

*Maisonette Firhill*

# Environment Management System

Prepared by: **HIMA^Verte**  
April 2019

A benchmarking assessment for Maisonette Firhill Resort, Murree Pakistan with reference to the Green Globe sustainability certification criteria for tourist destinations.



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Compliance Consulting  
For Environment

**HIMA^Verte**

**Address:** 6A-L, Gulberg-2, Lahore 54660, Pakistan  
**Tel:** +92-42-35714499, **Cell:** +92-321-4002043  
**Email:** info@himaverte.com  
**Web:** www.himaverte.com

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## 1. Background

Mr Imran Daultana, CEO of Maisonette Firhill contacted HIMA^Verte to assist the Murree resort hotel to be operated in an environmentally friendly manner. This motivation comes from the owners of the resort to reduce their ecological footprint, and provide an experience to their visitors that enhance their environmental awareness of the natural Murree forest habitat.




A few meetings were held between professionals of HIMA^Verte and Maisonette, and subsequently a contract was signed to benchmark the existing operations of the resort against some selected international standards.

The Maisonette Firhill is a high-end resort in Murree popular with visitors, and heavily booked during the season.

## 2. Executive Summary

### Green Globe certification methodology selected

Based upon a thorough study of available options for environmental certification of a tourist resort, the Green Globe<sup>1</sup> certification system has been adopted. Mr. Imran Daultana endorsed this based upon review of three priority options (a total of 17 were researched) as shown:

Standard	Pros	Cons	Joining Cost (USD)	Avg Annual Cost (long-term)	Available for Pakistan:
<b>Green Globe</b> 	1-Most active in region, South Asia 2 -Keen to work in Pakistan 3 -Movenpick Pakistan has links	-Slightly more expensive	1,450	1,470	Pakistan is listed through their Dubai office, though no certified hotels yet.
<b>Green Key</b> 	1-Part of a Danish non-profit 2 -Provides detailed guidance	-Low presence in South Asia	1,156	1,350	Pakistan not mentioned
<b>Earth Check</b> 	1-Comprehensive analysis 2 -Certifies other business operations	1-Low presence in South Asia 2-Expensive initial cost	3,480	2,392	Pakistan not mentioned

### Green Globe criteria for assessment

Based upon a review of existing operations of the resort against the various criteria of the environment related standards of Green Globe, some priority recommendations are being made for future action. For the purposes of this assignment, only the Environment related standards of the Green Globe are being utilised. Environment is one of 4 areas, the others being Sustainable

<sup>1</sup> Green Globe certification: <https://greenglobe.com>

Management, Social & Economic and Cultural Heritage. Within the Environment standards there are three key sub-categories:

Environment Category:	Aspects to be covered:
1-Conserving Resources	Monitor and reduce use of paper, water, energy and other selected resources.
2-Reducing Pollution	Manage disposal of sewage, harmful substances, garbage and encourage reuse and recycling.
3-Conserving Biodiversity, Ecosystems, and Landscapes	Visitor education about wildlife, planting of butterfly, bird friendly plants and appropriate landscaping.

### 3. Priority recommendations for action

Based upon a number of field visits to the resort and surrounding areas, and interviews and discussions with various professionals at the resort and meetings with Mr. Imran Daultana, the table below summarises the recommendations for further action, along with suggested prioritisation for action:

Environment Standard	Green Globe Ref.	Recommended Action:	Estimated Budget (Rs.):	Benefits:	Time for implementation:	Priority (1, 2 or 3)
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#### Conserving Resources

1	Energy consumption:	D.1.3	Electricity monitoring of the 3 meters and generators, with online and aggregation capability.	1 lakh (Rs. 5,000 per month for monthly analysis)	Remote monitoring, capability for analysis in savings. Display for visitor education about energy conservation. Opportunity for reduction in operating costs.	2 months	1
2	Energy consumption:	D.1.3	Insulation of 11 water tanks of 128 meter-cubed.	Rs. 180,000	Water heating bill will be reduced, fuel saved, and GHG emissions reduced.	2 months	2
2	Energy consumption:	D.1.3	Install 4 kW solar panels on roof of Honyemoo Suit-1	Rs. 5 Lakh	Electricity bill savings, expected payback within 4 years. Visitor education about renewable energy.	2 months	1
3	Water Consumption	D.1.4	Instal Water meters at selected points	75,000	Monitor water use, visitor education.	2 months	2
4	Water Consumption	D.1.4	Rainwater harvesting on selected roof	1.5 lakh	Reduce need to buy water, visitor education.	2 months	2
5	Consumable Goods	D.1.2	Provide handmade recycled paper notebooks for executive suits. Provided by PARWANA Paper custom made for Maisonette.	Rs. 75,000/Yr (Rs. 500 x 150)	Visitor education for recycled paper. A customised give-away for executive visitors for them to remember the visit.	On-going	1

Environment Standard	Green Globe Ref.	Recommended Action:	Estimated Budget (Rs.):	Benefits:	Time for implementation:	Priority (1, 2 or 3)
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#### Reducing Pollution:

6	Greenhouse Gas Emissions	D.2.1	Calculate annual Greenhouse Gas (GHG) emissions, set reduction target.	Rs. 30,000/Yr	Visitor education, reduction in emissions, reduction in operating costs.	On-going	1
7	Wastewater	D.2.2	Extend sewage pipe by 100 ft to reduce smell	Rs. 3 lakh	Reduce smell from road	4 months	1
8	Waste Management Plan	D.2.3	Place 3-colour waste bins for waste segregation at source.	Rs. 90,000	Visitor education, waste segregation and disposal efficiency.	On-going	1
9	Consumable Goods	D.2.3.3	PET Bottle recycling	N/A	All PET bottles to be transported to a responsible recycler after measuring quantity.	On-going	1
10	Harmful substances	D.2.5	Monitor use of refrigerants, replace with low Global Warming Potential ones when possible.	N/A	Will assist in calculating GHG emissions, visitor awareness.	On-going	2

Environment Standard	Green Globe Ref.	Recommended Action:	Estimated Budget (Rs.):	Benefits:	Time for implementation:	Priority (1, 2 or 3)
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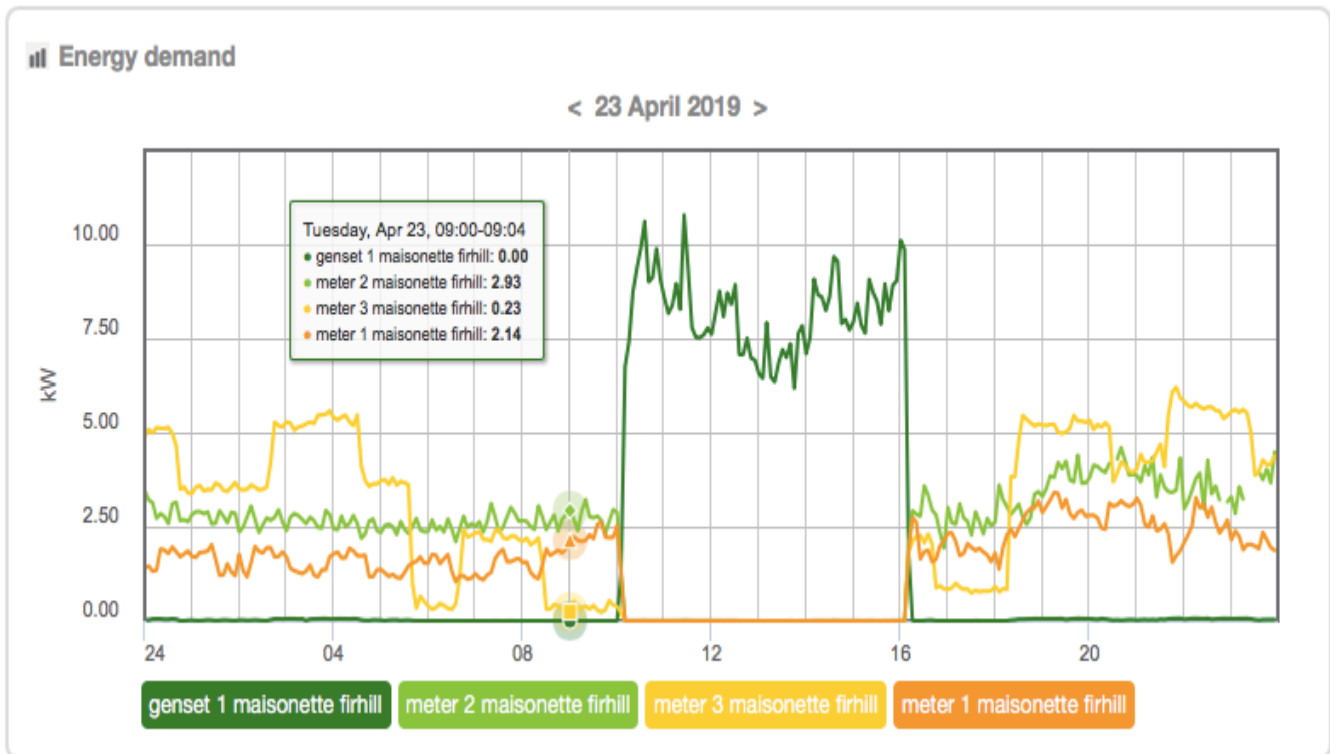
### Conserving Biodiversity, Ecosystems, and Landscapes

11	Wildlife Species	D.3.1	Develop brochure for interesting birds of the Murree area.	Rs. 50,000 for research, design + Rs. 70/brochure	Awareness about unusual birds of the Murree region, visitor education and activity for bird-watching.	On-going	1
12	Wildlife Species	D.3.1	Develop brochure for interesting butterflies and other insects of the Murree area	Rs. 50,000 for research, design + Rs. 70/brochure	Awareness about unusual butterflies, insects of the Murree region, visitor education and activity for bird-watching.	On-going	1
13	Wildlife Species	D.3.1	Develop brochure for interesting trees and plants of the Murree area	Rs. 50,000 for research, design + Rs. 70/brochure	Awareness about unusual trees, plants and flowers of the Murree region, visitor education and activity for bird-watching.	On-going	1
14	Wildlife Species	D.3.1	Obtain important books for resale at the resort reception.	Rs. 100,000 (initial budget, will be recovered through sale)	Relevant books on wildlife, nature of Pakistan, especially the Himalayan region	On-going	1
15	Landscaping	D.3.3	Planting of Bodlia, other plants to attract butterflies	Rs. 30,000	Bodlia plants give flowers, attract butterflies and provide a pleasant landscape for visitors.	On-going	1
16	Biodiversity Conservation	D.3.5	Repair of forest trail, place 3 sign-board and produce a walking trail brochure.	Repair of trail: Rs. 75,000, 3 sign-boards Rs. 45,000, brochure Rs. 50,000	Contribute towards improving the nearby forest trail, encourage visitors to walk in the forest and learn about the unique ecology. (Yew Tree, Pitcher Plant)	3 months	1
17	Biodiversity Conservation	D.3.4	Obtain documentary films about nature and wildlife of Pakistan and air them on the CCTV in rooms. Some of these can be aired on Environment Day (5-June), Earth Day (22 April) etc.	Rs. 50,000 consultancy to obtain up to 20 relevant films	Visitor awareness raising about the unique ecology of Pakistan and especially the Himalayan forests. Films to include ones on common leopard, Margalla Hills National Park, etc.	3 months	1
18	Biodiversity Conservation	D.3.4	Commission the production of a 10 minute documentary film on the unique location of Maisonette, surrounding forests and unique wildlife.	Rs. 1 million	Production of a new professional documentary film, which should as a minimum capture: Flying squirrel, Wild boar, common leopard, pheasant, birds, butterflies, beetles, etc.	12 months	2
19	Biodiversity Conservation	D.3.4	Commission photography of unusual trees, flowers, plants, butterflies, birds, etc of the Murree area for placement in resort rooms	Rs. 1 million	Production of a new professional documentary film, which should as a minimum capture: Flying squirrel, Wild boar, common leopard, pheasant, birds, butterflies, beetles, etc.	12 months	2
20	Biodiversity Conservation	D.3.4	Arrange Visitor, schoolchildren cleanup campaigns a few times a year. The resort can provide trash bags, gloves, spoke-sticks to participants, involve local government for closing remarks. Publicise on social media.	Rs. 30,000 x 3 events	Visitor involvement in helping reduce waste and pollution, positive collaboration with local government.	On-going	1
21	Interaction with Wildlife	D.3.5	Obtain 5 mountain bicycles for visitors to rent.	Rs. 40,000 x 5 (Money will be recovered through rental)	Additional activity for visitors, contribute towards healthy outdoor activities.	On-going	2
22	Interaction with Wildlife	D.3.5	Arrange an art activity for children, guests on nature. Provide small sketchbooks, that are to be checked at the end of the day, top 5 to get gifts of nature books, notebooks.	Rs. 30,000 per event.	Additional activity for visitors, contribute towards healthy outdoor activities.	On-going	2

Based upon review and approval of selected future actions, HIMA^Verte will propose more detailed and accurate plans, budgets and timelines for the implementation for each.

#### 4. Electricity consumption monitoring

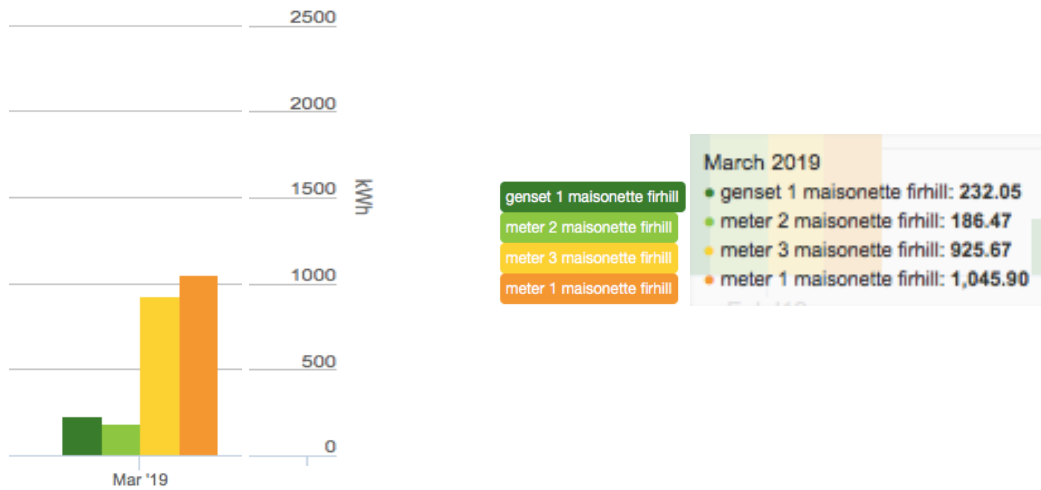
During this project, Mr. Imran Daultana approved the installation of four real-time, energy-monitoring units supported by online monitoring software. This is being monitored by HIMA^Verte, and enables the assessment of aspects such as electricity consumption, backup generator running, etc.



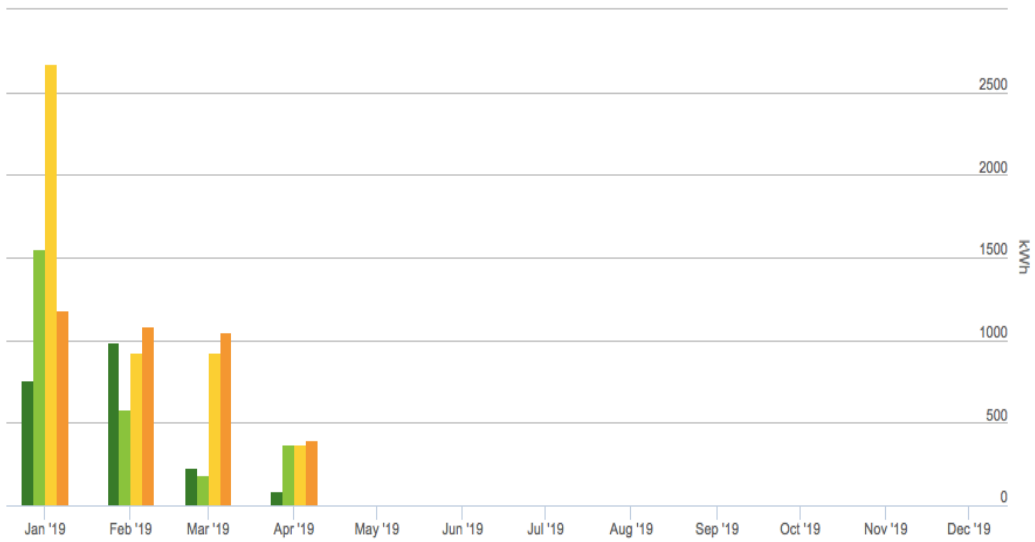
As shown in the screen-shot above, the online portal shows that around 10am on 22 April 2019 the utility supply was disrupted, and the backup generator is running at about 10 kW.

It is proposed that monthly electricity monitoring reports are prepared and utilised to analyse any opportunities to reduce electricity consumption. A sample monthly report is shown below:

### March 2019: Electricity consumption monitoring



< 2019



## 5. Consultants team

The following professionals from HIMA^Verte were involved in the assignment:

**Ali Habib** – Team Leader

**Salman Zaffar** – Deputy Team Leader

**Ali Raza Syed** – International certification research

**Ms Ana Farooq** – Ecology resource person

**Mansha Shakir** – Solar energy resource person

**Mohammad Tariq** – Solar energy technician

## 6. Conclusion

The Maisonette Firhill resort already enjoys the reputation of being a well run and pleasant destination for visitors. The initiative of improving environment management at the resort is commendable, and is likely to receive much appreciation from visitors, which in turn will also benefit commercial operations by enhancing revenue.

HIMA^Verte looks forward to a continued relationship to facilitate environment friendly practices, which will set an excellent precedent for other resorts in Murree and the country to follow as an example. Considering the Managing Partner of HIMA^Verte is a member of the Prime Minister's National Tourism Coordination Board, there will be an opportunity to highlight the environmentally responsible tourist destination of Maisonette Firhill.



## **Annexure-1: Green Globe Environment segments**

**Green Globe**



### **Environmental Standards:**

#### **D.1 Conserving Resources**

- 1 Purchasing Policy
- 2 Consumable Goods
- 3 Energy Consumption
- 4 Water Consumption
- 5 Food & Beverage
- 6 Green Meetings

#### **D.2 Reducing Pollution**

- 1 Greenhouse Gas Emissions
- 2 Wastewater
- 3 Waste Management Plan
  - 1 Plan and Reduce
  - 2 Reuse
  - 3 Recycle
- 4 Harmful Substances
- 5 Other pollutants

#### **D.3 Conserving Biodiversity, Ecosystems, and Landscapes**

- 1 Wildlife Species
- 2 Wildlife in Captivity
- 3 Landscaping
- 4 Biodiversity Conservation
- 5 Interactions with Wildlife

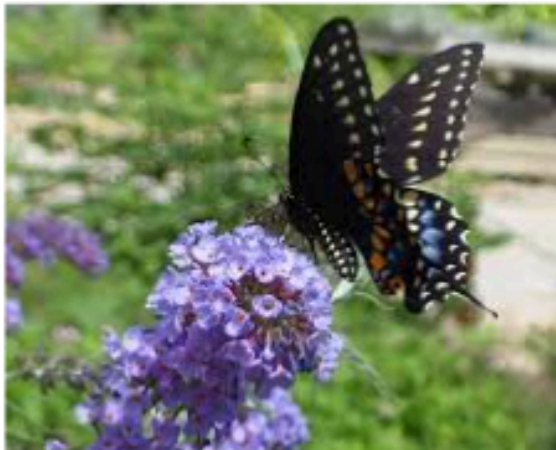
**Annexure-2:** Selected photographs



**Pitcher Plant:** Is able to digest insects to obtain nutrition



**Yew tree:** Its ingredients used to make cancer treatment medicine. Was used to make bow-arrows.



**Buddlia flower and Swallow-tail butterfly:** This flower attracts many butterfly, moth and bees



**Himalayan Barbet:** This beautiful bird is often seen and heard in Murree



**Flying squirrel:** This squirrel glides from tree to tree and comes out at night, though not easy to see

**Brief Detail of the Scope of Work:**

**1. Review of International Standards and Benchmarks**

This would entail detailed study of at least three selected international standards being followed by the hotel industry. We would in our report lay out the key constituents, potential benefits, and drawbacks of each standard.

Just to explain further, international standards include actions which include *conserving resources, pollution control, conservation of biodiversity, conservation of ecosystems and landscapes*.

**2. Recommending the right standard to follow**

After conducting the above mentioned review we will select one standard and in this section talk about the selected standard in detail and explain why we think it's the best fit for Maisonette. We will also give recommendations on how to achieve the various benchmarks and targets required for achieving a certification from the relevant body.

**3. Site Survey**

As part of our consultancy work we will do a site audit. This exercise can be divided into two parts.

- i) The first involves conducting energy / utilities audit. This includes auditing the use of electricity, water and gas.
- ii) The second part involves surveying the natural environment around the hotel. This would for instance include exploring potential for bird watching activities and looking to promote local flowers and plants etc.

**4. Recommendations based on the Survey**

Based on survey and data gathering activity we will give solutions and recommendations for both parts mentioned in section 3. This will be aimed at achieving various mile stones set out in the selected standard.

**5. General Recommendations for Compliance with the Selected Standard**

This section would cover recommendations other than those based on the survey. These would be general recommendations important for meeting the requirements of the selected standard.