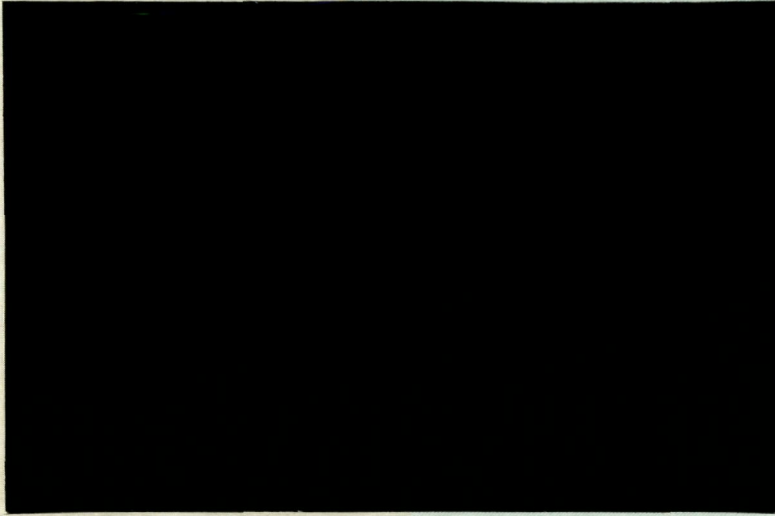


Juli 1992



Stichting Onderzoek Multinationale Ondernemingen
Centre for Research on Multinational Corporations



ENVIRONMENTAL MANAGEMENT
IN THE EUROPEAN
LODGING AND RESTAURANTS
INDUSTRY

Experiences and examples

Paper prepared for the European Community
Social Dialogue 5.

Wilma Roos

July 1992

Centre for Research on Multinational Corporations (SOMO)
Keizersgracht 132
1015 CW Amsterdam
Netherlands
Tel: +32.20.6391291

CONTENTS

	page
Introduction	2
Summary	3
Policy recommendations	4
Chapter 1: The lodging and catering sector	5
1.1. Some facts and figures for the lodging and catering industry	5
1.2. The connection between the lodging and catering industry and the environment?	6
1.3. Relevant arguments for environmental protection	9
* reduction of costs	9
* satisfying customers demand	10
* marketing advantage	10
* using high visibility as an example	10
* anticipating environmental legislation	11
* improving health	11
* improving working conditions	11
Chapter 2: Conditions and constraints in environmental management	12
2.1. Necessary conditions for environmental management	12
2.2. Problems and solutions in environmental management	14
2.3. Towards an environmental management system	17
Chapter 3: Identification of possibilities in environmental management, illustrated with European initiatives	19
3.1. Energy saving	19
3.2. Reduction of water use	21
3.3. Recycling or reduction of waste	22
3.4. Avoidance of chemical materials	24
3.5. Responsible use of the means of transport	25
3.6. Responsible methods of food preparation	26
Chapter 4: European initiatives	27
4.1. experiences of European branch organizations	27
* organizations with some experience in environmental management	27
* organizations with an interest in environmental management	28
* organizations with little or no interest in environmental management	28
4.2. 'Green marks' as a distinctive sign	29
Chapter 5: Two examples of environmental management	30
5.1. Ramada Hotel Chain	30
5.2. McDonald's fast food chain	31
Annexes:	
Annex 1: Itinerary	33
Annex 2: References	36
Annex 3: Notes	40

**ENVIRONMENTAL MANAGEMENT IN THE EUROPEAN
LODGING AND RESTAURANTS
INDUSTRY**

experiences and examples

Wilma Roos
Centre for Research on Multinational Corporations (SOMO)
Amsterdam, The Netherlands
Paper prepared for the European Community
Social Dialogue 5
July 1992

INTRODUCTION

Early in 1991 the department of Social Dialogue of DG-5 of the European Community prepared to organize a seminar during which environmental management in the European Hotel and Restaurant business was meant to be one of the themes. HOTREC, SETA/IUF and representatives of the national member-organizations were to be invited to participate in this seminar. The Dutch Centre for Research on Multinational Corporations (SOMO) was asked to execute research on the subject and to compose a background paper for the social partners of the lodging and catering industry. This research was carried out by two staff members of SOMO, drs. Hans Heerings and dr. Wilma Roos in May/June 1991. Although the seminar was postponed indefinitely, the extensive preparation of this document rationalized its completion.

The subject of environmental management can be dealt with from different viewpoints. One of those viewpoints is the ecological perspective, another the regional and urban planning perspective. Although both approaches can be of great use for environmental policy of regional and national governments, they are less relevant in the discussion among the social partners of the lodging and catering sector, Hotrec and IUF. In our research, therefore, a third approach has been chosen: the perspective of the impact of the lodging and catering industry, and its clients, on the natural environment, and the possibilities within this industry itself to implement measures to prevent or limit environmental pollution.

The objective of the research was to identify the importance of environmental management in the lodging and catering industry, paying attention to the conditions that need to be accomplished and constraints that need to be surmounted. The report is based on experiences and initiatives on environmental management within the various countries attached to the EC. On interviewing several key-informants in the hotel and catering industry, it was learned that the concept *environmental management* causes some confusion. The various people interviewed emphasized different aspects and therefore the definitive description can not be given. In this report the following definition is used: *environmental management means all efforts and activities undertaken by the firm's management in order to obtain an insight into how to control, and when possible, diminish that particular firm's negative impact on the environment.*¹ Environmental management has to include both offensive and preventive measures, such as: waste reduction, the use of harmless cleansing materials, the reduction of the use of water and energy, the arrangement of transport of clients to avoid the hindrance of crowded roads and traffic jams, the provision of relevant information for clients, the training of personal on environmental issues, and the serving of environmentally healthy food.

Another problem that proved to be an obstacle in obtaining a complete picture of the various European activities on environmental management, was the fact that those kind of initiatives are not systematically registered. It is possible that more initiatives in Europe exist, but they are unknown to the branch organizations and do not appear in the most common periodicals.

The preparation of this report is partially based on the collection of secondary sources such as articles in magazines, success stories, and statistics, provided by government agencies, international organizations and branch organizations.

A large number of the consulted articles were obtained from the Cornell School of Hotel Administration Library, Ithaca, New York, enabled by their computerized searching system. Partially, the information is obtained from interviews of representatives of HOTREC, SETA/IUF, representatives of the national member-organizations, hotel managers involved in environmental management and researchers belonging to advisory offices and universities. The interviews were held in several European countries, either by telephone or directly (see itinerary). Although the research was completed in May/June 1991, the report was compiled one year later, in May/June 1992, due to some delay in the decision making process among the social partners and the EC.

SUMMARY AND CONCLUSIONS

The direct outcome of the research is, that, in general, the responsibility for finding solutions to environmental problems is not so much sought within the hotel and catering business itself, but is rather delegated towards government institutions. However, hotel and restaurant entrepreneurs in northern Europe in particular, are becoming more conscious of the fact that efficient environmental management can not only save time and money, but that a direct connection does exist between a healthy environment and a sound attraction for customers. When the environment is deteriorating rapidly, the number of tourists will decline also. The increasing number of tourists, however, is also a real threat to a healthy environment. The lodging and catering industry is highly dependent on a clean and attractive environment yet can be seen as an additional burden to this environment: visual pollution, excessive water use, mountains of waste, traffic jams and increased outflow of CO². In a way the business is trapped in this paradox, which is a good reason not to rely fully on government action. Here, an important role can be seen for the branch associations: when efforts are coordinated, research is initiated and projects are implemented, solutions can be found for environmental problems and the lodging and catering industry can improve its image.

To make environmental management a success, several conditions need to be fulfilled. One of the most important is the continuity. Environmental management must therefore be initiated as a comprehensive management system, not as a set of separate measures to do something about environmental protection. Such environmental management system can consist of a variety of different measures including energy saving measures, measures to reduce water use, to decrease the waste outflow and avoid chemical materials. In this system, not only motivated employees and management are a prerequisite, it is also essential to involve guests as much as possible. Some hotels/restaurants have better opportunities to implement an environmental management system than others and success is also dependent on the availability of environmentally friendly materials and the existence of eco-firms. Some measures require extra investments, but many adaptations can be made with only small changes: better coordination, more control and more consciousness among employees. The various measures in this paper are illustrated with experiences from European countries and the US and Canada. It is remarkable that most examples originate from Germany and the Netherlands. In various other European countries, initiatives are taken by the branch associations, mostly in the field of research, but concrete experiences with hotels or

restaurants, are unknown. Until now, the most prevalent examples in environmental management systems in Europe can be found in either large international hotels or smaller, luxury five stars hotels/restaurants. It is obvious that they are most receptive to the subject. This is partly because of their size; an extra environmental coordinator will not weigh heavily on the budget, and partly because quality is considered more important than quantity. Hotels/restaurants serving mass tourism seem to be less open for environmental changes.

POLICY RECOMMENDATIONS

From the findings of this research, the following policy recommendations are proposed to the social partners of the lodging and catering industry, i.e. HOTREC and IUF:

- 1.** The stimulation of further research into the subject of environmental management in the lodging and catering industry, in particular to the:
 - a. sensibility of different kinds of hotels and restaurants (tourist/business, one/more stars, small/large) for environmental management measures
 - b. impact of environmental management measures in different regions in Europe or different tourists seasons (north/south, winter sports/summer holiday)
 - c. constraints and problems of environmental management
- 2.** The creation of European institutions to coordinate, implement, monitor and evaluate projects concerning environmental management in the lodging and catering sector. In these institutions various agencies can cooperate such as branch associations, government agencies, consultancy bureaus and environmental organizations
- 3.** The dissemination of information concerning environmental management to private business and the public:
 - a. by creating in each EC country an information centre where information is compiled and easily accessible
 - b. by organizing seminars and congresses for owners and managers of hotels and restaurants about the subject
 - c. by stimulating the publication of articles, research findings and experiences in newspapers and magazines
- 4.** Initiating and supporting the development of educational programmes to motivate employees and management of hotels and restaurants. This can be done in the form of:
 - a. courses of 2-3 days, in which the first step is to stimulate an awareness to environmental protection
 - b. courses lasting only 2 hours directed towards a special group of employees, such as cleaning employees
 - c. courses included in other courses. For example general management courses, in which 2 days are reserved for environmental issues
- 5.** The development of a kind of 'green mark/star' system, based on experiences gained by other organizations, such as the 'Bayerische Hotel und Gaststatteverband', so that hotels and restaurants that pay attention to environmental management can be distinguished from others

1

THE LODGING AND CATERING SECTOR

The connection between the lodging and catering industry and the environment is not always a clear one. For the guests it is sometimes difficult to see a relation, but for the owner, the management and the employees working in this industry, it seems even more difficult. In this chapter, attention will be paid to the following questions 'what is the relation between the lodging and catering industry and the environment' and 'why should the industry care about the environment'. The chapter will start with a brief description of the industry and its development.

1.1. SOME FACTS AND FIGURES FOR THE LODGING AND CATERING INDUSTRY

Everywhere in Europe, lodging and catering are activities with a high visibility. Many inhabitants in the various European countries are in daily contact with this sector. The lodging and catering sector comprises of various different activities that can be further subdivided:

- * Lodging
 - large hotel chains
 - small hotels
 - guest-houses
 - bed and break-fast
 - apartments and holiday houses
 - camping sites
- * Restaurants
 - gastronomic restaurants
 - fast food restaurants
 - motor way restaurants
 - home catering
- * Night establishments
 - cafes
 - pubs
 - nightclubs

For the sake of clarity, the illustrations in this document will be limited to a number of sub-branches only. Firstly, those where most experiences with environmental management are registered: the fast food chains and large hotel chains; and secondly, those that are most vulnerable to environmental damages such as the camping sector.

The lodging and catering sector is of great magnitude and increasing in number. Weekly, in larger cities, new hotels open their doors or a new restaurant with yet another specialty is inaugurated. In the Netherlands, for example, the number of hotel holidays increased 17% in the period between 1980 and 1988 and this increased demand has resulted in an increase in lodging capacity of 12% in the period between 1984 and 1989. The annual turnover of the lodging industry (excl. the catering services) in 1988 was 12 billion guilder.² But it is not only in the Netherlands that this sector has increased in importance, the same is also true for the other countries of the European Community.

Several factors are responsible for this increase. The first is the end of the economic recession at the beginning of the eighties, raising the purchasing power of potential clients. The low rate of inflation is another factor that plays

an important role, as well as the increased mobility, especially of the inhabitants of the countries of southern Europe who formerly did not travel that much. A final reason is the fact that the number of elderly people in the northern European countries is increasing rapidly. This age group has more leisure time which consequently leads to more tourists and restaurant clients.

Table 1: Development of the lodging and catering sector in the Netherlands in the period 1985-1991 (with 1985 as index)

year	1985	1989	1990	1991
hotels	100	124	133	135
restaurants	100	120	129	137
cafes	100	106	113	118

source: CBS, figures in 1992

1.2. THE CONNECTION BETWEEN THE LODGING AND CATERING INDUSTRY AND THE ENVIRONMENT

The environment surrounding us is considered a public asset, everybody can make use of it without significant expenditures and, consequently, everybody can damage it without severe fines. There is, however, a limit to environmental ill-use. This limit, once reached, will cause an atmosphere that is no longer attractive to live in. Although it is obvious that something has to be done to stop further deterioration, it is not clear who should be designated to do this. A compelling question is whether the bodies that are responsible for the pollution will be the ones that have to invest in limiting the damage, or whether it will be the ones suffering most who will have to be active in putting an end to the danger that can jeopardize their business.

The lodging and catering industry is an interesting example of a business that can be found on both ends of the scale. This industry can be seen simultaneously as an additional burden to the environment and highly dependent on a clean and attractive environment.

Additional burden

Additional burden because the lodging and catering industry is responsible in several ways for further environmental degradation. The principal reason for this is the large increase in the number of tourists, which poses a heavy burden on the environment around them. Linda Cronin remarked: "I suspect that each of us can look to our own country and come up with examples of situations where tourism and the environment, physical and/or cultural, have collided, and the environment has been left lying in the road. (-) Tourists, and especially mass tourists, are voracious consumers of water, power, beach and other resources, and they generate more waste on average than local residents."³

The first way in which the booming tourism sector is negatively influencing the environment is visual pollution: "along some sections of the Mediterranean coast, hotel buildings and associated developments which catered for those heavy days of early mass tourism, are now recognized as typifying the worst excesses of unbridled tourism development and despoliation. As the choice of holiday destinations has widened (for example winter sports in Alpine regions) so the spread of mass tourism has generated further inimical environmental change."⁴

Saturation tourism is causing negative visual impacts, which are most severe in the beach resorts. The current site coverage of all tourists lodgings in Europe is about 4000 square kilometre. The coverage is expected to double by the year 2000. Furthermore, the tourist expansion and the unlimited construction of new hotels and apartments is occupying a lot of space in rare ecological zones. A team of experts reached the conclusion that scarcely any significant area of coastal wetlands exists any more in the Mediterranean region.⁵

A second negative influence is the excessive water consumption of large hotels and tourist centers: "*Water consumption by international hotels in areas of low rainfall can severely effect water tables and hence the ability of local farmers to irrigate*".⁶ "*As a rule of thumb, 200 to 500 litre of water are necessary for every customer in the lodging industry per day. A luxury hotel in the Mediterranean area consumes in summer season 600 litre of drinking water per person per night*".⁷ Just how high the accumulated figures of water use can be, is shown by the statistics from Bayern, BDR. In 1991 the 20 million guests that spent 85 million nights in hotels in this German state, used as much as 300.000 cubic meter drinking water.⁸ The increased amount of garbage is another problem that is forming an additional burden on the environment. Solid waste produced by tourists, currently about 2,8 million tons per year, will reach 8-12 million tons in 2025. Sewage discharges will rise from 0.4 billion cubic meters to a figure that can be as high as 1,5 billion cubic meters.⁹

Table 2: Discharge of acid materials in sewage water of the Dutch lodging and restaurant industry in the period 1975-1988

year/ 1000 inhabitants equivalent	
1975	388
1980	548
1985	617
1986	536
1987	541

source: CBS 1990

Yet another aspect is the deforestation, mainly servicing winter sports tourism, which can be seen as a major cause of mud slides, floods and avalanches. The increased mobility of tourists might be seen as a stimulation of the lodging and catering branch, it can also be seen as a further threat of environmental pollution. An increasing number of tourists travelling by car and by plane causes a serious outflow of CO². In 1990, the percentage of European tourists living in the EC travelling by car was 66%, 13% travelled by plane, 14% by train, 10% by bus and 5% by boat.

This increased mobility results in an escalating burden for some attractive but vulnerable areas, such as the narrow valleys of the Alpine region. Every year approximately 8 to 9 million cars are crossing the most important Alpine route, the Brenner pas, on the frontier between Italy and Austria. This is a daily burden of 12.000 cars that are responsible for 26 tons of CO², 22 tons of nitrogen-oxide, 6 tons of hydrocarbon, 0.5 tons of soot and 20 tons of lead. In the Alps 80 to 90% of all toxic waste is caused by cars.¹⁰ The impact of this toxic waste on the forests in this region is clear, large parts of the valley woodlands, an indispensable protection against avalanches, are suffering from acid

rain and trees are dying in large numbers. On the average 60% of all valley woodlands in the Alps are damaged.

It is not only the increased number of tourists and lodging facilities that can be seen as a threat to the environment, the catering industry plays a major role in pollution also. Of all the different kinds of restaurants, the fast-food restaurant can be seen as the largest contaminator. Researchers of the University of Wisconsin compared different types of restaurants and found that fast food restaurants have a paper waste of 65% compared to 44% of full service restaurants and 40% for institutional restaurants. This large use of paper results in considerable haulage costs: the monthly haulage costs of fast food restaurants amounts to between 250 US dollars and 300 US dollars, between 75 US dollars and 350 US dollars for full service restaurants and 260 US dollars for institutional.¹¹

Highly dependent

The hotel and restaurant industry not only provides an additional burden on the environment, it is also *highly dependent* on it: "*The natural environment is crucial to the attractiveness of almost all travel destinations and recreation areas*".¹² The rate of return in this business tends to correlate positively with the attractiveness of the surroundings. A deteriorating environment will therefore result in declining profits. This is most visible in that part of the hotel branch that is attracting tourists. Although differences between the countries and within countries do exist, tourists constitute generally more than 75% of the customers of hotels, whereas business people form a minority smaller than 25%.¹³ In general tourists like to visit places where the environment is not spoiled; where beaches are clean, monuments are not damaged by acid rain and roads are not blocked with polluting cars.

According to Mr. Romeril, a british researcher on tourism and environment, the relation between tourism and environmental aspects is one of 'mutual dependence'.¹⁴ Mr. Batisse, director of the Plan Azul of the Spanish PNUMA, declares that it is of utmost importance to take care of the environment in tourist areas because otherwise "*the chicken with the golden eggs will be slaughtered: if we destroy the reason why people come, the people will not come anymore*".¹⁵ In 1982 the World Tourist Organization (WTO) and the United Nations Environment Program (UNEP) signed a joint declaration on tourism and environment, stating: "*The protection, enchainement and improvement of the various components of man's environment are among the fundamental conditions for the harmonious development for tourism. Similarly, rational management of tourism may contribute to a large extent in protecting and developing the physical environment and the cultural heritage, as well as in improving the quality of men's life*".¹⁶

In a research concerning the motives of tourists in selecting holiday resorts, 39,8% of all respondents mentioned 'nature' as their main motive and 25% mentioned 'quietness and clean water'.¹⁷ The Dutch Institute for Tourism investigated to what extent tourists were influenced by polluted surroundings. According to their findings, of all Dutch tourists that had their holidays in summer 1989, 38% mentioned that environmental problems, such as excess of garbage, dead woodlands, polluted seawater and air pollution, has effected their holiday in a negative way. The Mediterranean area in particular is mentioned as a polluted area by almost half of the total number of Dutch tourists.¹⁸ A number of tourists, in particular those who spend their holiday in Portugal, Italy and Yugoslavia, declared that they will change their future

holiday plans because of environmental pollution.

In other research, where the direct impact of deteriorating environment on number of tourists in Europe was investigated, it was reported that a decline of 14% in tourist numbers was measured in an inland lake area, due to eutrophic processes, and a decline of 25% was reported in a coastal region, due to pollution of the coasts and beaches.

Although the lodging and catering industry can be seen both as partly responsible for the problem, as well as one of the beneficiaries of the solution, the industry itself sees the answer for environmental pollution largely in government action. Despite their own contribution to the problem and their own interest in an optimal solution, they seem to have adopted a wait-and-see policy. It is important, however, that the entrepreneurs/management in this area start to feel responsible for an effective environmental management themselves, instead of pointing to government institutions only. According to Linda Cronin, as the public becomes increasingly concerned about the environmental issues, the best way the lodging and catering industry can ensure its own future prosperity is by demonstrating that it shares the concerns of the population. She therefore states that: *"by developing a code of ethics incorporating the principles of sustainable tourism development, the industry will position itself as a partner in the process and provide guidance to individuals and firms seeking to enter the industry."*¹⁹

1.3. RELEVANT ARGUMENTS FOR ENVIRONMENTAL PROTECTION

Various arguments exist as to why the lodging and catering industry should opt for a policy of environmental management. The most relevant are outlined in this section.

*** reduction of costs**

An important reason for the lodging and restaurant business to become interested in environmental protection is the reduction of their costs. A considerable cutback in operational costs can be reached by reduction or separation of garbage, reducing water use, and reducing energy expenses. Recycling of waste, for example, can include a considerable cost saving element. The Hyatt Recency Minneapolis recycles 30% of its waste which results in a reduction of haulage costs of about 14.000 US dollars yearly.²⁰ Hyatt was paying 3.50 US dollars a ton to have the 50.000 newspapers it buys each day hauled away. Now Hyatt is selling the papers for 7.50 US dollars a ton, and that includes free pick up.²¹ Reduction of water use is sometimes only a question of installing water saving devices and checking their functioning. When in a middle sized hotel a simple floater is installed in all toilets, reducing water use between 20-30%, this can save as much as 500 cubic meters of water, i.e. 450 US dollars per month. One leaking toilet can lose as much as 73.000 litre water per year which costs around 150 US dollars. Energy costs are a considerable factor, increasing by up to 15% of the total operation costs. Simple alterations can save money. The costs of changing from traditional 100 watts bulbs to special longlasting bulbs of 11 watts will be earned back in less than a year.²²

*** satisfying customers demand**

A second reason to start a policy of environmental management is the customers demand. With the contamination of the earth gaining much needed attention, the awareness and concern of the public is increasing daily. This can result in an ardent plea from the clients to the hotel/restaurant entrepreneurs to play a more active role in the solution to this problem.

In Canada a survey learnt that one third of all Canadians gave top priority to environmental protection. "*An increasingly aware and concerned public will soon see through the 'glitzy advertising' and insist upon real and meaningful change in operations, using their continued patronage as a weapon*".²³ In the Netherlands, it has been noted that on average, 25% of all tourists are interested in environmental protection and interested in tourism that is not damaging the environment. Another study, executed in the USA, found that 54% of the respondents were very concerned about the way food is handled in restaurants, and 90% reported that they were aware of the potential problem of contaminated food.²⁴

*** marketing advantage**

A more environmentally friendly management can be used as a marketing advantage; by advertising their environmental soundness and healthy operation, hotels and restaurants can attract certain segments of the market. In Germany, this marketing strategy is well recognized. In cooperation with various ministries, the Bayern branch organization GmbH, is rewarding ecologically friendly hotels with a special mark, making their efforts visible for the public. And in Austria, branch organizations are thinking of creating a kind of 'green card' by which the eco-hotels can distinguish themselves from other hotels.²⁵ Besides the advantages of this system, some disadvantages can be discerned. The danger exists that the customers are so overwhelmed with stickers, stars and marks on restaurant- and hotel entrances that one sticker more will not be noticed. The other problem is that criteria set for environmental testing can interfere with criteria set for the star system. A four star hotel, for example, has to provide the customer with a certain number of towels, which can exclude this hotel from an environmental green mark. In chapter 4.2. examples will be described into more detail.

*** using high visibility as an example**

The high visibility of hotels and restaurants is another reason why they should be involved in environmental management. "*Restaurateurs are very visible in the community; they can set a good example by showing people that they are willing to make that little, extra effort*".²⁶ This high visibility also results in misconception. In a survey conducted in 1990 in Canada, the public was asked to rank industries by their disregard for or potential threat to the environment. From this survey it became clear that the public misconception is a very important factor in this ranking: the industry as a whole was seen as worse for the environment than the nuclear power and hydro-electric power-generating industries.²⁷ Despite an ongoing effort on the part of the plastic and food service industries to battle widespread misinformation, the public continues to target plastic food packaging as a major culprit in the landfill crisis.²⁸ Excavations of landfills in Arizona, USA, indicate that paper is the largest problem, accounting for 35,6% by weight of solid waste after recycling. McDonald's senior vice President, Shelby Yastraw, is aware of the enormous potential example of environmental management in McDonald's. Recycling

waste in 4350 McDonald's restaurants means that 10 million customers each month will be exposed to the message, even if only 1% take it to heart, that's a large gain.²⁹ In general, customers are willing to cooperate with trash separation programs. In a Canadian survey customers of fast food restaurants were asked whether they would be willing to separate their trash: 60% answered that they were very willing to do this, 24% willing and only 16% were not willing at all.³⁰

*** anticipating environmental legislation**

Although European legislation in the area of waste management and environmental protection is not yet as far-reaching as in the US and Canada, it is certain that in the near future more strict rules and regulations will be imposed. In the US it is already evident that all lodging facilities will be forced to recycle major portions of their waste products. New legislation, lack of landfills and public demand will require it. In the Netherlands new legislation was introduced on the 1st of January 1991 concerning hindrance caused by noise, smell and garbage. So Herlong stated in her publication concerning simple things restaurateurs can do to save the earth: "*Sooner or later it is all going to be legislated, so you might as well be to the forefront, leading change instead of resisting it.*"³¹

*** improving health**

Health is another consideration in paying attention to environmental management, health of the employees as well as health of the clients. Canadian statistics show that 85% to 95% of all our exposure to poisonous chemicals in the environment comes through our food. Consumers are increasingly concerned about food safety and are demanding food without too many chemicals, such as drug free meat. In the Canadian Rowe Farm Meats, drug free meat sales have jumped from 10% in 1983 to 90% in 1989. A full third of these sales are directed to the hospital, restaurant and hotel business.³² In Germany the so-called 'Vollwert Kuche' is becoming more and more popular. Aspects that are of importance in this type of food is the way the food is cultivated (without or with a minimum use of chemicals such as insecticides, herbicides and hormones) and the way food is served (a better balance between vegetables and meat or fish). As much use as possible is made of products in season and sugar is replaced by other products such as honey. Customers are in general very enthusiastic about the 'Vollwert Kuche'.³³

*** improving working conditions**

Employees are also exposed to dangers in their work place caused by hazardous materials. Hazardous materials include grill cleaners, pot and pan detergents, oven cleaners, bleach and chemical reacting agents as well as decreasing agents for hoods and grease traps.³⁴ To eradicate the use of these products will not only improve the environment, but also improve working conditions of the employees to a large extent. From a research executed by the Dutch branch organization 'Bedrijfschap Nederland' in 1985, was learned that 85% of all employees working in restaurants and fast food restaurants, complained about the atmosphere in their work place. The most common complaints were that it was often too hot, too smoky, and the places were insufficiently ventilated, resulting in high percentages of hazardous materials in the air. These circumstances lead to higher levels of absence because of illness.³⁵

2

CONDITIONS AND CONSTRAINTS IN ENVIRONMENTAL MANAGEMENT

It is not an easy task to give general conditions for implementing a sound environmental management in hotels and restaurants in the various European countries, without neglecting differences that exist between them. However, several conditions are discernable that have an universal validity. The same can be said of the problems that hotel keepers and catering entrepreneurs encounter in their environmental management policy. In this chapter several conditions and constraints will be described, illustrated with examples from the US, Netherlands, Germany and Switzerland and a possible '*environmental management system*' will be described.

2.1. NECESSARY CONDITIONS FOR ENVIRONMENTAL MANAGEMENT

*** a motivated management**

One of the most important conditions for an effective environmental management system is a motivated management that is convinced of the benefits of the system and is able to execute a leading role in persuading both employees and guests. Success of the project is very much dependent on the personal commitment of the management and heads of the departments. They have to encourage the enthusiastic participation of all employees by taking measures to involve them as much as possible in the project. The Steinberger company in Germany is an example of the importance of a dedicated management. When the management was changed, the attention given to the environmental programme, faded. A solution can be to appoint an environmental coordinator responsible for executing the programme.

*** dissemination of information for the motivation of employees**

A difference needs to be made between measures that take place behind the scenes and measures that can be noticed by guests. So, before an environmental management programme is going to start, the target group should be well defined and the measures and the information should be well tuned to this target group.

When the environmental programme is primarily directed towards the employees working in the establishment, it is of utmost importance to involve them right from the beginning in the implementation of the policy. They are in general the right persons to judge whether measures are feasible or not. Examples have shown that the education of employees has been crucial to the success of environmental strategies. Since front-line workers must implement company policy, employees must be committed to the organization's causes. The Sonesta Hotel in Amsterdam has some experience in motivating its employees. In this hotel an 'energy saving committee' has been formed which is responsible for the implementation of the environmental policy. This committee organizes a meeting every two months dedicated to environmental management. New initiatives and evaluation of the environmental policy are discussed in biweekly meetings. Furthermore the creativity of all employees

is stimulated by asking them to invent energy saving measures, successes are emphasized and employees rewarded when successes are recorded.

Wil van Sante, vice president 'Horecabond FNV' from the Netherlands, states that environmental management needs to be included in the Collective Labour Agreements, because it is an item that involves both employees and employers in the lodging and catering branch. A sound environmental management will improve working conditions of the employees, which will in its turn, result in lower sick leaves figures.³⁶ On the other hand, success of the environmental management is also very much dependent on the efforts and motivation of the employees. The 'Horecabond FNV' designed a proposal for a Collective Labour Agreement including environment, health and safety. Employers will have to guarantee that attention will be paid to all three aspects.

*** dissemination of information to guests**

When the environmental programme is directed more to the customers, a slightly different approach is necessary. In this approach, a balanced dissemination of information is of utmost importance. An example is the environmental programme of van Hecke, a catering firm in the Netherlands, in which the provision of information to the customers, in particular on how to separate the waste, is the most important part. The customers will have to divide the leftovers of their lunches, the employees will have to divide the waste before it is leaving the company. For this purpose, different bins, separated for example by their colour or by their name plate, have been positioned near the lunch tables. The information used to familiarize the clients consists of leaflets, posters, courses, expositions, displays etc.

According to Maltzacher, of consultancy bureau 'Maltzacher und Volkart', who is largely involved in giving advise on environmental subjects, it is of utmost importance to find a balance between informing the guests and annoying them with too many notes, announcements and leaflets. She advises hotel keepers to start with some small environmental measures and when these can be called a success, other measures can be implemented as well. The 'changing towel' measure, that will be described in the next chapter, is one of the measures involving guests that usually is a success. A good idea is to organize special events/evenings in which the guests are informed about the impact of their activities on the environment and the ways they can do something about it. Another idea is to print recipes with the ecological menus that are served in the restaurant and distribute these among the guests who show interest. An additional effect is that, even when all these measures are only slightly effective, the impact will be large, because some of the guests take the ideas home, increasing the spread effect.

Although information dissemination within the hotel is important, the marketing aspects must not be neglected. Maltzacher is convinced that 66% of all guests will choose the ecological hotel when he/she can choose between two similar alternatives. One hotel keeper in Switzerland evaluated his environmental programme, and in a discussion with 23 guests he found out that only one of them disapproved largely with the measures taken, the other 22 reacted enthusiastically.³⁷

*** nature and magnitude of the hotels and restaurants**

Not all hotels and restaurants have the same opportunities to implement an environmental policy. Hotels with a professional management tend to accept environmental management measures more easily than hotels without. Apart

from this, smaller hotels are far too busy with operational aspects to care about the environment. But, on the other hand, small restaurants/hotels that strive for good quality and possess an interested management are more concerned about the environment. In Switzerland, for example, 3 to 4 stars restaurants are, in general, more involved than restaurants with less stars. The three most qualified restaurants in this country purchase their products from ecological farms. Another difference is the nature of the guests. In general, the acceptance of environmental management of hotels servicing mass tourism is low. And in mountain regions, the difference between summer and winter guests is influencing the possibility of implementing environmental measures. In the popular skiing resorts the winter guests tend not to be very interested. This implies that a regional difference in the acceptance of environmental management can be discerned as well. In the southern countries, popular for their beaches, mass tourism is of more importance, whereas in the northern countries, more popular for their rest and nature, tourism has more individualistic characteristics. Consequently, more attention is paid to environmental protection in northern Europe.

With respect to catering, a difference can be noticed between gastronomic restaurants versus fast food and motorway restaurants. The acceptance of an environmental programme in the latter types is low. An example is the 'Niederziessen' BAR-Rahstette in Brohltal West, BDR. The customers in this motorway restaurant did not show very much interest in its waste separation policy. The objectives of the guests also makes a difference. In hotels attracting more business people, energy and water saving policies are more easily realized. Firstly, because some tourists do not want to be bothered during their holiday with environmental pollution, and secondly, because business people are travelling a lot and can make comparisons between hotels.

*** availability of environmentally friendly materials**

A good environmental programme is very much dependent on the availability of materials and instruments that enable the firm to operate in an environmentally friendly way. In the US, the purchase of energy saving devices and water saving faucets is less of a problem. In Europe, where the demand of these items is still low, it will be more difficult and more costly. This implies that more time is needed to find the right items and that the initial investment costs can be somewhat higher. However, the savings gained will justify the expense.³⁸

2.2. PROBLEMS AND SOLUTIONS IN ENVIRONMENTAL MANAGEMENT

For successful environmental management, it is necessary to anticipate possible problems such as increased labour input, insufficient space availability, absence of environmentally friendly foodstuffs and lack of information.

*** increased labour load**

Some measures to protect the environment are in fact increasing the labour input to quite some extent. For the managers of the hotel who have to devise a good way to implement an environmental management system, but also for

the employees in the kitchen where more labour is needed to separate the garbage. When the management does not agree with an increase in the number of employees, this may lead to some problems. According to the representative of the Radisson Hotel South, US, the environmental programme in this hotel is not always met with enthusiasm: "*either employees are too busy, or they just don't care.*"³⁹

An example from the Netherlands is SAB Catering. The advantages of its environmental policy are obvious, but for the employees of SAB catering to serve the 'green' lunches is more labour intensive. Milk bottles made out of glass are much heavier than plastic or carton packing and cheese wrapped up in plastic is more rapidly dispersed than cheese that has to be cut in slices by the employees.⁴⁰

An additional problem is that activities in the lodging and catering branch are not regularly distributed throughout the day or week but very much dependent on peak periods. During these peak periods it is difficult to motivate employees to take care of waste separation. Especially when use is made of temporary employees who are less motivated and ignorant of environmentally friendly behaviour. It proves to be difficult to find time to instruct these employees. Even more difficult is the fact that in the lodging and restaurant industry, there are a large number of foreign employees who are not able to speak the language of the country concerned, making it hard to influence their attitude. In this case information materials designed for these employees need to be made in pictograms. The Sonesta experience in Amsterdam shows that it is impossible to involve all employees in the project. Of all employees, around 20% participated enthusiastically in the Sonesta project.⁴¹ Continuing efforts are needed to make the percentage that is enthusiastic as large as possible.

*** insufficient possibilities for waste management**

A major problem is the availability of good haulage companies that specialize in processing the separated waste. It discourages the employees involved very much when the consciously separated waste is dumped into one landfill or incinerated together in the same oven.

An example from the Netherlands shows the difficulties. The Sonesta Hotel in Amsterdam encountered many problems in finding a haulage company that could take care of the separated waste. Only when several hotels in Amsterdam coordinated their efforts, a company was found. A special van had to be bought for hauling purposes, delaying the project for four months. After all this effort, the company could not always find a landfill or other place to treat the separated waste and too often the carefully separated waste was dumped together.⁴² Michael Pennachia puts it like this: "*There are the immeasurable, intangible costs of confusion and frustration that comes about as a result of an abundance of conflicting information concerning waste management and a lack of a clear direction. For instance, when a recycling programme is implemented but does not work because reclamation sites can't be found, any desire among employees to become involved with another programme often dies, thereby further delaying the progress of environmental clean up.*"⁴³ Another problem that is often mentioned with respect to recycling is the problem of space: extra space is needed inside and outside the hotel for the storage of, for example, glass bottles. Space is especially a problem in narrow inner cities such as Amsterdam, London and Paris.

*** absence of environmentally friendly foodstuffs**

The manager of Vancouver's Raintree, a cuisine restaurant, remarked that the largest problem she encountered has been finding recycled goods and 'earth friendly' products.⁴⁴ Suppliers of organic food in particular are sometimes difficult to find and it is important to check whether the suppliers are reliable and can guarantee year-round availability. Because no exact standard exists as to what 'organic' means, foodstuff can be sold as organic that contains as many chemicals as commercially produced food.⁴⁵

Another problem in this respect is the difficulty of finding enough suppliers. This problem is especially acute in the larger hotels, above 300 beds, where large quantities are needed. Ecological farming is not able to cope with the increased demand.

The price differential that exists with commercially cultivated food is another obstacle for the use of organic foodstuffs. Chef Lars Jorgensson of Vancouver's William Tell, estimates that he pays 15% more for organic produce. John Higgins, executive chef of Toronto's King Edward Hotel has paid as much as 30-40% more. Organic food has problems with economies of scale when it comes to processing, transportation, and retailing. Furthermore, organic food is usually not spotless and some inconsistencies can exist, affecting restaurants with set menus. When restaurants change their menu daily, it is difficult to obtain a varied enough supply. More difficulties are met when only seasonal vegetables are used and not enough variation can be obtained.⁴⁶

*** lack of information**

Another difficulty is the lack of reliable information, for both hotel keepers and guests. Not much research is carried out yet on the environmental impact of some alternatives. Opinions are divided, for example, on whether plastic yoghurt cups are more environmentally friendly than bottles that need to be washed. Also the environmental impact of plastic versus paper is not yet clearly worked out. Another example is the lack of clear information about the use of paper towels, linen towels or heating to dry your hands. The research that is carried out with respect to this, is often not easily accessible. Some organizations started initiatives to provide the public with more information. The German tourist organization 'Fremdes Verkehr Verband Schleweg Holstein', together with 5 environmental groups, published three leaflets for tourist and entrepreneurs in the lodging and catering branch, with suggestions how to behave in an environmentally friendly way. The Dutch '*Stichting Milieu Educatie*' holds the opinion that efforts of improving information dissemination needs to be coordinated internationally. They suggested in 1989 the creation of centers in the various EC countries, a kind of European information network, where all information concerning the link between environment, hotels, restaurants and tourists, are collected and can be obtained easily.

*** lack of capital to make environmental investments**

The financial situation in the lodging and catering branch is often not very favourable, making it difficult to convince hotel keepers of the economic benefits of their investments. To execute efficient environmental management, an extra employee should be appointed, which means extra labour costs. In order to motivate the managers, some extra money needs to be spent on seminars, congresses and instruction. A solution can be found in the cooperation between various smaller hotels.

Although some adaptations might cost some money in the short term, in the long run a lot of these investments will be paid back by the savings. Ecological hotels do not need to be more expensive. Energy saving, water saving and garbage treatment, will save money.

*** ownership structure of the hotels and restaurants**

The ownership structure of some of the establishments is another obstacle that can be encountered. The BAR'S on the motorways in Germany, for example, are all managed by a leaseholder and it is not the owner that is responsible for day to day operation. This leaseholder obtains a fixed amount of money, no matter what kind of energy or water saving measures he takes, making economic incentives useless. This problem is less evident in small and medium sized hotels in which the owner is the manager as well.

*** some possible solutions**

Some of the problems mentioned are quite easy to solve. The problem with the shortage of space for the garbage bins can be solved by asking recycling companies to collect the waste more often. Before hotels and restaurants think of recycling their waste, they must consider a few things carefully: research has to be done to discover local markets for recycled materials. When dealing with recycling companies, check the transportation requirements. Is it cost effective to transport the waste to the recycling company? Throwing the wrong type of plastic bottles into a container can contaminate the whole batch.⁴⁷

To decrease the labour load of the employees, it is important that the efforts employees take to separate waste and behave in a more environmentally friendly way, are minimized. For example to locate the bin for used batteries in the same place as where new batteries can be obtained: no extra effort is needed.

2.3. TOWARDS AN ENVIRONMENTAL MANAGEMENT SYSTEM

One of the most important aspects of environmental management is not the inventory of the different measures that can be taken, nor the initial motivation of the employees to implement those measures, but the continuation of their efforts after time has passed. When the initial enthusiasm has faded, it proved to be difficult to keep employees and management motivated to give that extra bit of energy to separate the waste, or to watch the energy used in the kitchen.

It is therefore of utmost importance that environmental management is initiated as a comprehensive management system, not as a set of separate measures. A management system consists of a combination of related organizational, behavioural, technical and administrative measures. Some measures have a larger impact when the organizational changes are emphasized, some measures need a more individualistic change in attitude, either from employees or from customers, whereas some changes are purely technical in character. A number of successive steps need to be followed to complete an environmental management system.⁴⁸

1. motivation of employees and management
2. inventory of all potential points of interest: waste audit, energy audit
3. analysis of the various prevention options or reduction options
4. designing a plan of action
5. putting the plan into action
6. evaluation and feed back

It is important to realize that a lot of information on how to design and execute an environmental management system, does already exist. During the successive steps, support can be requested from various organizations such as consultancy bureau's, government institutions and non-governmental organizations. The various branch organizations in particular can play an important role in stimulating the development of environmental management systems in hotels and restaurants. In some countries financial programmes exist that provide subsidies for various initiatives. It is also possible to coordinate efforts with other hotels to implement environmental measures that are too extensive for one hotel. In the next chapter, various measures that form part of an environmental management system, will be outlined.

3

IDENTIFICATION OF POSSIBILITIES FOR ENVIRONMENTAL MANAGEMENT

In several countries, hotel and restaurant managers are already involved in environmental management. American and Canadian hotel managers, in particular, are trying to reduce the amount of waste that is generated in their hotels, or inventing new recycling methods for disposables. In the popular tourist resorts of Switzerland and Austria as well, much progress has been made with the above. Although this report is meant for organizations in countries belonging to the European Community, several of the examples will be derived from these non-EC countries. The reasons for this are simple. The first one is that in the EC countries not many examples have been found; apart from some experiences in Germany and the Netherlands, environmental management in the lodging and restaurant industry is not yet widespread. The second reason is that American and Canadian hotels and restaurants are not limiting their activities to the US and Canada alone; they can be found in the EC countries as well. A final reason is that most of their measures can be translated to the European context and can therefore serve as an example. In this chapter various measures will be described successively, illustrated with examples. The list of measures can be used as a check-list when studying the possibilities for environmental management. To illustrate, experiences of hotels and restaurants, mostly fast food chains, will be described.

3.1. ENERGY SAVING

*** energy used in the heating or cooling of the building**

Energy saving is a very important measure to be included in an environmental management system, not only because the generation of energy is a chief cause of pollution, but also because an inventive energy saving policy can save a considerable amount of money.

A large consumer of energy, especially in those countries with severe winters or hot summers, is the energy used in the heating or cooling of the building. In January 1990 an energy saving committee was created in the Sonesta hotel in Amsterdam, based on a US example. Various measures were taken to save energy. To avoid freezing during winter, a basic temperature of 15 degrees is necessary in all rooms. An automatic signalling system detects the guests when they enter the room and puts the heater on a more comfortable temperature. Higher temperatures can be controlled by the guests themselves.⁴⁹

It is proven that the amount of energy that is lost in restaurants and cafeterias is considerable. When a system is chosen in which cold outside air is blown into the filters from inside, there is a considerable decrease in the energy needed.⁵⁰ In Vollwert-Restaurant Heller in Mannheim, Germany, the owner Wolfgang Heller has implemented several measures to save energy costs. One of these measures is a special installation which recycles the energy needed to cool the agregator.⁵¹ In hotel Alte Post in Mullheim, Germany, an energy saving of 6% is obtained by adjusting the heating systems on a temperature one degree lower than it used to be.

*** energy for illumination**

In several corridors and rooms of the Sonesta hotel in Amsterdam, light will switch on when somebody is passing by. Besides the energy saving element in this measure, better security is obtained as well.⁵² The replacement of traditional bulbs for long enduring bulbs or halogen bulbs, as done by restaurant Ratskeller in Saarbrücken, Germany, will result in a lower energy bill. To change one bulb for a long enduring lamp will save 11 US dollars per year, not counting the labour costs that are needed to replace a normal bulb five times. Not all adaptations need to be technical in nature. Behavioural and organizational changes can save energy as well. When guests are asked to turn off the lights and heaters in their rooms when leaving, considerable savings can be reached. Researchers of the University of Amsterdam suggested some organizational changes for the Scandic Crown Hotel in Amsterdam. For the low season they proposed an efficient division of hotel guests over the various floors. The non occupied floors could be closed and the lights switched off.⁵³

*** energy used for cooking**

Research executed for 'Horeca Nederland' the Dutch branch association, concluded that only 10% of all used energy in the kitchen is spent effectively. So to achieve energy saving in the kitchen, is very important. Organizational and behavioural changes will already make a large difference. Often, stoves and ovens are on without being used, waiting for the peak hours. Meals are heated several times until they finally get consumed. Sometimes frying pans are ready to use all day, while french fries are only served during evening hours.

Sometimes technical adaptations show quite exiting savings. In hotel Kempinski Gravenburg in Germany, 35.000 DM was saved by installing stoves that could be regulated electronically.

*** energy used for heating the water and in washing machines**

When the water temperature of showers and taps is lowered to 60 degrees Celsius, considerable energy is saved. Washing clothes and dishes during non peak hours will further decrease the energy bill.⁵⁴ Advice from the Dutch consultancy office van Ebben to owners of hotels and restaurants, is to turn on the dish washing machine only when it is fully loaded. Even when you have to buy some extra crockery, it will pay back.

Miele is selling a washing machine that is saving 60% of its generated heat for reuse in the drying process. This adaptation, together with some other adaptations, resulted in a reduction of 35 kilo washing powder, 6000 litre water and 100 KW electricity per year/500 washing times.

3.2. REDUCTION OF WATER USE

*** reduction of water use in toilets and bathrooms**

Reduction of water use is especially important for countries where water, and clean water in particular, is a scarce resource. Scarcity of water can really become a problem when hot weather coincides with an influx of tourists. The large hotels with their enormous water use are depleting the water used by the local population for consumption and irrigation.

The following example is taken from the US, but similar situations can be expected to emerge in Spain and Greece in the near future. In California the drought in 1990 was so severe that many hotels were forced to implement extensive water saving programs. In the 'Four Seasons' in Baltimore even ice was saved from the iced tea pitchers for watering the hotels indoor plants and the management investigated the recycling of 'gray water' from the rinse cycles of the washing machines.⁵⁵ The Movenpick hotel in Stuttgart, Germany, succeeded in an considerable water reduction by the installation of flow restrictions in toilets and showers. The 200 litre of water used per guests per night, were reduced to 110 litres of water. In only three months a saving was achieved of 18.176,07 DM. Hotel Intercontinental installed one of the most modern watersaving installations in Europe and saves as much as 35% of its water use.

Several companies specialize in energy and water saving products, such as toilets that cut water use by three to four times, shower heads that not only reduce water flow from up to 5 gallons a minute to 2,5 gallons, but also remove chlorine, and electronic faucets in which the water starts to flow when you put your hands in front of the sensor, thereby saving up to 85% of water. This kind of faucet also reduces vandalism because there are no knobs or handles to turn and break, and the water cannot be left running.

*** reduction in the amount of laundry**

Laundry is an important water consumer which makes it worthwhile to consider water saving measures. Following the example of some German hotels, the management in the Dutch 'Relais du Silence Hotel Opduin' in Texel decided to offer its guests the possibility to choose whether they want their laundry changed every day, or less often. When the guests want their towels washed, they can show this by leaving them on the bathroom floor. After only four weeks of the experiment, the advantages of the initiative became visible: not only did the quantity of laundry, and consequently the use of water, diminish by an impressive 20%, but the hotel guests reacted enthusiastically also.⁵⁶

*** repair of running taps and other water saving measures**

Leaking taps or machines that are not functioning properly are a large source of water spoilage. It is amazing the amount of water wasted by not repairing a running tap. A tap that drips every 3 seconds spills 150-180 litre water per month which is 1800-2160 litre per year.⁵⁷ The German catering firm Karstadt in Essen appointed a special employee in 1989 to take care of environmental management. Within one year the firm reached a considerable water reduction from 800 litre per hour to 300 litre per hour with the control of all machines and the prompt repair or replacement when defects or deficiencies showed.⁵⁸

Some other water saving measures were observed in Vollwert-Restaurant Heller in Mannheim, where the management planned to collect rainwater to be used for the garden and examined the possibility of re-using the excess water derived from the vegetable and fruit cleaning.

3.3. RECYCLING OR REDUCTION OF WASTE

One of the most important ways to decrease the burden on the environment is the reduction of the amount of waste. This measure not only provides the lodging and restaurant industry with an environmentally friendly image, it can also imply a considerable decrease in operational costs. Here again it must be noted that some of the examples originate from the US and Canada where haulage costs are much higher than in any European country and where landfills are filling up and even closing down.⁵⁹ But also in Europe, especially in the Netherlands, it becomes increasingly difficult to find space to open landfills.

*** reduce the amount of waste**

Various measures can be taken to reduce the amount of litter. Hotel managers can use a trash pulping machine or a pressing machine, which can reduce the garbage by as much as 85%. Restaurant Saarbrücken in Germany is saving on its hauling accounts with the implementation of these kind of machines.⁶⁰ The reduction of the amount of food waste can be achieved with better coordination between kitchen and counter. When a better insight is obtained into the number and nature of the guests that can be expected to dine in the restaurant, a more accurate estimate can be made on the amount of food that needs to be prepared. Children, for example, eat less than adults and businessmen less than tourists. Providing the option of ordering smaller portions will result in a reduction of food waste.⁶¹

The environmental benefits of the installation of manual and automatic hand dryers are substantial because paper towels cannot be recycled and go directly to landfills. Besides this, on a per hand dry basis, it costs about 2,5 cents to use paper. To do the same job on a warm air hand dryer, it costs about one tenth of a cent.⁶²

Another measure, taken by the Hyatt Regency Chicago, is the use of left over food for charity purposes, animal fodder and dehydration into pulp.⁶³ To reduce the amount of organic waste, and save in this way on haulage expenses, some Santa Cruz restaurants introduced the 'doggie bag' in which customers can take home the leftovers of their meals.⁶⁴

*** separation and recycling of waste**

Another way of reducing waste and saving hauling costs is to separate and recycle it. An example is provided by the Hotel Alte Post in Mullheim, Germany that reached a reduction of garbage from 50% by separation and using its own recycling method. Another example is the Outrigger Hotel Chain. With their paper recycling programme, the 21 Outrigger Hotels have saved 5.500 trees in 1991. The hotel management estimated that roughly 750 tons of paper products were used each year, almost all of it recyclable. Special bins have been distributed throughout the hotel and the 2.800 employees sort out the recyclable for processing. Besides the economic incentive that is obtained from the recycled paper products -every pound of recycled paper

generates 3 to 4 US dollar cents- the waste disposal costs were reduced by at least 30% in the first year of the recycling programme. Mr. Brown, the recycling project coordinator, remarks: "*Recycling benefits a company on many levels, it saves energy, preserves resources, helps the environment and contributes to the bottom line. That's a hard combination to beat.*"⁶⁵

Also in restaurants, separation of waste can pay. In Vollwert-Restaurant Heller in Germany, all waste is separated and the aluminum is delivered to a special place in town where recycling is taken care of. The amount of waste decreased from 6 containers to only 3 containers which implied a reduction of costs of 3.500 US dollars (from 10.000 to 6.500 US dollars costs).⁶⁶

Russell Shaw mentioned in his article: "*A restaurant in the US can earn 25 US dollars a ton with glass sorted by color compared to paying more than 50 US dollars for disposal pickup.*"⁶⁷ In the Netherlands, a company supplying disposables for the catering and fast food industry, Zodiac, initiated the gathering of all disposables made of polystyrene to recycle this material for the production of bricks. In special containers, the so-called 'compactomats', which are placed near large consumers of these disposables, plastic cups and french fries buckets will be granulated into large blocks. These blocks are transported to German construction companies who save a considerable amount of production costs in using these recycled materials. The only constraint is that the disposables can not be too contaminated with food remains.⁶⁸

*** stimulation of the use of non-disposables bottles, cups and crockery**

As mentioned before, hotels and restaurants, especially fast food chains and breakfast buffets, have a bad reputation for increasing the mountain of garbage enormously with the use of disposable materials such as cups and plates, marmalade cups and the like. Although even after extensive research, it is not yet proven that the use of these disposables, like polystyrene cups, is really more harmful for the environment than crockery, it is nonetheless important to change the bad reputation.

An example from the Netherlands is SAB Catering. In 1990 this catering firm started the provision of 'green' lunches in the Canteens of the Department of Environment of the Netherlands Government. All plastic in which marmalade, butter, milk, cheese, meat and bread was packed, has been replaced by paper, carton, crockery and glass. The food, such as pudding, not containing any artificial colouring, is obtained from bio-dynamic merchants. Another difference with the traditional catering is that a choice can be made between vegetarian burgers and meat products. Finally, the waste, diminished by ten plastic bags daily, is separately collected and is partly recycled. The advantages for the environment are obvious and according to the district manager of SAB the care for environment management met with widespread support from the employees.⁶⁹

In Germany, several possible solutions for the enormous amount of waste disposal in the take away area are found. Examples are the use of plates made of Chinet, material from pulpwood that is completely decomposable, the use of multiple use dishes which the customer retains for further use, plates made from paper products whose production is not damaging the environment (i.e. unbleached paper). The German railway restaurants in particular are experimenting with products that are not damaging the environment.⁷⁰ A motorway restaurant that already started in 1987 with the separation of its waste, is Niederziessen, a BAR-Rahstette in Brohltal West. Furthermore, the

suppliers of foodware were pushed to offer their products in 'mehrwegverpackungen'. Ronald Greatz, the owner of this restaurant, concludes that all these measures combined result in an important saving of time and money.

3.4. AVOIDANCE OF CHEMICAL MATERIALS

*** the mechanical solution for obstructions**

The use and discharge of chemicals is a serious threat to the environment, the reduction in use of chemicals and discharge in an environmentally safe way is of utmost importance.

One possible measure is to use a mechanical solution for obstructions, possibly after a biological treatment, as done by the Hyatt hotel. To solve the problem of grease buildup in drains and grease traps in an environmentally friendly way, this hotel chain hired the American company 'Bio-Care' to apply their innovative solution. For a fixed monthly fee between 150 US dollars and 300 US dollars, representatives of the company visit clients to check the pipes. If necessary, a solution that contains millions of grease loving bacteria is dropped into the drainage system. These microscopic bugs literally chew their way through 90% of the grease, the rest is removed mechanically and no chemicals are needed.⁷¹

To lessen the use and disposal of frying fat is not only giving significant operational advantages, it will also lessen the burden for the environment. One way to do this is to filter the used oil at least once a day. Furthermore the temperature must be controlled carefully and when the so-called 'pumping method' is used, the reduction can be as high as 40 to 50%.

*** use of biological cleaning materials**

The slogan: more aggressive cleansing materials will give better results, is not true and is certainly harmful for the environment. In Vollwert-Restaurant Heller in Mannheim, measures are taken to reduce harmful cleansing materials that are damaging both the environment and the health of the employees. Although the clients of Hellers restaurant are rather environmentally conscious, the necessity to provide information still proved to be substantial. All guests are informed by a special info-paper that is handed out in the restaurant. The selection of biological cleansing materials is larger, making it easier to choose an environmentally friendly option. However, some of the materials originating from ecological companies still contain more harmful elements than are necessary.⁷² Another place where chemicals are used to clean, are gardens and camping sites that are spread with herbicides. Although it needs somewhat more work to weed mechanically or by hand, the environment will gain from it.⁷³

*** avoidance of CFC's**

Much is written about the CFC's (Chloro-fluor-carbons), that are responsible for the evaporation of the ozone layer. In the lodging and restaurant industry, devices containing CFC's are numerous. The CFC-12, used in airconditioners, cooling installations and isolation material, is responsible for a 45% reduction of the ozone layer and takes 139 years to disappear out of the atmosphere. Mr. Elshof, president of Food Service Consultants Society Europe, suggests that all freezing systems that are using the polluting CFC's need to be replaced.

Various alternative products with an efficient freezing system without these CFC's are already developed. One of them is the product HFK 134a.⁷⁴ Some items containing CFC's can be banned completely, such as insect sprayers, carpet cleaners or air sprayers.

*** the use of safe building materials**

To avoid environmental hazards and toxic wastes, hoteliers must consider building their premises with uncontaminated materials. This implies that no asbestos must be used, no lead paint and no fiberglass. Furthermore, when new hotels or restaurants are to be built, the ground underneath must be examined carefully. Owners of historic buildings should be particularly aware of earlier uses, and the possible existence of chemical waste underground.⁷⁵

*** chemicals used in the office and counter**

The final places where many chemicals are used, are the reception where guests are registered and the accounts are processed, and the office where the bookkeeping and management takes place. Some items used in these places that are not very necessary, can be avoided, such as text markers and liners. Toners of printers and typing machines can be refilled.

The reduction of the use of chemicals in the office has a positive impact on the safety and health of the employees as well. Aspects that are of importance, for example, are the location of printers and copy machines and the provision of a good air circulation.

3.5. RESPONSIBLE USE OF THE MEANS OF TRANSPORT

Hotels and camping sites are not always situated closely to the main attraction points for tourists. The result is that, when public transport is insufficient, the use of private cars will increase largely. The large number of vehicles and the increase of time spent in traffic jams not only has a negative effect on the environment, but can also result in a decrease in the number of tourists. It is therefore important to consider possible solutions.

Several camping and hotel entrepreneurs in the south of the Netherlands have taken the initiative of hiring a bus to transport tourists, without extra charge, from their establishments to the beaches. This initiative proved to be a big success: because the number of cars on the roads to the beach decreased significantly, cycling became attractive again, the irritation of large numbers of parked cars disappeared and the traffic noise diminished.⁷⁶

Another example, also from the Netherlands, is the initiative of Mr. van de Ham, who decided to buy himself a bus because his camping could not be reached easily by public transport and was situated 10 kilometres away from the beach. Guests can be transported without any problem and the bus can serve as a mobile advertisement board at the same time.⁷⁷ Some hoteliers in Frankfurt, Germany, are trying out a taxi bus service to bring guests from and to the railway station and a combination ticket can be purchased on which the customer can stay both in hotels and travel with public transport.

Other measures to decrease the number of guests travelling with their own car, are the dissemination of good information for employees and guests, concerning the accessibility of the hotel/restaurant/camping to public transport, and to provide the option of car and bicycle hire.

3.6. RESPONSIBLE METHODS OF FOOD PREPARATION

In the Netherlands more and more people are concerned about the way their food is prepared. A more critical knowledge of the food they are eating forces the restaurateurs to be more careful with the food they prepare. Guests seem to be most concerned about the use of pesticides, herbicides and the use of additives in processed food. The demand for meat that is cultivated in a more environmentally friendly and healthy way, is also increasing.

One of the firms which is involved in 'green catering' is van Hecke Catering BV. This company is catering daily for some 200.000 clients and has 4.000 employees. Van Hecke publishes its own environmental management leaflet in which the directors of other companies can read how to contribute to the protection of the environment with sometimes small alterations. This leaflet has been sent to the 750 companies that are dealing with van Hecke. Since July 1992, van Hecke offers the employees of the Dutch Ministry of Agriculture environmentally friendly lunches, including meat originating from the 'green' butcher 'de Groene Weg'. One of the main points of interest in its environmental management is the use of ecological products in the food preparation. The preparation of food with ecologically cultivated products has several advantages: an agricultural sector is stimulated in which ecologically good methods are used, customers are stimulated to become more conscious and the packing of these products is often made of recycled materials.⁷⁸

Another way of responsible food preparation is the use of products of the season. Not only are these products more tasty, they contain an important energy saving element in comparison to frozen products. Hotel/restaurant 'Hebelstube', that is considered to be among the 300 best restaurants of Germany, is proud of its kitchen as it uses regional products only, no exotic dishes can be found on the menu. The German environmental organization OIKOS fervently promotes the use of ecological food. An example is their 'Glasernes Restaurant' project, which is "*ein Ökologisch orientierter Beratungs-, Fortbildungs- und Praxisproject im Gastronomie- und Dienstleistungsbereich*" and already started in 1987 in Frankfurt am Main. The project encourages the serving of menu's composed of ecological cultivated products, that are purchased in the vicinity of the hotel, according to the season, with a limited component of (high quality) meat.⁷⁹

EUROPEAN INITIATIVES

Many of the examples of environmental management in the lodging and catering industry described in chapter 3, stem from the US. It is obvious that in this country considerable experience has already been gained in this area. To what extent the European lodging and catering industry is following this example in implementing measures and initiating programmes to protect the environment, will be dealt with in this chapter. The research, carried out by SOMO in 1991, learned that the majority of the European countries did not make much progress in the area. In general, European employers and employees branch associations expect the government to take action to combat environmental deterioration.

The same holds true for the trade unions of the lodging and catering sector. After consultation of various unions it became clear that environmental management scores low on the list of priorities. The only aspect to which attention is sometimes paid, is the relation between environment and health, and environment and stress because of too much labour pressure.

4.1. EXPERIENCES OF EUROPEAN BRANCH ORGANIZATIONS

The German and the Dutch branch organizations are most active among the EC countries in bringing the subject of environmental management to the attention of their members. For all the other branch organizations, the subject is too novel. In general they have no experience at all in environmental management and no examples of hotels and restaurants involved in this area could be mentioned. In the following description, a difference is made between branch organizations with some experience in environmental management systems, organizations with little experience but interested in the subject, and organizations that are not interested at all.

*** organizations with some experience in environmental management**

In the Netherlands the employers union *Bedrijfschap Horeca* and the trade union *Horecabond FNV* are involved to some extent in environmental management. Their focus of attention is to stimulate research into the relation between the environment and the lodging/catering industry. Besides this, there are various Dutch firms of consultants, such as *Practisch Milieu Advies*, and *van Ebben Bureau*, who are advising hotels and caterers in the implementation of environmental management systems. As a result of these efforts, several experiences with environmental protection programmes in hotels and restaurants in the Netherlands are recorded. Examples are the catering of the national airline company *KLM*, the catering service *van Hecke* and the *Sonesta Hotel*.

The *British* branch organizations have some experience in the subject of environmental management also. The *British Hotels, Restaurants and Caterers Association (BHRCA)*, is member of a task force consisting of 30 organizations, that is, amongst others, committed to environmental programmes. Initiated by this task force, research has been carried out by the British Tourists Board in which the relation between the lodging and catering branch and the environment has been analyzed. This research resulted in the final report

Maintaining the Balance. Explicit experiences from hotels and restaurants implementing measures to improve the environment in the UK could not be obtained from the BHRCA, however.

In *Ireland* the various branch organizations, such as the *Restaurants Association of Ireland* and the *Irish Hotel Federation*, are interested in the subject, but not very involved. Only the *Irish Tourists Industry Confederation* executed a research into the relation between *Tourism and Environment*, and is participating in a special environmental committee of the *Confederation of Irish Industry*.

*** organizations with an interest in environmental management**

Some European organizations are interested in the subject of environmental management, but are not involved in any kind of initiatives. Examples are the *Fédération Nationale des Hoteliers, Restaurateurs et Cafetiers du Luxembourg (HORESA)*, from *Luxembourg*, the *Portuguese União de Associações da Industria Hoteleira e Similares do Centro/Sul de Portugal* and the *Greek Chambre de Commerce Hoteliere de Greece*.

Although *Denmark* is a popular tourist resort and, because of its small size, largely dependent on a clean environment, not much effort is made by the lodging and restaurant industry to safeguard the attraction points. It is commonly agreed, however, by the *Centralforenigen of Hotelvaerter i Danmark*, the *Danish Tourism Board*, and the *Council for Tourism*, that the environment is a very important theme that requires more serious attention in the near future. Being a relatively new subject in *Denmark*, no concrete reports or experiences could be indicated.

*** organizations with little or no interest in environmental management**

In *France*, the branch organizations did not pay much attention to environmental management, to date. The *Federacion Nationale de l'Industrie Hoteleire* and the *Syndicat Francais de l'Hotellerie (SFH)* are not involved very much in the subject, and also the *Syndicat Nationale des Restaurateurs, Limonadiers et hotelliers* and the *Confederacion Francais des Hoteliers, Restaurateurs, Cafetiers (CFHRCD)*, do not see a role for their organizations to play in improving the environment, nor do they know of any French experiences. Although representatives of the *Federacion Autonome Generale de l'Industrie Hoteliere Touristique (FAGIHT)* are slightly interested in the topic, they have no idea how to contribute. The same can be said of the *Belgium* organizations.

The various organizations in *Spain*, such as the *Federacion Espanola de Restauracion* and *ZONTUR*, are not very much interested in environmental management. Representatives of these organizations consider the responsibility for a clean milieu a duty of the *Spanish* government. In *Italy* the same story emerged. In this country environmental problems are directly effecting the quantity of tourists: the pollution of the *Adriatic* sea, resulting in unattractive water for bathing purposes, makes tourists reluctant to visit these coasts. Another attraction point of the country is also threatened by environmental degradation: the numerous monuments in the various cities are suffering from acid rain. Despite these hazards, which can result in a dramatic decrease in the number of tourists, the *Italian* lodging and catering association *Federazione delle Associazion Italiane Alberghi e Turismo (FAIAT)*, is not interested in environmental management. The *Institute of Tourism* is also not involved in the area and can not mention examples in *Italy*.

4.2. 'GREEN MARKS' AS A DISTINCTIVE SIGN

Germany proves to be the country where most of the initiatives are taking place, thus far. Various organizations are committed to research, implementation of pilot projects and inventories of environmental management examples. Various government institutions tend to be active also. It is in Germany that the initiative to provide hotels and restaurants with a so-called *green mark*, to distinguish them from hotels and restaurants that are not involved in environmental management, was introduced.

An example is the project of the *Bayerische Staatsministeriums für Landesentwicklung und Umweltfragen*, in cooperation with the *Bayerische Hotel und Gaststättenerverband*. This project, which is an example of a successful cooperation between a government institution and a branch association, started in 1991 and consists of four successive steps. The first step includes research into environmental management in the lodging and catering industry. The aim of this research was to make an inventory of all environmental measures that can realistically be implemented in this sector. The second step was to design a checklist to be used in the lodging and catering industry. In this checklist, published in 1992, various ways to implement environmental management measures are described. The main emphasis of the checklist concerns operations in the kitchen, in sanitation and washing, in beverages, in administration and in maintenance. In all these operations, attention is paid to waste management, water use and disposal and the use of cleansing materials. The third step is a competition between various hotels, consisting of a survey with questions about experiences with environmental management. The final step, which is not limited to the lodging and catering sector alone, enables small enterprises to hire an external consultant who can investigate the possibilities for an environmental management system in their establishment. Finally, criteria will be set on which a green mark can be appointed to some of the hotels and restaurants.⁸⁰ Hotels that are participating successfully in this project are the Steigenberger Hotel and the Hotel Alte Post in Germany.

Two other countries are familiar with the phenomenon *green mark*: Switzerland and Austria. In the former country the *Süd Tiroler Hotelier und Gastwirte Jugend (HGJ)* has developed an eco-checklist in 1990 which includes criteria for environmental measures. The city council of Kleinwalsertal in Austria has stimulated environmental management since 1990 with the introduction of a so-called *Umweltsiegel*. All hotels and restaurants in the region that wish to participate in this project have to complete a questionnaire with various questions concerning environmental measures. In order to obtain the green seal, 23 questions need to be answered positively, and of the 30 remaining questions, 20 at least must be answered affirmative. Questions concern for example garbage treatment, energy saving and landscaping. The *Umweltsiegel* is given for one year only and must be renewed every year. Controllers visit the participants occasionally to check whether the list has been completed honestly.

In the Netherlands discussions are going on to introduce this kind of system. Mr Ezinga, from the Dutch branch organization 'Horeca Nederland' stated in a presentation held in 1990, that efforts should be combined between branch organizations, tourist organizations and government organizations, to set certain criteria that should be met before a green mark can be obtained by hotels and restaurants.

TWO EXAMPLES OF ENVIRONMENTAL MANAGEMENT

This report will be completed with the description of examples of environmental management systems, the first of the hotel chain Ramada, the second of the fast food chain McDonald's. Both chains are well known in European countries, and their initiatives could serve as an example towards other establishments in the lodging and catering industry. The examples show clearly the conditions necessary to implement an effective environmental management system, and what constraints can be encountered.

5.1. RAMADA HOTEL CHAIN

One of the larger hotel chains in the world is the Ramada International, owned by New World Development Corporation Ltd., Hong Kong. In 1989 this chain possessed a total of 40 Ramada Hotels, 23 Ramada Inns and 40 Renaissance Hotels with a total revenue of 800 million US dollars. In 1995 the number of hotels will increase to 196 properties.⁸¹

In 1990, using the slogan: *hotels of the new wave*, the Ramada International Hotels & Resorts started a five year environmental protection campaign in which the hotel managers were obliged to improve the internal and external environmental condition of their hotels. The first step of the campaign was focused on the employees of the hotel. The senior vice president of marketing, Kathy Redmond, stated: "*we are challenging our 22.000 employees in some 40 countries to make the environment in and around the hotel better than at competing properties.*" Employees will be responsible for thinking up ways to recycle, conserve energy and water and use bio-degradable products and organically grown foods. Ramada International is promoting its campaign via advertising. To reach the employees of the Ramada hotel chain, Ramada US developed a guide in which 50 tips are collected: "*50 Simple Things You Can Do To Save The Earth.*" In successive steps, the guests of the Ramada Hotels will be involved in the campaign as well. To achieve this, the hotel provides in-room educational materials.⁸²

As a second step, Ramada International is going to hire an environmental expert to advise its hotels and assist them in implementing plans. The main focus of attention will be the recycling of waste and water, and energy saving.⁸³ Many units in the Ramada Hotel chain already started an extensive recycling program involving tin, aluminum, paper, glass, china, and plastics. "*Xyrofoam cups are being replaced with paper cups, paper napkins with linen, and disposable coffee filters with wire filters. Low flow shower heads, aerators, and new faucet washers save properties thousands of dollars in water costs. Installing heat-lamp timers and energy saving light bulbs and training employees to monitor thermostats and light in unoccupied rooms, contribute to conservation and great savings.*"⁸⁴ An example of a programme already started is the Ramada Renaissance Hotel at the airport of Atlanta, US. In its *adopt a street* programme, the employees of this hotel collect once a week all garbage

on the way from the hotel to the airport. Also in the Ramada hotels in Germany various environmental measures have already been taken. Washing and cleaning materials are used that are not damaging the environment, recycled paper is used for toilets and for correspondence, garbage is treated with special care, polluting plastic is banned as far as possible, the airconditioning is made more energy saving and a water flow reducer has been installed.⁸⁵

The marketing aspect of this environmental management system has not been neglected: a measure with a large marketing impact is an agreement between Ramada and American Express to contribute 1 US dollar to the Nature Conservancy each time an American Express card is used to pay for accommodation in one of the 110 Ramada International's Hotels.⁸⁶ Although the introduction of the campaign in all hotels will take a considerable amount of time, serious drawbacks were not envisaged.

5.2. McDONALD'S FAST FOOD CHAIN

McDonald's is one of the examples of a large fast food chain with a bad reputation in relation to environmental damage. McDonald's is dominating world wide the fast food restaurants: in March 1989 a total number of 10.500 snackbars owned by McDonald's were in existence and every 15 hours a new subsidiary is opened. In 1988 the system wide sales were 16 billion US dollars, the total revenues 5,6 billion US dollars and the net income 656 million US dollars. Daily 22 million customers are served at McDonald's.⁸⁷ The environmental programme of McDonald's is mainly focusing on decreasing the quantity of waste disposal and to reach this objective, various measures have been taken.⁸⁸

The key word in this fast food chain is recycling. All waste in the McDonald's restaurants is divided into four groups: plastic, carton, food leftovers and miscellaneous. Plastic and carton is recycled, food scraps are used in the animal food industry and the last category is transformed into energy feedstock for the industry. Presently 70% of all containers for chicken, french fries and apple pie and 100% of the napkins in the Dutch McDonald's are made out of recycled paper.⁸⁹

In the United Kingdom McDonald's is recycling disposable cups. Despite its many advantages, the catering branch is becoming increasingly aware of the environmental threat in the use of disposables. The need to look for alternatives is therefore urgent. One alternative is to increase the use of paper cups instead of polystyrene cups. Despite the higher costs of paper cups in relation to EPS cups -25 British pounds per thousand against 15- the sales of paper disposables in the UK have doubled between 1986 and 1990. The paper cups are, however, not totally harmless as the bio-degradation of paper cups gives off methane gas.

In Nottingham, McDonald's has developed a pilot scheme in which all disposables are pre-sorted in separate bins -one for plastic and one for paper. The company Lin Pack Plastics collects the plastic waste and granulates, washes, rinses, dries and then repelletises it. The resultant reclaimed material is then made into items for non-food use. However, only polystyrene plastic can be used for this, PET, Polypropylene, PVC and paper will contaminate the mix.

In Canada, ten McDonald's restaurants are involved in a polystyrene recycling project. Customers are asked to deposit all hot drink cups, lids, sundae cups, plastic utensils and juice containers in a separate garbage bin stating: 'recyclable plastic only'. Recycling company Superwood is collecting the separated waste and hopes to sell the finished product back to McDonald's in the form of recycled trays.⁹⁰ However, the project encountered some difficulties and in the beginning of the summer 1990, Superwood refused to accept anymore of McDonald's waste. The complaint was that McDonald's did not bale its waste as agreed and 50% of the polystyrene was contaminated with food waste.⁹¹

Another possible re-use of the disposable plastic that MacDonald's is considering is the provision of energy for hospitals or factories. *"Incineration is seen as an attractive option because it can heat buildings and raise steam for manufacturing processes. In the case of oil based plastics, the amount of usable energy is significant."*⁹² At present, there is little operational experience with this alternative.

Besides recycling, McDonald's is trying to reduce its huge mountain of waste in other ways, for example to switch to frozen concentrate of orange juice. Before this measure had been taken, which reduced the packaging requirements by 75%, orange juice arrived at the stores ready to serve. This saving translates into about four million pounds Sterling per year chainwide. Also the new system of pumping syrup directly from the delivery trucks into the tanks, is saving 68 million pounds Sterling on packaging a year.⁹³

Some environmentally harmful items are even completely banned: on the first of November 1990, McDonald's announced that it will phase out its ubiquitous plastic-foam packaging that many individuals and public-interest groups have identified as a major source of environmental pollution.⁹⁴ Not only for environmental reasons, but because the styrofoam packing for food is also said to be harmful for people's health: *"Styrene is made from benzene, a known carcinogen. At high temperatures styrofoam does begin to melt contaminating the food."*⁹⁵

The reaction of the public to the environmental program of McDonald's is quite encouraging with support from about 75% of the customers. *"People (customers, WR) do not always do the job as we'd like, but they are trying and they are not resentful about it,"* the senior vice president of McDonald's remarked.⁹⁶

ANNEX 1: ITINERARY

Interviews by telephone:

THE NETHERLANDS

Mrs. Nederlof	Nederlands Research Instituut voor Toerisme en Recreatie, Leiden, the Netherlands
Mrs. Janka van Zundert	Stichting het loodje, the Hague, the Netherlands
Mr. Ronald Jansen	Prakties Milieu Advies PMA, Nijmegen, the Netherlands
Mr. Dijkerman	Central Bureau for Statistics CBS Voorburg, the Netherlands
Mr. Veerkam	Central Bureau for Statistics CBS Voorburg, the Netherlands: Department of Culture and Recreation
Mr. Kees Baas	Central Bureau for Statistics CBS Voorburg, the Netherlands, Department of Environmental Issues
Mr. Prieckaerts	Bedrijfsschap Horeca, The Hague, the Netherlands, documentation Department
Mr. Nieuwenhuis	Ministry of Foreign Affairs, The Hague, the Netherlands
Mrs. Carla Lubbers	Horeca Nederland, Nieuwegein, the Netherlands

FRANCE

Mrs. Sillerd	Federacion Nationale de l'Industrie Hoteliere, Paris, France
Mr. Saurin	Syndicat Nationale des Restaurateurs, Limonadiers et hoteliers, Paris, France
Mr. Dumontant	Syndicat Francais de l'hotellerie (SFH)
Mr. Savoye	Confederacion Francais des Hoteliers, Restaurateurs, Cafetiers, (CFHRCD) Paris, France
Mrs. Croare, M.	Federacion Autonome Generale de'industrie Hoteliere Touristique (FAGIHT), Chambéry, France
Mrs. Bouniol, M.	UNEP, Paris, France
Mrs. de Larderel	
Mrs. Helene Genot	

UNITED KINGDOM

Mr. Frank Bird	British Hotels, Restaurants and Caterers Association, BHRCA, London, UK
Mr. Dickenson, R.	English Tourist Board, Department of Environment and Research Department, London, UK

IRELAND

Mr. John Horan	Irish Hotel Federation, Dublin, Ireland
Mr. Henri o'Neill	Restaurants Association of Ireland, Dun Laoghaire Ireland

Mr. Brendan Leahy	Irish Tourists Industry Confederation, Dun Laoghaire, Dublin
-	Department of the Environment, Custom House, Dublin, Ireland
Mr. Noel Cavenedh	Tourist Office, Board Failte, Dublin, Ireland
Mr. Noel Hughes	ENFO, Dublin, Ireland
GERMANY	
Mrs. Klimith	Deutscher Hotel und Gasstatteverband DEHOGA
Mrs. Marita Kaiser	Hotel und Gaststatteverband Baden- Wurtemberg, Stuttgart, BDR,
Mr. Dahlinger	Bayerische Hotel Gaststatteverband E.V.,
Mr. Baumgertel	
DENMARK	
Mr. Koningshofer	Centralforenigen af Hotelvaerter i Danmark, Kopenhagen, Denmark
-	Danish Tourism Board, Kopenhagen, Denmark
Mrs. Lisbeth Nork	Ministry of Environmental Affairs, Kopenhagen, Denmark
Mr. Jan Hanssen	The Council for Tourism, Kopenhagen, Denmark
SPAIN	
Mr. C. D. Ruiz	Federacion Espanola de Restauracion, Madrid, Spain
Mr. Felipe Gaspart	ZONTUR, Palma de Mallorca, Spain
ITALY	
Mr. Lasirre	Federazione delle Associazion Italiane Alberghi e Turismo -FAIAT, Rome, Italy
Mr. Vincente Amaro	INIT, Institute of Tourism, Rome, Italy
LUXEMBURG	
Mr. Jean Schintgen	Fédération Nationale des Hoteliers, Restaurateurs et Cafetiers du Luxembourg HORESA, Luxemburg
PORTUGAL	
Mr. Albino Andre,	União de Associações da industria Hoteleira e Similares do Centro/Sul de Portugal, Lisbon, Portugal
GREECE	
Mrs. Christidou	Chambre de Commerce Hoteliere de Grece, Athens, Greece
OSTENREICH	
Dr. Klaus Kessler,	Gemeindeamt Kleinwalsertal, Mittelberg, Hirschegg, Ostenreich

Direct interviews

Mr. Mathijs vd Schaft	May 12th	Stichting Milieu Educatie, Utrecht, the Netherlands
Mr. van der Beemd	May 17th	Horecabond FNV, Amsterdam, the Netherlands
Mr. van Ebben	May 27th	Ebben Bureau in Doetichem, the Netherlands
Mrs. Donna Borjaille	May 28th	University of Amsterdam, Environmental Studies
Mrs. Pauline Steeman		
Mrs. Maltzacher	June 11th	Advisory office Volkart and Maltzacher Waltensburg, Switzerland
Mr. Grewing	June 12th	Umweltministerium Munchen, BDR
Mr. Heinzl, R.	June 12th	OIKOS (Okologisches Handelskontor GmbH & CoKG, Umweltberatung, Frankfurt A.M., BDR
Mr. Gunter Detsch	June 12th	GTU, Frankfurt, BDR
Mr. Bert Oldenburg	June 25th	Hotel Grandorado, Zandvoort, the Netherlands former 'environmental manager' Hotel Sonesta, A'dam, the Netherlands

Consulted agencies

- Bedrijfsschapp Horeca, The Hague, the Netherlands
- Nederlands Bureau voor Tourisme (NBT), the Hague, the Netherlands
- Stichting Recreatie, the Hague, the Netherlands
- Nationale Hogeschool voor Toerisme en Verkeer, Leiden, the Netherlands
- Stichting Milieu Defensie, milieu telefoon, the Netherlands
- ANWB headquarters, the Hague, the Netherlands
- Central Bureau of Statistics CBS Heerlen, the Netherlands, Department of Restaurants and Hotels
- Mrs. Sheila M. Watson, Cornell School of Hotel Administration Library, Ithaca, New York, US

ANNEX 2: REFERENCES

- Aliosi de Lardereel, Jaqueline,
1989 Tourism and environment, Parliamentary Conference on Tourism, The Hague, 10-15 April 1989
- Anonym,
1990 Toerisme professioneler door meer samenwerking, NTB koerier, nr 1, January, pp 4-5
- Anonym,
1990 Toeristisch bedrijfsleven werkt aan milieuzorgsystemen, NTB koerier, nr 1, January, pp 6-8
- Anonym
1990 Umweltschutz zeigt erste Erfolge, in: Hotel Restaurant, November
- Anonym,
1991 Outrigger Hotels launches recycling program, in: Hotel and Management, February, p 42
- Anonym,
1991 Der Kerngedanke: Stoffliche Verwertung, in: Food service, 2/91, pp 60-64
- Anonym,
1991 Praktizierter Umweltschutz, in: Food service, 4, pp 91-94
- Anonym,
1991 Umweltbewusst handeln, ihre Entscheidung zalt, praktizierter Umweltschutz, in: Food service no 3, pp 38-41
- Anonym,
1991 Fritesbakje grondstof voor baksteen, in: Snack Koerier, jrg. 5, no 3, 31 January
- Agöl,
1991 Okologische Landbau und Grossverbraucher, 1 bericht Januar
- Donna Borjaille et al.,
1991 Een afvalpreventiesysteem voor een hotel, University of Amsterdam, July
- Bayerische Staatsministerium für Landesentwicklung und Umweltfragen,
1991 Der Umweltebwsuste Hotel- und Gaststette betreib: ein Leitfaden für das Gastgewerbe, Munchen
- Bedrijfsschap Horeca,
1990 De ontwikkeling van de hotel-pension sector in Nederland, Den Haag
- dr. Beke, B.M.W.A. and others,
1991 Informatienetwerk milieu, natuur en toerisme kan recreant op goede spoor brengen, in: Recreatie & Toerisme, April, pp 10-14
- Betriebsberatung GmbH, GTU, OIKOS,
1990 Umweltschütsberatung im Hotel und Gaststettegewerbem, Zwischenbericht 1, 27 December
- Branch, Shelly,
1990 By recycling, hotels do the right thing, in: Meetings and conventions, vol. 25/7, June, p 17
- Canadian Restaurant and Foodservices Association
1992 Going green without seening red, an environmental guide for the foodservice industry, CRFA, Toronto
- Cave, Shane,
1991 El impacto del turismo en el mediterraneo, in: Nuestro Planeta, tomo 3, no 2,
- Centraal Bureau voor de Statistiek,
1990 Waterkwaliteitsbeheer: deel A, lozing van afvalwater 1987
- Centraal Bureau voor de Statistiek,
1990 Onder de loep genomen: Horeca, the Hague, pp 1-11
- Conner, Fred, L.,
1990 Be part of the solution: companies' programs help local communities, in: Cornell Hotel and Restaurants Administration Quarterly, vol 31/3, Nov, pp 12-13
- Cronin, Linda,
1990 A strategy for tourism and sustainable developments, in: World Leisure and Recreation, fall 1990, pp 12-18
- Dorfmeier Jr., Robert E.,
1990 Organic oracles: don't let granola-head special interests groups steer you wrong, in: Restaurant Hospitality, vol. 74/7, July, p 15

- van Egmond, Ton,
1989 Toerisme: verbroedering of verloedering, Dienstencentrum voor Toerisme en Verkeer
- Elshof, N.F.P.M.,
1991 Horeca en Milieu, in: Culinair Magazine, Jan/Feb. 1991, pp 20-23
- Farrell, Brian H. and Dean Runyan,
1991 Ecology and Tourism, in: Annals of tourism research, vol 18, pp 26-40
- Ir. Frentz, H.,
1989 Interne milieuzorg, ook voor horecabedrijven, 9 Oktober, Beurscommissie Horeca, the Hague, the Netherlands
- Frumkin, Paul,
1989 Trash Clash, in: Restaurant Business, vol. 88/8, May, pp 143-153
- Frumkin, Paul,
1990 Operators see red over 'greening', in: Nation's Restaurant News, vol 24/21, May 21, p 1
- Gitlitz, Jennifer S.,
1990 Restaurant replaces throw-away with dishes, in: Restaurant USA, vol. 10/7, August, p 13
- Glew, G.,
1989 Developments in food technology, in: Progress in tourism, recreation and hospitality management, ed. C.P. Cooper, Belhaven Press, London, UK
- Hamnett, Janett,
1990 Environmental concerns impact on industry; business has to translate consumer priorities to the market place, in: Canadian Hotel Restaurant, vol. 658/8, August, pp 14-15
- Hasek, Glenn,
1990 Hotels keeping watch on waste, in: Hotel and Motel Mont, vol. 205/15, September, p 3
- Hasek, Glenn,
1990 Ramada Int. rides new wave, in: Hotel and Motel Mont, vol 205/18, Oct, p 2
- Hasek, Glen,
1990 Product choice help to reduce use of energy, in: Hotel and Motel Management, vol. 205/18, Oct, p 3
- Hayes, Jack,
1991 Chains aim to please patrons and planet: restaurateurs cater to customers with 3 r's "reduce, recycle and reuse", in: Nation's Restaurant News, vol. 25/11, March, p 50
- Heinzel, Reinhard,
1990 Handbuch Umweltschonende Grossveranstaltungen, Leitfaden für Planning und Durchführung unterschiedlicher Veranstaltungstypen, Eric Schmidt Verlag
- Herlong, Joan E.,
1990 Some simple things restaurateurs can do to save the earth, in: Restaurants USA, vol. 10/9, Oct. pp 8-9
- Horeca Federatie,
n.d. Besparing op energiekosten in de horeca-branche
- Jurriens, H.
1990 van Hecke pakt milieu aan, Catering Magazine, nr 12, pp 5-6
- Kusiak, Loek,
1990 Zorgen dat er wat te genieten blijft, in: Horeca Info, no 9 september pp 3-5
- Kusiak, Loek,
1990 Met de bus naar het strand, in: Horeca Info, no 10 november, pp 4-5
- Kusiak, Loek,
1990 SAB Catering, Milieu-ambtenaren smullen zonder plastic, in: Horeca Info, no 11, December, pp 4-5
- Kusiak, Loek,
1991 Milieu is een thema dat leeft, in: Horeca info, no 3, pp 36-37
- Kranenburg, Bert,
1991 Gezondheids- en milieufreaks rukken op, in: Missets Horeca 39, no 6, 8 February
- Liddle, Alan,
1987 Stanta Cruz restaurateurs cut costs with 'scarf 'n arf, in: Nation's Restaurant News, vol 21/33, August, p 27

- Liddle, Alan,
1990 Panel: industry must join forces, face the solid-waste fight together, in: Nation's Restaurant News, October, p 36
- Liddle, Alan,
1990 Operators make 'greening' a part of their business, in: Nation's Restaurant News, vol. 24/31, August, p 18
- Linton, John,
1990 Marketing, how to respond positively to the environmentally aware consumer, in: Hotel and restaurant vol. 68/11, Nov, pp 48
- Luyken, Truus,
1991 20 jaar McDonalds in Nederland, barstend van de plannen, in: Horeca Entree, no 7, March, pp 27-29
- Menzies, David,
1990 Here comes the green age, in: Canadian hotel and Restaurants, vol. 68/1, Januari pp 18-19
- Mobach, Bernard,
1990 Uitgebeend en ingeblikt, of is er nog hoop? in: Recreatie & Toerisme, November, pp 40-43, p 16
- Nederlands Bureau voor Toerisme,
1989 Milieu en Toerisme, NBT, Leidschendam, the Netherlands
- Nota Tweede Kamer
1990 Ondernemen in toerisme, SDU Uitgeverij den Haag, the Netherlands
- Nouws, J.T.F. and A.B. Zwaard,
1990 Milieuproblematiek en MKB, in: EIM mededelingen, July/August, pp 3-5
- OIKOS,
1990 Vom Reden zum Tun, Institutionen lernen Umweltgericht Wirtschaften, Frankfurt am Main
- OIKOS,
1990 Umweltschützberatung in Hotel und Gaststätte Gewerbe, Frankfurt am Main
- Pennachia, Michael,
1990 The high costs of garbage, in: Food management, vol 25/1, Januari pp 96-100
- Rethmeyer, Alita E.,
1989 The frustrations and the rewards, in: The consultant, vol. 22/3, Summer, pp 40-41
- Romeo, Peter,
1990 Study: environmental concerns deter diners, in: Nation's Restaurant News, vol. 24/11, March 12, p 46
- Risch, Suzanne,
1991 Abfallvermeidung: wie Hotels ihre Müllberge vermeiden, in: Manager, September, pp 91-95
- Romeril, M.,
1989 Tourism: the environmental dimension, in: Progress in tourism, recreation and hospitality management, ed. C.P. Cooper, Belhaven Press, London, UK
- Rowe, Megan,
1990 Lodging today, in: Lodging Hospitality, vol. 46/8, August, p 16
- Scarpa, James,
1990 Trash clash update in: Restaurant business, vol. 89/9, June, p 138
- Seal, Kathy,
1990 Communities thirsting for water: regional droughts are forcing hotels restaurants to conserve, in: Hotel and Motel Management, vol 205/9, May, p 3
- Shaw, Russell,
1990 A lot of rubbish, in: Restaurant Hospitality, vol 74/3, March, p 142
- Smith, David A.,
1990 Investor protection against environmental risks, in: Journal of Property Management, vol. 55/2, March, pp 22-26
- Stichting Milieu Edukatie
1989 Een Europees informatienetwerk toerisme en milieu, samenvatting onderzoeksverslag SME, Utrecht
- Stewart, Anita,
1990 Going green, in: Canadian Hotel and Restaurants, vol. 68/1, Januari, pp 28-29
- Sullivan, Jim,
1991 How to green your club, in: Club Management, vol. 70/2, March, pp 12-13

- Telberg, Rick,
1990 Food service jumps on the 'green' bandwagon, suppliers must be part of the solution too, in: Nation's Restaurant News, vol. 24/26, p 30
- Thomasse, Jos,
1090 Horeca Nederland gooit de handdoek in de ring, in: Horeca Entree, no 22, November, pp 10-11
- Townsend, Rob,
1990 Solid waste solutions aid operators, environment, in: Restaurant Institutions, vol. 100/2, Januari, pp 97-98
- Townsend, Rob,
1990 Garbage control, in: Restaurant Institutions, vol. 100/7, March 21, pp 40-54
- Verhagen, Herman,
1989 De hamburgerconnectie, of McDonalds meedoet, in: McDonalds, March, pp 26-27
- Viëtor, M.C.,
1990 Duurzaam Alpentoeerisme vraagt om milieu-verantwoord verkeersbeleid, in: Recreatie en Toerisme, November pp 8-10
- M. de Vries,
1985 Arbeidsomstandigheden in restaurants en cafetarias, Bedrijfsschap horeca, the Hague
- Wallace, Elizabeth,
1990 Doing his part to save the planet, in: Restaurant USA, vol. 10/6, June, p 8
- Walsh, Susan,
1990 Food services and the Green revolution, in: Canadian Hotel & Restaurants, vol 68/9, September 1990, p 22
- Werkgroep Europa 1992
1990 Toeristisch Nederland en Europa 1992, Public Affairs Consultants B.V.
- Whitehal, Bruce,
1990 War on Waste, in: Caterer & Hotelkeeper 19 April, pp 67-70
- World Tourism organization,
1990 Tourism and the environment, basic document for the environment Committee meeting, Willemstad/The Hague, August
- Ysebert, Waldemar,
1990 Bedrijfsschap moet met milieuverordeningen komen, in: Missets Horeca 38, 21 September
- Zuil, Martine,
1990 Van Hecke en SAB presenteren eigen milieubeleid, in: Missets Horeca 38, no 42, 26 October, pp 10-11
- Zuil, Martine,
1991 Hotels sparen milieu met geringere handdoekenwas, in: Missets Horeca, 38, no 33, 17 August, p 11

ANNEX 3: NOTES

1. J.T.F. Nouws and A.B. Zwaard, 1990, p 3
2. Bedrijfsschap Horeca, March 1990
3. Linda Cronin, fall 1990, pp 12-18, p 13
4. Romeril, M, p 103
5. Shane Cave, 1991, p 7
6. J. Aloisi de Larderel, 1989, p 6
7. Shane Cave, p 6
8. Bayerisches Staatsministerium fur Landesentwicklung und Umweltfragen 1991, p 21
9. J. Aloisi de Larderel, Tourism and environment, 1989, p 4
10. M.C. Vištor, November 1990, p 82
11. James Scarpa, June 1990, p 138
12. Farrell, B. H. and Dean Runyan, 1991, p 26
13. Ton van Egmond, 1989
14. Romeril, M., p 106
15. Shane Cave, pp 5
16. Jaqueline Aloisi de Larderel, 1989
17. Bernard Mobach, 1990, p 16
18. Nederlands Bureau voor Toerisme, 1989, p 18
19. Linda Cronin, p 16
20. Shelly Branch, June 1990, p 17
21. Jack Hayes, March 1991, p 50
22. Bayerisches Staatsministerium fur Landesentwicklung und Umweltfragen, 1991, p 43
23. John Linton, November, 1990, pp 48
24. Peter Romeo, March 12, 1990, p 46
25. Interview Maltzacher, 12th of June 1991
26. Joan E. Herlong, Oct. 1990, pp 8-9
27. Alan Liddle, October 29, 1990, p 36
28. Paul Frumkin, May 21, 1990, p 1
29. James Scarpa, June 1990, p 138
30. Janett Hamnett, August 1990, pp 14-15
31. Joan E. Herlong, Oct. 1990, pp 8-9
32. Anita Stewart, January 1990, pp 28-29
33. OIKOS, Vom Reden tum Tun, Institutionen lernen Umweltgericht, Wirtschaften Frankfurt am Main, 1984, p 74
34. Alita E. Rethmeyer, Summer 1989, pp 40-41
35. M. de Vries, arbeidsomstandigheden in restaurants en cafetarias, Bedrijfsschap horeca, the Hague, 1985, p 6
36. Loek Kusiak, 1991, pp 36-37
37. Interview Maltzacher, 12th of June 1992, Switzerland
38. Rick Telberg, 1990, p 30
39. Shelly Branch, June 1990, p 17
40. Loek Kusiak, 1990, pp 4-5
41. Interview Oldenburg, 24th June, 1991, The Netherlands
42. ibid
43. Michael Pennachia, January 1990, pp 96-100
44. Alan Liddle, August 6, 1990 p 18
45. Robert E. Dorfmeier Jr., July 1990, p 15
46. Anita Stewart, January 1990, pp 28-29
47. Rob Townsend, March 21, 1990, pp 40-54
48. Donna Borjaille et al, 1991, p 3
49. Interview Mr. Bert Oldenburg, Sonesta Hotel, Amsterdam, The Netherlands, June, 1991
50. Mr. N.F.P.M. Elshof, 1991, pp 20-23
51. Food service no 3, 1991, pp 38-41
52. Interview mr. Bert Oldenburg, Sonesta Hotel, Amsterdam, The Netherlands, June, 1991
53. D. Borjaille et al. Een afvalpreventiesysteem voor een hotel, Amsterdam, July 1991
54. Bayerisches Staatsministerium fur Landesentwicklung und Umweltfragen, 1991, p 18
55. Kathy Seal, 1990, p 3
56. Martine Zuil, August 1991, p 11
57. Bayerisches Staatsministerium fur Landesentwicklung und Umweltfragen, 1991, p 28
58. Food service no 3, 1991. pp 38-41

59. Canadian Restaurant and Foodservices Association (CRFA), 1992, p 2
60. Oikos, Umweltschutzberatung in Hotel und Gastst tte Gewerbe, Frankfurt AM, 1990, p 18
61. Donna Borjaille et al, 1991, p 39
62. Glen Hasek, Oct 1990, p 3
63. Glenn Hasek, 1990, p 3
64. Alan Liddle, August 10, 1987, p 27
65. Outrigger Hotels launches recycling program, February 1991, p 42
66. Food service no 3, 1991, pp 38-41
67. Russell Shaw, March 1990, p 142
68. Snack Koerier, jrg. 5, no 3, 31 January 1991
69. Loek Kusiak, 1990, pp 4-5
70. Food service, 4/1991, pp 91-94
71. Glenn Hasek, September 1990, p 3
72. Donna Borjaille et al, 1991, p 52
73. NTB Koerier, 1991, p 4
74. N.F.P.M. Elshof, 1991, pp 20-23
75. David A. Smith, March 1990, pp 22-26
76. Loek Kusiak, November 1990, pp 4-5
77. Bernard Mobach, November 1990, p 41
78. Martine Zuil, 1990, pp 10-11
79. OIKOS, Glaseners Restaurant, Frankfurt am Main, June 1991
80. All information is this part is obtained from an interview with Mr. Grewing, "Bayerische Staatsministeriums fur landesentwicklung und Umweltfragen, Munchen, June, 12th, 1991, and the handbook: ein Leitfaden fur das Gastgewerbe, 1992, Munchen
81. Glenn Hasek, October 1990, p 2
82. Megan Rowe, August 1990, p 16
83. Hotel and Management, February, 1991, p 42
84. Fred, L. Conner, November 1990, pp 12-13
85. Hotel Restaurant, November, 1990
86. Glenn Hasek, October 1990, p 2
87. Paul Frumkin, May 1989, pp 143-153
88. Herman Verhagen, March 1989, pp 26-27
89. Truus Luyken, March 1991, pp 27-29
90. David Menzies, January 1990, pp 18-19
91. Susan Walsh, September 1990, p 22
92. Bruce Whitehal, April 1990, pp 67-70
93. Paul Frumkin, May 1989, pp 143-153
94. Fred, L. Conner, November 1990, pp 12-13
95. Joan E. Herlong, 1990, pp 8-9
96. James Scarpa, June, 1990 p 138