

Jetwing
LIGHTHOUSE
GALLE • SRI LANKA



GREEN DIRECTORY



GREEN DIRECTORY

Other Jetwing Green Directories:

Jetwing Ayurveda Pavilions, Ethukale, Negombo, Sri Lanka

Jetwing Beach, Ethukale, Negombo, Sri Lanka

Jetwing Blue, Ethukale, Negombo, Sri Lanka

Jetwing Lagoon, Thaladena, Negombo, Sri Lanka

Jetwing Sea, Palangaturai, Kochchikade, Sri Lanka

Jetwing St. Andrew's, Nuwara Eliya, Sri Lanka

Jetwing Vil Uyana, Rangirigama, Sigiriya, Sri Lanka

www.jetwinghotels.com



Printed by Karunaratne & Sons (Pvt) Ltd.
(www.karusons.com)

CONTENTS

The Green Directories of Jetwing Hotels	vi
The Jetwing Vision	vii
Jetwing Environmental Policy	ix
Jetwing Energy Policy	xi
Introduction	1
Jetwing Lighthouse: Gateway to the South	3
Energy Conservation	5-7
Water Conservation	9
Waste Water Management	11
Solid Waste Management	13-15
Air Quality Management	17-19
Jetwing Eternal Earth Programme (JEEP)	20
Jetwing Youth Development Programme (JYDP)	20-21
Trees for Life	21
Prevention of Chemical Pollution	23
Using Environmentally-Friendly Materials	25
Environmentally-Friendly Purchasing	27
Health and Eco-Consciousness	29
Landscaping and Organic Gardening	31
Biodiversity Conservation and Education	33
Corporate Social Responsibility: Involvement in Community Development	35
Future Plans for Environmental Management	37
References	39
Abbreviations	40
Photo credits	40-41





The Green Directories of Jetwing Hotels

Jetwing is active in many facets of Corporate Social Responsibility (CSR). The purpose of this book is to document some of our work in the sphere of environmental and community activities. We hope this will be useful to our guests, tour operators, students and the media to understand better some of the work in which we are engaged in.

Some of our informed and conscious decisions are not readily apparent. For example, it may not be evident that a hotel has asked suppliers to reduce unnecessary packaging, had switched to energy efficient lights or has an active programme of always striving to reduce wastage, promptly replacing leaking taps, etc.

Thanks to Jetwing, practices such as the use of wildlife information boards and bird watching hides have become established in hotels in Sri Lanka. Some areas of our work may not be so obvious. An example is the effort and money spent on training local service suppliers — such as trishaw drivers — so that they became quality-accredited business partners.

We would like to thank Dr. Sriyanie Miththapala, who engaged in a series of training programmes to educate our staff on environmental best practices. She introduced a framework of environmental audits and documented work at our hotels in the form of Green Directories such as these. What you see here is only a snapshot in time, of a continuous process, of striving for excellence and serving the community to discharge our responsibilities as a responsible corporate citizen of Sri Lanka.

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The Jetwing Vision

To Be World Class In Everything We Do

Our values

Passion: We are passionate about what we do.
Enthusiasm and devotion are part of our DNA.

Humility: We demonstrate humility by being open-minded
and having a healthy respect for others.

Integrity: Integrity is a part of who we are.
We value honesty and say and do the right things consistently.

Tenacity: Always tenacious, we take big challenges
and persist until we succeed consistently.

The Jetwing Mission

We are a family of people and companies
committed to legendary and innovative service
leading to high stakeholder satisfaction.



Jetwing Environmental Policy

Jetwing Hotels take all possible steps to protect and maintain a clean and healthy environment.

We are committed to:

- Conserving our natural resources by minimising our negative impacts through the implementation of routine actions and by sustainable management, as well as through education;
- Wherever possible, protecting and enhancing all ecosystems;
- Conserving energy and water;
- Minimising pollution by reducing the use of harmful substances;
- Making all efforts to mitigate and adapt to climate change;
- Reducing, reusing and recycling waste;
- Complying with relevant environmental legislation and regulations;
- Employing local people wherever possible;
- Purchasing local products and services, where possible and feasible, in accordance with our environmental purchasing policy;
- Always seeking to achieve a safe and sustainable environment for our community, future generations and ourselves.



Jetwing Energy Policy

Respect for the environment and a commitment to the principles of sustainable environmental management are among the guiding principles of Jetwing Hotels. We at Jetwing understand and believe that energy is a valuable commodity and conservation of energy is the need of the hour. In this endeavour, to continually improve our energy performance we commit to:

- Integrate energy conservation strategies in all our activities and consider our commitment to the environment when making business decisions.
- Purchase energy efficient equipment, goods and services and increase energy performance by design improvements.
- Promote wherever possible renewable and sustainable energy sources, taking advantage of energy resources available in the area.
- Set energy targets and regularly monitor and evaluate energy performance among the group hotels.
- Document and communicate energy performance data to all levels within the group.
- Review objectives and targets on an annual basis with the aim to continually improve on minimizing the environmental impact of our operations.
- Raise awareness on energy conservation of all new and existing employees through the provision of appropriate training.
- Comply with all applicable local laws and international regulatory standards.
- Monitor and reduce our carbon footprint and work towards a carbon neutral future.

While it is the responsibility of all associates to apply the principles of this policy through commitment and actions, the policy will be implemented under the authority of the Engineer of the Hotel.



Introduction

There are over seven billion people on earth who need food, clean water, clothing, shelter, good health and other basic amenities. All these services are obtained from the environment — from ecosystems, to be specific. Provisioning ecosystem services provide humans with goods such as food, fuel, medicines, clothes and shelter. Supporting ecosystem services such as the diversity of flora and fauna; primary production (the manufacture of food by green plants that sustains life on earth); pollination; soil formation; the balancing of gases in the atmosphere that provides oxygen for most life on earth; degradation of waste; cycling of essential nutrients and water — all affect human health and well-being. Mangrove ecosystems for example provide a physical barrier to storms and their roots serve to regulate floods, while forests make the climate even, providing regulating ecosystem services. Cultural ecosystem services provide humans with non-material benefits through spiritual enrichment, development of learning, recreation and aesthetic experience.

Ironically, although human well-being is so intimately inter-linked with ecosystems, in seeking to improve their well-being, humans are over-using, over-stressing and over-exploiting biological resources and damaging the environment. By doing so, they are destroying the very resources they need to improve the quality of their lives.

Although the use and consumption of biological resources are so critical for life, in recent decades and, indeed, during the whole of the last century, this consumption has been not only extreme and inequitable, but frequently unwarranted. Energy and water are used excessively and wasted. The accumulation of carbon dioxide and other gases is causing the earth to overheat with disastrous long-term consequences. Over-use of ground water is causing water tables to decrease in many countries and the quality of freshwater is being diminished continuously by runoff with industrial, agricultural and domestic pollutants. Our waste, notably plastic — the wonder product of the mid 20th century — is filling up arable and liveable land.

Tourism can place heavy, additional stresses on an already seriously overstretched environment by its greater consumption, waste production and pollution.

As stated by the World Wildlife Fund in the Living Planet report of 2006 "Effectively, the Earth's regenerative capacity can no longer keep up with the demand - people are turning resources into waste faster than Nature can turn waste back into resources. Humanity is no longer living off Nature's interest, but drawing down its capital."

Thus, there is a very urgent need for responsible and sustainable use of biological resources that reduces, re-uses and recycles.



Jetwing Lighthouse: Gateway to the South

Built in 1996 by Sri Lanka's premier architect, Geoffrey Bawa, Jetwing Lighthouse is classified as a Small Luxury Hotel of the World. It has been said that when Bawa built this hotel, he had to use a strategy to deal with 'the relentless waves that crashed on the rocks' nearby. In his book 'Bawa - the complete works', Dave Robson notes that Bawa's architecture for Jetwing Lighthouse . . . ' provide[d] contrasting areas of shelter and tranquillity . . . ' and that ' . . . no single space in the hotel is self contained or complete: each is, in part, the consequence of a previous space and the anticipation of a subsequent one; each retains links with its neighbours and with the outside so that the eye is continually invited to explore. The architecture itself is muted, but offers subtle memories of Moorish palaces, ocean liners, ancient manor houses and colonial villas.'

Recently renovated and expanded, the hotel now boasts 80 deluxe and super deluxe rooms and 5 themed suites. The hotel itself contains thematic historical pieces - the main being a spectacular and unique staircase, sculpted in beaten and welded copper and bronze. In this sculpture, Lucky Senanayake - an old friend of Bawa - depicts the arrival of the Portuguese invaders being repulsed by the Sinhala king and his army. Senanayake achieves a visual sense of drama and motion rather than historical accuracy, mixing fact with fiction. The stunningly simple architecture, the jade green sea and the excellent service combine to produce a luxurious and peaceful atmosphere.

However, Jetwing Lighthouse is committed not only to excellence in luxury service and standards, but also to minimising environmental damage and conserving biodiversity. The Hotel practises responsible environmental management that reduces, reuses and recycles natural resources. The Hotel also aims to strengthen community participation by involving the community in as many guest-related activities as is possible.



Biomass boiler



Dual set point thermostat and card-key control



Colour coded switches

Energy Conservation

Energy is obtained from various environment-related sources such as fossil fuels (coal, peat and gas), wood, wind, sun and water. Since 1971, global energy use has increased by 70% and is expected to continue to increase by 2% per annum in the future.

The two largest sources of global CO₂ emissions are combustion of fossil fuels for energy and the transportation sector; and since 1970, CO₂ emissions have grown by approximately 80%. As a result of excessive use of fossil fuels, during the last century, and the subsequent increase of CO₂ concentration in the atmosphere, has contributed greatly to the greenhouse effect and warming of the Earth.

Sri Lanka's electricity consumption has been increasing through the years, doubling between 1992 and 2002. In the past Sri Lanka relied heavily on hydro-power for its electricity and therefore was dependent in the vagaries of annual monsoonal rains. During years with inadequate rainfall daily power cuts — up to eight hours a day — were imposed, seriously disrupting public life and the economy.

It is essential, therefore, that frugal use of power and energy becomes routine for everybody.

Energy Conservation at Jetwing Lighthouse

- Seventy eight percent of total illumination is achieved through energy efficient lights. Replacement of bulbs in future will be with LED Light-emitting-diode (LED) bulbs whenever possible.
- Minimum wattage bulbs which give adequate illuminance are used for all lights in the hotel, to reduce electricity consumption.
- A colour coded system is used to switch on/off lights on a scheduled basis and a daily shift technician is held responsible for this.
- A card-key system is in operation in rooms to ensure that lights, TV, fans etc. are not left on when guests are not in their room.
- Each guest room is fitted with a dual set point thermostat, which automatically switch the air conditioner to a set-back temperature once the key card is removed.
- LED-backlit LCD televisions, which are more energy efficient compared to traditional CRT televisions are installed throughout the Hotel.
- A biomass boiler fuelled by cinnamon wood is used, for heating water and to generate steam for the laundry.
- Hot water for the Spa and guest rooms in the newly constructed wing is generated by solar panels.
- Energy loss through cold rooms has been reduced through the installation of freezer curtains. Opening of the freezers is monitored through door counters installed.



- Preventive maintenance is carried out on a planned schedule. During these checks temperature controls are examined to prevent over-heating and over-cooling, light fixtures are cleaned and equipment serviced.
- All new and existing staff are routinely trained about energy conservation.

Annual savings from energy conservation and efficiency improvements taken at Jetwing Lighthouse

Initiative	Savings			
	Amount (Units)		LKR	CFP reduction (tonnes / year)
Energy-saving bulbs ¹	73,214.00	kWh	1,512,166.00	31,116
Key card system ²	12,212.00	kWh	252,031.00	5,190
LED TVs ³	4,676.00	kWh	96,541.00	1,987
Dual set point thermostat ⁴	89,973.00	kWh	1,857,776.00	38,239
Saving from VFDs	12,720.00	kWh	262,668.00	5,406
Solar hot water system	13,200.00	kWh	273,240.00	5,610
Biomass Boiler for Hot water (Diesel savings)	116,823.00	Litres	10,314,321.00	314,124
Total Savings			14,568,743.00	401,672

¹Calculated on 70% of bulbs being used for 6 hours per day

²Calculated on 75% of bulbs being used for 6 hours per day

³Calculated for use of 3 hours per day

⁴Calculated for 6 hours per day on stand-by mode



Water saving, dual flush system



Conserving water while rinsing dishes



Water saving message to enlist guest support

Water Conservation

Two-thirds of the earth is water but of this, most is salt water and only three percent of all the world's water is fresh water. Of this fresh water, two percent is trapped in ice, leaving only one percent of this planet's fresh water to support all life on earth.

The rate of global freshwater consumption increased six fold between the beginning and end of the 20th century. About 20% of the world's population lacks access to safe drinking water and about 50% lacks adequate sanitation. This means that about one-third of the world's population already lives in countries in areas where water consumption exceeds the renewable freshwater supply. It has been estimated that if present consumption trends continue, two-thirds of the world's population will live in water-stressed conditions by the year 2025.

Not only is water scarce, but it is also polluted by sewage, fertilisers, pesticides and industrial effluents.

The tourism industry generally over-uses water resources for their hotels; with high consumption for swimming pools, golf courses and personal use by tourists etc. Thus, water conservation becomes extremely important in hotels.

Water Conservation at Jetwing Lighthouse

- Treated water from the Waste water Treatment Plant, is used for the hotel gardens. Over 70% of the water that is used in the hotel is reused after treatment by the Plant, saving about 44,940 m³ of freshwater per annum.
- All cisterns installed at the hotel are equipped with dual flushing capability. When compared to single flushing system, a dual flush system can reduce water usage by up to 60% per flush.
- To enlist support from the guests, water saving messages which encourage them to re-use towels and linen are kept in guest rooms.
- Ground water is now being used for both swimming pools, resulting in a saving of approximately 2,737m³ of municipal water per annum.
- Separate water meters have been installed in different departments, allowing daily monitoring of use and highlighting of any abnormal use.
- Preventive maintenance is carried out on a planned schedule. During these checks valves and level controls of water storage tanks and taps are examined for leakages. Housekeeping staff have been made aware about the need for vigilance about water leaks in guest rooms.
- Pre-wash shower units have been installed in the kitchen to minimize water use while rinsing dishes. Kitchen staff have also been trained to reduce water when rinsing dishes before using the dishwasher.
- All new and existing staff is routinely trained on the importance of water conservation.



Sewage Treatment Plant at Jetwing Lighthouse



Another view of the STP



Treated waste water being used in the garden

Waste Water Management

It is estimated that of the wastewater produced globally 90% remains untreated, causing widespread pollution, especially in low income countries. Construction of hotels, recreation and other facilities often leads to increased wastewater (laundry and bath wastes, kitchen water etc.) and sewage generation. Untreated wastewater and sewage runoff can lead to the pollution of seas and lakes surrounding tourist attractions, not only damaging the environment, but also posing serious threats to human health.

Waste Water Management at Jetwing Lighthouse

- Sewage generated in the entire hotel including guest rooms, public area toilets goes to the sewage treatment plant.
- The treatment plant at the hotel is a biological treatment plant utilizing both aerobic and anaerobic digestion.
- The sludge of one primary clarifier/aeration tank is sent to Biogas tanks to produce Biogas.
- A technician has been dedicated to check the treatment plant every day.
- Every three months, an accredited external company checks the water quality so that discharged water meet the required standards of the Central Environmental Authority.
- The treated wastewater is used for the hotel's entire gardening purpose, resulting in a saving of 3,745.60 m³ of freshwater per month.



Colour coded waste bins



Composting of garden waste



Composted organic waste used as fertilizer

Solid Waste Management

In natural ecosystems, animal and plant waste and other organic matter are disposed of speedily by a suite of detritivores ('dirt eaters'), decomposing bacteria and fungi. Humans have seriously disrupted this balance by producing vast mounds of waste, much of which is non-degradable. Human trash is, therefore, accumulating globally at an alarming rate.

Urban and developed areas can generate an enormous amount of solid waste. In Asia, it is estimated that urban areas generate 760,000 tonnes of waste daily, and this is predicted to increase by 2025 to 1.8 million tonnes per day. In Sri Lanka it is estimated that the total waste generation in Sri Lanka is approximately 6,400 tonnes per day.

Apart from looking unseemly, solid waste increases the breeding spots of many disease carriers — such as mosquitoes and rats — and therefore, increases the spread of disease. Solid waste can also wash into waterways, causing water pollution or leach into and contaminate ground water. Large trash dumps can also generate methane, a greenhouse gas.

Solid waste management therefore, needs to ensure that the waste a) generation is minimised, b) collected effectively (separated into non-degradable and biodegradable waste), c) treated and d) disposed of responsibly.

The key to sustainable solid waste management is, therefore, to reduce, reuse and recycle waste.

Solid Waste Management at Jetwing Lighthouse

In order to minimise waste,

- The use of plastic has been drastically reduced in the hotel; for example laundry is collected in linen bags and delivered in cane baskets.
- The use of plastic straws with cocktails or soft drinks has been reduced.
- Plastic cutlery and plastic grocery bags are not used at all.
- Garbage bags are used only for kitchen wet garbage and use is, therefore, minimised.

For effective separation of waste,

- Garbage and trash generated are separated at their sources of origin in all departments such as the kitchen, restaurant and bar, housekeeping, linen room, engineering, stores and guest rooms.
- Colour coded garbage bins that separately hold glass, paper and cardboard, wet garbage, polythene and plastic are kept in each of these areas for collection.
- Housekeeping staff have bags with correspondingly colour-coded pockets on their trolleys for waste collection from the guest rooms.

- All staff have been trained and are monitored in the separation of garbage.
- Guests are requested to bring back picnic boxes and plastic water bottles so that they can be disposed of properly.
- There are notices in each room requesting guests to use separate waste paper baskets provided in order to separate trash into degradable and non-degradable trash.

For treatment and disposal of solid waste,

- All garden waste is composted and used as organic fertilizer in the hotel gardens.
- Food waste is sent to a piggery.
- Dry solid waste (such as paper, cardboard, plastic, glass bottles and metal) are sold for recycling or reuse. Income from these sales is credited to the Staff Welfare Society.



Air Quality Management

Emissions of greenhouse gases such as carbon dioxide (CO₂), nitrous oxide and methane have increased since the time of the industrial revolution. These gases function much like glass panes in a greenhouse, allowing light in, but preventing heat from escaping resulting in a warming of the interior. During the last century, the concentration of CO₂ in the atmosphere rose by twelvefold. Humans excessively use coal, oil and petrol; factories spew out enormous quantities of CO₂ into the atmosphere; forests (that serve to absorb CO₂) are decimated world over. Every year, globally, over 30 billion metric tonnes of CO₂ are emitted into the atmosphere. The impact of these emissions and the resultant increased greenhouse effect is a measurable warming of the earth. The last century recorded the largest increase in global temperature; in 2010, the combined global land and ocean surface temperature tied with 2005 as the warmest such period on record.

As a result of this warming, profound changes are occurring in global weather patterns and resulting in climate change. Global warming is, inter alia, causing glaciers to melt, with an associated sea level rise, increasing extreme weather events (such as intense rainstorms and cyclones, floods, increased heat and drought), as well as causing changes in the world's water availability. All these changes have overwhelmingly negative effects both on human and ecosystem well-being.

Climate change, therefore, is an extremely grave environmental issue with over-arching and long-term consequences.

Effective and prompt response to the impacts of climate change has, therefore, become imperative. One way to do this would be to mitigate the effects of climate change, i.e., reduce carbon emissions. But, mitigation alone will not be enough. Even if greenhouse gas emissions are reduced drastically, the current effects of climate change will be felt for several decades more. Therefore, a second strategy for dealing with climate change — adaptation — also becomes essential. Adaptation, simply, is accepting that climate change and natural disasters will occur, and being prepared.

Meanwhile, the ozone layer, which protects the earth from harmful radiation from the sun, is being destroyed by certain air pollutants, mainly Chlorofluorocarbons (CFCs). Again, the effect of ozone depletion is acutely damaging, particularly to human health. CFCs are used in the manufacture of aerosol sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. Reducing emissions of CFCs is also, therefore, essential for wise management of the environment.



Air quality management and reduction of air pollution at Jetwing Lighthouse

- The use of aerosols has been reduced drastically and only used in emergencies.
- Natural air fresheners - mainly fresh flowers - are used instead of chemical air fresheners.
- The pest control service uses biodegradable chemicals such as synthetic pyrethroids (natural pesticides found in plants of the Chrysanthemum family) for spraying.
- Picnic boxes given to guests are made of paper, not from Polystyrene foam.
- Incineration is never used as a means of garbage disposal on hotel premises.
- Vehicles and the boiler are serviced on a regular schedule to ensure optimum performance and minimum emissions.
- Each year, emission tests are carried out for all the hotel vehicles.
- Environmental performance (energy star / CFC free / energy efficiency rating) is considered in the purchase of all new appliances.

Responding to climate change at Jetwing Lighthouse: Mitigation

In order to reduce the GHG emissions associated with the hotel's operations Jetwing Lighthouse has actively reduced its grid electricity consumption by both reducing its energy demand via energy conservation measures and promoting non-fossil fuel based (renewable) energy generation. (Discussed in Energy Conservation)

Jetwing Hotels has over the years, implemented an ongoing scheme to promote the option of selling trees to guests as means of offsetting a portion of their carbon footprint from travelling, under its 'Trees for Life' project. (see next page)

Overall reduction of greenhouse gas emissions as a result of actions taken at Jetwing Lighthouse

Carbon Footprint of the Hotel (metric tonnes CO ₂ per year)	822.98
Average number of guests per month	35,743
Carbon footprint per guest stay (kg CO ₂ per guest stay)	23.02
Emission avoided by use of renewable energy sources and energy saving initiatives (metric tonnes CO ₂ per year)	401.67
Omission of Carbon Footprint (kg CO ₂ per guest stay)	11.24
Percentage of omission (kg CO ₂ per guest stay)	33%

Carbon Dioxide emissions reduced from hotel operations is equivalent* to Carbon sequestered by approximately 18,450 trees

*Assumption: a tree can absorb as much as 48 pounds of carbon dioxide per year, (<https://www.americanforests.org/discover-forests/tree-facts/>)

Jetwing Eternal Earth Programme (JEEP)

The Jetwing Eternal Earth Programme (JEEP) is the umbrella term used for all community and nature-based projects undertaken as a responsible tourism initiative by Jetwing. JEEP is split into the following components:

- **Community Outreach Initiatives:** Ongoing projects carried out assist the communities surrounding all Jetwing hotels. Examples include Jetwing Youth Development Programme (JYDP) and the 'Trees for Life' initiative described below in more detail.
- **Sustainability at Jetwing Hotels:** Sustainable measures of practice implemented to 'Green' Jetwing Hotels ensure that all hotels attain high standards of environmental custodianship in both front-end and back-end processes.
- **Eco-projects:** Initiatives undertaken by Jetwing in the field of conservation and raising awareness on the environment. For example, the Jetwing Research Initiative (JRI) provides the logistics to support projects undertaken by researchers, as we believe this helps the tourism industry to develop partnerships with scientists and conservationists to protect Sri Lanka's biodiversity. Over the years, JRI has supported scientific studies on primates of Sri Lanka, Sri Lanka's dragonflies and the Sri Lankan leopard at the Yala National Park.
- **Humanitarian programmes:** Consists of all the short-run measures undertaken at each Jetwing hotel to assist the neighbouring communities. Examples include donations for building projects and purchasing equipment at rural schools and hospitals, beach and site cleanups and projects undertaken to assist underprivileged persons.

Jetwing Youth Development Programme (JYDP)

Sri Lanka faces a massive problem with the unemployment of youth, especially in the rural areas. Our country has had the bitter experience of youth uprisings as a direct result of unemployment and its accompanying poverty and frustration. Thus the objectives of the Jetwing Youth Development Programme (JYDP) are:

- To address the issue of, and provide solutions for the shortage of manpower in our hotels and the Sri Lanka Hotel Industry in general.
- To involve local communities in Tourism by passing some of its benefits to them.
- To contribute towards resolving the problem of Sri Lanka's youth unemployment.
- To help resolve the problem of youth frustration by providing the youth with gainful employment.



Focusing on bridging the gap between the unskilled and the skilled, and equipping them for employment, the first Jetwing Youth Development Programme conducted at Jetwing Vil Uyana, provided free training to school leavers from disadvantaged farming families in the Sigiriya area. Based on the success of the initial JYDP, which won Jetwing Vil Uyana the PATA Grand Award (2007) in the Education & Training category, over the past few years the programme has been conducted at Jetwing Vil Uyana again, Jetwing Lighthouse, Jetwing Yala, in Negombo and in Passikudah.

The participants of the programme are given comprehensive six month training on the hospitality sector and those who successfully complete the programme are absorbed to the staff cadre. English language classes are also conducted regularly focusing on practical, spoken English - using role play in a series of real- life situations, with exercises in grammar, general knowledge, Western ideas and ideals, to provide them with a working knowledge of English, which would enable them to express themselves in English as well as understand others. All sessions are held under the guidance of members of the Training and Development team of Jetwing Hotels.

The JYDP which was held for school leavers from areas around Galle, commenced on 08th November 2012 and the programme was successfully completed by 10th June 2013. Of the 20 students that registered 08 completed the program and 04 were absorbed into the Jetwing Lighthouse carder to work on full time basis.

Trees for Life

'Trees for Life', involves and encourages hotel guests, associates of the hotel and the local communities in learning, understanding their level of responsibility and the contribution necessary to minimise the impacts of global warming and climate change. It provides an opportunity for guests to offset their carbon footprint from international travel by pledging trees which will be planted and cared for by Jetwing.

The first phase of the Trees for Life programme, which ran from 2008-2011, resulted in over 3,000 trees being planted in a model reforestation project undertaken at Hunas Falls Hotel. On the 20th January 2012, the Trees for Life programme was re-launched at St. Anne's Church in Talawila in the Kalpitiya Peninsula, where in a period of just over two months, over two hundred trees have been planted from pledge makers across all Jetwing Hotels. 'Trees for Life' seeks to establish, over a period of time, a forested area that aims to enhance biodiversity in what was previously bare land.

For more information on JEEP and some of the other projects carried out, you can visit www.jetwingeternalearthprogramme.com



Biodegradable chemicals used at the Hotel



Diluting cleaning chemicals before use



Natural oils burnt as air fresheners

Prevention of Chemical Pollution

Pesticides, herbicides and fungicides are all poisons designed to destroy pests, weeds and fungi respectively. When these poisons are washed off to waterways or leach into ground water, they cause serious water pollution, with very damaging effects for both human health and the environment. Some pesticides are known to be carcinogens, while others cause reproductive defects and damage vital human organs. Persistent chemicals — such as DDT and Hexachlorobenzene (HCB), by definition chemicals that last without breaking down for a long time — as well as relatively fast-acting chemicals (such as N-Methyl Carbamates), have been and are being used as pesticides. When these chemicals are washed off or accumulate, animals and plants which are not target species but are beneficial to humans are also poisoned. This disrupts the ecological balance in food webs and chains — which, in turn, is detrimental to the functioning of ecosystems and thus, the various services they provide to humans.

Fertilisers used to boost agricultural productivity are also detrimental to the environment because they add excess nitrates and phosphates to soil and water. In the last 50 years, nitrogen and phosphorus pollution from excess fertiliser use has escalated dramatically, poisoning both soil and water; affecting natural ecosystem functioning, and also reducing the services that the system provides to humans: clean water, fish and crustaceans, for example.

Prevention of chemical pollution at Jetwing Lighthouse

- Only compost from the hotel's compost pit is used as fertilizer in the hotel's garden.
- Pesticides, fungicides and weedicides are no longer used in the garden.
- The pest control service uses biodegradable chemicals such as synthetic pyrethroids (natural pesticides found in plants of the Chrysanthemum family) for spraying.
- Natural air fresheners, such as fresh flowers and essential oils are used instead of chemical air fresheners.
- Cleaning agents are used reduced in strength and used only if they are certified as biodegradable and environment-friendly.
- Disinfection of the swimming pool at Jetwing Lighthouse operates on a salt water chlorination system. The chlorinator uses electrolysis to break down salt (NaCl) and the resulting chemical reaction liberates chlorine ions which subsequently produces chlorine gas, which is the sanitizing agent already commonly used in swimming pools. This process not only results in financial savings as salt is less expensive than granular chlorine but is also less hazardous to the environment and human health.



Fresh fruit served without cellophane wrappers



Refillable shampoo and conditioner containers



Laundry delivered in cane baskets

Using Environmentally-Friendly Materials

Plastic, the boon of the mid 20th century, is proving to be the bane of the 21st century. Plastic may be light-weight, low cost and water-proof, but it is an ecological and waste management nightmare. It takes only 2-3 weeks for a banana peel to breakdown in the soil but at least 100-1,000 years for a plastic bag to do so.

Plastic not only causes waste management problems (non-degradable waste inevitably piles up) but also ecological disasters. It is reported that, every year, plastic bags kill about 100,000 whales, sea turtles, and other marine animals (many of which are endangered), often by choking on the plastic bags which resemble edible squid and jellyfish. Polyethylene Terephthalate (PET) — which is used to replace glass for containers because it is strong, cheap, unbreakable and lightweight — also does not degrade and accumulates in the environment.

Plastic and its 'relatives' are not friends of the environment, and their use must be reduced drastically, if not banned totally. The use of environmentally-friendly products in its place should be encouraged in the process of responsible environmental management.

Using environmentally-friendly materials at Jetwing Lighthouse

The use of plastic has been drastically reduced in the Hotel, and in its place more environmentally friendly alternatives are used.

- Use of plastic straws is limited within the hotel and the cocktail stirrers used are made out of wood.
- Plastic cutlery, plastic shopping bags and plastic flowers are no longer used in the Hotel.
- Garbage bags are used only for kitchen wet garbage and use is, therefore, minimised.
- Shampoo and conditioner bottles etc are re-usable and re-fillable ceramic bottles.
- Shampoo, conditioner and soaps are now all herbal products.
- Laundry is collected in linen bags and delivered in cane baskets
- Coasters and good night cards are made of recycled paper and carry environmental messages.
- Some of the vegetables used in the kitchen are organically grown in the hotel garden.
- The hotel shop does not sell products made from threatened or protected species.



Reusable plastic crates used by suppliers



Toilet paper in biodegradable packing



Coffee in biodegradable packing

Environmentally-friendly Purchasing

As noted under Solid Waste Management, waste that humans accumulate is damaging the environment. The manufacture of certain products that we purchase may heavily use power and energy, thereby draining already depleted natural resources. In order to reduce this damage, we have to ensure that the products we buy a) generate waste that is mostly biodegradable, b) are energy and power saving and c) do not add to the degradation of air quality by adding CO₂ and CFCs into the atmosphere.

In addition, transporting produce and food products from far away adds to generation of more greenhouse gases. Hotels, which purchase products in bulk and transport these long distances, need to be acutely conscious of the above. To this end, environmentally-friendly purchasing is an important and vital tool of environmental management in hotels.

Environmentally-friendly Purchasing at Jetwing Lighthouse

- Whenever possible, Jetwing Hotels promote maximum purchase from local suburbs.
- Reusable crates are used when purchasing fruits and vegetables.
- Local suppliers who use environmentally friendly packaging are selected preferentially.
- Most suppliers deliver purchases in environmentally-friendly wrapping.
- The purchasing officer has been trained and is aware of the need for reduction of unnecessary and damaging packaging.
- In the replacement of pumps and motors only equipment in E1 and E2 energy efficiency categories will be purchased.
- When purchasing electronic items such refrigerators, only CFC free, energy-star appliances with a minimum of a three star rating are considered.



Healthy options provided at meals



Herbal porridges served at buffets with write-ups

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Poster for staff awareness

Health and Eco-consciousness

While in many parts of the world, infectious diseases such as diarrhoea, malaria, tuberculosis and HIV/AIDS pose serious problems, in other parts of the world the so-called 'diseases of affluence' — cancer, diabetes and heart disease — are on the increase. Although in part, these diseases are on the increase because human life expectancies have increased due to better living conditions, they have also increased due to certain lifestyles that include poor eating habits among other factors. Eating animal products high in saturated fat and cholesterol is linked to heart disease. Dietary factors are estimated to account for approximately 30% of cancers in industrialized countries.

In addition, for the first time in recorded history, the number of overweight people rivals the number who are underweight. This spread of obesity is no longer confined to rich countries, but is linked to all the diseases of affluence. Being conscious of what you eat in terms of your health has become extremely important in today's world.

Meanwhile, some people also crave luxury foods that are rare and exotic. In addition to being grossly expensive, the increased demand for these foods has led to over-exploitation of many species. When species become threatened, often their international trade is either prohibited or regulated strictly and national laws prevent their harvest. Thus, it is important to be conscious and aware of what you may legally eat in a given country.

Health and eco-consciousness at Jetwing Lighthouse

- Herbal porridges, fresh fruits and traditional, healthy, Sri Lankan meals are featured at meals.
- Clearly marked, heart-healthy alternatives are also provided at all meals.
- Wherever possible, the hotel serves organically grown vegetables from the hotel garden.
- Meats of protected species are not served in the hotel.
- Kitchen staff are trained to identify specimens (such as immature or egg-bearing lobsters) that are illegal to purchase.
- The Hotel is HACCP (Hazard Analysis & Critical Control Points) certified in food safety standards.



Harvesting organically grown paddy at Kurulubedda



The organic garden at Kurulubedda



Cleaning the beach outside the hotel

Landscaping and Organic Gardening

Because tourism is the world's fastest growing industry, its sheer speed and scale has had a serious impact on the environment. Where tourist infrastructure development (e.g. hotels, marinas, waste treatment facilities, groynes, golf courses, beach access and parking, etc.) has been careless, without reference to existing environmental laws, many forms of environmental damage – such as erosion, pollution, habitat destruction (clearing of forests, filling of wetlands) have and still ensue, damaging the services that natural ecosystems provide to humans.

Erosion not only causes severe ecological problems but also economic ones. As the world saw so clearly in December 2004, facilities sited on beaches are extremely susceptible to extreme weather events and the effects of accelerated sea level rise. The erosion of beaches and consequent loss of recreational areas due to the construction of tourist facilities on the coast has led a number of countries to adopt coastal laws. In Sri Lanka too, a Coastal Zone Management Plan exists, where set backs of no-build zones are recommended according to the vulnerability of the site. In the global Millennium Ecosystem Assessment - habitat change, overexploitation, invasive alien species (IAS), pollution, and climate change, are identified as the most important direct drivers of change in ecosystems. IAS are introduced species that do not stay confined to the area into which they were introduced, compete vigorously with native species, become established in natural ecosystems, threaten native species and have the potential of eradicating them. Pollution in the form of pesticides and fertilisers can poison waters. As reported in the Millennium Ecosystem Assessment, since 1960, flows of reactive nitrogen in terrestrial ecosystems have doubled, and flows of phosphorus have tripled; signifying the importance of cultivation without chemicals.

It is imperative, that hotels ensure that their built infrastructure minimises damage to the environment, their garden landscaping is carried out with conscious efforts to minimise damage from IAS, minimise chemical pollution and to maximise ecosystem services from the environment.

As a beachfront hotel, Jetwing Lighthouse is acutely conscious of the need for proper erosion control and landscaping.

Landscaping and Organic Gardening at Jetwing Lighthouse

- Beach clean ups are carried out daily.
- Invasive species or potentially invasive species have been replaced with native species.
- After the tsunami, Screw Pine and Goat's Foot were planted near on the beach front to prevent erosion.
- An organic garden flourishes at Kurulubedda. The garden produced 280kg of vegetables and 202kg of rice last year, for use in the hotel kitchen.



Guests on tour along the 'Seashore Trail'



Red-wattled lapwing at Jetwing Lighthouse



Blue Whale seen off the coast of Mirissa

Biodiversity Conservation and Education

At the United Nations Millennium Summit held in 2000, the world's leaders acknowledged the enormity of the challenge of mitigating environment-related problems. In the same year, the then UN Secretary General Kofi Annan called for the first-ever international scientific assessment of the health of the world's ecosystems, the Millennium Ecosystem Assessment.

The results of this assessment five years later (involving over 1,000 experts from 95 countries) were alarming. Approximately 60% (15 out of 24) of the ecosystem services evaluated in this assessment are being degraded or used unsustainably. The services to humans from those ecosystems — such as fisheries, supply of freshwater, water purification, flood control, air quality and climate regulation and pest control — have also been damaged. As identified by the assessment the most important direct drivers of change in ecosystems are habitat change, overexploitation, invasive alien species, pollution, and climate change. All these threats severely affect the well-being of humans, including the collapse of the fisheries industry, the higher incidence of existing diseases, the emergence of new diseases and the increase of natural disasters. Worst of all, this degradation is worsening living conditions for the world's poor.

Thus, the creation of awareness about the present state of the planet and what individuals can do about it, as well as conservation education, has become essential facets of good environmental management.

Conservation Education and Biodiversity Conservation at Jetwing Lighthouse

- The hotel has a resident naturalist who interacts with the guests, staff, school children and university students to create awareness about biodiversity conservation and environmental management.
- Several nature tours – promoting biodiversity conservation – are offered by Jetwing Lighthouse. These include boat rides along mangroves habitats, treks to rainforests, trips to national parks as well as whale and dolphin watching.
- Awareness programmes on responsible whale watching, and environmental cleanliness around the jetty areas are carried out for the fishing community and boat operators in Mirissa.
- The Resident Naturalist conducts free talks and runs free documentaries on biodiversity to guests and the public; and carries out routine briefings about environmental awareness to the staff.
- Tree planting programs are carried out in the hotel premises and at Jetwing Kurulubedda to celebrate special days like World Tourism Day, World Environmental Day etc
- Jetwing Lighthouse, like other Jetwing hotels, supports conservation activities by providing board and lodging for researchers, students and academics.



Programme for students conducted by Resident Naturalist



Blood donation campaign at the hotel



Tree planting programme

Corporate Social Responsibility: Involvement in Community Development

The development of tourism can lead to social problems when local communities are excluded from that development. When jobs in both the service and support sectors are given to non-locals and products are purchased from out of town, then local communities begin to feel displaced, local livelihoods suffer and community resentment against a hotel can accumulate.

To this end, contributions to community development and improving economic linkage with local livelihoods is essential in the hospitality industry.

There is a general perception that the private sector is exploitative. In the early 20th century, corporate social responsibility by the private sector merely meant large donations to religious organisations. In the 1990s, a model of CSR that practised stakeholder involvement began to take hold in Sri Lanka's private sector. With the triple focus of people, planet and profits in sustainability reporting, such models have become extremely important.

Presently many companies now ensure that their CSR portfolio encompasses a wide range of issues, including responsible environmental management and community development at which Jetwing Hotels have been at the forefront.

Corporate Social Responsibility projects by Jetwing Lighthouse

- Hotel associates routinely carry out clean-up programmes of the beach area.
- The Hotel maintains strong links with National Parks/ Forest Department/ Schools/ Religious places of worship and creating a learning environment for all stakeholders.
- Donations are given regularly to hospitals, schools and temples.
- A two-day workshop on responsible whale watching was carried out for boat operators in Mirissa.
- Under the Jetwing Youth Development Programme (JYDP), school leavers from the Galle area were given on-the-job training in hotel management; at present, there are four JYDP graduates employed at Jetwing Lighthouse.
- After the tsunami, a community pool where free swimming lessons are offered for school children, was built and maintained by the hotel.



Future Plans for Environmental Management

Jetwing Lighthouse, as an environmentally responsible corporate citizen, plans not only to maintain the environmental standards set down in this Green Directory, but also to expand their green initiatives in the years to come.

Several policy decisions will bring about further changes. For example, any electrical item that needs replacement – such as heaters and refrigerators - will be energy-saving and energy efficient and room lights will be replaced with Light-emitting-diode (LED) bulbs which will further reduce consumption. In addition, solar PV units are proposed in the long-term to reduce dependency on the national grid.

The hotel which is an ISO 14001 certified establishment is now in the process of finalizing its ISO 50001 (Energy Management Systems) certification.

Jetwing Lighthouse will continue its routine in house training of staff in environmental management, and periodic audits of its green initiatives will be carried out to ensure that high environmental standards are maintained.



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Abbreviations

CFP	Carbon footprint
GHG	Greenhouse Gas
IPCC	Intergovernmental Panel on Climate Change
LKR	Sri Lankan Rupee
JEEP	Jetwing Eternal Earth Programme
JYDP	Jetwing Youth Development Programme

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Page Number	Caption
Cover	Aerial view of Jetwing Lighthouse
iv-v	View of the hotel across the pool
ix	A Common Jezebel (<i>Delias eucharis</i>) at Jetwing Lighthouse
xi	Rock-lined shores in front of the hotel
viii	View from the terrace at Jetwing Lighthouse
2	Sculpture of the Portuguese invading Sri Lanka by Lucky Senanayake
4	Biomass boiler
4	Dual set point thermostat and card-key control
4	Colour coded switches
6	Solar hot water panels
8	Water saving, dual flush system
8	Conserving water while rinsing dishes
8	Water saving message to enlist guest support
10	Sewage Treatment Plant at Jetwing Lighthouse
10	Another view of the STP
10	Treated sewage water being used for the garden

12	Colour coded waste bins
12	Composting of garden waste
12	Composted organic waste used as fertilizer
14	Main solid waste collection centre at Jetwing Lighthouse
16	View of the ocean from the hotel
18	View of the pool and seashore from the hotel
20-21	School JEEP program by Naturalist
22	Biodegradable chemicals used at the Hotel
22	Diluting cleaning chemicals before use
22	Natural oils burnt as air fresheners
24	Fresh fruit served without cellophane wrappers
24	Refillable shampoo and conditioner containers
24	Laundry delivered in cane baskets
26	Reusable plastic crates used by suppliers
26	Toilet paper in biodegradable packing
26	Coffee in biodegradable packing
28	Healthy options provided at meals
28	Herbal porridges served at buffets with write-ups
28	Poster for staff awareness
30	Harvesting organically grown paddy at Kurulubedda
30	The organic garden at Kurulubedda
30	Cleaning the beach outside the hotel
32	Guests on tour along the 'Seashore Trail'
32	Red-wattled lapwing at Jetwing Lighthouse
32	Blue Whale seen off the coast of Mirisssa
34	Programme for students conducted by Resident Naturalist
34	Blood donation campaign at the hotel
34	Tree planting programme
36	Open to nature, interior of Jetwing Lighthouse
38	Entrance to the hotel
40-41	Serene surroundings, garden of Jetwing Lighthouse

Jetwing
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