, and with examples relevant to the national and local context. Site visits and guest lectures by environment and hospitality professionals will also provide value input.

How is the Pack Organised?

- The pack is organised into 5 units;
- Each unit begins with a unit outline and teaching objectives, and ends with a glossary and exercises;
- Units 2, 4 and 5 include examples of good practice and case studies;
- A short list of resources is provided at the end of the publication.
WHERE DO WE STAND?
THE STATE OF THE GLOBAL ENVIRONMENT
UNIT 1
WHERE DO WE STAND? THE STATE OF THE GLOBAL ENVIRONMENT

Unit Outline
The objective of this unit is to provide an overview of the global environment field as it stands today. It is divided into 2 sections:

Section 1
The state of the environment – an overview
To give readers an impression of the seriousness of environmental threats facing the world today, this section outlines and discusses:

- Climate change;
- Depletion of the ozone layer;
- Water scarcities and pollution;
- Biodiversity loss;
- Land degradation;
- Acid deposition;
- Air pollution.

The discussion explains why these threats are important to tourism, and outlines international action being taken to combat them.

Section 2
Introducing sustainable development
If readers are to appreciate the importance of environment management in tourism and hospitality, they need to be first introduced to the concept and implications of sustainable development.

The framework and principles for sustainable tourism are covered in Unit 2.

Given the diversity and continuous evolvement of the environment field, it is recommended that the information in this unit be:

- Applied to national environment issues;
- Supplemented with news and views of topical environment issues at the time of teaching.

Learning Objectives
At the end of the lesson, students should be able to:

- Gain an overall appreciation of global environment issues;
- Link global environment threats to national environment issues and appreciate that global environment threats are caused by environment degradation, pollution and resource depletion at the national level;
- Define and discuss sustainable development.
Healthy economies and societies cannot continue to develop in a world with so much degradation of the environment and such large inequalities in the distribution of wealth and resources. Degradation of the environment is the biggest threat facing the world today. The excessive damage we are causing to the earth is threatening our very existence.

To understand this phenomenon better, let us draw a simple analogy between the human body and the earth. If a person continuously works too hard and too fast, he or she will have a physical and mental breakdown, as the body cannot maintain the level of activity demanded of it. Similarly, the rate at which human economic activity extracts resources and emits pollution and waste is growing to be intolerable: the earth can no longer sustain it.

The following tables highlight some of the major threats to the world environment today which are then discussed in further detail.
1.1 Global Warming and Climate Change

The earth’s atmosphere is getting warmer. The United Nations Environment Programme reports that the average global temperature, 15°C, has increased by 0.3° to 0.6° since the late 19th century, while thermal expansion of the oceans has caused sea levels to rise by 10 to 25cm in the same period. The 11 warmest years of this century have all occurred during the 1990’s, with 1997 being the warmest so far.

Global warming, or the ‘greenhouse effect’, is a natural atmospheric feature. The earth’s surface absorbs radiation from the sun and re-radiates it into the atmosphere. Radiatively active gases, or ‘greenhouse’ gases, absorb some of this thermal radiation. If this did not occur, the earth’s average temperature would be minus 18°C. Human industrial activities, however, are substantially increasing the atmospheric concentrations of greenhouse gases. This enhances the natural greenhouse effect, causing additional warming of the earth’s atmosphere. This is called ‘global warming’. The main gases that absorb thermal radiation and increase global warming are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), the CFCs, ozone (O3) and water vapour.
The Impacts of Global Warming

Anthropogenic sources of greenhouse gases

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<tr>
<th>GASES</th>
<th>ANTHROPOGENIC SOURCES</th>
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<tr>
<td>Carbon dioxide</td>
<td>Fossil fuel burning for industrial activity, energy generation and vehicles</td>
</tr>
<tr>
<td>Methane</td>
<td>Agriculture, biomass burning, gas drilling and transmission, landfill sites, coal mining</td>
</tr>
<tr>
<td>Nitrous oxide</td>
<td>Fossil fuel burning for industrial activity, energy generation and vehicles</td>
</tr>
<tr>
<td>CFCs</td>
<td>Used as refrigerants, propellants, and blowing and cleaning agents</td>
</tr>
</tbody>
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CFCs also cause depletion of the ozone layer

Global carbon dioxide emissions

1,000 million tonnes CO2/year

Source: CDIAC 1999/Published in Global Environment Outlook 2000, UNEP

Carbon dioxide emissions per capita

Source: compiled by UNEP GRID Geneva from CDIAC 1998 and WRI, UNEP, UNDP and WB 1998/
Published in Global Environment Outlook 2000, UNEP