



# Green Industry

## UNIDO Approach to Greening the Tourism Industry



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

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## Tourism: background

- During the last **50 years the tourism industry** increased from 25 million to 806 million travelers annually
- According to the United Nations World Tourism Organization tourism is **a primary source of foreign exchange earnings in 46 out of 50 of the world's Least Developed Countries**
- Tourism is considered to be **the fastest growing industry**

### **In 2010 Tourism Economy accounts \***

- About **9 %** of global GDP
- About **6 %** of total world exports
- Over **9 %** of the global world investment
- Over **8%** of the total employment
- Real GDP growth in average **4%** p/a for next coming 10 years

\* Estimated by The World Travel & Tourism Council (from direct and indirect activities combined)

## Environmental Aspect of Tourism

Main subsectors of Tourism	CO2 (Mt) in 2005
Air transport	517
Other transport	468
<b>Accommodation</b>	<b>274</b> (21 % of the total tourism industry)
Activities	45
<b>TOTAL</b>	<b>1,307</b>
Total world	26,400
Share (%) (not including business travel)	4.95

- Contribution of about 5 % to greenhouse effect
- High consumption of resources (water, energy)
- Waste generation and lack of waste treatment
- Destruction of landscapes and threat for biodiversity

**NOTE:** Regarding the estimation of UNEP: *energy consumption in global tourism is around 5,000 million kWh per year.*

*Accommodation sector consumes a great amount of energy for daily operations and recreational activities. One-star hotels consume appr.157 kWh per m<sup>2</sup> per year; two star hotels show an increase of 46%, and four star hotels get up to 380 kWh per m<sup>2</sup>/year, an increase of 142% over one-star facilities (IFEN).*



## International players and programmes in sustainable tourism

### **The United Nations Environmental Programme (UNEP)**

Activities in the tourism area focus on working with governments, and consumers to design policies, management practices and consumer information tools that support sustainable tourism development.

→ Policy and Trainings

### **The World Tourism Organization (UNWTO/OMT)**

Main objective is to assist Governments in acquiring technical know-how in formulation of tourism policies and strategies, product development, marketing and human resource development.

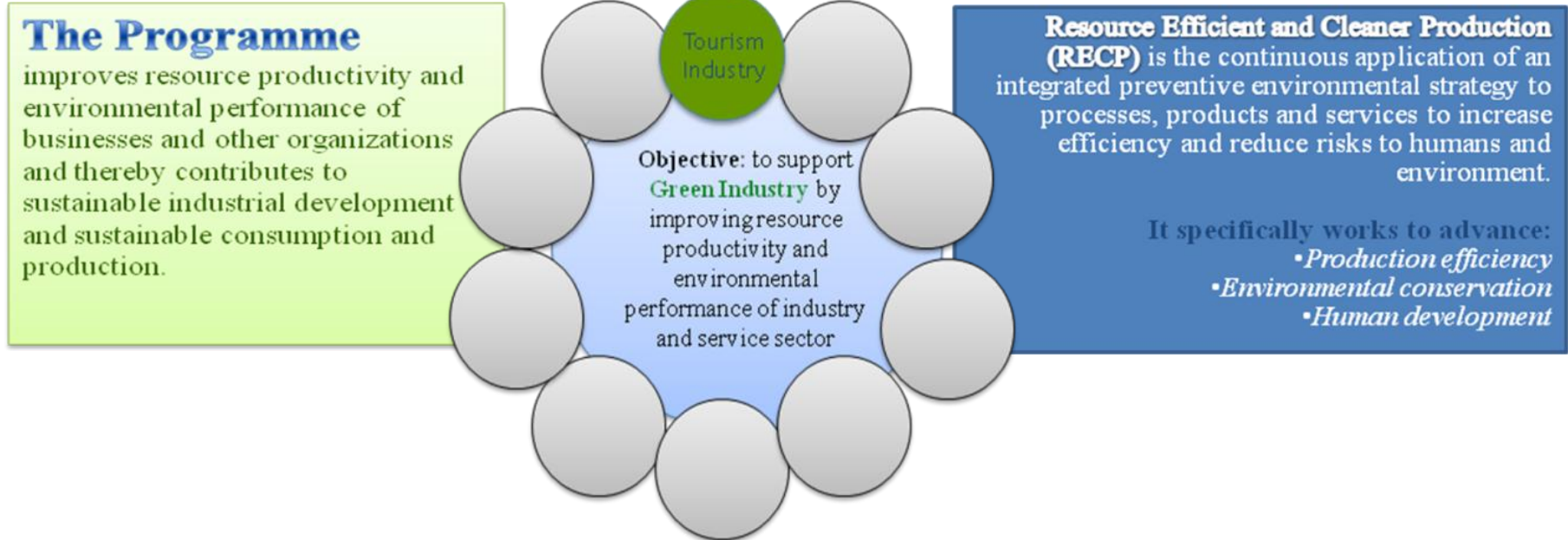
→ Policies, Strategies and Trainings

**The European Commission "Agenda for a sustainable and competitive European tourism"** approved by the European Commission in October 2007 outlines the future steps for promoting the sustainability of European tourism.

**The Marrakech Task Force on Sustainable Tourism Development**, coordinated by UNEP and the the French Government includes a number of projects and actions in the areas of policy tools, good practices, education and capacity building, strategies and pilot projects and information, communication and networking.



# UNIDO Programme on Resource Efficient and Cleaner Production



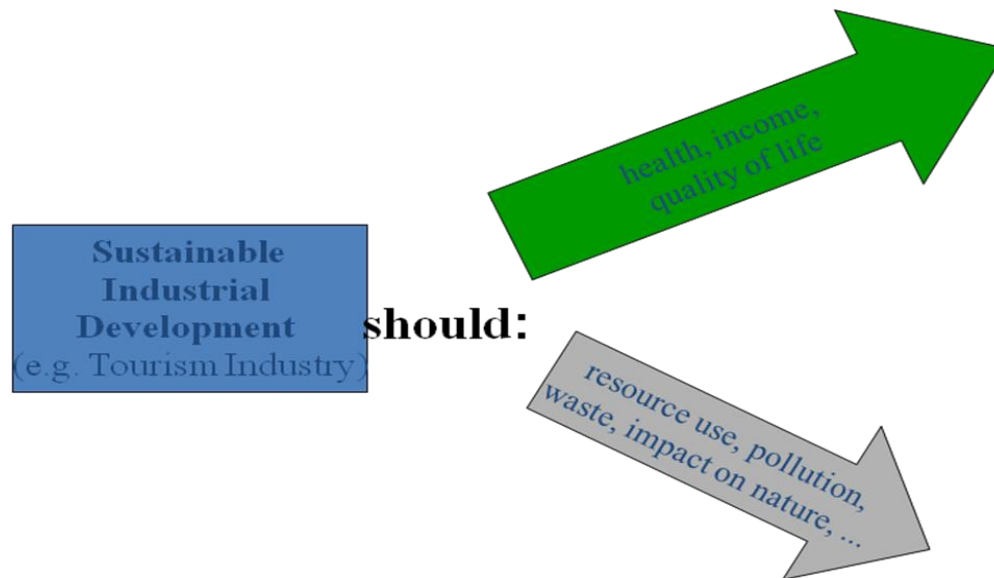
Tourism should support economy and local communities, providing jobs and incomes without damaging the environment and improving its competitiveness.

→ The **GREEN INDUSTRY** Programme of UNIDO may contribute to the achievement of this goal.



## UNIDO Role

**Greening the Tourism Industry** corresponds to the UNIDO **thematic priorities and goals:** to “improve standards of living through industries that are both internationally competitive and environmental sustainable”



### Global objective:

*Contribute to develop a sustainable tourism in observance with the rules and regulations **protecting the environment, contributing to saving energy and water and recycling and minimizing waste.** The above actions have to be developed in observance with the principles of Corporate Social Responsibility and promoting competitive entrepreneurship activities, optimizing the supply chain.*



## UNIDO Approach

### UNIDO's Focus:

- ***RECP in the accommodation sector***
- ***RECP in the supply chain of accommodation sector***
  - example: electronic equipment, textile production, food production, printing, design companies, laundries, campsites, cruise ships etc



### UNIDO Assistance in

- Benchmarking resource use and developing energy efficiency, renewable energy, and conservation programmes
- Water efficiency and quality management programmes
- Waste management
- Purchasing policies to integrate the use of “green products”
- Noise reduction, improving air quality, and landscape integration
- Corporate Social Responsibility issues



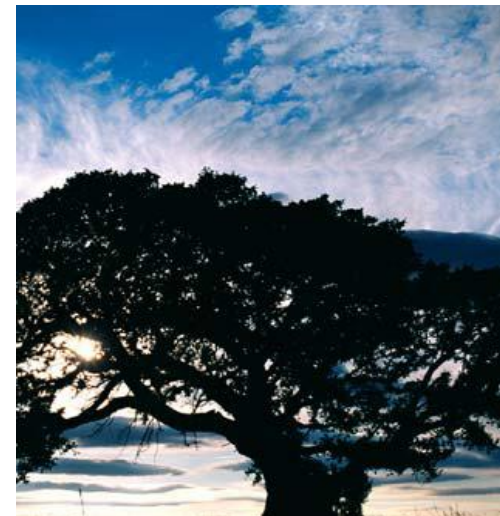
## UNIDO Tourism initiatives

UNIDO is the executing agency for GEF project in 9 African countries to **reduce the impact of tourism related land-based activities on coastal waters**

Member of the **Marrakech Task Force** on Sustainable Tourism

Sustainable **Tourism Projects** in Bulgaria and Romania

UNIDO-UNEP **Side Event** “Advancing a Low-carbon Tourism Industry: Challenges and Responses” of the International Conference on Green Industry in Asia (Manila, September 2009)



### **According to the latest UNIDO survey:**

- About 30% of the UNIDO-UNEP NCPCs and NCPPs have undertaken tourism-related projects implementing CP and CSR options in the accommodation sector and its supply chain → more than 200 projects worldwide

### **Results obtained:**

- Reduced production of waste, more efficient consumption of water, energy savings, better working conditions and advanced market competitiveness
- Reduced pollution & emission of CO<sub>2</sub>** as a result of more resource-efficient operational management



## Case Study: RIN GRAND HOTEL, Bucharest

- 1410 rooms
- 3 Restaurants – 950 seats
- 42 Conference Meeting Rooms - 4000 seats
- The biggest hotel in South – East Europe
- Huge electricity, gas and water consumption



### Concerns of the management



### The strategy developed & adopted

- High fix costs for keeping the hotel running
- Almost no employee awareness regarding energy, gas and water consumption
- Waste management
- High amount of raw materials and packaging usage
- Complex operational processes

- Reduction of energy and water consumption and increase the efficiency of the processes
- Reduction of waste quantities and cost
- ***A Cleaner Production/ Resource Efficiency program*** was initiated in cooperation with Center for Sustainable Development in Romania

- **The hotel is recognized as the biggest conference center in Romania**
- **The hotel image among the community is associated with a high resource consumer**



## Case Study: Options/Benefits

CP options	Environmental Benefits
<p><b>Energy use efficiency</b></p> <ul style="list-style-type: none"> <li>▪ Turn off the lights on the hallways in building corps where no occupancy</li> <li>▪ Replacing lamps with low energy consumption ones</li> <li>▪ Replacing electrical lighting with natural lighting on the reception hallway</li> <li>▪ Introduce de-hardener chemicals in thermal agent system in order to avoid calcareous deposit and corrosion</li> <li>▪ Regularly cleaning programme implementation for the condenser coils of refrigeration equipment. Dirty coils reduce the equipment's performance and increase its energy consumption</li> <li>▪ Turn off all kitchen and restaurant equipment and appliances when they are not needed, including extractor fans, burners, ovens, fryers, plate warmers, coffee makers and conveyor toasters</li> </ul>	<p>Reduction of electricity consumption by more than 10%</p> <p>Reduction of gas consumption by more than 5%</p>
<p><b>Water use efficiency</b></p> <ul style="list-style-type: none"> <li>▪ Regularly compare towels use with guest occupancy to and wash only used towels</li> <li>▪ Train employees and especially housekeepers to identify leaking and malfunctioning toilets</li> <li>▪ Use one set of towels and one pillow in the double rooms were with single occupancy</li> </ul>	<p>Reduction in water use by 15%</p> <p>Reduced use of chemicals and detergents by 30%</p>
<p><b>Reduction of generation of waste</b></p> <ul style="list-style-type: none"> <li>▪ Segregating their waste into 4 Categories</li> <li>▪ Train the employees on the importance of waste segregation</li> <li>▪ Supply food products (sugar, flower, oil, cereals, etc) in big quantities; food items purchased in bulk are less expensive and create less waste.</li> <li>▪ Use only glass returnable bottles for water and beverages</li> <li>▪ Use press-container for waste volume reduction and number of waste disposal costs</li> </ul>	<p>Reduction of landfill waste volume and costs by 20%</p>



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**THANK YOU FOR YOUR  
ATTENTION!**

Cleaner and Sustainable Production Programme  
Environment Management Branch UNIDO



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