



One Planet Living® | Global
Leader 2020

Singita

Singita One Planet Action Plan Progress Review - 2019

May 2020

Contents

1.	Message from Luke Bailes - Singita Founder and Executive Chairman	3
2.	Message from Ben Gill – One Planet Communities Technical Manager	3
3.	Summary of progress and recommendations	5
3.1.	Bioregional’s recommendations	6
4.	Singita – Southern and East Africa operations	7
5.	Singita’s One Planet Action Plan	7
5.1.	Awards and recognition	8
5.2.	Singita’s Vision 2025	8
5.3.	Role of Bioregional	9
6.	Carbon footprint	9
7.	Review of progress against the One Planet Action Plan	11
7.1.	Health and happiness	11
7.2.	Equity and local economy	13
7.3.	Culture and community	14
7.4.	Land and nature	16
7.5.	Sustainable water	18
7.6.	Local and sustainable food	20
7.7.	Travel and transport	21
7.8.	Materials and products	22
7.9.	Zero waste	23
7.10.	Zero carbon energy	25
8.	Message from Andrea Ferry – Singita Sustainability Coordinator	27
9.	Plans for the year ahead	28

1. Message from Luke Bailes - Singita Founder and Executive Chairman

As a deeply mission-led company, our 100-year purpose is to 'protect large areas of African wilderness for future generations', and we remain as committed as ever to this vision. I am heartened to read about our One Planet Living progress and successes in this 2019 review. It is clear to me that the programme is well-embedded and that our staff are committed to ensuring the ethos of One Planet Living is woven throughout everything we do. That said, we face many challenges in preserving our natural heritage, reducing negative impact from our operations and improving the daily lives of our communities. With the guiding Principles of One Planet Living, we will continue to learn and work hard to improve the sustainability of our design, building processes and operation of all Singita's lodges and support businesses.

Amid all the pandemic turmoil, it's easy to sometimes forget that nature is at the heart of our business and our reason for being, and despite all the global uncertainty and hardship, it's heartening to see that the environment is taking a very deep breath. Wildlife is being seen in unusual places now that the world is on pause, surely a strong indication that mankind has not been in touch with our environment! At Singita, this inspires us to carry on working hard to create a healing place for guests, contribute what we can to an equal and fair society, and of course to preserve wildlife and wilderness.

2. Message from Ben Gill – One Planet Communities Technical Manager

Undertaking this review during the global Covid-19 pandemic, it's clear how quickly things can change. Just a few months ago Australia's historically catastrophic wildfires grabbed global attention and, alongside the school strikes, it seems the tide was turning on public awareness of climate change.

Unquestionably the world has changed with Covid-19, but we cannot allow our focus to shift away from impending climate and ecological breakdown as well.

With people remote working and children distance learning for weeks – and months – on end, new models for living will evolve. Tourism and travel have been massively impacted, highlighting the need to rethink how and why we travel. Global aviation emissions had increased by over 30% in the past five years, and with no alternative to fossil fuels in the pipeline, the contribution of aviation to global emissions can only be reduced by reducing flights.

As a tourism industry Singita is dependent on aviation, and global travel. But with its focus on local job creation, supporting local economies and conservation, guests are bringing greater benefit than a holiday elsewhere. People want to travel, but we must ensure that the carbon invested in this travel brings maximum benefit while minimising its impact.

Operationally 2019 has been quite a challenging year at Singita, with an increase in carbon emissions and water consumption at a group level. Over the previous years Singita has done the groundwork to significantly reduce its environmental impact:

- New buildings and refurbishments, such as Singita Volcanoes National Park are being built to exceptional environmental standards
- Existing lodges, including SKNP, have incorporated solar to reduce carbon emissions by over 80%
- Singita Pamushana, conservation partner Malilangwe Trust, and Singita Serengeti have shown how exceptional waste reduction and recycling can be achieved

- Water management and conservation practices at Singita Sabi Sand and Singita Serengeti show significantly reduced consumption.

Singita's challenge is to take these individual examples and make them the norm across all its properties. The preparations for solar at SPM and at SSS are an excellent start, and it is imperative that these initiatives are pushed through quickly, and supported by further water, energy and transport initiatives.

The global pandemic is forcing us to rethink our economic models to ensure that they are resilient to shocks. While tourism is an industry that is vulnerable to shocks, Singita's conservation-orientated approach, which reduces resource consumption and relies on lower numbers of tourists, should make them more resilient than many organisations. Further embedding of sustainability into operational structures will increase this resilience.

3. Summary of progress and recommendations

This is the third review of Singita’s One Planet Action Plan and, while there is a lot of comparability to the data gathered in previous years, there are some discrepancies due to increased accuracy of the data and evolution of the indicators being used.

On the other hand, Singita has been on a path towards sustainable operations for many years and a range of projects and initiatives are already bearing fruit.

	Substantially or entirely completed, or a high degree of certainty over delivery
	On track for a long-term target
	Substantially incomplete, behind schedule or doubt over delivery

One Planet Principle	2020 Outcomes	Progress
Health and happiness	Improvement in staff health and engagement	Ongoing provision of healthcare and improvement in facilities
	Improve local education and teaching levels	Approximately 65 teachers and principals at 17 preschools trained and supported through Singita Holistic ECD Support Programme.
Equity and local economy	Maximise local recruitment	Local employment grown to 78% on average
	Support development of local businesses	Still generating over ZAR 8.1m at SKNP and SSS, but figure is falling
Culture and community	25% of guests to participate in a community activity	Local experiences provided, but tours still on hold
	Promote a culture of sustainability	Training programme continues to grow and strengthen
	Maximise contribution to Singita Lowveld Trust (SLT)	Ongoing increase to over ZAR 6mi
Land and nature	Maximise area under management	Ongoing assessment of options
	Maximise anti-poaching and conservation efforts	Zero poaching incidents of key species
	Encourage environmental care within local communities	133 Grade 6 learners took part in the School Safari Programme in partnership with Sabi Sand Wildtuin and Good Work Foundation.
Sustainable water	Reduce losses through leaks to 5%	10% at SSS
	Reduce extraction of water from boreholes	Increase at SSS, SKNP and SPM
Local and sustainable food	Increase local expenditure	Local farm helping increase local production
	All fish to be sustainably harvested	90% farmed
	Improvement in staff diet	Introduction of salad bars at lunch and dinner
Travel and transport	20% reduction in fuel	Unchanged
	Reduction in business flights	55% increase
Materials and products	Only sustainable cleaning products	All use an eco-range
	Prioritising sustainable construction and fit-out materials	OPL integrated into Castleton fit out but opportunities missed
Zero waste	90% reduction in plastic waste	97% reduction in bottled water on 2014, plastic waste 2/3rds below 2017
	> 90% recycling rate	High levels of recycling at all sites – sorting at SSS and SKNP can be improved
Zero carbon energy	30% reduction in energy use	2% increase on 2018 building energy use
	100% renewable energy	Unchanged at 25% of electricity

3.1. Bioregional's recommendations

Having reviewed all the information provided, Bioregional has specific recommendations relating to some of the One Planet Living principles. These are summarised below.

Zero carbon energy

Singita has made excellent strides in incorporating renewable energy into its projects. Nonetheless there has been a significant increase in building related emissions in 2019. Solar energy has been incorporated into many new and existing projects, significantly reducing carbon emissions from these Lodges. A clear strategy for implementing solar projects at SSS and SPM/TMT would go a long way to putting Singita on path to zero carbon buildings.

Water

Water use has somewhat surprisingly increased in 2019, and given the importance of this issue locally this needs to be addressed. The planned increased metering and rainwater storage capacity will help address this, but staff need to prioritise water conservation to drive reductions.

Culture of sustainability

Exceptional customer service and style are ingrained into the way that Singita staff think, sustainability needs to become second nature in the same way. This can be done through:

- Integrating into job descriptions and performance reviews
- Integrating into daily life, such as morning meetings with a sustainability award sitting alongside the 'service awards'.
- Putting in place the procedures required to ensure staff think about sustainability at the correct stage of any project or process.

Retrofit

The recent upgrade at Castleton Lodge at SSS aimed to address many of the One Planet Living principles, but the framework was not comprehensively applied. For example, non-endemic species were planted and opportunities for incorporating solar energy and grey water treatment were missed. Given the renovation programme for the lodges it is imperative that these opportunities are maximised for incorporating OPL. Additionally, retrofit projects should avoid using high-impact materials such as concrete. A simple process could be put in place to ensure that these opportunities are addressed at the relevant stage of the project lifecycle.

Local and sustainable food

The impacts of livestock production on the climate globally and ecosystems locally has become increasingly apparent. Singita has a fantastic sustainable offer for guests, and staff food has been improved with key initiatives like Meat-free Mondays and the introduction of salad bars. Nonetheless it is fair to say that a low-meat diet is not the norm among Singita staff and more can be done to make them aware of the health and environmental benefits of a plant-based diet.

Travel and transport

Business air travel has increased significantly, due to the opening of a new Lodge in Rwanda and orientation of new senior staff. It would be good to see Singita develop a clear strategy to address this, drawing from the COVID-19 lockdown it is clear that remote meetings and even remote site 'site visits' are practical and should be explored.

4. Singita – Southern and East Africa operations

Singita is a company that operates 15 eco-tourism lodges and camps in Southern and East Africa. Preserving large areas of wilderness for future generations while benefitting local communities lies at the heart of its business.

Singita is a conservation brand, financially supported by a number of commercially operated lodges within the reserves that are under Singita's stewardship. Singita partners closely with non-profit Funds and Trusts, which focus on community development and biodiversity management.

Singita's operations in the Serengeti in Tanzania have been applying the One Planet Living principles since 2012 and separate reports on its progress are regularly produced. This report covers all existing Singita operations outside of Tanzania, which are predominately in Southern Africa (South Africa and Zimbabwe), but it includes the project being developed in Rwanda. These are:

- All existing Singita lodges and conservation partners in South Africa:
 - o Singita Sabi Sand (SSS): Boulders, Ebony and Castleton Lodges
 - o Singita Kruger National Park (SKNP): Lebombo and Sweni Lodges
 - o The Singita Lowveld Trust (SLT)

- Singita lodges and conservation partners in Zimbabwe:
 - o Singita Pamushana Lodge and Malilangwe House (SPM)
 - o The Malilangwe Trust (TMT)

- Singita lodge in Rwanda, Singita Volcanoes National Park (SVNP):
 - o Singita Kwitonda Lodge and Kataza House

- All Singita support companies and their buildings
 - o Singita Management Company (Cape Town) (SMC)
 - o Singita Style, Design and Procurement (Johannesburg) (SDP)
 - o Singita Mauritius - Reservations office (SMIL)

The Malilangwe Trust is a wholly Zimbabwean, non-profit organization with a focus on harmonizing biodiversity conservation, community development and commercial tourism. Singita Pamushana lodge is situated within the Malilangwe Reserve, Zimbabwe.

The Singita Lowveld Trust is the South-African based non-profit organization supporting biodiversity conservation and community development in South Africa.

5. Singita's One Planet Action Plan

In committing to its [One Planet Action Plan](#) Singita is aiming to create a benchmark for sustainable tourism for the 21st century demonstrating how conservation, local economic development and high-quality tourism can reinforce each other.

Singita's Southern African operations are complex as they are, in effect, both a business and three communities combined; more than 320 staff and their families are provided with accommodation onsite. Furthermore, the success of the tourism operations is directly linked to the success of the conservation and community development work that Singita undertakes or supports.

By becoming a One Planet Community Singita is pledging to 'operate within global environmental limits' and committing to this principle as the foundation of how the company conducts its business. Singita has demonstrated this in a number of ways:

- Outreach to influence conservation in the region and tourism globally
 - Singita’s Executive Chairman sits on the Virtuoso Travel Show Sustainability Panel
 - Collaborating with other leading conservation-orientated tourism companies to compare information and data on performance and best practice which will form benchmark indicators for the industry for sustainability. With 2 more quarters’ worth of data collection to go (to June 2020) the members are discussing how to generate the most impactful format and reach for the benchmark and intend to publish these in late 2020.
 - Continue to partner with Panthera over leopard conservation, founding member of the Lionscape Coalition.

- Increasing the awareness of conservation and environmental issues among key stakeholders
 - Staff: programmes to embed sustainability culture are run all year. The Singita Leadership Course (MYTTSW) now has an enhanced module on Conservation with 44 learners registered for 2020.
 - Guests: sustainability brochure created for guest rooms and to take home.
 - Academic: TMT’s resident ecologist is embarking on her PhD on rhinos; Ad hoc academic queries: interview granted to MS Candidate in Tourism Management, NYU. Community Partnership Programme Project Manager (SKNP) completed his MBA for Conservation Leaders from the ALU School of Wildlife Conservation (SOWC).
 - Supply chain: data collection survey and system developed for use by Singita’s interiors supplier Cecile & Boyd. This provided increased education at Cecile & Boyd and beyond.

- Transforming existing operations to a sustainable One Planet Living level, particularly during major refurbishments, without compromising conservation and tourism goals e.g. rainwater harvesting capacity increased at existing properties as well as improved water metering.

- Developing new camps and lodges in line with One Planet Living principles
 - Completion and opening of Singita Volcanoes National Park in Rwanda

5.1. Awards and recognition

Singita’s commitment to sustainability has been recognised with a number of sustainability related awards in 2019 including:

- Kiwi Collection – Best Sustainable Luxury Hotel 2019
- Skift Design Awards – Singita Sweni Lodge – Winner – Best Eco-Friendly Design
- Pure Awards – Winner – Conservation and Sustainability

Its detailed sustainability strategy will have contributed to the various other awards Singita received in 2019.

5.2. Singita’s Vision 2025

During 2018 Singita developed a set of targets that it wishes to achieve by 2025. The targets cover its business objectives, its conservation and community impact, as well as six sustainability targets. These sustainability targets are aligned with those in the One Planet Action Plan, but to maximise their communication impact they are more tightly defined and specific. The six targets are:

- Off-grid lodges 80% powered by renewable energy and on-grid 30% powered by renewable energy.

- 30% reduction in water/bednight from property-specific baseline year
- Elimination of single-use plastics by 2020
- Only 10% waste to landfill by 2023
- 50% of Singita's fresh produce to be purchased from within a 100km radius
- 100% electric game-viewing vehicles within three years of commercial availability; 80% of other vehicles electric within four years

5.3. Role of Bioregional

One Planet Living is a framework and an initiative developed by Bioregional that grew out of the experience of developing the pioneering BedZED eco-village in south London, UK in the early 2000s. Today there are One Planet Communities and Destinations in Europe, North America, Africa and Australia.

Bioregional supported Singita to develop its One Planet Action Plan for their Southern Africa operations in 2016. Bioregional continues to provide technical support and to undertake an annual review of Singita's progress in implementing its Action Plan.

6. Carbon footprint

A carbon footprint was undertaken by an external company in 2012. This has been used as a driver to internalise the data gathering and calculations within the organisation.

As Singita has improved its data monitoring there has been an apparent increase in the carbon footprint. While in some areas this is real, in other areas it is actually due to increased data gathering. For this year the emissions from SVNP have not been included as it is not a complete year, but they will be included as of 2020.

The graphs in **Figure 1** and **Figure 2** show the carbon footprint from 2013 – 2019, with only the years 2016-18 being the most comparable, though refrigerant gas data may not have been fully captured in those years. The first graph shows carbon footprint by scope and the second by location. This highlights a number of key points:

- Excluding refrigerant gas, there has still been a 10% increase in carbon emissions
- An increase in flight emissions accounts for the majority of the growth, but building emissions have also increased by 5%.
- Flight emissions exceeded vehicle emissions for the first time.
- When reviewing by location only the carbon emissions of SKNP fell with increases in all other areas. Excluding refrigerant gas, the emissions at SSS did fall by 2.5%, but the site is still responsible for over 40% of Singita's total carbon footprint. Additionally, the increase at SPM/TMT was driven by increased generator use due to increased black-outs.

This is clearly not a positive picture with emissions increasing in most key areas. This highlights the importance of pushing forward initiatives like the proposed solar project at SPM/TMT and SSS, as this will be crucial in halting the growth.

The carbon footprint includes all Scope 1 and 2 carbon emissions: generator and vehicle fuel, LP gas, paraffin, electricity and refrigerant gases. Refrigerant gas measurement does need to improve; the measurement of other Scope 1 & 2 resources is robust. Indirect, Scope 3, emissions covered in the report include: business flights, commuting to office and other vehicle transport for business.

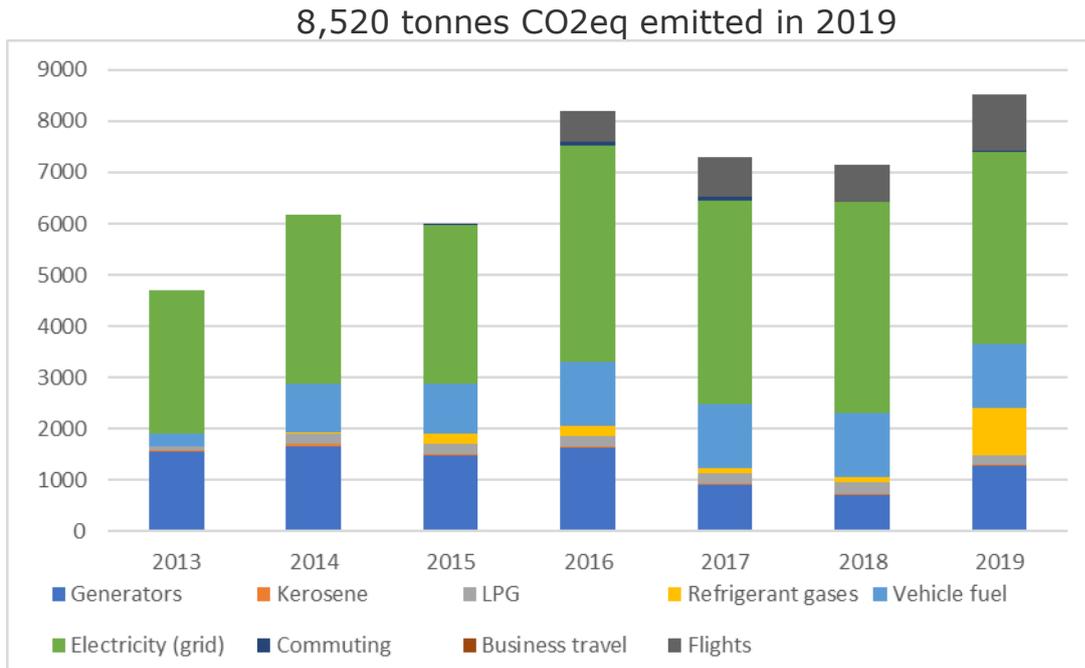


Figure 1. Total carbon footprint (tCO2eq) by emission source

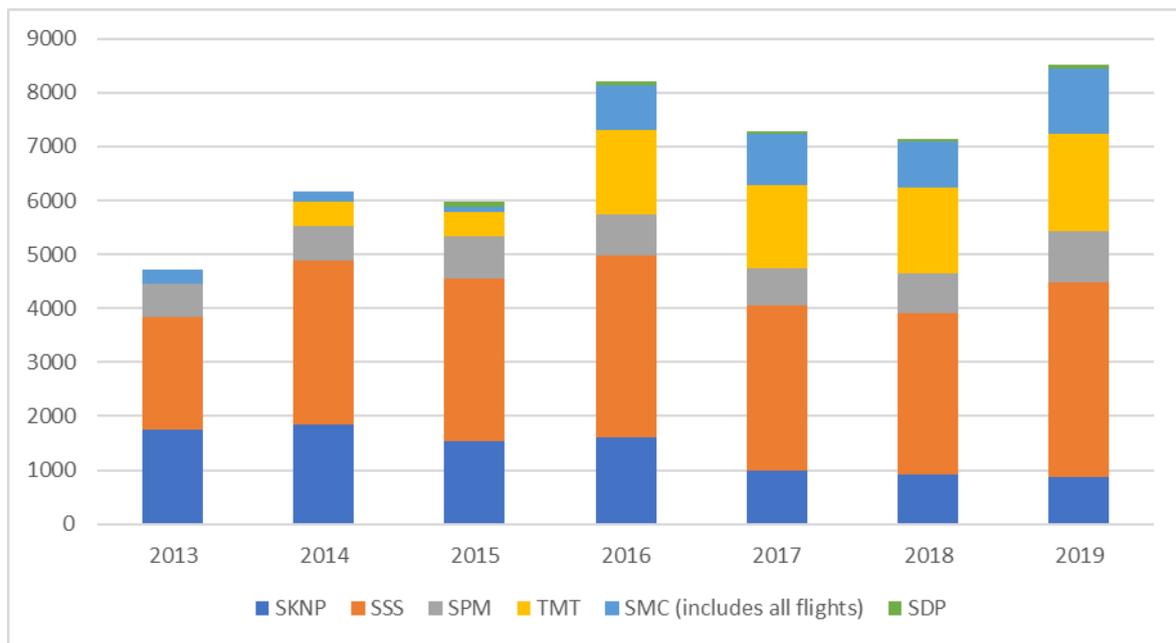


Figure 2. Total carbon footprint (tCO2eq) by location, with all staff flights included in SMC

DEFRA (UK Department for environment) emission factors for the year in question are applied to the relevant resource quantities. For this analysis the conversion factor for fuels includes both the direct emissions of burning the fuel as well as the estimated emissions of extracting the fuel and delivering it to site. Defra has redefined these as the 'Well to Tank' as opposed to Scope 3 emissions. Flight emissions include 'radiative forcing' to account for the greater greenhouse effect impact of gases injected higher into the atmosphere. These factors have been included here to provide as complete a picture as possible of the carbon impact.

7. Review of progress against the One Planet Action Plan

This section reviews the progress against the targets set out in the 2016 One Planet Action Plan using the principles of Bioregional's One Planet Living framework

	Substantially or entirely completed, or a high degree of certainty over deliverability
	On track for a long-term target
	Substantially incomplete, behind schedule or doubt over delivery

Where Bioregional have specific recommendations, these are in the summary at the start of this document.

7.1. Health and happiness

	2020 outcome	Target and Baseline	Progress in 2019
HH1	Improvement in key health statistics of staff, including psychological health	Target: to be determined Benefits significantly exceed legal minimum	All staff have access to medical care with ongoing improvements to facilities
HH2	Maximise staff engagement	15 events in 2017	50 events held in the relevant properties
HH3	Improvement in local education and teaching levels	Target: > 1700 children Baseline: SSS and SKNP 1,720 pre-school children provided with improved education	Year 1 of ECD Support Programme focused on support for teachers of the youngest children

7.1.1. Key achievements and challenges

- 50 staff engagement events relating to One Planet Living were held across the relevant properties. There was some significant variation with 23 events held at SSS, 6 at SPM/TMT and just 1 at SDP.
- The first year of the 4-year Singita Holistic Early Childhood Development (ECD) Support Programme was implemented with a focus on support for the teachers of and resources available to the youngest children, babies to aged 2.
- There were ongoing improvements to staff accommodation and facilities:
 - Singita Sabi Sand: renovation of the staff canteen
 - Singita Kruger: shower blocks replaced with private bathrooms for all at the staff village
 - SPM / TMT: ongoing importing of topsoil, watering and landscaping of junior staff accommodation areas
- Healthcare: Company medical aid claims and hospital admittances, increased by 45% and 3%. However visits to the onsite clinics fell by 13% from 2018.

Auto Mthenjane - Banakeli (butler) at Ebony Lodge

Singita in South Africa has been using One Planet Living since 2016. As part of its staff engagement programme it identifies One Planet Champions – people who embody the framework in their work and personal life to engage other people and create sustainable change.

We caught up with one of Singita's recent champions, Auto Mthenjane who was nominated for his efforts on making change in his local community by engaging young people to reduce waste.



Tell us a bit about yourself

I've been at Singita for almost 10 years as a banakeli (waiter or butler) at our Ebony Lodge at Sabi Sand in South Africa. I learned about environmental issues at school but have really broadened my horizons at Singita with its One Planet Living initiative.

What are the biggest sustainability challenges in your community?

There's a huge amount of pollution and litter. We have a lack of waste infrastructure which means that people burn rubbish - creating toxic fumes.

So, I'm especially passionate about reducing waste and educating the younger generation about what they can do - both my own kids, as well as other local children in the community.

I've started to go into schools to share the importance of recycling and illustrating how they can make a difference by creating their own eco-bricks. These are reusable building blocks created by packing clean and dry plastic into a plastic bottle. Eco-bricks are a great way for us to lessen the amount of rubbish that goes into landfill, as well as making visible just how much plastic we actually use. They're also a lot of fun for kids to make and get them to think about reusing materials.

Have you noticed a change in your community in the years since you've been creating awareness of environmental issues?

I've noticed a huge change in my home. My kids are more passionate and educated about the environment. This is probably helped by the fact that I give my kids R10 for every eco-brick they make!

It's important to spread the word about things like this so I have been teaching my neighbours about the importance of not burying things like tins and rubbish to keep our soil clean. I've also been involving my whole street and community to make sure our road is litter-free.

Since teaching local people, including shop owners, how to make eco-bricks, and the importance of collecting rather than burning waste, the collection of plastic has increased dramatically.

How do you think people can make the most change in their communities?

Leading by example is the most important thing. You must practice what you're telling others to do. Now my kids know about these issues, I've seen them showing their friends what they can do too.

A whole community coming together means you can make a real difference.

7.2. Equity and local economy

	2020 outcome	Target and Baseline	Progress
Eq1	Maximise recruitment from the local community, increasing total black employment	Black employment > 75% 2015 baseline: 314 of 440 staff 2018 local employment 75%	Local employment > 78% on average, increase in diversity employments and promotions
Eq2	Maximise the impact of training programmes	Target: to be determined. Singita Community Culinary School (SCCS) trains 10 students a year	14 students at SCCS, 83 in total have graduated and 95% in employment
Eq3	Entrepreneurship - actively support the development of local businesses	Target: increase purchases by 10% per annum 2017 baseline SSS/SKNP: ZAR 8.8m	ZAR 8.1m combined spend at SSS and SKNP, 7% drop. > ZAR 100,000 local spend on fresh produce.

7.2.1. Key achievements and challenges

It has been assessed that the target for entrepreneurship is not realistic, as the majority of the local sourcing are fixed costs (such as transport services) that are difficult to increase. Therefore there is increased focus on supporting local suppliers – such as food producers, and engaging with key suppliers to encourage them to increase their local procurement.

- The Singita Community Culinary School (SCCS) trained 14 new chefs, up from 10 in prior years thanks to our donor funded Expansion Fund, bringing the total trained to 83.
- Singita supported local vegetable grower David Shilabi to set up Xikupe Farm to supply a larger range of vegetables to SSS and SKNP. David is being mentored by a local farming expert, and the project is moving towards financial stability. Buying from the farm has helped increase local expenditure, though it is challenging for the produce to meet the same standard as larger suppliers.
- Employment figures – at SSS and SKNP there has been an increase in the percentage of local employees, to close to 80%, and proportion of salary going to the local economy (55% and 60% respectively). At SPM local employment and salary remains 100%.
- In 2019 74% of staff appointments qualify as diversity appointments, per the South African government definition, and 49% of promotions were of those considered as diversity employees. This is an improvement on the 2018 figures of 61% and 41% respectively.
- Singita has an Employment Equity committee made up of employees from SMC, SSS and SKNP who meet quarterly. A comprehensive Employment Equity plan is in place, and this will be renewed in 2020 where all aspects will be debated and considered for a new 5-year plan. The plan aims to make Singita an attractive employer to diverse candidates and enable them to use preferential employment to ensure a diverse workforce.
- Male to female ratios are relatively unchanged, close to 50% at SKNP and SSS. There has been a reduction in female employment at SPM where it has fallen to 30%.

Equity & Local Economy: on sourcing more supplies locally

“We’re passionate about supporting local economies in Africa by buying locally. Not only does this support local people, but it also reduces carbon emissions because we’re not importing stock.. Developing Africa’s economies into stronger economies is in the best interest of all of us.

Our purchases are small in the bigger picture of the world economies, but our little contribution helps real families. There are so many people with incredible talent and skills to share so it’s important we make space for them to have this opportunity to shine and prosper”.

Marthinus Pelzer – Financial Controller, Singita Style, Design & Procurement.
(Photo Credit: Singita)

7.3. Culture and community

	2020 outcome	Target and Baseline	Progress
CC1	Guests to experience the local community	Target 25% guest exposure to the Community Partnership Programme	Negotiations are ongoing with the local service provider on appropriate tour. 360 performances by local musicians
CC2	One Planet Centre for guests and staff to promote a culture of sustainability	Target: 100% of staff trained in One Planet Living	All staff receive a basic induction. Junior staff training strengthened with monthly information provided on the One Planet Living principles.
CC3	Maximise contribution to Singita Lowveld Trust from Singita and Guests	Target: Equivalent to 14 bed nights a month total donated 2017: Lodge donation ZAR 1m	Lodge donation increased 20% to over ZAR 6m

Creating Singita's Staff Volunteer Programme – Shelly Alkema

Singita's values are identifiable among its staff and there has been a long-expressed desire to "Put Care into Action" in our neighbouring communities.

My dual role as a Project Leader for Community Partnership Programme (CPP) and the One Planet Champion at SSS helped me see how an organised Staff Volunteer Programme would benefit our official CPP project partners and our staff who embrace the Shangaan culture - as well as align with Singita's approach of being equitable, sustainable and impactful.

Throughout 2019, lodge staff at SSS and SKNP were able to get involved with an exciting range of volunteering opportunities, including: two Early Childhood Development (ECD) Resource Drives, six School Safaris, Good Work Foundation's Bridging Academy Graduation and four Early Childhood Development Centre Graduation Ceremonies.

A total of 120 staff from both SSS and SKNP properties volunteered or participated in these events and feedback from the staff was extremely positive and encouraging. Likewise, CPP were most grateful for the staff's assistance with Singita's ambitious Conservation goals, and for the opportunity to showcase the community work Singita is committed to.



These engagements will continue to be offered and in 2020 we will expand to include GWF's Open Learning Academy Awards of Excellence. We are also launching an ongoing reusable materials collection for ECDs that supplements the resource requirements of the 17 Pre-schools while contributing towards zero waste. The Singita Staff Volunteer Programme not only inspires uptake? Of many of the One Planet Living principles among our staff but also in local communities and demonstrates the significant impact we can all achieve when #livingourpurpose.



(Photo Credits: Singita)

7.3.1. Key achievements and challenges

In 2018 there was a significant change made to the approach to funding the SLT, with the lodges committing to fund the core costs of running SLT's operations. Thus the programmes are guaranteed and guest donations are 100% additional. On top of 2018's five-fold increase in donations from SSS and SKNP there has been a further 20% increase in 2019.

Additional achievements include:

- There has been a significant increase in guest donations, significantly influenced by increasing the visibility of the SCCS and providing a visitor opportunity. By the end of the year nearly 5% of SKNP guests were making a donation.
- Community tours at SSS and SKNP continue to be on hold as Singita works with the local community to identify the best delivery partner. Over 360 performances by local dance groups and choirs were given at the South African Lodges
- SPM community tours to Kambako Living Museum continue to be a success though there was a fall in the number of visitors in 2019.
- Staff engagement is ongoing and a standardised approach developed to raise awareness about specific issues at each location which are aligned with the One Planet Living principles. An emailer/poster template was created with three parts discussing; the issue, what Singita is doing about it, and then a “call to action” with a suggestion on what the staff can do to help.
- The Industry Sustainability Indicators Benchmarking initiative, whereby Singita is collaborating with other conservation-orientated tourism companies to compare data on performance and best practice, is ongoing with information sharing and a report to be published in 2020.

The SLT delivered a range of community activities in the local communities, including:

- Ongoing support to the 17 Early Childhood Development centres
- 440 learners participated in the Open Learning Academy at Justicia Digital Learning Campus every week, receiving supplementary maths and English literacy training on digital devices.
- The Sabi Sand School Safaris were piloted successfully this year with six safaris being hosted by Singita for all Grade 6 learners (see below).
- 53 students graduated from the ‘Bridging Year Academy’ having developed their skills in key areas to prepare them for employment, including: English, computer skills and Media Studies

7.4. Land and nature

	2020 outcome	Target and Baseline	Progress
LN1	Land area under conservation management	increase by 20% (by 85,000 Ha) 425,000 Ha in 2016 (increased from 287,000 Ha in 2015)	Range of new opportunities being assessed
LN2	Maximise Singita’s anti-poaching and conservation efforts	Zero incidents of poaching of key species (rhino, lion, elephant)	Zero incidents of key species
		Conservation spend >20% of total	No longer measured
LN3	Encouraging a commitment to environmental care within local communities	Reach >1,000 children per year 2016: SKNP: 3 schools,	SKNP: Local Children’s Home visit to the Park; School visit on OPL.
LW4	Progress in conservation goals at each site	Specific indicator per site	Zero poaching lion, elephant, rhino

7.4.1. Key achievements and challenges

- Singita continues to identify and develop openings for new conservation projects.
- The Lionscape Coalition, of which Singita is a founding member, launched in 2019. Supported by four commercial competitors, the Coalition aspires to double the number of lions in Africa by 2050 by expanding the area available to lions and building public and political will.
- Singita continues to support Panthera’s ‘faux-fur’ programme for leopard conservation.

School Safaris

Although the local children live next to one of the world’s iconic ecosystems, most of them will have had little opportunity to see the animals or the National Park. The Community Partnership Programme (CPP) launched the School Safaris programme in 2019, giving all Grade 5 learners from Babati and Mketse Primary Schools the opportunity to be exposed to the natural wonders of the Sabi Sand Reserve.

This was made possible through the support of the SSS guiding department sharing their expertise and passion for conservation, and through our partnership with Good Work Foundations Justicia Digital Learning Campus in conjunction with the Pfunanani Trust of the Sabi Sand Wildtuin.



(Photo Credits: Singita)

- The K9 dog unit situated at SSS continues to provide 24/7 anti-poaching coverage.
- During the refurbishment of the Castleton spa at SSS, trees were protected during construction. Some non-indigenous plants were planted during the refurbishment, but these were quickly replaced.
- Ongoing and expanding engagement with local schoolchildren on conservation and sustainability, though it was hampered by some challenges at the schools:

- SKNP: Engagement with local primary school on OPL Principles, and ‘Zero Carbon’ homes. Schools also received lodge-derived recyclable materials and training on how to take incorporate them into lessons and education.
- SSS: Coaching for Conservation(C4C) was conducted with Grade 5s (75 learners at Mketse Primary and 54 learners at Babati Primary)
- SPM’s Environmental Education Programme continues to look in local schools.

7.5. Sustainable water

	2020 outcome	Target and Baseline	Progress
SW1	Reduce losses through leakage	5% Baseline – not known	Average unaccounted for water at SSS – 10%
SW2	Reduce extraction of water from boreholes	30% reduction or 350 litres /person/day (l/p/d) 2015 baseline: SSS and SKNP: 93,000 m ³ /year	SSS 460 litres/person/day SKNP: 500 l/p/d (+20%), Treated water: 149,000 m ³ Untreated: 475,000m ³ (+50%)
2025 Sustainability Target		Reduce water/bednight by 30% from property-specific baseline year	

7.5.1. Key achievements and challenges

In the initial phases of water conservation, it is common for water use to apparently increase as organisations begin to meter water use more effectively and comprehensively. This is usually then followed by a steady reduction in water use. So while Singita is relatively early in their water conservation journey it would be expected to see a downward trend in some areas – yet this does not seem to be the case.

Total treated water (for human consumption) increased by over 15%, with an increase in water consumption **at all key locations**. It is likely that in the case of SSS this comparison with 2018 is not accurate due to improved monitoring, and at SKNP there has been an expansion with a new villa and additional public pool, nonetheless the increases range 4% to 19%. (**Figure 3**).

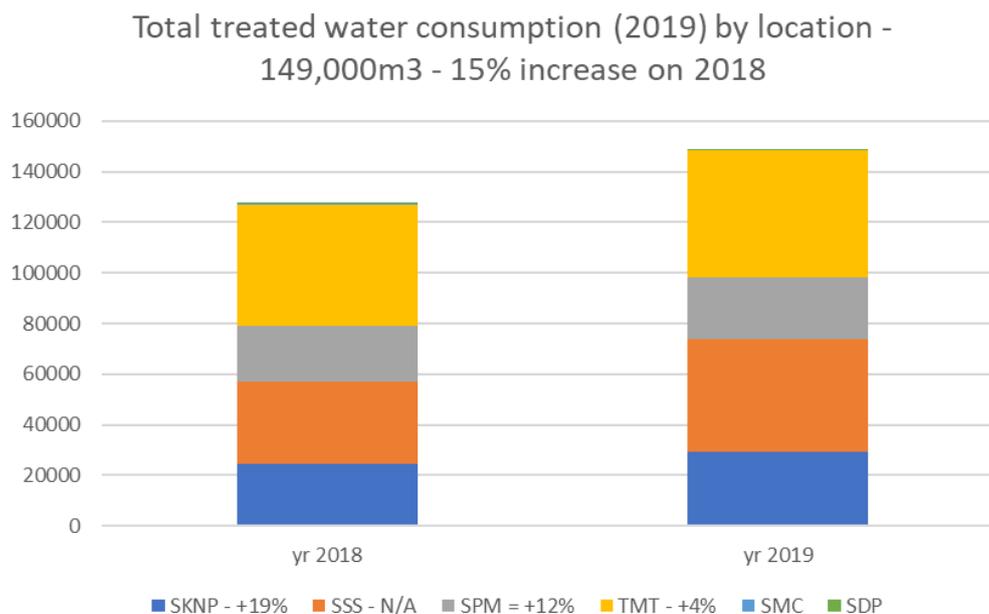


Figure 3. Total treated water consumption by location

Comparing annual treated water use by bednight shows that in the case of SPM and TMT there has been a fall, and the increase has been driven by an increase in staff. Nonetheless the water use per person in both locations, particularly in the case of SPM, are still high - considerably above the 350l/p/d target. In the case of SKNP the increase per person is the same as the total increase. (**Figure 4**).

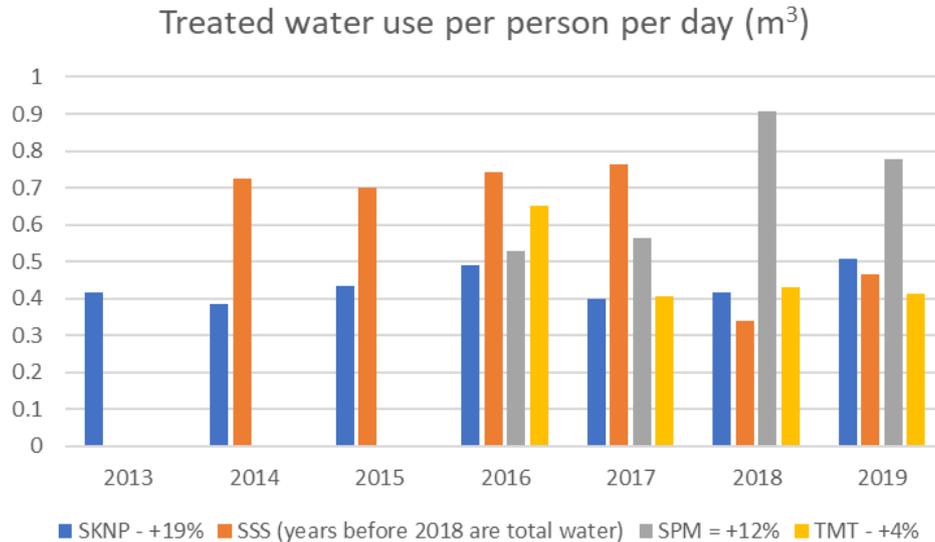


Figure 4. Water use per person per day (m³) at three key locations

When comparing the water used for conservation, primarily for guaranteeing water availability for animals, there has also been an increase at all locations. In the case of TMT, this is an increase of over 80%. While there may be clear conservation reasons for the water use, such an increase raises questions about the long-term viability of such conservation measures and whether alternative approaches can be developed.

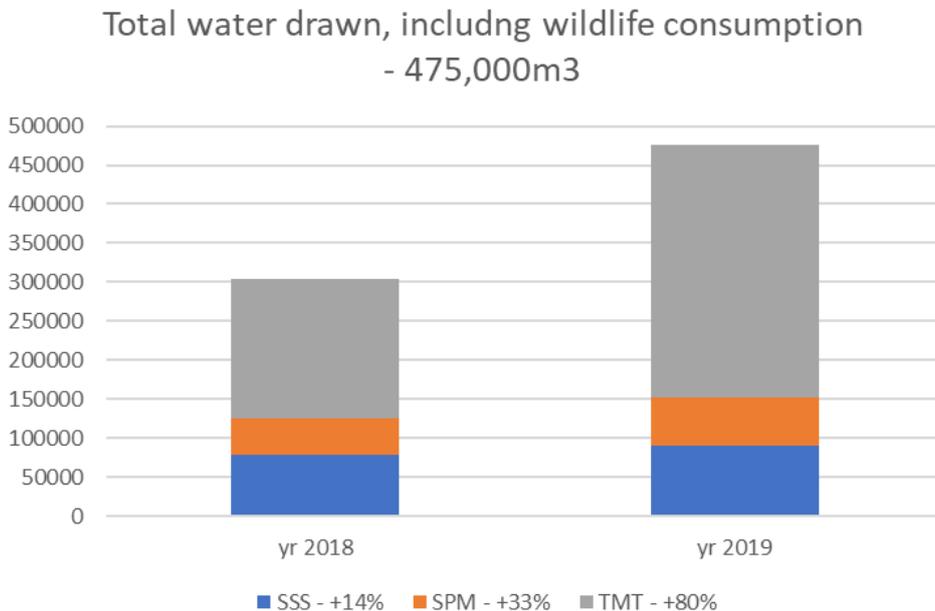


Figure 5. Total untreated water consumption by location

Across the properties a range of water-saving initiatives were undertaken:

- At SPM raw water is being used for greening; plants being irrigated prevent soil erosion, especially in areas of high human traffic and where buildings concentrate and accelerate rainfall runoff.

- At SKNP the water consumption was mapped, meters installed, and initiatives undertaken; laundry water is used to irrigate the sports field in the staff villages and guttering installed to increase rainwater collection. The reedbed water treatment system has been operating well, within Park limits.
- At SSS more water meters have been installed and automatic ball valves replaced in pools to stop overflows.
- SSS also held a water-saving week in August. Average water use in the first 3 weeks of August was measured, and the staff challenged to reduce in the final week. Significant water savings were made in the car washbays and kitchens, showing what can be achieved when staff focus on a single issue.

7.6. Local and sustainable food

	2020 outcome	Target and Baseline	Progress
LSF1	Increase expenditure on 'local' suppliers	50% of fresh produce to be sourced from within 100km	Chefs' estimate: 15% guest food from within 100 km at SSS and SKNP. For SPM the target is very challenging.
LSF2	All fish to be sustainably farmed or harvested	% certified, green list All green/orange	90% farmed, SPM – bream caught from the onsite lake
LSF3	Progressive improvement in the balance of the staff diet		Salad bars successfully trialled Meat Free Mondays in place
LSF4	Maximise procurement that is environmentally friendly - e.g. certified, low-impact products	Eliminate specific foodstuffs (e.g. palm oil)	Palm oil all but eliminated
2025 Sustainability Target		50% of Singita's fresh produce to be purchased from within a 100km radius	

7.6.1. Key achievements and challenges

The health and environmental benefits of a low-meat diets has been driving an increase in the popularity of vegetarian and vegan diets in many parts of the world, and this is clearly reflected in the guest offer at Singita. But this has not really reached the Singita staff where the vegetarian offer is not on a par with a non-vegetarian offer. Steps have been taken to change this, but more concrete measures are required.

- Salad bars have been introduced into the staff kitchens
- Meat-free Monday or 'Wellness Wednesday' continue to be championed across the properties, though the degree of participation varies across the properties.
- Currently the SA lodge kitchens are receiving approximately 15% of fresh produce from Xicupe Farm, and staff kitchens around 25%.
- *Singita: Our Food Journey* a specialist safari cookbook was published in 2019. The cookbook pays tribute to the world-class guests enjoy, while supporting the two cooking schools that form part of Singita's community partnership programme. The cookbook brings together the themes of guest experience, community partnership and sustainability.

7.7. Travel and transport

	2020 outcome	Target and Baseline	Progress
ST1	Reduction in onsite vehicle fuel use	Reduce fuel litres 20% 2014 and 2015 approx. 290.000 l	397,000 l (~ unchanged from 2017 and 2018)
ST2	Reduction in business flight emissions	20% reduction in emissions. 2017: Approx. 760t CO ₂ eq	Approx. 1270 t CO ₂ eq – 55% increase.
ST3	Compensate direct transport emissions (vehicles flights)	2014: approx. 2,000 t of CO ₂ eq to offset	Offset strategy developed but put on hold
ST4	50% of guests offsetting or using a low-carbon air carrier	50% involved	No progress
2025 Sustainability Target		100% electric game viewing vehicles within three years of commercial availability; 80% of other vehicles electric within four years	

7.7.1. Key achievements and challenges

Vehicle fuel and business flights by staff both account for just under 15% of Singita’s total carbon footprint. Vehicle fuel use has been approximately stable, though emissions per bednight are increasing, and increased 10% from 2018. Vehicle use at each location has remained remarkably constant, with SKNP increasing 3%, SSS falling 7% and TMT and SPM virtually unchanged.

Conversely there has been a significant increase, around 75%, in emissions due to flights, this is in spite of installing conference call facilities to reduce the need to travel. Other transport-related emissions – commuting and land business travel are minor, no more than 1%.

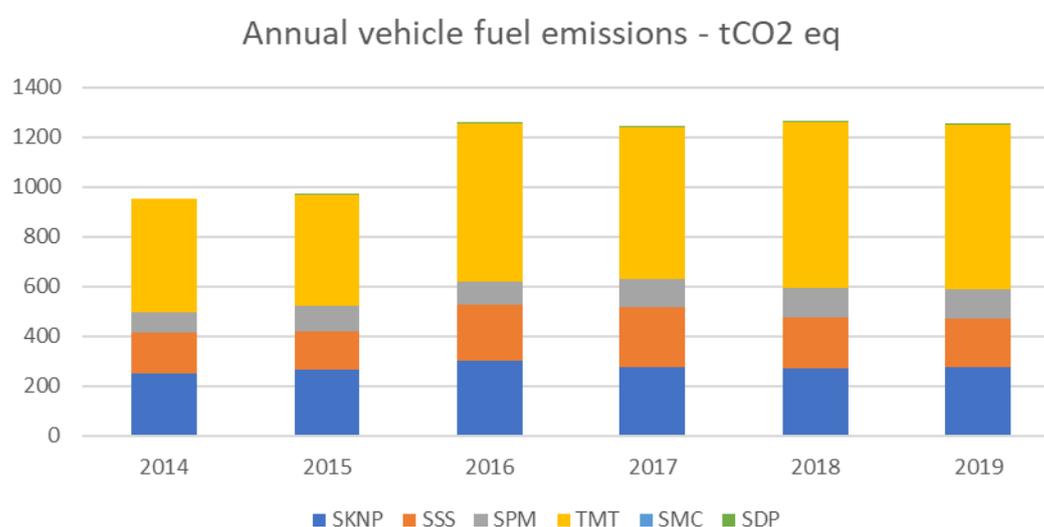


Figure 6. Annual carbon emissions from transport fuel by location

There has been an 10% increase in the number of guests paying for a private Land Rovers (PLDs), as opposed to sharing with other guests. This represents about 10% of guest, and while there is no clear trend between PLDs and fuel use, lower vehicle occupancy does increase fuel use per guest and some of the revenue could be set aside to fund initiatives to mitigate vehicle carbon emissions.

The possibility of setting up a carbon offset fund has been examined a number of times. As Singita is already generating significant revenue for conservation and community development and would only invest in offset funds that also delivered these benefits. But given the investment Singita is already making there is little appetite to pay a third party to do similar conservation in a different location. The potential for inhouse ringfencing of funds for self-offset through carbon reducing programmes, such as reforestation, is being reviewed.

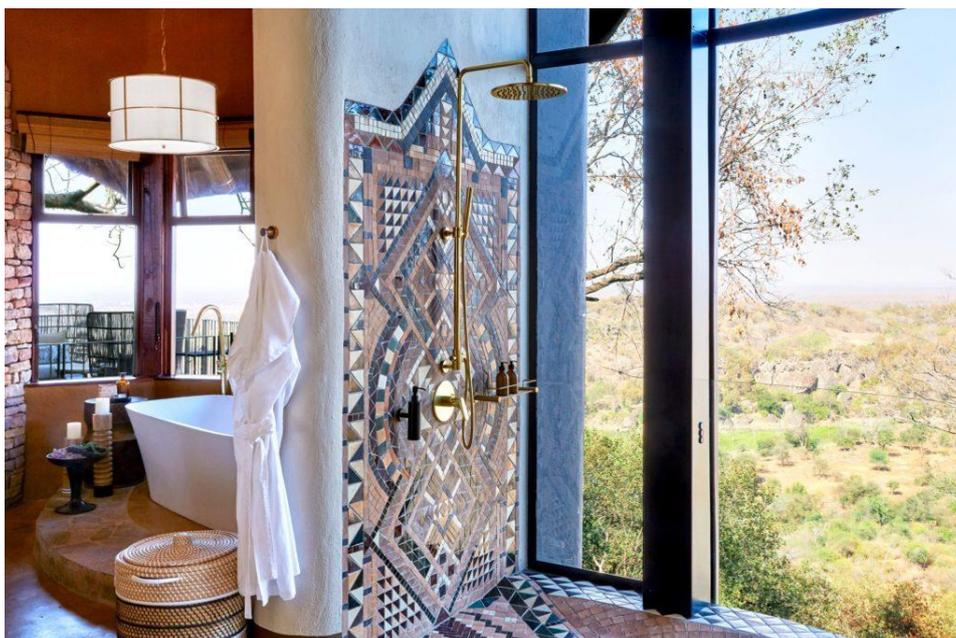
7.8. Materials and products

	2020 outcome	Target and Baseline	Progress
SM1	All cleaning products to be sustainable	100%	All lodges use environmentally friendly ranges
SM2	Maximise local and environmentally friendly procurement	Increase by 5%	SSS: Earthkind products for staff
SM3	Prioritising sustainable construction and fit-out materials	Project by project basis	One Planet Living integrated into process for Castleton refurbishment
2025 Sustainability Targets		Elimination of single-use plastics by 2020	

Pamushana fit-out survey

Singita supported its interior designers, Cecile and Boyd, to undertake a detailed survey of its furnishing, fittings and equipment suppliers for the 2018 Singita Pamushana refurbishment. The questionnaire covered a range of sustainability issues from country of origin, environmental certification to lifespan and repairability of the product. 75% of the 63 suppliers responded covering more than 90% of the products. The survey found that:

- 50% of products were produced by an artisan or small business
- 11% of products have some environmental certification
- 60% of products have been designed to last for more than 10 years and 60% of products can also be easily repaired on the property.



(Photo Credits: Singita)

7.8.1. Key achievements and challenges

- Earthkind sustainable cleaning products were trialled but were not found to be sufficiently effective.
- Trials were undertaken to replace the cling wrap used on pallets. A biodegradable film was trialled but unfortunately was not strong enough. Alternatives such as Cargo netting or tie down straps, are being looked at.
- A move has been made to paper packaging tape
- Items from existing Lodge undergoing refurbis reused for staff housing at SVNP.
- Cecile and Boyd, interior designers for the many Singita projects, developed a detailed supplier survey which was piloted during the SPM refurbishment that took place in 2018. This has been rolled out on all new major refurbishments, to help understand the supply chain in more detail, and encourage the suppliers to be thinking about sustainability in more detail.

Additional location specific initiatives include

- At SSS, Earthkind body products are available to staff from the staff shop
- SDP repurposed floorboards from a previous office refurbishment to make desks, meeting room tables and shelving for Castleton lodge back offices.

7.9. Zero waste

	2020 outcome	Target and Baseline	Progress
ZW1	Reduction in plastic waste	Reduce plastic bottles 90% Baseline - 70,000 litres/year (2014)	2,150 litres – 50% reduction on 2017 and > 97% reduction on 2014
ZW2	Reduction in other waste	Tonne year – 10% reduction	25% fall in material sent to recycling at SSS and SKNP, SPM – 10% increase
ZW3	Recycling rate of non-food waste	90% 136 tonnes recycled at SSS and SKNP in 2017	100 tonnes of waste from SSS and SKNP sent for recycling
ZW4	Responsible disposal of food waste - 100%	100%	SPM: compost pit, worm farm SSS & SKNP: pig farmer receives a proportion, the balance to landfill. 0.6 tonnes composted at SMC
2025 Sustainability Target		Only 10% waste to landfill by 2023	

SKNP and SSS waste sent for recycling - KGs

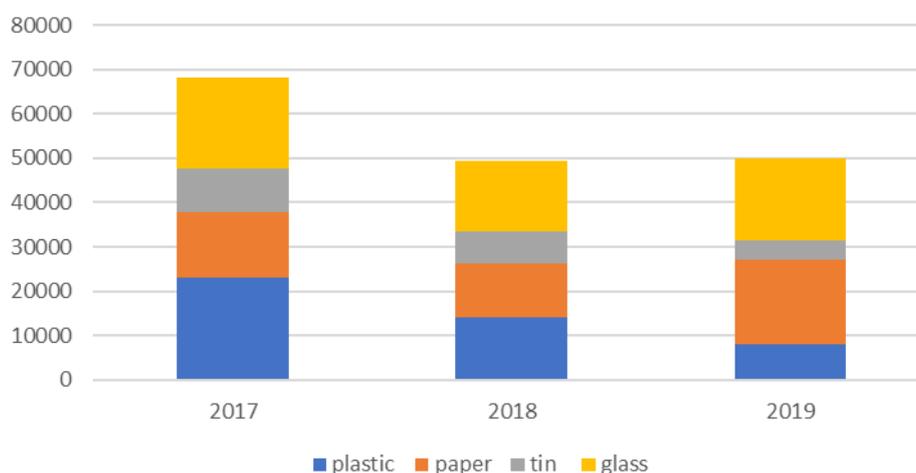


Figure 7. Total quantities of key materials recycled by year at SKNP and SSS

7.9.1. Key achievements and challenges

- Use of plastic bottled water increased 30%, mainly due to increases at SPM /TMT. Nonetheless overall use is still 95% below the 2014 use, and infrastructure is planned for installation in 2020 to reduce bottled water consumption at SPM/TMT.
- TMT is the main bottled water user, accounting for nearly 30% in 2019. Water filter systems at four different locations at TMT will be installed in early 2020.
- TMT/SPM ran a programme to reduce the use of disposable nappies – see box
- The majority of coffee machines moved to bean to cup, removing coffee pods
- A bio-clingfilm trial was run at SKNP but unfortunately it was found to be inadequate. Alternatives continue to be sought.
- SSS rolled out upgraded waste and recycling infrastructure and engagement programmes
- At SKNP and SSS plastic waste use fell by 40% and is about 2/3rds lower than 2017 consumption
- Printed paper use also fell by 10%
- SMC and SSS continue to collect plastic waste and compress them into 'ecobricks' that can then be used in construction of community projects.

Nappy project at The Malilangwe Trust/Singita Pamushana

Analysis showed that Malilangwe used around 600 kg of wood per month to incinerate non-recyclable waste. Further analysis showed that disposable nappies were by far the biggest consumer of firewood with a single disposable nappy, on average, requiring 1.15 kg of wood to incinerate! Although a large proportion of this fuel wood is composed of construction waste, this amount is still excessive and unsustainable.

As a solution the Malilangwe Trust launched an awareness campaign in October and November to teach staff about the environmental impact and personal economic cost of disposable nappies. Posters were produced in English and Shona, and evening discussions held at the various staff villages. As an alternative to disposable nappies staff were offered modern washable nappies for purchase through the Trust on a monthly loan repayment scheme. Nappy orders flooded in and by the end of December more than 900 pairs of fitted nappies had been sold to staff at a reduced, bulk-cost price. Since the project's initiation in October, the mass of disposable nappies and firewood incinerated has fallen by about 50%!



Figure 8. Washable nappy project (Photo Credits: Singita)

7.10. Zero carbon energy

	2020 outcome	Target and Baseline	Progress
ZC1	Reduce total building energy use	30% reduction in MWh/year 9,250 MWh/y (2014)	Approximately 10,500 MWh (primary), 7330 MWh (end-use). 15% and 2% increase on 2018
ZC2	Reduce non-building energy GHG emissions (e.g. refrigerant gas emissions)	30% reduction in CO ₂ eq/year 115 t CO ₂ eq (2012) 112 t CO ₂ eq (2017)	920t CO ₂ eq – 9 fold increase
ZC3	Near zero building energy emissions	Near zero 5,200 t CO ₂ eq (2014) and 6,000 (2016)	6,250 t CO ₂ eq, 20% increase on 2018
ZC4	100% renewable energy	% renewable energy Zero (2012)	PV contributes 25% of electricity, (equivalent to 15% of building energy – electricity and generators)
2025 Sustainability Target		Off-grid lodges 80% powered by renewable energy and on-grid 30% powered by renewable energy.	

7.10.1. Key achievements and challenges

While energy demand in buildings has increased slightly, less than 2%, emissions from buildings have increased by nearly 20% over 2018, but this is driven by two factors:

1. A 9-fold increase in reported refrigerant gas emissions, which is due to data omissions in previous years
2. A significant increase in the use of generators due to the unreliability of the grid, particularly in Zimbabwe. Electricity from generators has a higher carbon intensity than grid electricity.

This highlights the importance of both designing to avoid the need for air conditioning, and refrigerant gases, wherever possible, and of renewable energy to minimise the need for generators.

Singita has made significant investment in renewable energy and the SKNP solar power plant has contributed to a more than 60% reduction in building emissions from the 2014 peak (**Figure 9**), with continuing annual reduction in emissions as the system learns.

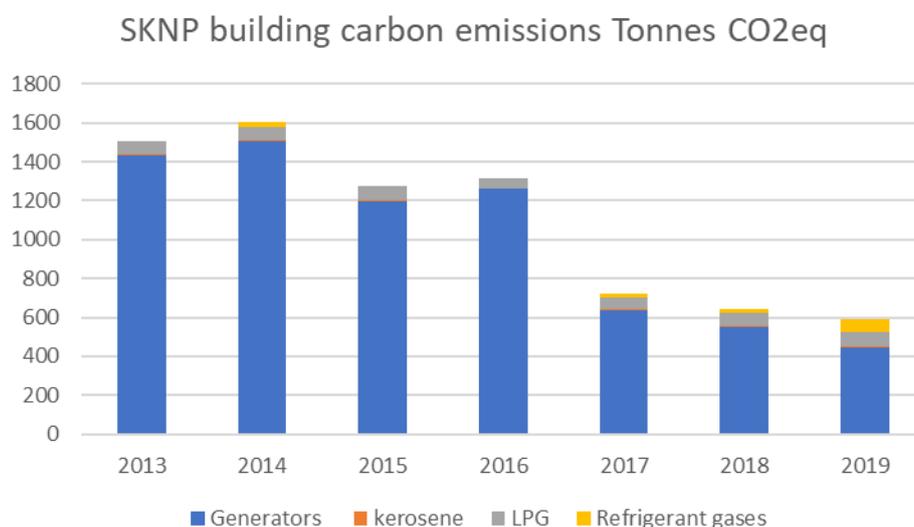


Figure 9. SKNP building carbon emissions (tCO₂eq) by emission source

All buildings are being upgraded to ensure that they have best practice in energy efficiency including: LED lighting, efficient inverter air conditioning units and efficient appliances. The gains here though are being offset by increased demand from installing new appliances, often air conditioning units to increase staff comfort. While staff wellbeing is of primary importance increased energy demand should be matched by increased solar generation, and where possible air conditioning units should be avoided as they do also increase refrigerant gas emissions.

The locations with the largest building carbon footprint are SSS and SPM/TMT which account for 55% and 30% of the emissions. At SPM/TMT grid unreliability has led to an increase in generator use and therefore an increase in CO₂eq emissions. Nonetheless estimating the electricity consumed from the generators suggests that there has also been an increase in energy used at SPM of over 10%.

There were plans for significant renewable energy investment at SPM and SSS in 2021. However acknowledging the impact of COVID-19 these will likely be pushed out to 2022 or beyond. Nonetheless ensuring that these are delivered will be imperative to bring about a reduction in building-related carbon emissions.



Photo: Children visiting Malilangwe Trust Environmental Education Centre. (Credit: Singita)

8. Message from Andrea Ferry – Singita Sustainability Coordinator

I first started working on Singita's sustainability programme in 2010. Ten years on it's amazing to look back at the changes made – both infrastructurally and culturally - to how we build and create a sustainable Singita. Although sustainability has always been part of Singita's DNA and our strong Vision inspires our daily operations, having a practical and clear guideline like the One Planet Living programme has helped immeasurably in actualising the vision.

Singita's driving imperatives is to conserve vulnerable wildlife and wilderness on the African continent. Our big achievement this year was opening Singita Kwitonda and Kataza House on the edge of the Virunga forest, Rwanda – home to the endangered mountain gorilla. It has been so exciting to see sustainability integrated into the design and construction phase, but also to see the spirit of that work continued into operations. With a committed management team on the ground, One Planet Living has been integrated from day one through staff training, engagement and maximising the resource-saving infrastructure built into the lodge itself. We have also learnt valuable lessons from this process which we take on to other lodge builds.

Our 2025 targets remain a strong focus, and we've seen good progress, especially on reducing single-use plastics. Carbon emissions are a significant challenge, however our solar energy production is growing. We have made some progress with more rainwater harvesting capacity and improved recycling infrastructure. Water use remains a challenge and even with improved metering, we still need to make significant reductions if we are to thrive in a water-stressed future. Our work in supply chains continues with excellent efforts from our interiors suppliers with increased local content as the key focus.

A One Planet Living culture lives at our lodges through our One Planet champions, the One Planet committees, internal communications and staff engagement activities. In 2019, Pamushana Lodge employed a One Planet champion and their One Planet Committee is now active and engaging with staff. This year we also created a Staff Volunteer Programme at our South African lodges where hospitality staff can volunteer time and resources to assist with our Community Partnership programmes. We are planning to extend this programme to our other lodges. We are planning more expansive and intensive One Planet Training for staff in the year ahead, integrating One Planet content into our online training platform and Management Leadership course.

Although it's great, and entirely necessary, to take big strides in improving sustainability at Singita it is also the smaller things that cross my desk that bring me much joy; from a colleague expressing their sustainability purpose so elegantly, to the brightly coloured One Planet Living murals painted, to colleague Auto Mthenjane working to reduce waste in his own community, to guests leaving positive comments about our sustainability efforts. These show a sustainability culture that is alive! It makes me realise we are making a difference.

Our post Covid-19 future will require us to focus even more strongly on ways to heal the planet and communities. With many years of One Planet Living experience under our belts, we are ready to do more ourselves, to show and encourage guests and staff to live sustainably, and to hold strong to our ideals and values, despite the current significant economic stressors in our industry. I cannot wait to be part of this future; the one where the right things are valued and we see even more clearly that sustainable living is the only way to be safe and thrive – for ourselves, our families, communities and the planet.

9. Plans for the year ahead

The table below shows the plans for 2020, though given the COVID-19 crisis these are liable to change.

One Planet Principle	2020 Goal	Key strategies
Health and happiness	Improvement in staff health and engagement	Continuing refurbishments of key staff accommodation – A/C units in staff accommodation at SSS; At least one OPL event per month at each location Staff Food Health Initiative
	Improve local education and teaching levels	Ongoing implementation of existing programmes SVNP: partnership with local Culinary School
Equity and local economy	Maximise local recruitment	Continue to use local referrals in recruitment
	Support development of local businesses	14 students to be trained at the Singita Community Culinary School (up from 10) Mentoring at Xikupe Farm continues
Culture and community	25% of guests to participate in a community activity	A CPP Projects visit itinerary has been designed for SSS. Guests are invited to Singita Community Culinary School at SKNP. Kambako Living Museum and educational projects for SPM guests.
	Promote a culture of sustainability	Online OPL training for junior staff to be developed
	Maximise contribution to Singita Lowveld Trust and The Malilangwe Trust	Agreed funding of the Project costs of 4,77m – exceeding the 14 bednight per month target without counting any guest donations.
Land and nature	Maximise area under management	Vision 2025 expansion plans
	Maximise anti-poaching and conservation efforts	Continue to source partners and donor funds to support efforts
	Encourage environmental care in local communities	CPP engagement with communities via the schools supported.
Sustainable water	Reduce losses through leaks to 5%	At SSS: install 8 further water meters, rainwater tanks at Castleton, plus 50kl capacity elsewhere
	Reduce extraction of water from boreholes	Act on information gathered from meters
Local and sustainable food	Increase local expenditure	Engage with major food suppliers to earmark local produce they can source specifically for Singita.
	All fish to be sustainably harvested	Chefs continue to source land farmed MSC/ SASSI green list fish
	Improvement in staff diet	Building on the installation of salad bars a food survey will be undertaken and will be supported by chef training, a new menu and greater educational information for staff
Travel and transport	20% reduction in fuel	Private Land Rover offset plan to be developed
	Business flight reduction	Virtual meeting systems are in place SOP on staff air travel to be devised
Materials and products	Only sustainable cleaning products	Continue to trial new products. New Standard Operating Procedure to ensure trial is adequate.
	Prioritising sustainable construction and fit-out	Ongoing roll out of fit out questionnaire. Develop internal Sustainable Construction guideline
Zero waste	10% reduction in waste	Staff training; supplier engagement on packaging. TMT to install drinking water points
	> 90% recycling rate	Make the recycling areas into areas that can be shown with pride! Ebony waste room makeover.
Zero carbon energy	Reduce energy use 30%	Castleton all electric geysers converted to solar
	100% renewable energy	Move forward solar proposal for TMT/SPM of a 1MWp solar with 3MW of battery storage Development of solar PV system at Castleton, SSS