

# Jetwing SEA

NEGOMBO • SRI LANKA



GREEN DIRECTORY



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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 Lighthouse, Dadella, Galle, Sri Lanka

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

Jetwing Vil Uyana, Rangirigama, Sigiriya, Sri Lanka

Jetwing Yala, Yala, Sri Lanka

Jetwing Lake, Dambulla, Sri Lanka

Jetwing Kaduruketha, Wellawaya, Sri Lanka

[www.jetwinghotels.com](http://www.jetwinghotels.com)



Beach stretch in front of Jetwing Sea

## 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.



View across one of the pools

## Jetwing Hotels' Sustainability Strategy

Sustainability underscores all aspects of operation and lifestyle at our hotels. We aim to provide world class service to our guests, while striving towards social and economic progress for all stakeholders and reducing our ecological footprint.

The Sustainability Strategy guides us in our continuous improvement in key impact areas.

- Carbon Dioxide released through burning fossil fuels is the largest source of greenhouse gas responsible for global climate change. We strive towards carbon neutrality at the operations level of each hotel, not primarily through carbon offset but by minimizing emissions through innovation and tenacious efforts to reduce our fossil fuel usage and increase generation of renewable energy.
- With population growth, natural resources and services are in high demand and limited supply. The hospitality industry is an intense resource consumer and in an effort to reduce our burden on the environment, we focus on resource optimization and management to reduce consumption as well as increase reusability of waste produced on our sites.
- With high rates of habitat loss occurring globally, we are ever conscious about impacting the natural systems and organisms with which we share this planet. We strive to protect, and spread awareness about the flora and fauna in the diverse and sensitive habitats in and around our hotel properties.
- Our undying love for Sri Lanka and her culture has us eager to preserve and share the country's rich and diverse heritage with our guests while also being mindful to retain its unique authenticity. We are also committed towards passing along the economic and social benefits of sustainable tourism to the community through livelihood development and support.
- As a family of people we are committed to providing our associates with an enriching and equal opportunity work environment to promote employee satisfaction, welfare and empowerment. Through personal and professional development opportunities and interest based organizations and events we encourage a holistic experience marked by innovation, exploration and growth.
- Our islandwide presence requires the transport and movement of large quantities of material and supplies. In order to minimise the negative impact on people and the environment we are dedicated to minimising imports, supporting the local economy, internalizing the supply chain wherever possible and encouraging supplier responsibility.

## Jetwing Energy Management 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, international regulatory standards and other requirements.
- 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 Energy Manager of the hotel.

## 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;
- Reducing, reusing and recycling waste;
- Making all efforts to mitigate and adapt to climate change;
- Continual improvement by means of minimising environment aspects;
- 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.



Muthurajawela marsh © SM

## Introduction: Infinite Growth Economy in a Finite Planet

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.

As stated by the World Wildlife Fund in the Living Planet report of 2012, humanity's annual demand on the natural world has exceeded what the Earth can renew in a year since the 1970s, and this 'ecological overshoot' has continued to grow over the years, reaching a 50 percent deficit in 2008. Which means that it now takes more than 1.5 years for the Earth to regenerate the renewable resources that people use, and absorb the CO<sub>2</sub> waste they produce, in that same year.

Tourism can place heavy, additional stresses on an already seriously overstretched environment by its greater consumption, waste production and pollution. Thus, there is a very urgent need for promotion of responsible and sustainable practices within the industry.



Entrance to Jetwing Sea © NM

## Jetwing Sea: Elegant but Casual

The history of Jetwing Sea dates back to 1972, when a building contractor named Herbert Cooray constructed a 40-room hotel named the Seashells Hotel in Negombo, for a Mr. G.E.B. Milheusen. Achieving the near impossible, he completed the hotel in just six months. Later, in 1978, Mr. Cooray himself purchased Seashells Hotel and made significant improvements to it. A new wing was constructed with 35 rooms, as well as a pool, bringing the total number of rooms to 75. He also shifted the previous focus on the Scandinavian market to include the British and the German markets, sparking a considerable interest in the Negombo region, which at the time, was gaining prominence as a tourist destination.

With all properties adding the 'Jetwing' prefix under the Company's umbrella brand, Seashells Hotel was duly renamed Jetwing Seashells in 2006. Jetwing Seashells remained unchanged until mid-2010. Then, in a remarkable achievement underlining their commitment to excellence, Jetwing Hotels undertook and completed the transformation of Jetwing Seashells into Jetwing Sea, an elegant, contemporary, designer resort.

The challenge of this renewal was masterfully undertaken by the internationally renowned architect Murad Ismail — a student of Sri Lanka's legendary genius, the late Geoffrey Bawa — and an avid follower of his minimalist style. With warm, delightful interiors and naturally sunlit exteriors, he breathed fresh new life into the old, creating a unique blend of harmony that permeates all throughout. New facilities and little luxuries were added to uplift the standards to be on par with the best. The new expanse of the hotel includes 83 gracefully furnished rooms and two luxury suites on the top floor with panoramic views of the ocean. The walk-in wine cellar offering a select collection exclusive to Jetwing Hotels, the airy main restaurant opening out on to the beach, the two luxurious swimming pools, a fully equipped gym and a lavish rooftop spa are all features that impress.

The deep commitment to green policies and practices that is inbuilt in Jetwing as an organisation played a vital role at every stage of the reconstruction process of Jetwing Sea, and several initiatives were taken to make the hotel even more energy-efficient and environmentally friendly in its day to day operations.



Solar panels for hot water © SM



Calorifier and biomass boiler © SM



Card-key control, power-in use indicator and dual set point thermostat © HL

## 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 CO<sub>2</sub> emissions are combustion of fossil fuels for energy and the transportation sector; and since 1970, CO<sub>2</sub> emissions have grown by approximately 80%. As a result of excessive use of fossil fuels, during the last century, and the subsequent increase of CO<sub>2</sub> 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 Sea

- The hotel by design has maximised the use of natural light and ventilation. This significantly reduces the need for artificial lighting during daylight hours. The restaurant, reception and lobby area, are designed to be open and spacious, not just to be aesthetically pleasing but to allow maximum light and ventilation.
- Jetwing Sea maximises the use of solar power for lighting; 55 of the total 83 guest rooms and all public corridors are illuminated using solar power. To enlist support from the guests, an indicator has been fitted in each room, where guests can see when the electricity consumed by them is from solar energy or the grid supply.
- Total illumination of the hotel is achieved through energy efficient lights.
- A colour coded system is used to switch on/off lights on a scheduled basis.
- 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.
- A centralized hot water system is used at the hotel; during day time water is heated through solar hot water panels and a biomass boiler fuelled by cinnamon wood or efficient heat pump is used to produce hot water during the night.
- LED-backlit LCD televisions, which are more energy efficient compared to traditional CRT televisions are installed throughout the hotel.



LED light fittings © SM



Solar panel for lighting © SM



Variable speed drive for the chiller © SM

- Energy loss through cold rooms has been reduced through the installation of freezer curtains. Opening of the freezers have been reduced by following prepared schedules which are examined routinely by the Chef.
- 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.
- Daily monitoring of usage of electricity and diesel is carried out. This is compared against occupancy levels and any irregularities are raised at daily briefings.
- A sub-metering system is in place for monitoring electricity with a modern web-based Power analyzer that monitors consumption patterns in real time.
- All new and existing staff are routinely trained about energy conservation.

### Annual savings from energy efficiency improvements and use of renewable energy sources at Jetwing Sea

Initiative	Savings	
	Amount (Units)	LKR
Energy-efficient lighting <sup>1</sup>	41,239 kWh	722,129
15kW solar PV system <sup>2</sup>	1,333 kWh	21,306
Key card system - room lighting <sup>3</sup>	6,465 kWh	113,202
Dual set point thermostat <sup>4</sup>	14,886 kWh	260,665
LED televisions <sup>5</sup>	5,911 kWh	103,509
Solar hot water system <sup>6</sup>	8,233 Liters	823,451
Variable Speed Drives	8,040 kWh	140,786
Biogas cooking stoves <sup>7</sup>	2,567 kg	361,114

<sup>1</sup> Calculated on 70% of bulbs being used for 6 hours per day

<sup>2</sup> Financial saving calculated based on 'day-time' electricity tariff

<sup>3</sup> Calculated on 75% of bulbs being used for 6 hours per day

<sup>4</sup> Calculated for 6 hours per day on stand-by mode

<sup>5</sup> Calculated for use of 3 hours per day

<sup>6</sup> Calculated compared to diesel fuel

<sup>7</sup> Calculated compared to LP Gas

## 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 Sea

- 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 8,900 m<sup>3</sup> 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.
- Separate water meters have been installed in key departments, allowing daily monitoring of use and highlighting of any abnormal use.
- A rainwater harvesting system installed on the roof of this Spa block provides water for the hotel's swimming pool.
- 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.



Treated sewage water being used for the garden © SM



Conserving water while rinsing dishes © SM



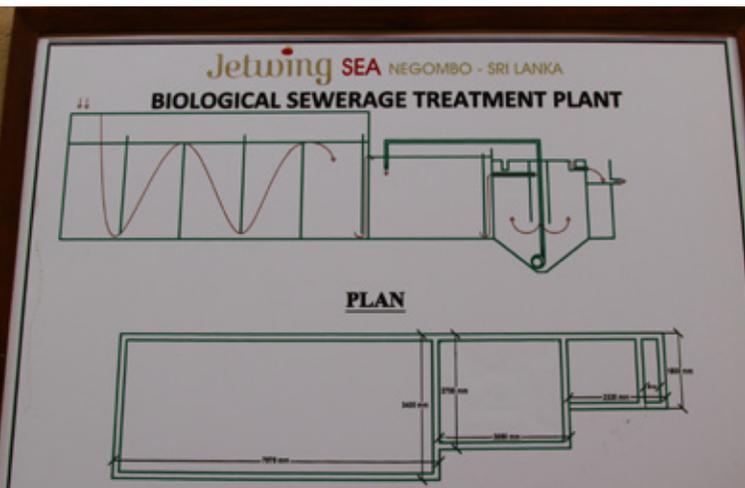
Water saving, dual flush cistern © SM



Treated sewage water used for watering lawns © SM



Sewage Treatment Plant at Jetwing Sea © RC



Sewage treatment process at Jetwing Sea © RC

## 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 Sea

- 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.
- Sun-dried sludge is used for the garden.
- A technician has been dedicated to check the treatment plant every day.
- Every six 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 watering the hotel gardens, resulting in an average saving of 750 m<sup>3</sup> of freshwater per month.

## 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 Sea

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. (See also under section on Use of Environmentally friendly Materials)
- Instead of plastic water bottles, Jetwing branded glass bottles are currently kept in the guest rooms. Plastic bottles are only provided for guests at their departure or when travelling on excursions.
- Use of plastic straws have been replaced with paper straws and the cocktail stirrers are made out of wood.
- Plastic cutlery and plastic grocery bags are not used at all.
- Garbage bags are no longer used for the collection of waste.



Garden waste being composted © HL



Colour coded waste bins at Jetwing Sea © SM



Compost from garden waste being used © SM



Main solid waste collection site for the hotel © RC

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.

For treatment and disposal of solid waste,

- All garden waste is composted in a conventional compost pit, and the compost produced is used as organic fertilizer in the hotel gardens.
- Food waste is added to an onsite biogas digester for renewable energy generation.
- Dry solid waste (such as cardboard, plastic, glass bottles and metal) are sold for recycling or reuse. Income from these sales is credited to the staff welfare society.



View from the roof top © NM

## Air Quality Management

Emissions of greenhouse gases such as carbon dioxide (CO<sub>2</sub>), 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 CO<sub>2</sub> in the atmosphere rose by twelvefold. Humans excessively use coal, oil and petrol; factories spew out enormous quantities of CO<sub>2</sub> into the atmosphere; forests (that serve to absorb up CO<sub>2</sub>) are decimated world over. Every year, globally, over 30 billion metric tonnes of CO<sub>2</sub> 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, with 2016 being ranked the warmest (combined land and ocean surface temperature) year 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.



View of beach © SM

### Air quality management and reduction of air pollution at Jetwing Sea

- The use of aerosols has been reduced drastically and only used in emergencies.
- Natural air fresheners - mainly essential oils - 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.
- Environmental performance (energy star / CFC free / energy efficiency rating) considered in the purchase of all new appliances.

### Responding to climate change at Jetwing Sea: Mitigation

In order to reduce the GHG emissions associated with the hotel's operations Jetwing Sea 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 Sea

Carbon Footprint of the hotel (metric tonnes CO <sub>2</sub> per year)	664
Carbon footprint per guest stay (kg CO <sub>2</sub> per guest stay)	17.6
Carbon emissions avoided by use of renewable energy sources and energy saving initiatives (metric tonnes CO <sub>2</sub> per year)	74
Omission of Carbon Footprint (kg CO <sub>2</sub> per guest stay)	1.97
Percentage of emissions avoided	10%

Carbon dioxide emissions reduced from hotel operations is equivalent\* to carbon sequestered by approximately 3,400 trees.

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



Salt water chlorinators © HL



Natural oils are used as air fresheners © SM



Diluting cleaning chemicals before use © SM

## 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.

### Measures taken to prevent chemical pollution at Jetwing Sea

- The use of aerosols has been reduced drastically and only used in emergencies.
- 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.
- An air curtain has been installed above kitchen doors to prevent flies and insects from entering, reducing the use of pesticides.
- 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 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 environmentally-friendly.



Plastic-free fruit basket © SM



Laundry is delivered in a cane basket © SM



Refillable shampoo and conditioner containers © SM

## 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 Sea

- Use of plastic straws have been replaced with paper straws and the cocktail stirrers are made out of wood.
- Plastic cutlery and plastic flowers are not used at all.
- Instead of plastic water bottles, glass bottles are currently kept in the guest rooms.
- Shampoo and conditioner bottles etc are in re-usable and re-fillable ceramic bottles.
- Shampoo, conditioner and soaps are all herbal and natural products.
- Amenity containers, coffee trays and door signs are made of wood.
- Laundry is collected in linen bags and delivered in cane baskets.
- Garbage bags are used only for kitchen wet garbage and use is, therefore, minimised
- Coasters and good night cards are made of recycled paper and carry environmental messages.
- Fruit baskets are presented without cellophane wrapping.

## 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 CO<sub>2</sub> 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 Sea

- 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.
- Over seventy percent of the 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 and deliveries with only the last packing are taken in.
- 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.



Toilet paper in biodegradable packing © SM



Reusable plastic crates are used by suppliers



Sugar in biodegradable packing © SM

## 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 Sea

- Herbal porridges, fresh fruits and traditional, healthy, Sri Lankan meals are featured at meals.
- Clearly marked, healthy alternatives are also provided at all meals.
- 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.



Healthy herbal porridge served at breakfast © SM



Low fat options are provided © SM



Poster for staff Awareness



Cleaning the beach outside the hotel © DS



Banana plants in the hotel garden © HL



Vegetables are grown organically © SM

## 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 Sea is acutely conscious of the need for proper erosion control and landscaping.

### Landscaping and Organic Gardening at Jetwing Sea

- The strip of beach outside the hotel is cleaned daily. Beach clean-ups extending beyond the boundaries of the hotel are carried out twice a month.
- Although the hotel has only a small garden space that is seasonally affected by sea spray, its use has been maximised with organic fruits, vegetables and herbs grown whenever possible.



Red-wattled lapwing is observed easily at Muthurajawela marsh © HL



A child helping out during Earth Hour © DS



Tree planting by guests © SM

## 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 Sea

- Jetwing Sea, along with other Jetwing properties in the Negombo area offer several nature tours, which include boat rides along mangroves habitats, treks to rainforests, trips to several national parks as well as whale and dolphin watching.
- Tree planting programs are carried out in the hotel premises to celebrate special days like World Tourism Day, World Environmental Day etc.
- Jetwing Sea, like other Jetwing hotels, supports conservation activities by providing board and lodging for researchers, students and academics.

## Future Plans for Environmental Management

Jetwing Sea, 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.

Jetwing Sea 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.



Awards that Jetwing Sea has received © SM



Donation to local school



Tree planting programme



Beach clean-up campaign

## 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.

### Community involvement initiatives by Jetwing Sea

- The hotel periodically conducts education programmes for students of local schools.
- The hotel maintains strong links with schools and religious places of worship in creating a learning environment for all stakeholders.
- Donations in kind are made regularly to various local temples, hospitals and schools.
- Hotel associates routinely carry out clean-up programmes of the beach area.

#### Local sourcing

- Whenever possible products and services are purchased or procured locally.
- Buying local products as much as possible, essentials such as seafood, fruits and vegetables are purchased from the locality.
- The hotel frequently organizes excursions to the nearby natural and historical sites and the surrounding areas, and essentially employs drivers and guides who are local.



Involving local youth in hotel operations

## Jetwing Youth Development Programme

While industries in the country face a huge manpower shortage, in Sri Lanka we also have a massive problem with the unemployment of youth, especially in rural areas. In seeking to address these two major issues, 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 as well as the Sri Lankan hotel industry in general.
- To involve and engage local communities in tourism, passing on its benefits to them.
- To contribute towards resolving the problem of Sri Lanka's youth unemployment.

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, to date, 32 editions of JYDPs have been successfully completed at Jetwing properties around the island.

The participants of the programme are given a comprehensive training on entry level technical inputs on the four core operational areas, which are: Front Office, Housekeeping, Kitchen and Food & Beverage service. These four areas are supported with personal and professional development inputs. As it was realised that a fair level of proficiency in English was imperative to the progress of the trainees, English language classes are also conducted regularly focusing on practical, spoken English. All sessions are held under the guidance of members of the Training and Development team of Jetwing Hotels.

The trainees, who are short-listed in to the departments they are potentially allocated to work at, are given on the job training at other Jetwing Hotels. Upon successfully completing the program the trainees who graduated are given an opportunity to work with the hotel and recruited as full time Associates.

The continuing success of this long running community outreach initiative was recognized and won Jetwing Hotels yet another PATA Grand Award for Education & Training in 2016.



View from the hotel

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Magnificent sunsets at Jetwing Sea

## Abbreviations

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

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