three tree-hill

history • nature • culture

WE ARE A SIGNATORY AND LAUNCH PARTNER OF THE GLASGOW DECLARATION ON CLIMATE ACTION IN TOURISM.

STATEMET: WE WOULD LIKE TO BE CARBON NEUTRAL BY 2030

We have long known that our dependence on fossil fuels, unsustainable land use, and wasteful consumption patterns drive climate change, pollution and biodiversity loss. Rebalancing our relationship with nature is critical to regenerating both its ecological health and our personal, social and economic well-being.

Our aim is to reduce all areas of carbon emissions in our business & encourage others to try the same. Tourism plays a key role in accelerating the change to more sustainable consumption by promoting the sustainable use of natural resources, promoting local culture, improving the quality of life and the economic empowerment of women, young people and indigenous communities. The conservation of biodiversity will also lead to the promotion of investment and entrepreneurship in sustainable tourism.

The tourism value chain is complex, diverse and overlapping. The process of measurement is marked by an unfamiliar lexicon of principles, such as the concept of Scopes. As for now, the complex and composite nature of tourism operations does not allow any one tool to measure the totality of the tourism supply chain. Therefore, in the absence of full spectrum tools, our goal for 2023/24 will be to eventually MEASURE our carbon footprint using multiple tools.

Three Tree Hill has declared our commitment by drawing up a co-ordinated plan for **Tourism Climate Action.**

- 1. We have developed a **Climate Action Plan** for the next 12 months, which will confirm our intention to help reduce carbon emissions over the next decade.
- 2. We are proud to publicly declare this **Climate Action Plan** and update our progress annually in a transparent and collaborative manner.
- 3. Our plan has been aligned with the guidance of **Tourism Declares** five shared pathways, which are to **measure** all travel emissions, **decarbonise (reduce)** wherever possible or off-set if necessary, **regenerate** and restore our precious ecosystems,

collaborate with other like-minded small businesses and encourage others to think along the same lines, **financing** of training, research and implementation of programmes to achieve this goal.

- 4. We will encourage our suppliers and partners to make the same declaration, sharing best practise ideas and support each other to make this happen.
- 5. We recognise the need for change across the industry so will be **advocates for change** to accelerate the transition towards zero carbon travel.

CLIMATE ACTION PLAN

To start, we need to know where our climate impact comes from. This originates with greenhouse gas emissions (GHGE), which are defined in three broad categories, or "scopes":

- Scope 1: all direct GHGE wood burned in fireplaces, charcoal used for cooking roasts, fuel used for battlefield tours, staff transport, fuel used for shopping trips, gas for cooking in the kitchen
- Scope 2: indirect GHGE from consumption of purchased electricity, heat or steam electricity, heaters, air conditioners
- Scope 3: other indirect emissions delivery vehicles, guest transport to get to the lodge, water, waste, staff transport

To achieve carbon neutrality, all Scope 1 & 2 emissions must be neutralized. Scope 3's are a little more difficult to quantify, since they may be "shared" with the Tour operator & other Suppliers. Ie. Guests travelling from UK may book with an International Tour Operator, who then books with a local DMC, who then books them into atleast 8 different places during their holiday.

So, in simple terms, we aim to reduce what we can and offset what we cannot. We can do this by:

- Avoiding or reducing emissions through Efficiency & Conservation
- Eliminating emissions by switching to Renewable (carbon zero) sources of energy
- Sequestering or Offsetting any remaining emissions

We will analyse each area of consumption & emissions by following the pathways below.

MEASURE – how much carbon are we actually emitting

REDUCE – how can we reduce this consumption

REGENERATE – how can we generate our own

COLLABORATE – share this information with others

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SCOPE 1 EMISSIONS

MEASURE

• We measure all diesel consumption each time we re-fill a vehicle. We report this on a whats app group. We do not collaborate the information to use it more effectively.

DECARBONISE & REGENERATE

- * All wood that is used in our fireplaces is collected & harvested by staff members on site. Only alien vegetation, such as eucalyptus is used for this purpose.
- * Where possible we co-ordinated guest battlefield tours to co-inside on the same day, so we do not take 2 couples on 2 consecutive days, but rather 2 couples on the same day to minimise vehicle travel.
- * We introduced a new tour recently, which takes guests ON FOOT to the battlesite. We try to promote this potion as much as possible.
- * We supply staff transport to minimise individual transport options.
- * Reservations & Marketing Teams live off-site and work from home. Reservations team is shared with 2 other lodges therefore splitting the load.
- * Marketing team is split between 7 lodges, therefore splitting the load further.
- * Most cooking done on gas to reduce electricity usage.
- * Some cooking done in Wonderbag & solar Cooker.
- * Shopping trips are all co-incised with school runs, so no unnecessary trips are made. A shopping trip book is kept in the office, so all lists can be amalgamated for the specific trip into town.
- * We have encouraged local groups in the village to grow vegetables for purchase by the lodge. We even sent a group of women to Mphophomeni to learn about Permaculture, we bought seedlings to get started, but sadly this project fell flat. When we have more "hands on deck" we aim to revive this project, so we can purchase more from the local community than from town.
 - * We monitor what we purchase so that we generate less waste. We choose to buy items that have less packaging waste, where possible.
 - * Fresh supplier uses returnable crates, so we minimise packaging.

- * Plated meals to reduce waste from buffet
- * We re-use any plastic, cardboard containers where possible.
- * All our organic waste is recycled by pigs, worms or compost & this is worked back into the soil.
- * Tea bags are dried, soaked in paraffin & used as fir lighters.
- * Crushed eggs shells & coffee grinds to compost for vegetable garden.
- * Worm vermicompost produced for the garden.
- * Toilet paper boxes kept & re-used
- * Toilet Roll inners used for disposal of tampons & for use in craft projects at the village creche.

COLLABORATE

- Signage in guest rooms encourage them to take the walking options to battlefields, hiking, mountain biking. Non-motorised nature-based activities.
- We inform guests that we are burning alien vegetation.
- We inform guests when we have cooked their meal with SOLAR.
- We inform guests about the dishes that have been harvested locally, used traditional African grains, farm-raised meat, home-grown vegetables etc.

FINANCE

- We aim to replace older vehicles with newer more fuel efficient options.
- Invest in community garden projects to supply lodge with fresh vegetables

SCOPE 2 EMISSIONS

Our energy conservation strategy at Three Tree Hill is two-pronged: we utilise energy-saving technology and equipment whenever possible, while also ensuring that our team is saving energy at every opportunity.

MEASURE

• We measure all our electricity usage in kWh monthly & fill it in on a chart to share with staff so they are aware of consumption.

DECARBONISE & REGENERATE

- We choose appliances with "eco" or "energy-saver" settings
- Energy-efficient CFL and LED lighting throughout
- Small kettles in rooms (500ml)

- Lights and all electronic equipment are turned off when not in use.
- Washing appliances (e.g. for dishes and laundry) are only used when the load is full.
- Use of Solar cooker & Wonderbag in our kitchen to reduce energy use
- Geyser timers installed in all our Solar Hybrid geysers. These are all still switched off when the rooms are not in use.
- All sheets, duvet covers, pillow cases are taken off-site to local laundromat, so water & energy consumption on site is reduced.
- Washing appliances (e.g. for dishes and laundry) are only used when the load is full.
- Only indigenous vegetation is planted to ensure better water conservation.
- Only the vegetable garden is watered, rest of the grounds are only watered by rain.

COLLABORATE

- * Signage is provided in all guest rooms to make them aware of energy conservation and to invite them to take these ideas home.
 - * Three Tree Hill provides guests with information about nature reserves & national parks, in the area whose objective is to support biodiversity conservation. This is done in guest rooms, & on our website.

FINANCE

• Ideally we would like to run entirely off renewable energy, but this comes at a large capital outlay. Application for funding has been submitted to GTIP.

SCOPE 3 EMISSIONS

MEASURE

• We are working on a Carbon Calculator template that could measure guest international flights, car hire & travel to our lodge. At this stage we do not have the capacity to measure this accurately.

REGENERATE & DECARBONISE

• We could encourage guests to travel with public transport, but not sure that our level of clientele would be interested in this, so we would need to sequester for this section.

COLLABORATE

• Encourage guests to TRAVEL (despite the bad press that long-haul travel is getting) since the rural communities depend on economic benefit of tourism

in South Africa & that we are able to offset their travel by doing good in these communities.

FINANCE

• E-marketing the idea that guests should not feel guilty about long-haul travel.

CARBON SEQUESTRATION

Carbon Sequestration is the process of capturing, securing and storing carbon dioxide from the atmosphere. The idea is to stabilize carbon in solid and dissolved forms so that it doesn't cause the atmosphere to warm. The process shows tremendous promise for reducing the human "carbon footprint." There are two main types of carbon sequestration: biological and geological.

WHAT IS CARBON

In many ways, carbon is life. A chemical element, like hydrogen or nitrogen, carbon is a basic building block of biomolecules. It exists on Earth in solid, dissolved and gaseous forms.

The build-up of carbon dioxide and other greenhouse gases in the atmosphere can trap heat and contribute to climate change.

Learning how to capture and store carbon dioxide is one way scientists want to defer the effects of warming in the atmosphere.

Biological carbon sequestration is the storage of carbon dioxide in vegetation such as grasslands or forests, as well as in soils and oceans. For Three Tree Hill, only the first 3 areas will be investigated.

<u>Soil</u>

Carbon is sequestered in soil by plants through photosynthesis and can be stored as soil organic carbon (SOC).

Forests

When leaves and branches fall off plants or when plants die, the carbon stored either releases into the atmosphere or is transferred into the soil. Wildfires and human activities like deforestation can contribute to the diminishment of forests as a carbon sink.

Grasslands

While forests are commonly credited as important carbon sinks, grasslands and rangelands can be more reliable than forests. Unlike trees, grasslands sequester most of their carbon

underground. When they burn, the carbon stays fixed in the roots and soil instead of in leaves and woody biomass. Forests have the ability to store more carbon, but in unstable conditions due to climate change, grasslands stand more resilient. Since Three Tree Hill is historically a grassland area, we aim to restore the biome to its former self.

We are working on ways to keep the landscape vegetated and soil hydrated for plants to grow and sequester carbon.

CONCLUSION : WE AIM TO REVIEW OUR CLIMATE ACTION PLAN ANNUALLY AND COLLABORATE WITH OTHER TOURISM STAKEHOLDERS TO MAKE THE JOURNEY EASIER.