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for a sustainable future

OCCASION

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RECP Experiences at Dolce Vita Hotel

The efficient and environmentally sound use of materials, energy and water - coupled with the minimization of waste and emissions - makes good business sense. Resource Efficient and Cleaner Production (RECP) is a way to achieve this in a holistic and systematic manner. RECP covers the application of preventive management strategies that increase the productive use of natural resources, minimize generation of waste and emissions, and foster safe and responsible production. Benefits are eminent in many enterprises, regardless of sector, location or size, as demonstrated by the experiences of at Dolce Vita Hotel, Albania.

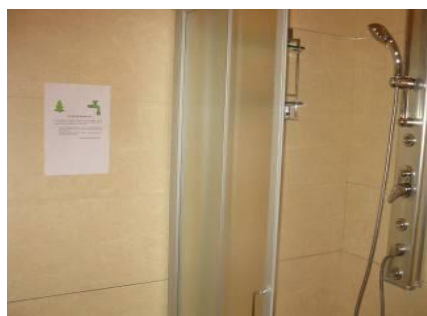
Achievements at a Glance

The Resource Efficient and Cleaner Production (RECP) project in at Dolce Vita Hotel. Good housekeeping options in Dolce Vita Hotel requiring organizational measures and no investments were considered as important opportunities by the hotel management have been directly implemented and led to cost reductions of EUR 3,900/year and reductions of energy, water and materials consumption.

Resource efficiency and pollution reduction was achieved by focusing on simple, organizational and low investment process change measures such as: the policy for changing towels at request, the decrease of the temperature for laundry washing, the reduction of the water flow in the bathrooms by installing flow restrictors (aerators) at the taps, the replacement of the existing bulbs with low energy consumption bulbs in the rooms and corridors, the installation of movement sensors, the replacement of the amenities from the bathrooms with soap & shampoo dozers/dispensers, etc.



Providing shadow for direct sunlight



“Changing Towels on Request”



Lowering laundry temperature

Overview

Dolce Vita Hotel is a four-star hotel situated at the seaside of the Adriatic Sea, about seven kilometers away from the town of Durrës, Albania. The hotel is located in a pine forest, next to the sandy beach and is open all year to its local and international customers. Hotel Dolce Vita was built during 2008 with a total of 48 rooms, 3 restaurants F&B (total capacity 220 seats), 2 kitchens serving Albanian and other European cuisine, a swimming pool (size 600 m²), a conference room (total capacity 100 seats), laundry, gift shop, logistic and service locations.

Benefits

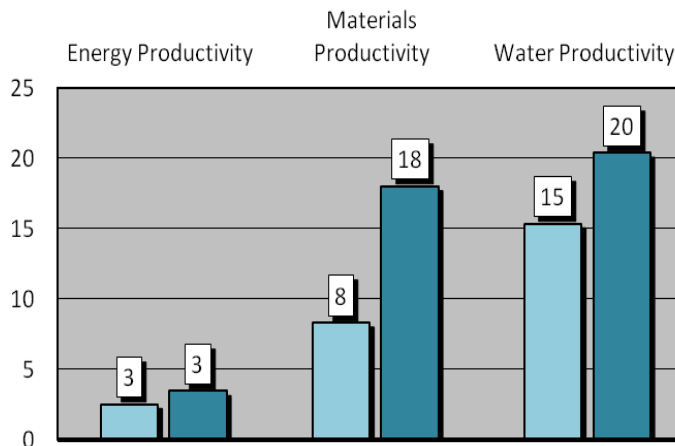
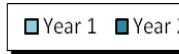
During the audit the CP team identified a total number of 27 RECP opportunities for improvement out of which; 14 were good housekeeping options recommended for direct implementation, while 13 options requiring low to high costs investments have been evaluated for their feasibility. Good housekeeping options requiring organizational measures and no investments were

considered as important opportunities by the hotel management have been directly implemented and led to cost reductions of energy, water and materials consumption.

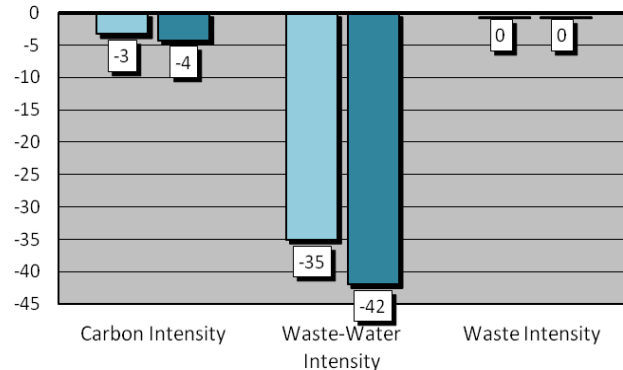
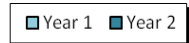
Absolute Indicator	Change (%) Year 1	Change (%) Year 2	Relative Indicator	Change (%) Year 1	Change (%) Year 2
Resource Use			Resource Productivity		
Energy Use	-12	-13	Energy Productivity	3	3
Materials Use	-17	-24	Materials Productivity	8	18
Water Use	-22	-25	Water Productivity	15	20
Pollution generated			Pollution Intensity		
Air Emissions (global warming, CO2 eq.)	-13	-14	Carbon Intensity	-3	-4
Waste Water	-42	-48	Waste water Intensity	-35	-42
Waste	-10	-10	Waste Intensity	0	0
Production output	-10	-10			

RECP Profile

RESOURCE PRODUCTIVITY (change in %)



POLLUTION INTENSITY (change in %)



Resource Efficient and Cleaner Production (RECP)

Resource Efficient and Cleaner Production (RECP) entails the continuous application of preventive environmental strategies to processes, products and services to increase efficiency and reduce risks to humans and the environment.

RECP addresses three sustainability dimensions individually and synergistically:

- *Production efficiency*
 - > Through improved productive use of natural resources by enterprises
- *Environmental management*
 - > Through minimization of the impact on nature by enterprises
- *Human development*
 - > Through reduction of risks to people and communities from enterprises and supporting their development



The results were achieved through the implementation of the following measures:

- Reduce the frequent change of linen up to once in three days
- Implement policy for changing towels at request
- Turn off the heated roll ironer when it is not in use
- Turn off equipments when not in use
- Lower the temperature for laundry washing from 90 °C to 60°C (white laundry) and from 75°C to 40°C (colored)

<i>Principal Options Implemented</i>	<i>Benefits</i>			
	<i>Economic</i>		<i>Resource Use</i>	<i>Pollution generated</i>
	Investment [EUR]	Cost Saving [EUR/yr]	Reductions in energy use, water use and/or materials use (per annum)	Reductions in waste water, air emissions and/or waste generation (per annum)
OPTION 1. Reduce the frequent change of linen up to once in three days	0	NA	Reduction in energy, water, detergent consumption	Reduction in waste water, CO2 emission, waste generation
OPTION 2. Implement policy for changing towels at request	0	700	5,900 kWh/year 71 m3 water/year	Reduction in waste water, CO2 emission by 0.12 tons/year, waste generation
OPTION 3. Turn off the heated roll ironer when it is not in use	0	350	Reduction in energy consumption	Reduction in CO2 emission
OPTION 4. Implement rule for housekeeping to shadow the rooms after cleaning and when not occupied	0	NA	Reduction in energy consumption	Reduction in CO2 emission, waste generation
OPTION 5. Turn off equipments when not in use	0	350	3,100 kWh/year	Reduction in CO2 emission by 0.06 tons/year, waste generation
OPTION 6. Lower the temperature for laundry washing from 90 °C to 60°C (white laundry) and from 75°C to 40°C (colored)	0	2500	21,800 kWh/year	Reduction in CO2 emission by 0.46 tons/year, waste generation

Approach Taken

The main reason for joining the Programme were concerns related to energy and water consumption; the hotel's management has been attracted by the idea of exploring new possibilities for achieving cost reductions and environmental performance, through the utilization of the Resource Efficient and Cleaner Production (RECP) methods implemented with the support of Environmental Centre for Administration and Technology (ECAT Tirana), Albania. The in-plant hotel assessment has been carried out for six months starting in April 2010. This success story presents audit and monitoring results for years 2010 and 2011, compared with the baseline data of year 2009.

Business Case

The hotel management has saved at least EUR 3,900 during the initial phases of the RECP Programme after the implementation of no cost options. Due to this experience, staff and guests are actively encouraged to participate in energy, water and waste reduction measures. The vision of the hotel is to be a truly eco-friendly hotel with sustainable practices in place. The RECP Programme has contributed by significantly and continuously improving the hotel's general environmental performance. Besides the savings of energy, water and materials consumptions, the company's environmental image has been improved and the

environmental impact has decreased, delivering benefits for the surrounding community. The RECP Programme has brought improvements in working practices and beneficial changes in employees and guest behavior.

Testimony Box

National Cleaner Production Programme in Albania

Officially launched in 2010, the National Cleaner Production Programme in Albania, is established under the guidance of NCPP Steering Committee with membership of national government counterparts, UNRC, UNIDO, and UNEP. The NCPP is hosted by ECAT Tirana (Environmental Centre for Administration and Technology) established in 1995 by EU/DG Environment, German and Albanian Government to serve as an advisory body for the Ministry of Environment. ECAT has a sound experience of country-specific and capacity building projects related to energy, technical assistance, pollution, waste and healthcare waste, institutional assessment and policies.

The NCPP in Albania has a double fold purpose: to upscale RECP through plant demonstrations and industry outreach activities, and to mainstream RECP policy instruments into country's relevant legislation.

A total of 36 companies of food, beverage, quarry and tourism benefited from practical solutions identified for cost effective reduction of energy, water consumption, waste, effluents and emissions.

A pool of 35 trainee experts coming mainly from academia and industry, have been trained and about 20 trainings have been held. In addition, UNIDO and UNEP supported the NCPP to develop into a national RECP focal point, through contribution to national workshops and conferences, industry and policy consultations (about 17 in total), as well as in development of policy instrument package to promote RECP in Albania as RECP Mainstreaming Strategy; Primer for Albanian SMEs; Sector Specific Guidelines and Success Stories

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About RECP Experiences

Through the joint Resource Efficient and Cleaner Production (RECP) Programme, the United Nations Industrial Development Organization (UNIDO) and the United Nations Environment Programme (UNEP) cooperate to improve the resource productivity and environmental performance of businesses and other organizations in developing and transition countries. The Programme is implemented in partnership with the Global Network for Resource Efficient and Cleaner Production (RECPnet). This series of enterprise success stories documents the resource productivity, environmental and other benefits achieved by enterprises in developing and transition countries through the implementation of RECP methods and practices.

These successes were achieved with the assistance of the National Cleaner Production Centres, which are part of RECPnet established with support of the UNIDO and UNEP. The success stories employ the indicator set described in *Enterprise Level Indicators for Resource Productivity and Pollution Intensity*, UNIDO/UNEP, 2010. The primer with accompanying calculator tool and further case studies are available at www.recpnet.org, as well as on www.unido.org/cp and www.unep.fr/scp/cp.

