



*sonera sustainability  
report 2014-15*



Our vision is inspired by nature's magnitude, mystery and enchanting beauty. We work hand in hand with the environment to craft beautiful, beyond bespoke experiences where discovery is a way of life.

Soneva is built on the foundation that a business must exist for a greater purpose than shareholder returns. We believe in a natural excellence in everything we do, whether it is delivering the ultimate in guest experience or providing energy to the rural poor in Myanmar via the Soneva Foundation.

That our efforts have been recognised with the 2015 WTTC Tourism for Tomorrow Award is extremely rewarding. These annual awards are among the highest accolades in the industry and the judging process is the most rigorous of any awards process in the travel and tourism industry. This recognition means that we are setting the benchmark for responsible tourism.

This report highlights just some of the efforts we are making across the group, and we are delighted that we are able to share this with you and, in the process, we hope to inspire others towards this purpose.

[www.soneva.com](http://www.soneva.com)  
[www.sonevafoundation.org](http://www.sonevafoundation.org)  
[www.slowlifesymposium.com](http://www.slowlifesymposium.com)



## *table of contents*

---

	Page
Profile	3
Founders' Statement	6
CFO's Statement	8
Soneva Total Impact Assessment 2014-15	10
Carbon Footprint and Mitigation	11
Social and Environmental Conscience Statement	12
Natural Capital	14
Human Capital	48
Social Capital	58
Soneva Foundation	67
SLOW LIFE Symposium	75
Partnerships	82
Organisations We Support	83
Awards	87
Soneva Total Impact Assessment Methodology	88
Carbon Footprint	98

---

## *founders' statement*



As the custodians of pristine locations, we constantly ask ourselves what we can do to preserve this environment for future generations. What is the best way for us to share these rich resources with our local communities for mutual prosperity? What kind of journey do we want to embark on with our hosts who contribute so much to our business? How can we inspire our industry to collectively take responsibility for our impact on the global environment?

2015 marks the 20<sup>th</sup> anniversary of Soneva. We have so much to celebrate and while we will certainly take the time to do so, we will also be asking ourselves these questions. How can we ensure that over the next 20 years every opportunity for positive impact is embraced enthusiastically?

Of all the lessons we have learnt in the past 20 years, perhaps the most significant is the power of positive experiences to inspire the best in people. We see it time and time again. Experiences create light bulb moments. Experiences change lives.

For our guests, their experience begins the minute they arrive. We take away their shoes and they feel the sand between their toes - no news no shoes. It is so simple and so effective at helping them feel immersed in the pristine beauty around them. We hope their sense of wonder remains long after they return home.

For our hosts, we know that the respect, the training and the care that we give them inspires a loyalty that is unusual within our industry. We hear our hosts using the same language with their children to talk about sustainability issues as we might use in our training sessions. They take our vision to their hearts and make it their own.

For our local communities, our shared experiences inform us both and we learn so much from each other. Our Learn To Swim programme is developed with our local community and delivered alongside the teachers, the police officers and the parents who make it possible for our young neighbours to safely experience the wonder of the ocean. It is through such experiences that we nurture the next generation of ocean stewards.

For our global communities, the experience of a fuel-efficient stove provided by the Soneva Foundation can mean more hours in the day for more productive and paid tasks than collecting firewood. But the ripple effect extends further. They can also expect their health to improve as they are no longer inhaling noxious fumes from open fires, and as the forest starts to regenerate the damaging effects of deforestation on the micro-climate will abate.

For our global community of environmentalists, their immediate experience of communing for three days and three nights for our annual SLOW LIFE Symposium is one of inspiration, stimulation and camaraderie. Yet the experience resonates long after they leave, and it is here when the real work begins. Project leads from previous Symposiums now coordinate teams of participants who have stepped outside their usual organisational or thematic boundaries to collaborate on new solutions to environmental problems.

For our industry partners, we know that they will be motivated by our experience of guest loyalty. Our repeat business far surpasses industry norms and this tells us unequivocally that the values of a company matter to those who consume its products.

For our investors, we help them to experience our impacts in a language they understand. For this purpose, we have developed the Soneva Total Impact Assessment which translates our sustainability impacts to a business measure. We are stating very clearly that we measure our sustainability returns as highly as our financial returns. We are confident investors will be inspired by this and come to expect the same returns – both financial and other – from all their investments.

Perhaps the best acknowledgement of what we hope to achieve at Soneva has arrived with the 2015 WTTC Tourism for Tomorrow Award. It is always nice to be recognised for one's achievements, but this award stands out for its rigorous judging process and highly respected judging panel. The experience of winning this, regarded as the Oscars of sustainability awards in the hospitality sector, bolsters our belief that tourism can and should be a powerful force for good in the world. What a way to celebrate our 20<sup>th</sup> anniversary!

**Sonu and Eva**

## *cfo's statement*

---



A company's performance should be assessed as its total contribution to society. Such societal contributions are traditionally measured in terms of the goods and services that companies provide, and the resulting returns they earn in order to compensate capital for its risk. What is often missing is any gauge of the total impact that such activities have on the natural world and on the communities in which they operate and in many cases the communities in which the goods and services are consumed.

The measure of one's total impact is a summing of the "gives" and the "takes". The generation of returns for capital, the provision of jobs and training and the value created in supply chains are all gives which must be looked at alongside the value of the natural capital which is exploited in order to generate this return. The netting of these indicates whether a company is a net contributor to society.

In this report we assess our own performance in the context of such societal contribution, providing quantitative and qualitative assessments of the impact of our activities. While we have been rigorous in our assessment there are many moving parts to the total impact equation and this is surely something that we, and others, will develop and debate for many years to come.

For all the caveats required, it nevertheless feels good to have made a start in getting to grips with our total impact. Better still is to know that our initial conclusion from such analysis is that our net impact on society is a positive one. And with this as a starting point we are able to formalise new benchmarks against which to assess our activities and drive incremental improvements – which in time will raise the bar ever higher.

**Bruce Bromley**  
Chief Financial Officer, Soneva  
Trustee, Soneva Foundation



## social and environmental conscience statement

*Arnfinn Oines, Social and Environmental Conscience, oversees Soneva's sustainability performance. He introduces the intentions behind the Total Impact Assessment and how the business is responding to its findings.*

### **What has the Total Impact Assessment (TIA) revealed about your sustainability performance?**

We developed the Soneva Carbon Calculator in 2008 to provide data on our direct and indirect CO<sub>2</sub> emissions and our environmental performance. We understood that to effectively direct our resources, we must also analyse the impact of our supply chain.

The TIA contextualises the environmental impact of our food and beverage supply chain as a percentage of our total impact. It also confirms how important our offsetting strategy is, particularly in areas that necessitate longer-term reduction targets such as our supply chain and guest air travel. That is why we continue to measure our carbon footprint rigorously and why our offsetting programme of environmental and social initiatives via the Soneva Foundation remains central to our vision.

### **Which areas of the business have you focused on in this first TIA?**

Initially we developed the methodology for our Environmental Profit and Loss (EP&L), which is what we collectively call our supply chain impacts including land use, water consumption, energy consumption and CO<sub>2</sub> emissions. Together with resort and guest travel emissions this completes the Natural Capital segment of the TIA.

Subsequently, we have assessed our positive impacts through human and social capital and economic and tax contributions. The study of our supply chain was definitely the most challenging part of our TIA, but it

has helped us achieve a more complete overview of our performance.

### **How will you adapt your operations in response to the TIA?**

We will continue doing things that are working well, such as a 2% environmental levy on guest room revenue, and reducing the resorts' energy footprint with more renewable energy, lower diesel consumption and improved energy efficiency. I am very excited to see the expansion of our solar PV field at Soneva Fushi as well as the solar PV plans for our new resort development Soneva Jani.

Waste management is a growing success and becoming profitable. We now export compost and import waste from other resorts to process at our new glass factory. Water provision is always a big challenge for resorts in remote locations. We are responding to this with an improved efficiency distillation plant at Soneva Fushi.

Our TIA has exposed the water intensity in our supply chain is much higher than our direct water use. We are exploring ways to address this, such as reducing beef consumption.

Our TIA measures the positive contributions to human and social capital we have made. Our continued investment in our hosts yields important human development impacts well beyond our own business. We are proud to see that projects like the Myanmar Stoves Campaign give a social capital return that would satisfy any impact investor.

### **How do you plan to expand and improve the TIA in the next fiscal year?**

Our methodology is openly available in this report as we want this to be a tool for the whole industry. We

are constantly refining and improving our methodology and we welcome feedback for improvement. We plan to introduce measurements for design and build. What is the impact of the materials we chose?

### **Not every initiative can be translated into a financial metric. What Soneva initiatives are not captured in your TIA that remain central to your vision of sustainability?**

We are completely committed to reducing our own impact but we know that to have impact in a wider context we need to work with industry partners, global influencers and our local communities. We collaborate with organisations such as World Travel and Tourism Council, International Tourism Partnership, The Long Run and NGO partners. We help foster global connections among experts via the SLOW LIFE Symposium and I am very excited to see close relationships developing between Symposium participants and the B Team, founded by Richard Branson and Jochen Zeitz to encourage leadership within business.

The deep analysis of the TIA and the process of assessing all our initiatives has revealed that while there are always ways to improve, we have a lot to be proud of and that all the hard work and ingenuity of our team pays off.

*“The study of our supply chain was definitely the most challenging part of our TIA, but it has helped us achieve a more complete overview of our performance.”*



Arnfinn Oines planting trees for the Soneva Foundation Forest Restoration Project.

# NATURAL CAPITAL

Natural capital represents the positive and negative impacts that our operations have on the natural environment. Our Total Impact Assessment covers both direct and indirect CO<sub>2</sub> emissions as well as impacts from energy, water and land use via the food and beverage products in our supply chain. Collectively we refer to these supply chain impacts as our Environmental Profit and Loss (EP&L).

Additionally within this section, you will find details of initiatives that are core to reducing our environmental impact but are not yet monetised according to our Total Impact Assessment methodology.



## Summary

Natural Capital: **\$8,777,704**

- 93% of our Natural Capital deficit is via our supply chain. Measuring our supply chain impacts (our EP&L) allows us to calculate the true cost of the ecosystem services required to produce our food and beverage products.
- Our single largest deficit is from water used in food production. We grow as much fresh produce on site as possible, but inevitably a lot of food is imported. Our EP&L identifies which ingredients are most water-intensive, allowing us to source alternatives.
- 80% of our waste is recycled on site and converted into revenue raising or saving supplies.
- The financial value of protecting our local biodiversity is harder to evaluate. Similarly, the decision to use building materials only from sustainable sources is not informed by financial calculations. However, we include our practices in this section as they are fundamental to our philosophy of environmentally responsible tourism.
- 21% of our CO<sub>2</sub> emissions are directly from resort operations. The remaining 79% are predominantly from guest air travel. We mitigate all emissions via the Soneva Foundation.

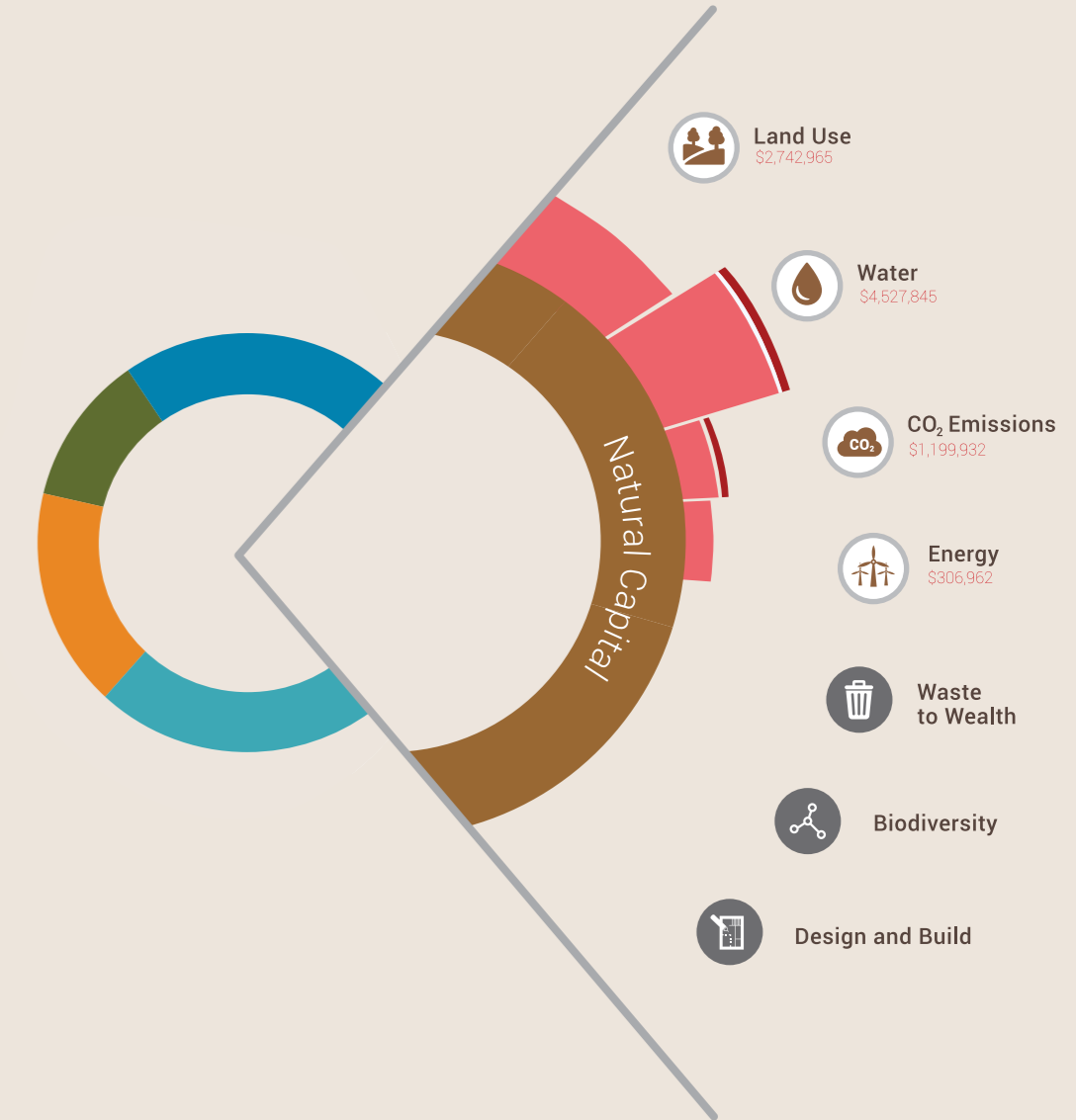
### Key

Bars represent the scale of our impact

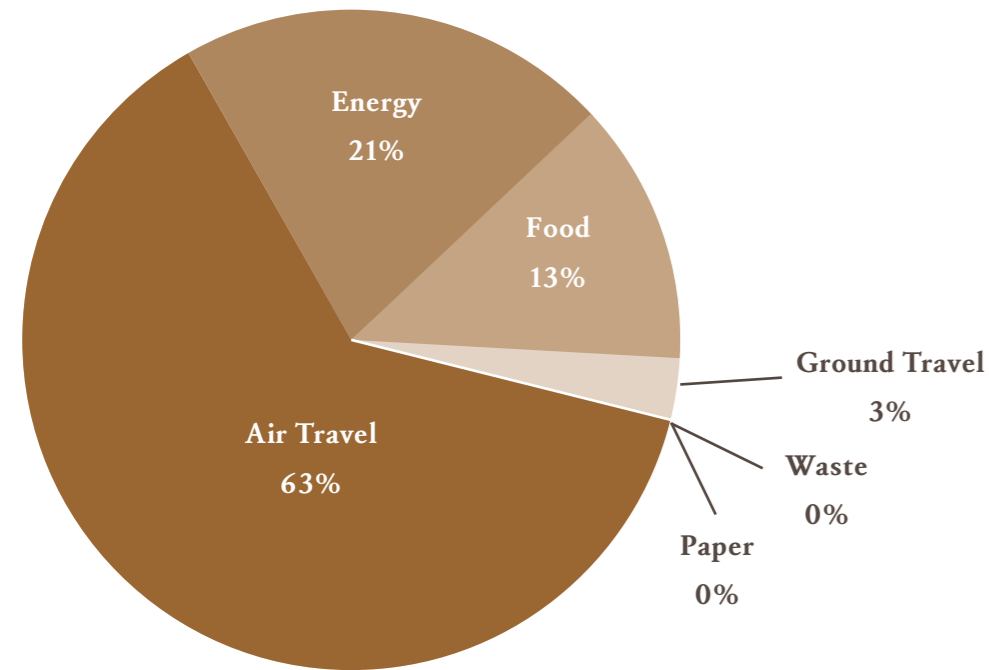
Red represents a negative contribution

- Direct
- Indirect

● Grey icons represent impacts that are not yet monetised



Soneva resorts are located in remote off-grid locations where typically resorts rely heavily on imported diesel. 21% of Soneva resort CO<sub>2</sub> emissions are derived from energy consumption, which is the second largest contributor after guest air travel. Soneva aims to reduce reliance on fossil fuels with a portfolio of energy initiatives that reduce CO<sub>2</sub> emissions and increase energy self-sufficiency.



Soneva CO<sub>2</sub> emissions by source including supply chain impacts



The Soneva Fushi solar plant.



As Chief Engineer at Soneva Fushi, Hilary Fontenelle is responsible for ensuring reduced diesel dependency at the resort whilst maintaining a reliable energy supply. He answers questions on the resort's energy strategy for the year ahead.

**What are your energy priorities over the next fiscal year?**

Improving our energy efficiency and switching to renewable energy sources continues to be our top priority. As we operate in remote off-grid locations, it is imperative that we continue to innovate and champion new technologies and approaches. We will see many improvements at Soneva Fushi throughout 2015-16 to help reduce our diesel consumption and to make our water production and consumption more efficient.

**You are installing a new solar plant. How effective will this be at reducing your diesel consumption?**

We are installing a 624 kWp solar system which will be integrated to our powerhouse for distribution to the island. This is an expansion of our existing 70 kWp capacity system which was the largest renewable energy plant in the Maldives when it was set up in 2009. In addition to this new system we will also be upgrading our powerhouse with the installation of two new linear generators, which alone will lower our diesel consumption by 10-15%. When the full system is installed and energised, we will realise savings of 30% or more on diesel consumption.

**What other measures can make a big difference to your energy footprint?**

In late 2015 we will also be installing a 100 m<sup>3</sup> symbiotic distillation plant which uses waste heat from our generators to produce water instead of the desalination membrane technology which has been used for many years and uses a lot of electricity to drive the plant. This system is being installed with an agreement between Soneva Fushi and Aquaver Foundation who designed this new technology.

*“Improving our energy efficiency and switching to renewable energy sources continues to be our top priority.”*

DID YOU KNOW...

UN Sustainable Development Goal 7.2 advocates a substantial increase in the share of renewable energy in the global energy mix by 2030.

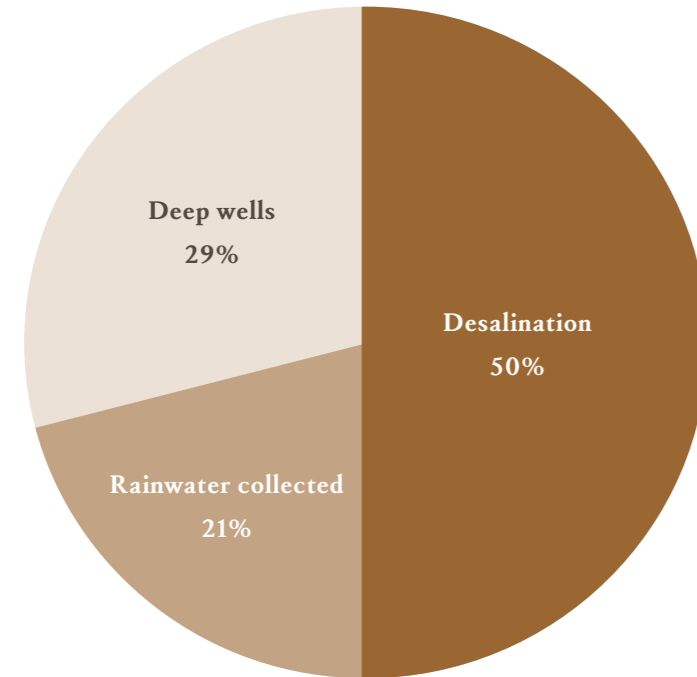
The International Energy Agency estimates that in 2013 renewables accounted for almost 22% of global energy generation. It projects renewable electricity generation will triple by 2040.



We are absolutely committed to reducing our carbon footprint and increasing our energy from renewables. In 2014-15, Soneva's carbon footprint was down 22% against the baseline emissions of 2008-9.



Soneva resorts are located in remote areas with no municipal water supplies. Soneva has the dual challenge of ensuring water self-sufficiency at the same time as reducing the energy intensity of techniques such as desalination. Waste water at Soneva Kiri moves through a series of filtration and oxygenation ponds that are populated with nine species of mopping plants. The result is a BOD level of 5.4 mg/l – well below the 20 mg/l maximum requirement for treated waste water.



Soneva water supply by source

DID YOU KNOW...

UN Sustainable Development Goal 6.4 advocates a substantial increase in water-use efficiency across all sectors by 2030.

Globally, 750 million people lack access to safe drinking water and 2.5 billion to basic sanitation services.



Soneva produces filtered drinking water on site and donates revenue from sales to projects that provide access to clean and safe water to 610,018 people.



Martijn van Berlo, is the Biologist at Soneva Kiri, a role that includes biodiversity mapping, guest experiences, community relations and informing resort practices. He monitors the long-term patterns in natural water supply and oversees treatment processes. He talks about managing the water supply in a remote location and in a variable climate.

What are the main challenges in managing the water supply for a remote resort?

Soneva has been successful at ensuring a plentiful water supply and we do this entirely through self-sufficiency, which is something we are very proud of. We are constantly looking for energy saving measures in the processing of our water. Weather and climate have an enormous impact on the water supply at Soneva Kiri and it is essential that we account for the potential variability in supply due to forces of nature in both our short and long-term planning on water provision.

2015 is an El Niño year, which means we are experiencing lower rainfall in South East Asia. We rely heavily on collecting rainwater so we need to manage our water supply, both for utilities as well as drinking water. To mitigate the lower rainfall we are increasing our capacity from deep wells. They have more storage capacity of rainwater because they draw water from a very large surface area. Across both our resorts, 21% of our water is from collected rainwater, 29% is from deep wells and 50% is from desalination.

What are the longer-term projections for water security in Koh Kood where Soneva Kiri is located?

Climate change also affects us. It is predicted that El Niño might increase due to climate change and the dry season might last longer, so efficient use of water is absolutely crucial to us. At Soneva Kiri, we are self-sufficient through collected rainwater and deep wells.

How do you ensure water-saving measures are adopted by everyone at the resort?

Our open air bathrooms are a feature of the resort and our outdoor showers are exceptional. Guest and host water consumption is reduced with water-saving shower heads, aerators in taps and push valves in heart-of-house areas, but guests would never find their experience compromised. I am also organising a series of educational courses for our hosts which will cover where our water comes from, how scarce is it as a resource on the island and how we can improve our processes. All 300 hosts will take the course, and as many are local, we hope that they will take the learning back to their own communities. Our aim is to not just operate efficiently but to also to inspire our guests and hosts.

*“Climate change also affects us. It is predicted that El Niño might increase due to climate change and the dry season might last longer, so efficient use of water is absolutely crucial to us.”*



*In a nation with few municipal waste facilities and a huge stress on the limited available land, Soneva Fushi recycles 81% of waste on-site through a robust waste management strategy. Gordon Jackson, Waste-to-Wealth Manager at Soneva Fushi, explains how.*

**What waste facilities are available to you in the Maldives?**

The Maldives has very few municipal waste facilities and the majority of waste ends up on Thilafushi Island, close to the capital Male. There is little separation and most is openly burnt. The majority of resorts send their waste to Thilafushi at a financial cost to themselves and an environmental cost to the Maldives. We aim to demonstrate a completely different approach to waste and to encourage everyone from resort owners to guests to hosts to view waste as an asset rather than a problem.

**What facilities have you developed in your own waste management centre?**

At Eco Centro Waste-to-Wealth we compost 100% of our food and garden waste, transforming it into much needed rich soil for our vegetable gardens. We never dump food waste in the sea, which is common in the Maldives, both because it is bad practice and because food waste, when composted, is a valuable input for the sandy soil we have here. There are very few places where you get to witness the full cycle of food waste to food cultivation and right through to food preparation in the restaurants. It is immensely satisfying.

Our wood waste is made into biochar and charcoal that we use on site; glass is crushed and reused in our glass factory, and plastic waste is virtually eliminated as we do not serve branded bottled water and all our in-room amenities are offered in ceramic reusable containers.

**What are your plans for 2015-16?**

New investments to improve our waste management in the coming year include a shredder machine for polystyrene. When polystyrene is shredded, it can be used as beanbag filler or mixed with cement to make lightweight concrete. A civil engineering firm is interested in experimenting with us and if successful, they could use this mix in civil works. It is through such partnerships that we are able to challenge perceptions of waste and even influence national waste strategy.

DID YOU KNOW...

UN Sustainable Development Goal 12.5 advocates a substantial reduction in waste generation by 2030 through prevention, reduction, recycling and reuse.

Approximately 17 million barrels of oil are used to produce 50 billion plastic water bottles annually in the US alone.



Soneva has prevented 1 million plastic bottles going to landfill since 2008 by filtering and bottling our own water in reusable glass bottles. The value generated by Eco Centro in 2014-15 was \$113,583.

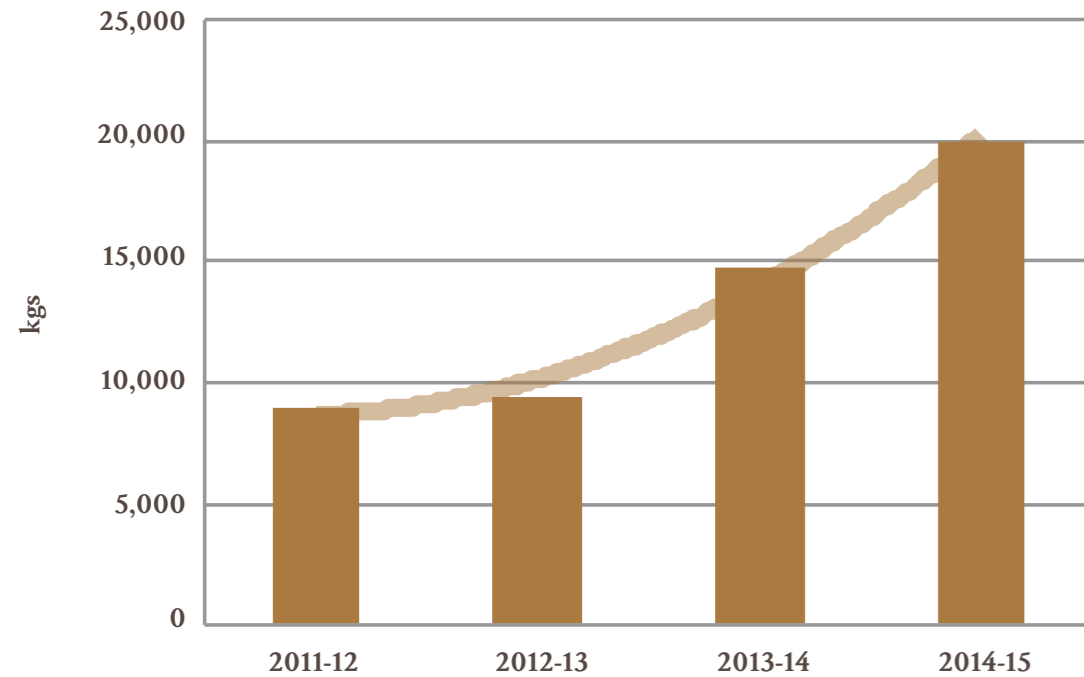
## *case study: soneva glass studio*

The Soneva Glass Studio invites guests to watch world-renowned glass artists create objects of art from waste glass materials and to learn the art of glass blowing themselves. Only waste glass produced from resorts in the local area is used at the facility. The Glass Studio takes our Eco Centro concept to the logical next step – creating not just wealth from waste but also beauty.



# vegetable gardens

With limited land and poor sandy soil, growing fruit and vegetables in an atoll nation is a challenge. Maldivian islands often have a land mass of just 1km<sup>2</sup> or less and an elevation of just two metres above sea level. The soil is poor and highly alkaline. Many resorts import soil from Sri Lanka to improve fertility.



Soneva Kiri and Soneva Fushi vegetable garden yield by kg

## DID YOU KNOW...

UN Sustainable Development Goal 2.4 calls for sustainable food production systems and the implementation of resilient agricultural practices that increase productivity and production.

Just 10% of the land in the Maldives is cultivated due to limited land and poor soil, accounting for approximately 5% of GDP.



Fruit and vegetable yields increased at Soneva resorts in 2014-15 by 35% compared to 2013-14 and by 124% compared to 2011-12. That totals a value of \$66,083 generated from vegetable production in 2014-15.



Herath and the gardening team at Soneva Fushi.

*“We would never compromise our guests’ experience by producing sub-standard ingredients and we would never compromise our local environment by introducing harmful chemicals.”*

Herath Rathnayake, Horticulturalist at Soneva Fushi, explains how vegetable yields can be transformed with rich compost from kitchen waste and a strict rotation system.

**Soneva Fushi is a small sandy island. How much can you produce in your vegetable gardens?**

The vegetable gardens are the pride and joy of Soneva Fushi. Through adopting a systematic approach of composting, rotating beds and constant innovation, we are producing between 800-1,200kgs of fresh produce a month with a market value of around \$5,000.

**How important is compost to a good yield?**

It is vital. It isn’t easy to produce this kind of volume and quality in the Maldives. Typically, Maldivian soil is 90% sand. We have a strict policy of no synthetic fertilisers, so we have to be creative! We produce around 150 bags of compost every three months from our kitchen waste and we use this to create rich fertile soil, which is a mix of 75% compost and 25% soil from our jungle floor. Not many islands have access to this local soil as they have cut down their jungle.

**Are there not less labour-intensive ways to increase yield?**

I have worked in other locations with increased yield to Soneva Fushi but only as a result of synthetic fertilisers and a loss of flavour. We would never compromise our guests’ experience by producing sub-standard ingredients and we would never compromise our local environment by introducing harmful chemicals. This is especially important in low-lying Maldivian islands where the ground water is in constant flow with the seawater. It is dangerous for islanders who often drink the ground water. The fertilisers also leach into the sea, encouraging the growth of algae which smothers the coral and reduces the oxygen content of the water, making it more difficult for fish to survive.

**What do you grow in the Soneva Fushi vegetable gardens?**

We grow lettuce, onions, herbs, morning glory, egg plant, snake gourd, Maldivian chillies, garlic, banana....We haven’t had much success growing tomatoes as the flowers drop at around 26°C and the temperature in the Maldives is usually at least 30°C. I am trying to introduce a local tomato variety with some plants I have collected. I don’t know if it will work but we continue to try new things!



Ao Salad fishing village: fishermen supply fish straight from the sea to Soneva Kiri.



*Soneva measures the environmental impacts of food production and preparation through an Environmental Profit and Loss reporting process. Gabriel Le Roux, Executive Chef at Soneva Kiri, answers questions on how this affects the management of the kitchens.*

**Dining is always at the core of a guest experience.**

**What guides your kitchen?**

Food is at the heart of a Soneva experience. Our guests travel a lot and are exposed to fine dining so they have high expectations. Food is an excellent way to demonstrate the Soneva philosophy.

**How do you navigate the restrictions of a strict sustainability policy in the kitchen?**

On the contrary, our kitchen is guided by our EP&L as well as our 'no-no' list. We simply won't serve something that is endangered or suffers cruelty. All our fish is sustainably sourced from the local fishing village, Ao Salad. We measure the environmental cost of ingredients by the inputs required to produce them and how far they have travelled. It all comes home to you when you walk along the jetty and see small fish and think ahead to how you can protect them from trawlers so they are still here a year from now.

Contrary to expectations, our focus on sustainability allows creativity on a totally different level. When I walk into our vegetable garden to see what is available to harvest, I never feel restricted. On site we produce foods and condiments as diverse as pea blossom vinegar, pickles, sourdough breads, 12 different cheeses, 14 varieties of sausage, 68 flavours of ice cream and sorbet and a whole room full of luxury fairtrade chocolates.

**What is the magic ingredient on a Soneva menu?**

At Soneva, I see a passion that carries through from the planting of seeds in the ground to the serving of food on the plate. Our head gardener Khun Khem has a passion for the gardens. Martijn, our biologist, is passionate about calculating the inputs each vegetable we grow requires, guiding us to a bigger yield with lower impact on the land. I have a passion for cuisine. Food production and the art of cuisine should go hand in hand, yet in my whole career I have never experienced it at this scale. I'm so proud of what we achieve here.

DID YOU KNOW...

UN Sustainable Development Goal 14.4 calls for effective regulation of harvesting and an end to overfishing, illegal, unreported and unregulated fishing and destructive fishing practices.



Soneva restaurants do not serve overharvested species such as bluefin tuna, shark or wild oysters, nor products with low animal welfare standards.

We favour local suppliers: our Thai fish is sourced from a local fishing village and our Maldivian fish is delivered straight from the boat.



## Soneva Fushi Reef Survey



*Soneva Fushi publishes an annual reef report that details any changes to the house reef and attempts to identify cause and effect.*

*The reef report guides conservation and management policies that protect the reef and the local marine ecosystem. Federica Siena, Marine Biologist at Soneva Fushi, introduces the conclusions of the latest report.*

Coral reefs are declining globally and the Indian Ocean and the Maldives unfortunately follow the same trend. For the tourism industry, reefs play a vital role as an attraction for guests and it is in all resorts' best interests to manage their

activities to increase the resilience of the reefs. Beyond human interaction there are many events, both natural and otherwise, that can affect the health of a reef and of a marine ecosystem. It is always challenging to identify with certainty what factors are causing a change and therefore monitoring the house reef is critical for Soneva Fushi to ensure the health of our local environment.

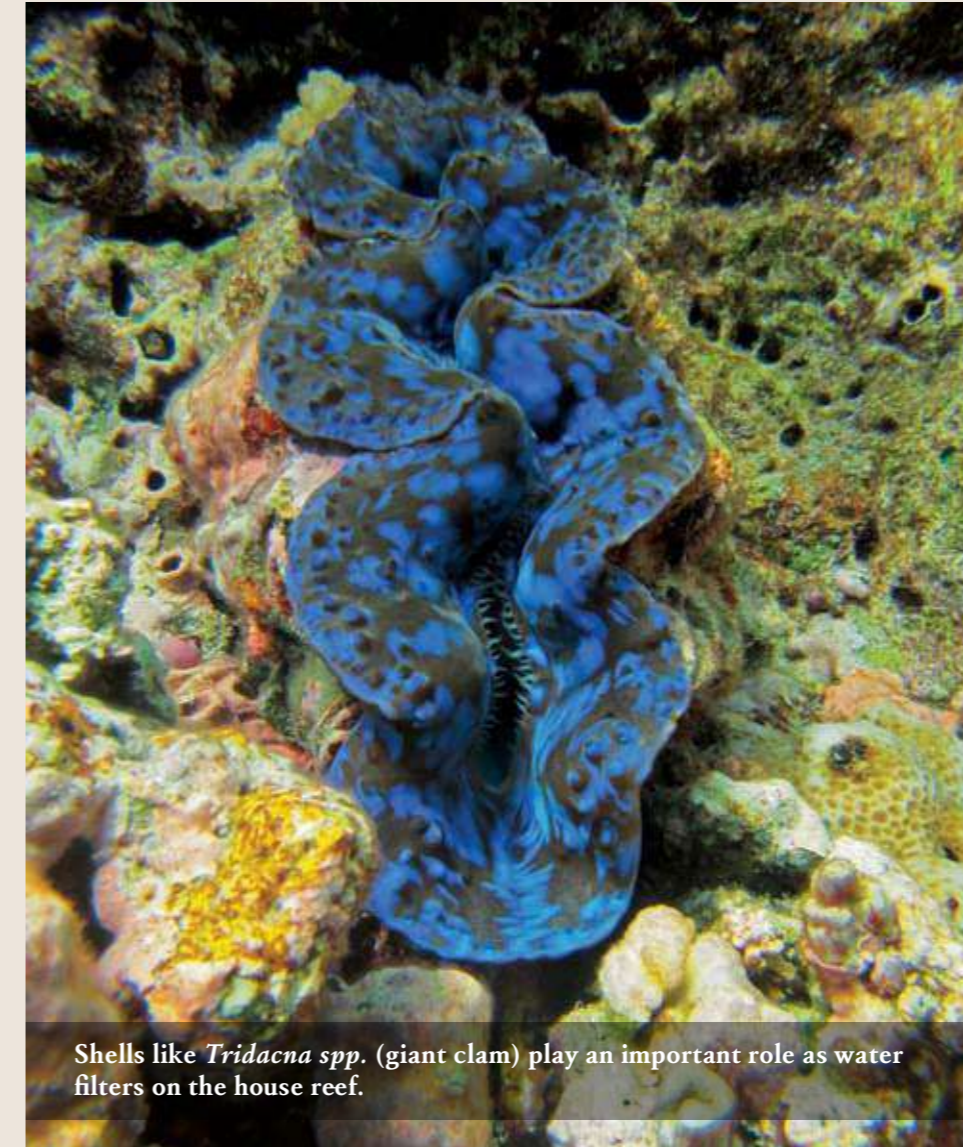
A coral reef survey is a tool to measure the resilience of the reef and enables comparison of areas over time to detect changes on the reef and to help us manage a response.

Our reef report concludes that our house reef shows some evidence of negative impacts resulting from human interaction and naturally occurring factors, but due to strict management policies, nothing like on the scale observed across much of the Maldives. The good news is that we are seeing encouraging improvements in the condition of the reef from previous surveys. Positive changes can be observed in a short space of time, which demonstrates that while the reef is fragile, it is also highly resilient if given the right protection.

We are fortunate that Soneva Fushi is located in Baa Atoll, a UNESCO Biosphere Reserve, and it is a privilege to be in a place that has been recognised for its biodiversity. With the governance of the reserve improving, this is a trend that we expect to continue and accelerate in the coming months, and for Baa Atoll to begin to reflect the benefits of protection that we have seen in places like Komodo in Indonesia and the Chagos Islands, not far from our home here in the Maldives.

### **Actions from the 2013-15 Soneva Fushi reef surveys:**

- We are considering a coral restoration project. The aim of a coral restoration project is to increase the success rate of different mother colonies that in turn increase the genetic differentiation and reduce the risk of mass susceptibility to bleaching events and diseases.
- We are placing sedimentation traps to check sedimentation values. We will also mark all the sampling points with GPS.
- We will carry out a survey of the currents and the sedimentation movements around the island to better understand beach erosion.
- We will monitor coastal vegetation and consider a restoration project. Vegetation and especially coastal vegetation play an important role in holding the soil and reducing sand run-off from the shore.
- We will host regular briefings to ensure that every guest and host of Soneva Fushi is aware of the vulnerability of the reef. Increasing guests' and hosts' awareness of the vulnerability of the reef is of utmost importance.



Shells like *Tridacna spp.* (giant clam) play an important role as water filters on the house reef.

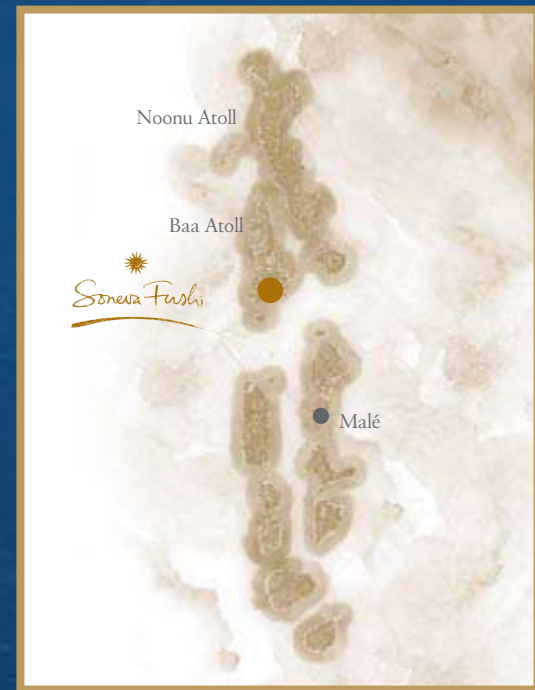


*Acanthurus leucosternon* (powderblue surgeonfish) grazing the algal turf.

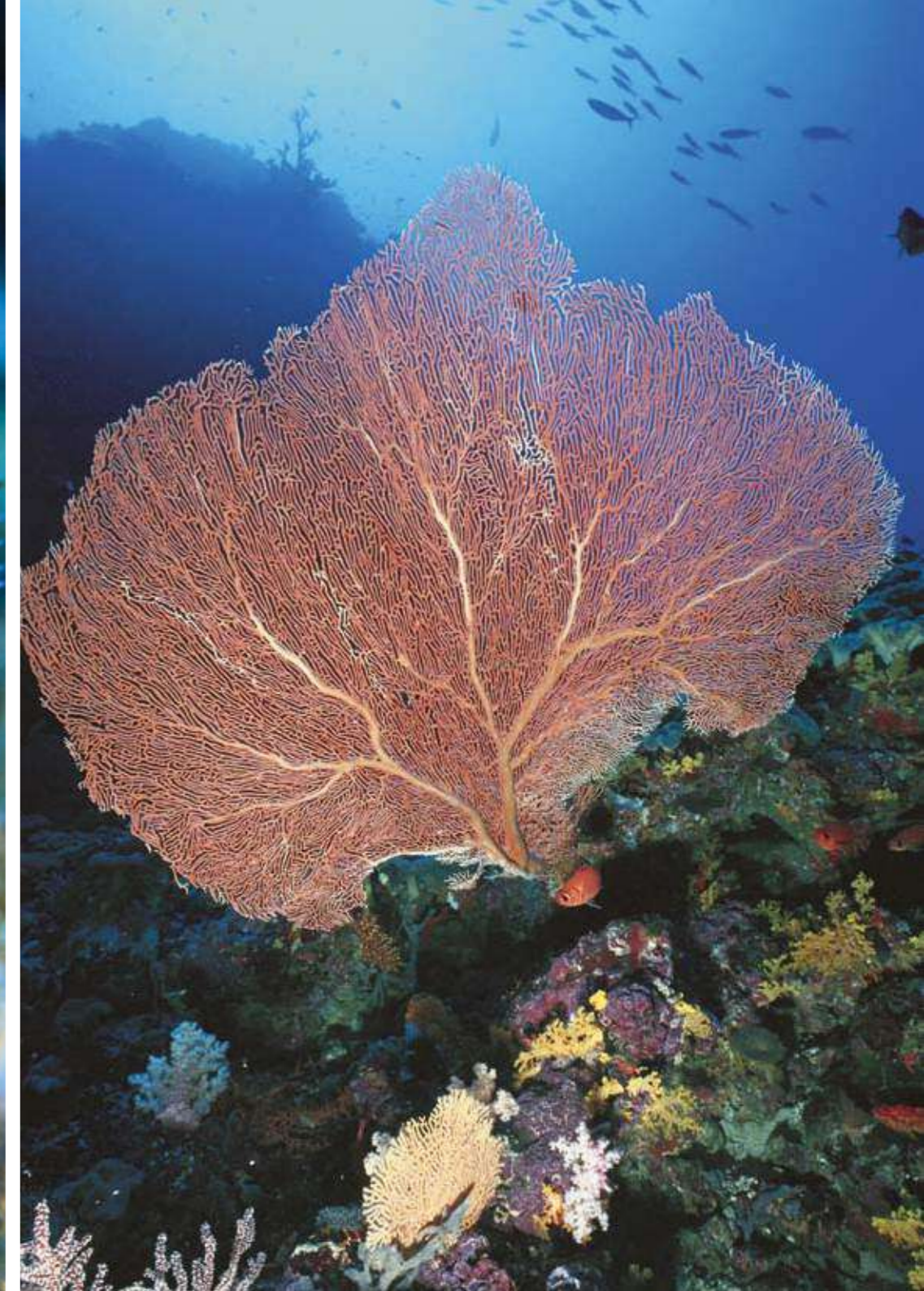


Marks left on a coral by an excavator such as a parrotfish.

Soneva Fushi is located in the Baa Atoll UNESCO Biosphere Reserve. The reserve supports one of the largest groups of coral reefs in the Indian Ocean and is home to a globally significant biodiversity including approximately 250 species of corals and 1,200 reef and reef-associated fish species, a population of marine turtles, manta rays, whale sharks and seabirds. These also include threatened and endangered species such as the green turtle, hawksbill turtle, Napoleon wrasses, and tawny nurse shark.









Champion freediver Hanli Prinsloo with a whale shark. Hanli offers Soneva guests a marine wildlife adventure that inspires a lifelong love of the ocean while raising funds for her I AM WATER ocean conservation foundation.



Villa 15 at Soneva Fushi is designed and built around one of the largest banyan trees on the island.

## design and build



*Sustainably sourced materials for both interiors and exteriors inform the design of Soneva villas. Eva Malmström Shivdasani, Creative Director and Co-Founder of Soneva, explains the design ethos behind Soneva properties.*

### What are the key elements that inform the design of Soneva resorts?

Sonu and I fell in love with the untouched beauty and the simplicity of life in the Maldives and I wanted to capture that in the design of Soneva Fushi. This was completely the antithesis of resorts in the Maldives at the time, but I followed my instincts and my values. The biggest challenge at the time was to find sustainable construction materials. Everyone thought I was crazy!

The other key influence was that we weren't just building a resort. Soneva Fushi is also our home so we designed and built our villas the way we would enjoy entertaining in them ourselves. It's a way of life that we hope people will take away with them - the feeling of having been one with the earth, having walked barefoot in the sand, eaten fresh food, feeling happy to have been in an environment that tries not

to take advantage of the earth's resources and to leave with a sense of harmony. We have translated this concept to Soneva Kiri, celebrating Thai cultural and artisanal features in the design.

### Soneva villas offer a very generous amount of space. With island resorts limited on space, how did you arrive at this decision?

We consider personal space and privacy to be one of the greatest luxuries so this becomes integral to the design. We are aware that outdoor space is a precious commodity for many of our guests who live in cities so our villas incorporate outdoor bathrooms and open air living space. The feel of the sea breeze is magical. This also means that these spaces, as well as our restaurants and cinemas which are all open air, do not require air conditioning.

### How do you select suppliers for the materials used in your interiors?

Our hand-woven fabrics come from Barefoot in Sri Lanka. It's a wonderful company that helps rural women find work locally without having to leave their families. Their shop in Colombo is a wonder of colours. The leather furniture I design is made by a supplier in the Philippines. The material is from small factories that use more eco-friendly products. I do use leather from livestock, but would never use any fur or skin from wild animals that are not in the food chain.

### What is the most unusual design challenge you have encountered?

We will go to great lengths to conserve the natural environment of our resorts. One of the plots for our new residences at Soneva Fushi was also home to the one of the largest banyan trees on the island. How can you destroy a tree like that? After consultation with the villa owner and the architect we designed the villa around the tree. It is one of our most talked about and loved features on the island.

## DID YOU KNOW...

UN Sustainable Development Goal 15.2 calls for the implementation of sustainable management of all types of forests, a halt to deforestation, restoration of degraded forests and a substantial increase in afforestation and reforestation globally by 2020.

Forests cover 30% of the total land area on earth and provide habitats for two-thirds of all species.

Only 10% of forests globally are certified to any sustainability standards.



All timber used in Soneva villas is certified by governance organisations such as the Forest Stewardship Council (FSC) and the Programme for Endorsement of Forest Certification (PEFC) or is from fast growing plants.



# HUMAN CAPITAL

Human capital calculates the value of the jobs created and sustained in our operations by salary, training, working environment and experience, namely Human Capital Creation. It also calculates Human Capital Externalities, which is the value created in society from hosts post-Soneva employment.

We believe that the success and profitability of a company depends on how well human resources are managed. We measure, value and maximise the holistic returns on our human capital rather than simply considering training from a “cost-to-company” perspective.



## Summary

Human Capital: \$8,523,972

- Human Capital Creation assesses the value of the jobs created and sustained in our operations by salary, training, working environment and experience.
- Human Capital Externalities assesses the value created in society from hosts post-Soneva employment.
- Soneva employed 716 full time hosts in 2014-15.
- Soneva hosts received 26,611 training hours per year across all levels of employment in 2014-15.
- 52 % of all training hours were focused on sustainability.
- \$8,433,770 was the value of Soneva's human capital creation in 2014-15.
- \$90,202 was the value of Soneva's human capital externalities in 2014-15.
- 78% of Soneva hosts are local to the country we operate in. The majority of the remainder are from neighbouring developing countries.

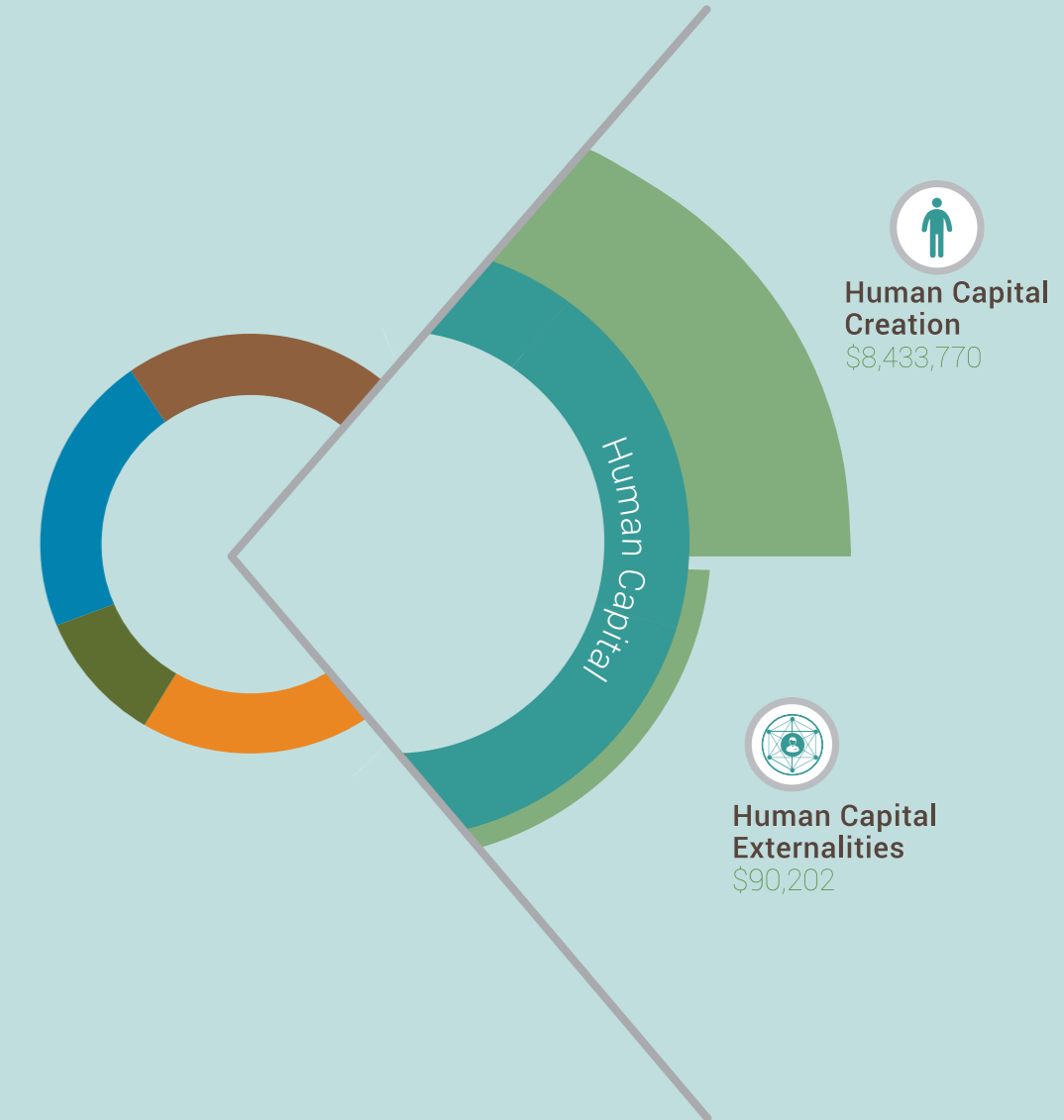
### Key

Bars represent the scale of our impact

Green represents a positive contribution

- Direct
- Indirect

● Grey icons represent impacts that are not yet monetised





*Soneva has a goal to be one of the top ten employers in every country it operates in. Sara Fildes, Director of Talent Development for Soneva, answers questions about the company's Learning and Development strategy.*

### **How does your learning and development programme contribute to staff retention and career development?**

You can approach learning and development with a sweeping generic offer, or you can get to know the people and the culture and work with that to create exciting experiences that will have them coming back for more time and time again.

When our hosts have a goal, a direction and a destination they feel empowered and purposeful. The

emotional salary attached to this feeling of achieving personal growth is huge. This sets us apart and the huge number of long serving hosts on both resorts is testament to the success of the formula.

Soneva seeks talent from within first. We have a number of initiatives in place which enable hosts to raise their profiles and showcase their talents. If one of our waiters wants to be a Mr or Mrs Friday one day they know they can just tap me, or any of the management team, on the shoulder and ask for some time to discuss their development and we will not only take it seriously, we will be thrilled to help.

### **What are the opportunities for a new Soneva recruit?**

Whether you 'know what you want to be when you grow up' or have absolutely no idea, there is so much scope for flexible working, cross training, cross exposure, secondments, shadowing, mentoring and coaching - not to mention the talent development and leadership programmes we run. We are a learning organisation, we breathe it like others breathe air.

### **How does this contribute to your goal of being in the top ten employers in the countries you operate in?**

In my 20+ years in the field I have never yet worked in a business where employees have said that they have enough learning and development training. This appetite for development is an indication of its importance in employee engagement, so it stands to reason that if we are delivering what people want and need they will be happier and more engaged and they will do a better job. That means we have happier guests, Soneva's profile raises and more people want to work for us. It's our virtuous circle.

### **What role does sustainability training play in this?**

As hosts we are role models for the Soneva philosophy. We cannot only talk about sustainable practices, we have to demonstrate them too. We want to share this with our guests as we are so proud of what we do.

New hosts are given a 'Soneva so Welcome' induction which covers who we are, what we do, why we do it and how we do it. The emphasis of this three day programme is our vision, our core purpose, and our goals. It follows our model 'TIDE' - Training, Inspiration, Development, Education and at the end of the programme hosts understand and are able to discuss and explain what Soneva stands for and why we are different.

In addition we run a 'Learning Olympics' event regularly for all hosts at all levels. This is a fun packed one day event which includes refreshers on our vision, values and core purpose, and challenges and opportunities to innovate and create. It is also a huge amount of fun!

We run regular tours and education sessions at Eco Centro for our hosts, we have talks and presentations, films and publications which are shared with all hosts. We have also launched a fabulous initiative to educate hosts about our water processing and usage, conserving energy, becoming even savvier with waste disposal and keeping food waste down to a minimum.

It's part of our DNA.



### DID YOU KNOW...

**UN Sustainable Development Goal 8.9 advocates devising and implementing policies to promote sustainable tourism that creates jobs and promotes local culture and products by 2030.**



**In 2014-15 a total of 26,611 training hours were completed across Soneva. Of this, 52% or 13,903 hours were dedicated to sustainability training.**

**78% of our hosts were from the country in which we operate in 2014-15.**

**Santosh Sutradhar**  
Project Logistics Manager, Soneva Fushi

I arrived in the Maldives in 1995 as a 17 year old from Bangladesh with a big debt to pay for my transportation and my papers and with little formal education. It was a very scary situation but my family was poor and I needed to take this risk to support them.

I found work with Soneva Fushi just before it opened to guests in an entry position with a beginner's salary. I didn't speak more than a few words of English, but Madam Eva and Sonu took a great interest in me and encouraged me to continue my studies alongside my work. They gave me magazine articles in English to read along with an English Bengali dictionary and encouraged me to watch news programmes on TV. Not long after this the company brought in an English teacher and I attended every session. I have continued to take any training course available and I am always looking for ways to improve. We have so much to learn from each other, regardless of status or rank.

In my 20 years at Soneva, I have had many promotions. My roles have included supervisor, head gardener and landscaper. I know when Sonu asks me to do something difficult, it is because he believes in me. If you work honestly and do your very best, there is nowhere better to work than Soneva. I have demonstrated my commitment to the company and they have rewarded me with responsibility, salary and most importantly, belief in me.

I don't have any formal certificates but my trajectory through the company from labourer to Project Logistics Manager tells you everything you need to know. Now I try to use my experience to help and guide new employees. Hopefully I can provide some hope and inspiration to those who arrive in a similar position to the one I was in 20 years ago and I can be a mentor to help them on their journey.



**Mohamed Saleem**  
Food and Beverage Service  
Manager, Soneva Fushi

It was my childhood dream to work for Soneva. I joined in 2010 as Food and Beverage Coordinator and I always believed I would progress to a management position.

If you want to develop in Soneva, you can. I saw that green light when I arrived. As a young Maldivian who wants to progress, Soneva is the right place. At each and every level, we can raise our voice. Host engagement and initiative is really encouraged.

Now I am studying for my MBA and I'm fully supported with paid leave by Soneva. I see this as a partnership – I develop myself and I become a better manager for the guests, the hosts, and the company. It is very important that hosts in a front of house role understand that marketing is not just for the marketing department. We are delivering the service, which is what our guests will actually talk about with their friends.

This MBA will help me deliver a food and beverage strategy in line with our top five company goals. Learning about global business development will help me to help the company grow.



**Sirisuai Brighton**  
Excursion Coordinator, Soneva Kiri

I am a scuba diver and I'd heard a lot about how harmless sharks were being killed. I felt pretty helpless about this until I saw live sharks in the local seafood market. Without really thinking, I bought them and returned to Soneva Kiri to set them free. The guests loved it and it was an opportunity to inform them about shark protection. After that I returned to the market many times and bought more sharks. I love that Soneva allows us to not only take this kind of initiative but also to share it with our guests. The young guests really felt that they were cool kids to be saving sharks and it totally changed their perception of these beautiful creatures.

## host development – soneva fushi



*As part of Soneva's Total Impact approach, we aim to increase the environmental awareness and stewardship of our wider community. As the face of the company and our values, our hosts are best placed to engage on such issues with both guests and local communities. Laurie Burr, Area General Manager Maldives, talks about the ripple effect of inspiring our hosts.*

### **How central is the host's role in enthusing your guests about Soneva's sustainability concept?**

It is absolutely central. Some guests already love the sustainability concept, some simply love the beautiful villas and the style and design. But I think every guest takes something away with them, something that is delivered subtly by our hosts. Guests will create something special in our glass studio with Kevin, our Glass Curator; they will learn about local marine life while snorkelling on the reef with Federica, our marine biologist; they will experience a fusion of unexpected ingredients from our from Sanjeeva, our executive

chef; they will learn about the stars in our observatory from Shameem, our astronomer. There will be something, even if it is unexpected and understated, that inspires them to be a little more environmentally aware at home.

### **How do you see your hosts' attitude to sustainability develop over their career at Soneva?**

I see a huge progression and a huge increase in knowledge from very junior right through to senior hosts. I have witnessed separation of waste starting on local islands, which is still a new concept in the Maldives, and I hear our hosts using the same language we use at Soneva with their own children. We deliver about 400 hours of sustainability training each month and we tailor our learning patterns to make them relevant and applicable to all hosts and within different contexts. We've seen hosts taking real ownership of sustainability practices as a result.

For example, over the next 12 months, selected hosts will visit each other's properties. That is at least 20 hosts from Soneva Fushi visiting Soneva Kiri and vice versa to learn about each other's sustainability practices. It will be an immersive experience, shadowing their counterparts. This will include chefs, gardeners, administrators, mechanics and so on. Each of those individuals will share their experiences with at least three people on their return, creating a ripple effect of peer-to-peer learning. It is hugely powerful.

### **What is Soneva Fushi's biggest accomplishment this year?**

We have been globally recognised with many awards for our sustainability initiatives, not least the WTTC Tourism for Tomorrow Award, and we know our success stems right back to how our hosts innovate, deliver and communicate on all our sustainability practices. A culture of excellence is at the heart of everything we achieve.



Soneva Fushi hosts receiving training for the Soneva Learn To Swim programme. Hosts from any area of Soneva operations can request to take part in the programme which enhances skills they can use professionally and within their own community.





## host development – soneva kiri



*Soneva's Total Impact Assessment allows us to identify where to invest for the biggest environmental impact. An essential component to success is for hosts to have a shared understanding of the company's sustainability vision. Graham Grant, General Manager of Soneva Kiri, addresses the importance of working holistically across all operations.*

**What inspired you to work for Soneva?**  
At Soneva, we don't just influence our industry, we also inspire our guests. We take our guests on a voyage of discovery and if they encounter wonder along the way, they will leave inspired. Many of our guests are business owners themselves. They want the tour of Eco Centro and to understand how we run our operations so they can apply it to their own businesses. Some are very advanced in their sustainability journey and share their expertise with us. We also have a very charismatic chairman who is an excellent communicator and has access to global forums. It's the ability to influence positively on so many levels that makes Soneva unique.

**How do you manage the integration of sustainability targets across all areas of operations?**  
The key here is a shared understanding of sustainability. We have 300 hosts at Soneva Kiri from different backgrounds and cultures and if you ask what 'sustainability' means, you will get many different answers. None are wrong but we do need to establish a shared understanding for our vision to resonate.

It is vital that we pull together as a community rather than as individuals. We have recently introduced a five-step training programme that covers water, energy, composting, waste management and laundry. Hosts effectively do each other's jobs to gain an understanding of the challenges and the opportunities in different areas of operations. Nothing beats personal experience, certainly not just telling people what to do.

**How do you measure impact?**  
One of the things Soneva does best is our huge effort in analysing and reporting results. We go to an advanced level of recording information, setting KPIs and offering team rewards. It gives us the opportunity to analyse where we can place our resources for the biggest environmental impact. It might sound a bit dull but being able to measure progress is actually very motivating.

**What are the opportunities at Soneva Kiri for the year ahead?**  
We know that Koh Kood will continue to develop over the next 15-20 years and there is a strong desire locally for the area to develop sustainably. We are working with officials and businesses in Trat province to advise on waste and recycling and to provide a positive vision of resort management. We invite businesses, government officials and schools to visit us and experience what we are doing first hand.

At Soneva, we are not just managing our own sustainability targets, we are adopting guiding principles for our industry today and in the future. When you adopt a business model like ours, both the business and the local community get so much back in terms of environmental and social value.

# SOCIAL CAPITAL

Social capital calculates the value of the wellbeing generated by our outreach and philanthropic activities.

Social capital is hard to assess in purely financial terms as by its very nature the benefits to individuals are often qualitative rather than quantitative. Not all social and environmental projects will deliver a dollar value, though they may nevertheless have an important social and environmental value. Hence, within this section, you will find details of initiatives that are core to delivering our impact but are not yet monetised according to our Total Impact Assessment methodology.

For example, the connections made at the SLOW LIFE Symposium are hard to place a dollar value on. But we know from experience that connections made lead to long-term collaborations between some of the best minds on the planet.



## Summary

Social Capital: \$3,454,488

- \$780,913 was spent in 2014-15 via the Soneva Foundation, returning a social value of \$3,454,488.
- The Myanmar Stoves Campaign reached 20,649 people and trained 155 cook stove vendors in 2014-15.
- The Myanmar Stoves Campaign has distributed 6,698 stoves and reached 30,810 people in 264 villages and trained 208 vendors to date.
- The fuel efficient stove supplied by Envirofit reduces wood consumption by 50%, air pollution by 80% and CO<sub>2</sub> emissions by 60%.
- The Learn To Swim programme has taught 62 children to swim and trained eight swimming instructors.
- 30 participants were invited to discuss and collaborate on global sustainability challenges at the SLOW LIFE Symposium.
- \$370,870 was invested in WHOLE WORLD Water.

### Key

Bars represent the scale of our impact

Green represents a positive contribution

● Direct

● Indirect

● Grey icons represent impacts that are not yet monetised





*working with our communities*



*Soneva works closely with local communities on projects spanning environmental protection, waste management, sustainable development and education. Aisha Niyaz, Community Engagement Manager at Soneva Fushi, shares some examples of community partnerships.*

**What is your background?**  
 My educational and technical background is in environmental management and sustainability and I have been an environmental practitioner for over 12 years. I contribute towards Soneva's corporate social and environmental responsibility programmes.

**What do you think is the main contribution a private company can make to local initiatives?**  
 It's really inspiring for me to see the owners and core management of Soneva so committed to environmental sustainability and working in partnership with our local communities. One of the challenges for local communities is a lack of resources and private companies can help plug the gaps.

**What services are you able to extend to the local community?**  
 Our Eco Centro Waste-to-Wealth centre, our organic gardens, and our observatory are resources for the local community. We organise school visits to learn about waste management and organic gardening and conduct astronomical sessions at the observatory. Our chefs also engage with the local community by giving tips for healthy eating. For the past four years we have organised a cooking competition for the students of the neighbouring school.

**You are in the second year now of the Learn To Swim programme. What progress are you making in rolling it out?**  
 Our aim is to ensure the long-term viability of the programme and extend it to more children. An additional local island is participating and we have invited locals to become swimming instructors. Surprisingly, four officers of the atoll police, a local council president, a health officer and two teachers joined the instructor training programme. As swimming is now part of the national curriculum, we are working with the neighbouring school and the Ministry of Education to train teachers to become swimming instructors. Our local schools do not have swimming instructors and this is an area where we can extend support to plug the gap.


**What is the main motivation for investing resources into community projects?**  
 Our guests come to enjoy the natural beauty of the island from white sandy beaches to pristine coral reefs. The local communities are the custodians of these natural resources. Without investing in their wellbeing, we cannot strive for sustainability of the business. Our success depends on the state of the environment and the wellbeing of the local communities.

**DID YOU KNOW...**

**UN Sustainable Development Goal 17.17 encourages and promotes effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.**

---

**UNICEF identifies drowning as a leading cause of death among children in low and middle income countries in Asia.**



**The 2014-15 Soneva Learn To Swim programme taught 62 children to swim and trained eight swimming instructors.**

## soneva learn to swim programme

Despite living in an island nation, many Maldivians grow up without learning to swim. While this poses a clear risk to life, it also means that children grow up with little environmental awareness of the ocean and the coral reefs that surround them. We believe that if children learn to swim, they can lose their fear of the ocean and learn to love it. Over an intensive two weeks, the Soneva Learn To Swim programme takes local children from the very basics through to their first time snorkelling on the reef edge.

During the course of the swimming programme, we take the children on a journey of ocean awareness including community beach cleans and school sessions on the vulnerability of the ocean.

Watch an excerpt from National Geographic six-time grantee Jon Bowermaster's documentary film *Sink or Swim* about our Learn To Swim programme: [www.slowlivesymposium.com/videos/learn-to-swim](http://www.slowlivesymposium.com/videos/learn-to-swim).





## *case study: learn to swim*

***Patti Kilgore is a Red Cross certified swimming instructor. She volunteered with the Soneva Learn To Swim programme and here she shares her experience of teaching Ibaa, a Grade 3 student from Eydhafushi.***

Can you imagine not being able to swim? Can you imagine living on an island but not having been in the water in your entire life? That is how Ibaa came to us in the 2015 Learn To Swim programme.

Ibaa is tall for her age. She is also autistic. She loves to sing and has a lovely voice. She was also very afraid of the water. I experienced the rigidity in her body, resistance and shrieks of fear. “Learning to swim” was completely out of the picture and so we took a different tack.

We sat in the sand and felt the water run over our legs. We let it wash up to our waists and moved our arms and legs in the water with the security of land beneath us. She responded quickly and that same day I was able to take Ibaa out in the deeper water, cradling her head on my shoulder and supporting her back with my hands and arms. I felt her body relax as she was able to feel the incredible weightlessness that the support of the water affords. Her shrieks were interspersed with incredible smiles and laughter.

Throughout the two weeks Ibaa learned how to kick her legs and use her arms in a paddling action all her own style, while being supported on her back. When the seas were too rough, we jumped the incoming waves, walked through the shallow water and sang songs while holding hands. She always came with a huge smile on her face.

As swimming instructors, we typically measure success by ticking off skills that students master. The magic moment when it all comes together and swimming actually happens is very rewarding. Then there are students like Ibaa where this isn't the kind of success you seek. Rather, you feel honoured to be a small part of helping someone overcome their fear, watching them find pleasure and enjoyment in the water. The memory of Ibaa's radiant smile, her laughter, singing songs while walking hand in hand, is more than enough success for me!



*soneva foundation*



We are committed to reducing our environmental footprint by embracing responsible business practices and accounting for and managing our environmental liabilities through our Total Impact Assessment. While we go to great lengths to improve our own performance, we recognise that the environmental impacts of our resorts also include indirect emissions such as guest air travel.

To address these emissions we have introduced an environmental levy of 2% of room revenue to each guest's stay, which has raised \$5.8m to date. The Soneva Foundation (previously named the SLOW LIFE Foundation) invests these funds in projects that have a positive environmental, social and economic impact, and importantly, offset carbon emissions from resort activities and guest flights. The Foundation uses impact investing principles, seeking to recover outlays through carbon finance, which is in turn will be fed back into projects to help extend the reach and benefits to more families.

In 2014-15, we have expanded into energy provision. Human development and energy use are intrinsically linked. Simply being able to turn a light on can extend the working day and allow for much needed extra income or allow a child to study after dark. Approximately 1.5 billion people globally lack electricity. We are funding a pilot project to deliver clean solar-powered lighting to households in rural Myanmar, which we expect to expand further in 2016.

The Soneva Foundation is funded by a 2% environmental levy on room revenue. To date, this equates to...

- ☀ \$3,454,488 in social value generated in 2014-15.
- ☀ 191,192 tonnes of CO<sub>2</sub> mitigated since 2008.
- ☀ 1 million tonnes of CO<sub>2</sub> to be mitigated over the lifetime of Soneva Foundation projects already initiated.
- ☀ 511,920 trees planted in Thailand.
- ☀ 160,810 people benefiting from fuel-efficient cook stoves.
- ☀ 610,018 people receiving access to safe drinking water and basic sanitation services.

## *soneva foundation projects*

### **Myanmar Stoves Campaign**

The Soneva Foundation is delivering the first Gold Standard Foundation certified carbon project in Myanmar which will see the distribution of fuel efficient cook stoves to 84,000 families. We are working with Orbis Development Partners as our project developer and Mercy Corps as our implementation partner. In 2015 this project was extended to include institutional cook stoves, large stoves used in schools, monasteries and market places.

In 2014-15 we distributed 4,489 stoves reaching 20,649 people in 264 villages. The fuel efficient stove supplied by Envirofit reduces wood consumption by 50%, air pollution by 80% and CO<sub>2</sub> emissions by 60%.

### **Myanmar Rural Electrification Project**

The Soneva Foundation is funding Orbis Development Partners to install solar micro-grids in two villages in rural Myanmar as a pilot for the Myanmar Rural Electrification Project. The project supplies clean, affordable and reliable lighting to 23 households in Yone Kone village and 45 households in Kyat Tel village.

In a country where darkness typically falls at 6pm, the extra hours of light allow villagers to extend their working day to include work that can be done from the home. Some villagers report increasing their monthly income by up to 35%. Solar-powered lighting also offers a safe alternative to candles and oil lamps which pose a serious fire hazard.

### **Darfur Stoves Project**

The Soneva Foundation is providing funding to distribute fuel efficient cook stoves in war-torn Darfur and to register the project for carbon credits with the Gold Standard Foundation. Women are particularly vulnerable to assault and violence while foraging for wood, so reducing the amount of fuel needed for cooking is vitally important. Deforestation is also averted and carbon emissions from cooking – a major contributor to global carbon emissions – are reduced. The project has created a local industry around the assembly of cook stoves, bringing much needed employment to an area where jobs are scarce.

### **Soneva Forest Restoration Project**

The Soneva Foundation has partnered with the PATT Foundation to plant 511,920 trees covering 300 acres in the Chiang Mai region of northern Thailand. We used a Framework Species Methodology, with guidance from the Forest Restoration Research Unit of Chiang Mai University, with 90 species of trees planted. Over a period of 7-8 years, seed-dispersing birds will increase the number of species further, creating a rich biodiverse forest. The project will mitigate an estimated 255,000 tonnes of CO<sub>2</sub>.

### **Soneva Wind Turbine**

The Soneva Wind Turbine is a 1.5 Mega Watt (MW) Suzlon wind turbine built to provide clean energy in Tamil Nadu, India. This will mitigate 70,000 tonnes of CO<sub>2</sub> over a 20-year period through the production of 80,000 MWh of clean electricity.

[www.sonevafoundation.org](http://www.sonevafoundation.org)





### *profile: than than win*

Myanmar ranks very low on the Human Development Index, coming in at 150 of 187 countries in 2014. Only 25% of the population has access to electricity, and this is concentrated in urban areas. Consequently, rural families spend as much as 40% of their income – or time equivalent – on purchasing or collecting firewood for cooking. It is a huge and unremitting task.

The problem is compounded by the indoor air pollution created by cooking on open fires, which kills over to 4 million people a year, mostly women and children, and more than HIV/AIDS and malaria combined. It is a shocking statistic.

Than Than Win is the owner of a fuel efficient cook stove that was supplied by the Soneva Foundation at a subsidised cost. The cook stove reduces air pollution by 80%. Than Than Win explains the benefits of the stove.

“I think this cook stove is amazing! Buying it was a big investment for us, but I made the right choice. It uses about half the wood of our old stove and it cooks much faster.

“But it is more than just saving wood and money. It is also the simpler, most unexpected things. I have peace of mind. My kitchen is not going to catch fire and I don’t need to worry if I need to step away for a moment. I can leave it cooking while I get water or feed the animals.”

Known locally as the ‘five minute stove’, the saving in time spent in the kitchen and on sourcing fuel means more time for the harvest and creative ways to supplement household income. For Than Than Win, this also means she can send her eight year old son to school. He has a thirst for learning and she has high ambitions for him.

“I’d like my son to be well educated so he can join the government and help prevent global warming.”





*profile: ma thet mar oo*

With a smile that lights up a room, Ma Thet Mar Oo is known in her village of Kyat Tell as the ‘power lady’. Ma Thet is the local supervisor of the Myanmar Rural Electrification Project, set up by the Soneva Foundation with Orbis Development Partners.

Until recently, villagers’ only source of light was battery powered torches. 87% of Myanmar’s population is not connected to the grid and, according to the United Nations Environment Programme, over 9 million households in Myanmar live without access to reliable electricity for basic lighting needs. This leaves Myanmar among the least electrified countries in the world.

Ma Thet oversees a micro-grid that serves 45 households. Rather than supplying individual solar arrays and batteries, a central system is set up for a cluster of

households. The households pay a monthly fee that includes maintenance and is comparable to the cost of candles and oil lamps. This saves families from the prohibitive cost of an individual system and on-going maintenance fees.

“I’m happy. Our village is brighter and safer. My neighbours are satisfied and this is affordable for them.” Additionally, Ma Thet earns an extra \$20 a month as supervisor, a significant supplement to her day job as a farmer in a country where the average income is just \$70 a month.

“I use the additional income to invest in my farm. I now can rent a motorised plough that makes it easier when the rain comes and gives me a better chance to get good crops.”

The Soneva Foundation plans to extend solar power to more households in 2016.

Ma Thet Mar Oo is Kyat Tel village’s ‘power lady’. She provides lights for 45 households from the solar PV array in her backyard.



## *slow life symposium*

We founded the SLOW LIFE Symposium to have influence beyond our own networks and beyond our own industry. Organised by the Soneva Foundation and hosted by Soneva, it is a perfect opportunity to align the values of the Foundation with the business ethic of Soneva.

Each year we gather the best scientists, philanthropists, business leaders and policy makers for three days of problem solving around the large sustainability challenges and opportunities facing humanity. Participants leave as partners collaborating on solutions-focused initiatives that are supported year round by the Soneva Foundation.

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

**Jonathon Porritt**  
**Chair, SLOW LIFE Symposium**  
**Founder Director, Forum for the Future**

I have always hung on to the idea that it is possible for a small group of people to make very good things happen. Over three days in November last year, 30 accomplished individuals sought out opportunities to inject new energy into existing sustainability initiatives or get some wholly new ideas shared and tested.

It's always a privilege to spend time with people intent on using their creative energy to help solve some old but still massively problematic challenges. There have always been a number of really complex barriers in terms of 'selling in' the whole notion of sustainability - not least the way it seems to work against what we've been trained up to see as 'progress'. The beauty of the Symposium is the opportunity it provides to bring together people with very different kinds of creative energy, ready and able to infuse each other's ideas with fresh and innovative perspectives.

On leaving last year's Symposium, I think we all felt an additional sense of urgency about turning these ideas into actions that could make a real difference in the lives of millions of people.



**Jean Oelwang**  
**CEO, Virgin Unite**

Virgin Unite works with the B Team, a group of business leaders co-founded by Richard Branson and Jochen Zeitz with a shared goal of finding better ways of doing business. After the SLOW LIFE Symposium, we brought the B Team together with Symposium participants, ranging from a documentary filmmaker to a financial investor to two people that are working in the fishing industry.

It was beautiful to see the collaboration between those groups. We had some great discussions about what a future world of business could look like to inspire millions of business leaders to work towards a better way of doing business for the wellbeing of people and the planet. We have struck up a particularly strong partnership with Johan Rockström and his team at the Stockholm Resilience Centre and have adopted the planetary boundaries as a guiding framework for the B Team.





## 20-14 slow life symposium initiatives

### **Abundance within Planetary Boundaries**

The planetary boundaries framework, developed by a team of international scientists led by Symposium participant Johan Rockström, defines the nine planetary boundaries that create the ‘safe operating space’ within which humanity can continue to thrive. Boundaries include freshwater over-abstraction, land use change, nutrient run-off and terrestrial and atmospheric pollution: combined with climate change, crossing these boundaries causes food and water scarcity, ocean acidification, aquatic eutrophication and anoxia, and biodiversity loss.

The planetary boundaries have been adopted as a guiding principle by the United Nations Sustainable Development Goals but there is still much work to do to integrate the boundaries further into policy frameworks and business practices. We have assembled a team of experts from the 2013 and 2014 Symposiums including scientists and communicators to stimulate engagement from all elements of society. This includes a partnership with the B Team, co-founded by Symposium participants Richard Branson and Jochen Zeitz, to mainstream the planetary boundaries into the business sector.

### **Sustainable Agriculture**

Digital Green, founded by Symposium participant Rikin Gandhi, currently works across 4,000 villages and with 450,000 farmers in India. About 60% of these farmers are in rice-growing regions of the country. Digital Green is actively converting many of these farmers from an anaerobic flood-based cultivation of paddy to the System of Rice Intensification (SRI) which can reduce N<sub>2</sub>O-N emissions by 0.90 kg ha.

We are working with Digital Green to develop a methodology for securing Gold Standard Foundation carbon credits for farmers adopting SRI. The returns that are raised will be reinvested to sustain and scale Digital Green’s work across India and could open a new channel for voluntary carbon credits for other organisations.

### **Community Capital**

At the 2014 Symposium, discussions of ‘Philanthropic Governance’ touched on several constraints and opportunities to more efficiently and effectively deploy capital on behalf of a charitable organisation’s mission. Several participants, including EcoTrust’s Jim Norton, expressed a key theme: philanthropy needs to move away from the extraordinarily high costs and transactional resource requirements of sourcing funds project-to-project, proposal-by-proposal.

The Soneva Foundation is supporting EcoTrust to develop a funding mechanism in which local communities can invest. Engaging communities in local and regional projects can increase capital flows and ensure that the community is invested in the project’s success. The initial product will be a ‘Salmon Nation Note’ to contribute to lively cities, functioning ecosystems, meaningful employment and healthy local and diverse sources of food, water and energy on the US west coast. Longer term, the product design will be shared by the Soneva Foundation as an asset to our NGO partners.



Chef Khun Benz cooks for SLOW LIFE Symposium participants using Soneva Foundation cook stoves.



WWW works with One Drop and Water for People to ensure that 100% of the population of Sheohar, India, has access to safe drinking water.  
Photo Credit: ONE DROP/Terry Hughes

## *case study: whole world water*

Imagine a world in which sending your child to school could make her sick because there is no clean drinking water and the toilets are unsanitary. Imagine operating a health clinic where the medical professionals do not have access to the clean water necessary to guarantee hygienic conditions. Imagine living in a community with a limited water supply and the fear that what there is may well be contaminated.

This is the reality for 750 million people worldwide who do not have access to clean and safe drinking water and the 2.5 billion people who lack basic sanitation services. We think this is an intolerable injustice, not least because it is a fixable problem.

WHOLE WORLD Water (WWW) was founded with a very simple premise: if the hospitality industry united to provide clean and safe drinking water globally, together we could raise the millions of dollars necessary to achieve this goal.

The idea for WWW was borne out of the 2011 SLOW LIFE Symposium, with participant Karena Albers taking inspiration from the Soneva concept of filtering and bottling water on-site and donating a percentage of revenues to clean drinking water projects. Soneva has been doing this since 2008 which has averted the production of 1,000,000 plastic bottles and allowed us to provide clean water and sanitation to over 600,000 people whilst simultaneously reducing operating overheads.

WWW members are hotels, resorts and restaurants that adopt a similar operating and financial model, installing on-site filtering and bottling and generating revenues from sales of their own water. Members can increase their water sales revenue by 28% compared to buying branded bottled water. 10% of sales revenue is donated to the WHOLE WORLD Water Fund which is then distributed to carefully selected partners to deliver local water and sanitation services.

We are aligned with the UN Sustainable Development Goals adopted by the 193 member nations of the United Nations, specifically SDG 6, which calls us all to ensure that everyone, everywhere has access to clean and safe drinking water - forever.

Visit [www.wholeworldwater.org](http://www.wholeworldwater.org) to find out how to become a member, or how to encourage hotels and restaurants you visit to join WHOLE WORLD Water.

## partnerships

Whether working with our local communities or working with global institutions, we know that influencing change is more effective in partnership than individually. We work with carefully selected partners to deliver our social and environmental mission.

### **The Long Run**

Established by entrepreneur and former CEO of Puma Jochen Zeitz, the purpose of The Long Run is to provide a gold standard for the management of pristine destinations. To qualify as a member, destinations need to own or have influence over significant areas of landscape or seascape and adhere to rigorous standards of the 4Cs: commerce, culture, conservation and community. Soneva Kiri and Soneva Fushi are Long Run Alliance Members and Soneva Fushi is in the process of becoming accredited as a Global Ecosphere Retreat, considered the highest standard for sustainability within the hospitality industry.

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

### **International Tourism Partnership**

The International Tourism Partnership (ITP) provides a non-competitive platform for hotel industry leaders to share ideas, build relationships and work collaboratively to make this one of the world's most responsible industries. ITP provides a network for leaders within the hotel industry to collaborate with businesses, industry associations, non-profit organisations, campaigners, suppliers and academics – all with the common goal of improved sustainability standards. The focus this year has been the development of the Hotel Water Measurement Initiative in which Soneva participates.

[www.tourismpartnership.org](http://www.tourismpartnership.org)

### **FINished with Fins**

Soneva Fushi has long been an active campaigner against shark fishing in the Maldives. In 2010, the Maldives became only the second country in the world to implement an outright ban on shark fishing. In 2014, Soneva Fushi was named SharkSavers' 'I'm FINished with Fins' regional campaign headquarters and Sonu and Eva Shivdasani were named as ambassadors.

[www.sharksavers.org](http://www.sharksavers.org)



Since a ban on shark fishing was implemented in the Maldives in 2010, the shark population has increased. Sharks are vital for the balance of marine life and coral reefs.

## organisations we support

### **Soneva Foundation**

[www.sonevafoundation.org](http://www.sonevafoundation.org)

### **WHOLE WORLD Water**

[www.wholeworldwater.org](http://www.wholeworldwater.org)

### **Orbis Development Partners**

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

### **Mercy Corps**

[www.mercycorps.org/myanmar](http://www.mercycorps.org/myanmar)

### **Gold Standard Foundation**

[www.goldstandard.org](http://www.goldstandard.org)

### **Potential Energy**

[www.potentialenergy.org](http://www.potentialenergy.org)

### **MyClimate**

[www.myclimate.org](http://www.myclimate.org)

### **Water Charity**

[www.watercharity.org](http://www.watercharity.org)

### **Thirst Aid**

[www.thirst-aid.org](http://www.thirst-aid.org)

### **Action Against Hunger**

[www.actionagainsthunger.org](http://www.actionagainsthunger.org)

### **Care for Children**

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

### **PATT Foundation**

[www.pattfoundation.org](http://www.pattfoundation.org)

### **The Converging World**

[www.theconvergingworld.org](http://www.theconvergingworld.org)

### **Shark Savers**

[www.sharksavers.org](http://www.sharksavers.org)

### **One Ocean Media Foundation**

[www.jonbowermaster.com/oombf](http://www.jonbowermaster.com/oombf)

### **Diversity in Aquatics**

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

### **Baa Atoll Resorts United (BAARU)**

[www.broffice.gov.mv/en/](http://www.broffice.gov.mv/en/)

### **Baa Atoll UNESCO Biosphere Reserve Office**

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

### **The Long Run**

[www.tourismpartnership.org](http://www.tourismpartnership.org)

### **International Tourism Partnership**

[www.wttc.org](http://www.wttc.org)

### **World Travel & Tourism Council**



## *case studies: organisations we support*

### **Action Against Hunger UK**

Childhood malnutrition is a potentially fatal health condition. Soneva is funding Action Against Hunger UK to deliver Outpatient Therapeutic Programmes to identify and treat severely acute malnourished children in rural Nepal. The programmes are designed to reach families in remote villages whose distance from health clinics mean they are often underserved.

The Soneva Foundation funded the programme with \$60,000. The funds were raised through Soneva's participation in the Restaurants Against Hunger programme.

### **Care for Children**

Care for Children was originally established in China to provide foster care for orphaned children, successfully placing over 250,000 children in foster homes. A recent UNICEF report recommends a transition from institutional care to foster care for Thailand's orphaned and vulnerable children. At the invitation of the Thai government, Care For Children has now partnered with the government to train all government-run orphanages in local family placement care practice.

The Soneva Foundation has funded Care For Children to open a National Foster Care Training and Resource Centre in Chiang Mai with an \$11,000 donation. From this centre, Care For Children will strategically manage and deliver its national training programme. There are approximately 50,000 orphaned and vulnerable children living in some form of institutional care in Thailand, and the goal is to help the government ensure all children have the opportunity to live with a family they can call their own.

*“I was immediately struck by how natural these boys looked in their foster family. And spending time with pet dogs can be very therapeutic for children who've suffered some form of trauma in their young lives, which is not an opportunity they would get living in an institution.”*

*Thomas Abbott, SA Project Manager, Care for Children*



Care for Children help place orphaned and vulnerable children with foster families.



## awards

Soneva is committed to excellence in everything we do. We are proud of the following awards which demonstrate that a commitment to our values ultimately enhances our guests' experience.

### General Awards

#### 2015

CONDÉ NAST JOHANSENS AWARDS FOR EXCELLENCE 2015	Finalist, Best for Families - Soneva Kiri, Thailand
JETSETTER 'Best of the Best' Award 2015	Best Far Flung Escape - Soneva Kiri, Thailand
TRIPADVISOR TRAVELER'S CHOICE AWARDS 2015	Top 10 Hotels for Service, Maldives - Soneva Fushi, Maldives

#### 2014

CONDÉ NAST TRAVELLER READERS' TRAVEL AWARDS 2014	3rd best hotel in the Middle East, Africa and Indian Ocean, and 5th in the 'World's Top 100' - Soneva Fushi, Maldives
BILANZ – Switzerland's leading business magazine – 2014 'World's Best Holiday Hotels'	Winner and Ranked Best Hotel World Wide - Soneva Fushi, Maldives
GLOBAL TRAVEL EXPERIENCE AWARD - Zanadu, China	Best Children's Programme - Soneva Kiri, Thailand

### Sustainability Awards

#### 2015

VIP INTERNATIONAL, Readers' Travel Award 2015	1st Place Sustainable Luxury Tourism - Soneva Kiri, Thailand
VIP INTERNATIONAL Traveller Readers' Travel Award 2015	2nd Place Sustainable Luxury Tourism - Soneva Fushi, Maldives
MATATO Maldives Travel Awards 2015	Leading Eco Resort - Soneva Fushi, Maldives
ITP GREEN HOTELLIER AWARDS 2015	Highly Commended for Asia Pacific 2015 - Soneva Fushi, Maldives
ENERGY GLOBE AWARD 2015	Thailand National Winner - Soneva
WTTC TOURISM FOR TOMORROW AWARD 2015	Environment Category - Soneva

#### 2014

IE SUSTAINABLE LUXURY AWARD 2014	Category Hospitality Industry - Soneva
TOP 10 MR & MRS SMITH AWARDS 2014	Category The Eco Award - Soneva Fushi, Maldives
INTERNATIONAL HOTEL AWARDS 2014	5* Sustainable Hotel Maldives - Soneva Fushi, Maldives
INTERNATIONAL HOTEL AWARDS 2014	Best Sustainable Hotel Asia Pacific - Soneva Fushi, Maldives
INTERNATIONAL HOTEL AWARDS 2014	Best International Sustainable Hotel - Soneva Fushi, Maldives
THAILAND TOURISM AUTHORITY 2014	Thailand Green Excellence Award, Category Nature, Marine & Heritage - Soneva Kiri, Thailand
LONELY PLANET TRAVELLER 2014	Thailand's Destination Awards, Eco Friendly Resort - Soneva Kiri, Thailand



# soneva total impact assessment methodology

The Soneva Total Impact Assessment (TIA) methodology is inspired by the pioneering efforts of companies such as Puma and PwC to measure their Environmental Profit and Loss (EP&L) and Total Impact Measurement and Management (TIMM) respectively. As yet, there is no industry standard for environmental and social reporting so we have developed our methodology internally with the intention to improve on it year-on-year. Our Human Capital and Social Capital sections were developed with assistance from GIST Advisory.

The TIA assesses impacts from sources over which we have direct and indirect control within the following five categories.

## 1. Natural Capital

- a. CO<sub>2</sub> emissions  
CO<sub>2</sub> emissions from energy, air travel, ground travel, food, paper, waste and water from Soneva's direct and indirect operations.
- b. Direct water use
- c. Environmental Profit and Loss  
Impacts from energy, water, land use and CO<sub>2</sub> emissions via the food and beverage products in our supply chain. Collectively we refer to these supply chain impacts as our EP&L.

## 2. Human Capital

- a. Human Capital Creation  
The value of the jobs created and sustained in our operations by salary, training, working environment and experience.
- b. Human Capital Externalities  
The value created in society from hosts post-Soneva employment.

## 3. Social Capital

- a. Social Capital calculates the value of the relative improvement in wellbeing of individuals compromising the communities Soneva has been involved in.

## 4. Economic Capital

- a. Payroll
- b. Operational Expenditure
- c. Investments

## 5. Tax

- a. Property Tax
- b. People Tax
- c. Production Tax

The total value for each category is combined with the Natural Capital deficit to give the value of the Total Impact Assessment.

## Inclusions and Exclusions

- Soneva accounts for all of its direct and indirect impacts and no impacts have been intentionally omitted from this report.

## Base Year Selection

To measure performance Soneva has set a base year of July 2014 - June 2015 as a reference against which to assess progress on reductions targets in the future years.

## Quality Assurance

The data provided by Soneva Fushi and Soneva Kiri presented in this report was obtained under the supervision of Soneva Social & Environmental Conscience and is assumed to be accurate and complete.

Where accurate measures of emissions are not possible, estimates have been made. Soneva strives to improve the accuracy of its measurement and reporting of this voluntary disclosure.

## Natural Capital

Natural capital represents the positive and negative impacts that our operations have on the natural environment.

### Environmental Profit and Loss

We calculate the true cost of ecosystem services provided for our food and beverage products via our supply chain. There are a number of environmental drivers of which we assess land use, water, energy and CO<sub>2</sub> emissions. Collectively we refer to these impacts as our Environmental Profit and Loss (EP&L). We have placed a monetary value on each of the four environmental drivers based on research from academic papers as shown in Figure 2.

Figure 2 Environmental drivers

Environmental Drivers				
	Land use	Water	Energy	CO <sub>2e</sub>
<b>Pricing methodology</b>	Global farmland index approach	Cost of green, blue and grey water	Oil = energy	Social cost of carbon/effective cost of carbon
<b>Breakdown of usage per kg of to ten products</b>	Feed production, grazing processing, infrastructure, etc.	The green, blue and grey water footprint of farm animals and animal products.	Crop and feed production, building and construction, up/downstream processes, etc.	Feed production, on-farm energy usage, transportation, commodity delivery, water supply, etc.
<b>Derived costs</b>	USD 5,861/ha	USD 1.98/m <sup>3</sup>	USD 108/barrel of oil	USD 35/tonnes of CO <sub>2e</sub>

### Analysis

We have completed detailed studies of 44 of our top products, accounting for 75% of our total food purchase dollar value. For the remaining products we have used averages in categories such as meat, seafood, fruit and vegetables, groceries, dairy, alcoholic beverages, non-alcoholic beverages using the following methodology:

1. A universally acceptable model of Life Cycle Assessment.
2. Conversion of the environmental impact in monetary terms – refer to Figure 2.
3. Land use, water, energy, carbon emissions breakdown – refer to example in Figure 3.

### CO<sub>2</sub> Emissions

Our CO<sub>2</sub> emissions (for methodology see page 98) and our EP&L constitute the Natural Capital component of our TIA. We have converted our CO<sub>2</sub> emissions to a dollar value using a conversion factor of \$35 per tonne of CO<sub>2</sub>. For water consumption we use a conversion factor of \$1.98 per m<sup>3</sup> as shown in Figure 2.

Figure 3 Life Cycle Assessment: case study of beef

Land use	Unit	Amount	Notes: Land use	
For a billion kgs	Ha	6,106,000	<b>1. Effects of improved productivity upon population size and reduced time to slaughter, in combination with increased cropping yields has reduced the land use per kg of beef.</b>	
For 1 kg	Ha/kg	0.006		
<b>Total land used per kg of beef</b>	Ha/kg	0.006		
Water usage	Unit	Amount	Notes: Water	
<b>In feed</b>				
Grazing	Green	L/kg	<b>1. Feed depends on method of farming - grazing, mixed or industrial. Figures taken from The Green, Blue and Grey Water Footprint of Farm Animals and Animal Products.</b>	
	Blue	L/kg		
	Grey	L/kg		
Mixed	Green	L/kg	<b>2. World average of water footprint has been used for the “Green, Blue &amp; Grey Water” inputs.</b>	
	Blue	L/kg		
	Grey	L/kg		
Industrial	Green	L/kg	<b>3. Increased crop yields have per hectare resulted in a reduction of water use per kg of feed of 19% for corn silage, 65% for grain, 89% for soybeans, 14% for pasture.</b>	
	Blue	L/kg		
	Grey	L/kg		
Total water in 1 kg of beef	Green	L/kg		
	Blue	L/kg		
	Grey	L/kg		
<b>Summary: Water use</b>				
Feed	L/kg	15,928		
Miscellaneous (maintenance, drinking)	L/kg	-		
<b>Total water in 1 kg of beef</b>	L/Kg	15,928		
Energy	%	Unit	Amount	Notes: Energy
Processing plant	75%	Mj/kg	12	<b>1. Timeframe consideration: 485 days birth-slaughter.</b> <b>2. Carbon is the fundamental unit of energy within animal systems; thus differences in total maintenance energy can be considered to be a proxy for both resource use and CO<sub>2</sub> emissions.</b>
On-site processes	14%	Mj/kg	2	
Upstream processes	7%	Mj/kg	1	
Transport	4%	Mj/kg	1	
Fossil fuel energy		Mj/kg	-	
<b>Total energy</b>	100%		16	

CO <sub>2e</sub>	%	Unit	Amount	Notes: Carbon emissions
Enteric processes	30%	Kg CO <sub>2</sub> /kg	4.71	<b>1. Crop production in Australia is usually dry (no irrigation) but chemically intensive. Crop storage also adds significant weight to energy costs.</b>
Feed production	40%	Kg CO <sub>2</sub> /kg	6.27	
On farm energy consumptions	20%	Kg CO <sub>2</sub> /kg	3.14	
Manure management	0%	Kg CO <sub>2</sub> /kg	-	
Transportation	4%	Kg CO <sub>2</sub> /kg	0.63	<b>2. Total CO<sub>2</sub> emissions per kg of beef is averaged from three different case studies (Victoria, NSW and USA).</b> <b>3. Manure management is considered 0% because it is fed back into the system.</b> <b>4. Studies evaluating CO<sub>2</sub> footprint of beef production shows ranges per kg from 8.4-25.5 CO<sub>2</sub>/kg,</b>
Commodity delivery	2%	Kg CO <sub>2</sub> /kg	0.31	
Water supply	2%	Kg CO <sub>2</sub> /kg	0.31	
Administration	2%	Kg CO <sub>2</sub> /kg	0.31	
<b>Total CO<sub>2e</sub>/kg of beef</b>	100%	Kg CO <sub>2</sub> /kg	15.7	

## Human Capital

Human capital calculates the value of the jobs created and sustained in our operations by salary, training, working environment and experience, namely Human Capital Creation. It also calculates Human Capital Externalities, which is the value created in society from hosts post-Soneva employment.

The key drivers of Human Capital are:

- Skills generated by company training.
- Value of association with company brand.
- Individual capacity to absorb and apply training.

### Focus groups

The analysis constitutes two separate focus groups:

- Total employees in individual cohorts at Soneva Fushi and Soneva Kiri at the end of each financial year.
- New hires and trainees hired in each individual cohort annually.

### Data collection

The following data points for hosts and trainees are used for the analysis. Data is segregated into five individual cohorts based on Soneva’s employee structure and obtained from metrics collected on an annual basis by the human resources (HR) team:

- Total Employee Headcount (cohort-wise).
- Average Age of Employees (cohort-wise).
- Average Salary: Average annual compensation at the end of financial year for each cohort.
- Cost of Training: Marginal costs such as fees paid to external trainers, travel costs for training programme, and absorbed or allocable costs.

### Quantification and valuation of HCXTM

General reporting measures do not reflect the value of human capital impacts beyond a narrow ‘incurred-cost’ value whilst also ignoring the lifetime returns on the same. The value of the ‘asset’ created by skills training and other forms of human resource development is not estimated nor reported. The positive externalities from attrition are usually not measured nor reported. To address these failings in most reporting systems, the following key valuation parameters are incorporated in assumptions of GIST Advisory’s HCXTM model:

- Future annual salary growth rate.
- Future annual attrition rate.
- Future annual increase in compensation attributable to Soneva.
- Per capita Human Capital (HC) distribution across training period.
- Discount rate.
- Long-run inflation rate .

## Social Capital

Social capital calculates the value of the wellbeing generated by our outreach and philanthropic activities. To enable this, it is necessary to estimate quantitative (i.e. monetary) as well as qualitative values of the benefits gained as a result of Soneva CSR activities which are known to lead to improvement in wellbeing (i.e. social capital) at the individual and community level.

### Drivers

Three programmes have been assessed that generate positive benefits for stakeholders across South East Asia. These are:

- Myanmar Stoves Campaign
- Soneva Learn To Swim
- Soneva Eco Camp

The key drivers of social capital externalities for these three material programmes are:

- Income benefits stemming from productivity gains / employment opportunities.
- Indirect savings (i.e. monetary costs avoided) for beneficiaries attributable for Soneva initiatives.

### Valuation and data collection

Valuing and measuring social capital both in physical and monetary terms involves developing benchmarks and metrics that identify welfare improvements as a direct result of a specific programme and derived within a specified period of time.

Table 1 Myanmar Stoves Campaign data indicators

Indicator	Unit	2014-15
<b>Target population</b>		
Location	Pyawbwe, Myanmar	
Total population of region	Number	255,506
Total number of households in region	Number	50,048
Total number of households covered under programme outreach	Number	4,489
Average number of people per household in region	Number	4.6
Percentage of women in total population	%	52%
Percentage of children in total population	%	28%
Primary occupation of households in region	Description	Farmers
Average monthly income per household in region	US\$	\$71.00

Table 1 Myanmar Stoves Campaign data indicators

Indicator	Unit	2014-15
<b>Cook stove details</b>		
Type of cook stove (primary) used prior to programme intervention	Description	Three stone cook stove
Type of fuel utilised by three stone cook stove (primary)	Description	Fuel wood
Thermal efficiency of three stone cook stove	%	10.00%
Quantity of fuel wood consumed per household per year (prior to programme intervention)	Kgs/year	3,938
Type of cook stove (secondary) used post programme intervention	Description	Envirofit M5000
Primary fuel used by Envirofit M5000 (secondary)	Description	Fuel wood
Market price of Envirofit M5000 cook stove	US\$	\$30.00
Thermal efficiency of Envirofit M5000	%	29.70%
Percent improvement in average fuel consumption by switching to Envirofit M5000 versus traditional three stone cook stove	%	50.00%
Unit cost of fuel wood	US\$/Kg	\$0.02
Percentage improvement in CO emitted per kg of fuel wood for Envirofit M5000 versus three stone cook stove	%	70.90%
Percentage improvement in Particle Matter (PM) emitted per kg of fuel wood for Envirofit M5000 versus three stone cook stove	%	44.70%
CO <sub>2</sub> emitted per cook stove per year for three stone cook stove	Tonnes CO <sub>2</sub> /year	7.8
CO <sub>2</sub> emitted per cook stove per year for Envirofit M5000	Tonnes CO <sub>2</sub> /year	3.05
Estimated social cost of carbon (current estimates based on Trucost)	US\$/tCO <sub>2</sub>	\$121.00
<b>Vendor training</b>		
Total number of vendors trained	Number	155
Percentage to local vendors employed post-training	%	100%
Average number of cook stoves sold per vendor in financial year	Number	33
Average income per cook stove sold (over period of two years) for vendor	US\$/cook stove	\$2.00
Average monthly income per vendor post-training in financial year	US\$/vendor	\$66.00
<b>Cost of the programme</b>		
Total cost of programme design & management in financial year	US\$	\$69,959
Total cost of programme implementation in financial year	US\$	\$60,000
Total fixed costs associated with programme in financial year	US\$	\$129,959
Percentage of total fixed costs borne by Soneva in financial year	%	100%
Total cost of purchasing Envirofit M5000 cook stoves in financial year	US\$	\$164,124
Total cost of distributing Envirofit M5000 cook stoves in financial year	US\$	\$7,116
Total variable costs associated with programme in financial year	US\$	\$171,240
Percentage of total variable costs borne by Soneva in financial year	%	100%

Table 2 Myanmar Stoves Campaign assumptions

Description	Unit	FY
<b>Health expenditure</b>		
Percentage of COPD afflicted population seeking healthcare	%	100%
<b>Vendor training</b>		
Average increase in annual income post-training	%	5%
Discount rate for NPV of future incomes	%	0%
Inflation rate	%	5%
Average quit rate (i.e., rate at which trained vendors quit occupation)		
Years 1-5	%	10%
Years 6-10	%	25%
Years 11+	%	20%
Notes:		
<ul style="list-style-type: none"> <li>Women are primarily vulnerable to respiratory diseases caused by indoor air pollution.</li> <li>The most harmful constituents of indoor air pollution are particle matter (PM) and carbon monoxide (CO). The average reduction of both these pollutants (CO &amp; PM) has been used as a proxy for reduction in the health cost of target population.</li> </ul>		

Table 3 Soneva Learn To Swim data indicators

Indicator	Unit	2014-15
<b>Target population</b>		
Location	Baa Atoll, Maldives	
Target population	Children	
Total population of the region	Number	13,856
<b>Swimming lessons</b>		
Total number of children covered under programme	Number	62
Total number of adults covered under programme	Number	8
Annual frequency of conducting programme	Number	2
Average number of classes conducted under single programme schedule	Number	12
Average cost per beneficiary for participating in alternative programme providing same benefits (i.e. fees paid for similar swimming lessons to private instructors)	US\$	\$40

Table 3 Soneva Learn To Swim data indicators

Indicator	Unit	2014-15
<b>Employment</b>		
Total number of adults trained under programme	Number	8
Total number of adults employed as swimming instructors post-training	Number	0
Skill development-employment ratio	%	0%
Average annual income of women employed as swimming instructors in financial year	US\$	\$7,000
<b>Costs of the programme</b>		
Total number of personnel employed under programme in financial year	Number	10
Total work hours per programme for employed personnel in financial year	Number	28.50
Average CTC per personnel in financial year	US\$ / personnel	\$698
Total average CTC of personnel for programme in financial year	US\$	\$6,984
Percentage of total fixed costs borne by Soneva in financial year	%	100%
Total fixed costs borne by Soneva in financial year	US\$	\$6,984
Total cost of travel incurred by programme in financial year	US\$	\$1,057
Other variable costs (material, literature, etc.)	US\$	\$1,523
Other personnel costs (hosts apart from trainers) in financial year	US\$	\$7,612
Total variable costs associated with programme in financial year	US\$	\$10,192
Percentage of total variable costs borne by Soneva in financial year	%	100%
<b>Opportunity costs associated with the programme</b>		
Total number of volunteers associated with the programme	Number	11
Average hourly wage rate in region in financial year	US\$	\$5.73
Total number of hours under programme in financial year	Hours	20
Average opportunity cost of volunteering (based on forgone incomes) per volunteer for programme in financial year	US\$/person	\$114.60
Total opportunity cost of volunteering (based on forgone incomes) for programme in financial year	US\$	\$1,260.60

Table 4 Soneva Learn To Swim assumptions

Description	Unit	FY
<b>Swimming Classes</b>		
Opportunity costs (estimated hourly wages) per volunteer	US\$	5.73
<b>Swim Instructors</b>		
Average quit rate (i.e. rate at which swimming instructors quit occupation)		
Years 1-2	%	0%
Years 3-4	%	0%
Years 5+	%	0%
Estimated lifespan for income generation	Years	10
Average increase in annual income post-training	%	8%
Discount rate for NPV of future incomes	%	4%
Inflation rate	%	8%

Table 5 Soneva Eco Camp data indicators

Indicator	Unit	2014-15
<b>Target population</b>		
Location	Baa Atoll, Maldives	
Target population type	Children	
Total population of region	Number	13,856
<b>Eco Camp programme</b>		
Total number of children covered under programme	Number	84
Total number of schools in the region	Number	12
Number of schools covered under the programme in financial year	Number	4
Number of Soneva Eco Camps conducted annually	Number	5
Average number of students participating in each Eco Camp	Number	17

Table 5 Soneva Eco Camp data indicators

Indicator	Unit	2014-15
<b>Cost of the programme</b>		
Total number of personnel employed under programme in financial year	Number	5
Total work hours per programme for employed personnel in financial year	Number	60
Total CTC per personnel in financial year	US\$	\$685
Total fixed costs borne by Soneva in financial year	US\$	\$685
Total cost of programme design and management in financial year	US\$	\$0
Total cost of travel incurred by programme in financial year	US\$	\$389
Other variable costs (material, literature, etc.)	US\$	\$0
Total variable costs associated with programme in financial year	US\$	\$389
<b>Opportunity costs associated with the programme</b>		
Total number of volunteers associated with the programme	Number	20
Average hourly wage rate in region in financial year	US\$	\$5.73
Total number of hours under programme in financial year	Hours	3
Average opportunity cost of volunteering (based on forgone incomes) per volunteer for programme in financial year	US\$/person	\$17.19
Total opportunity cost of volunteering (based on forgone incomes) for programme in financial year	US\$	\$343.80

## Economic Capital

Economic Capital uses the financial figures from the Soneva's fiscal year and summarises three categories:

- Payroll
- Operational Expenditure
- Investments

## Tax

Tax impact uses the financial figures from Soneva's fiscal year and summarises three categories:

- Property Tax
- People Tax
- Production Tax

# carbon footprint

## Carbon Survey

The management of our carbon footprint is a key component of our commitment. To identify where to invest in carbon reduction, Soneva conducts an annual Carbon Survey.

Each of our resorts has a designated sustainability officer who collects and reports performance data on all resort activities and equipment that emit greenhouse gases. In addition to monitoring our own emissions, we also collect data on emissions from activities that occur outside the resort property but which can be directly attributed to the activities of the resort – this includes emissions from the freight transport of goods and the air travel of our hosts and guests.

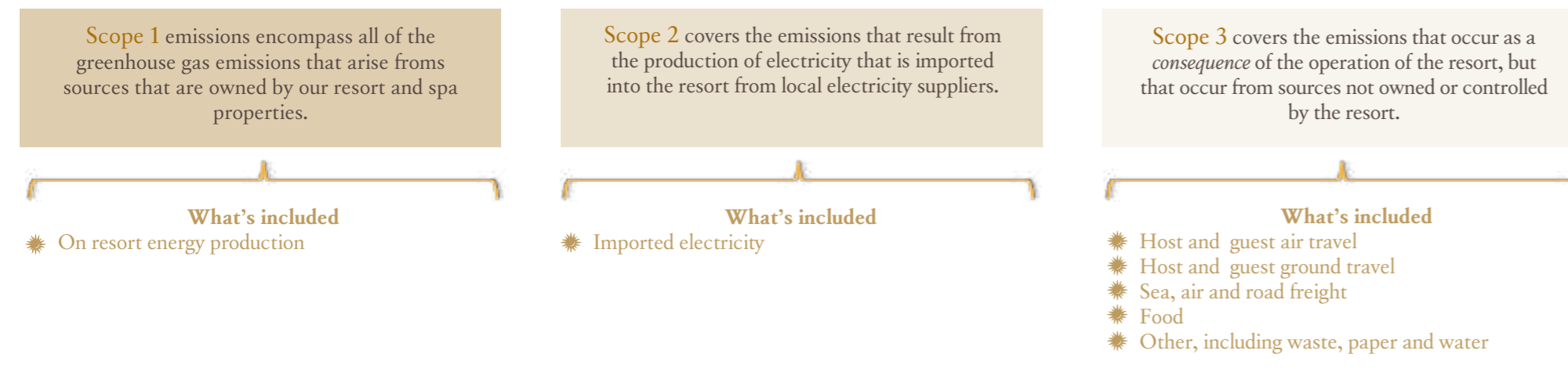
## Scope

For our annual carbon survey we collect and report emissions data on activities in eight categories that collectively capture all the CO<sub>2</sub> emissions associated with Soneva resorts. These categories are: energy, air travel, ground travel, freight, food, paper, waste and water.

In order to meet international conventions on emissions reporting we further group these emissions into three baskets or ‘scopes’. Each scope reflects how the emissions relate to the activities of the resort. Figure 1 provides a key for identifying how each category of emissions is grouped by scope.

Throughout this document we report emissions by both scope and the activity category responsible for the emissions.

Figure 1: The scope of our carbon footprint analysis



Source: Soneva

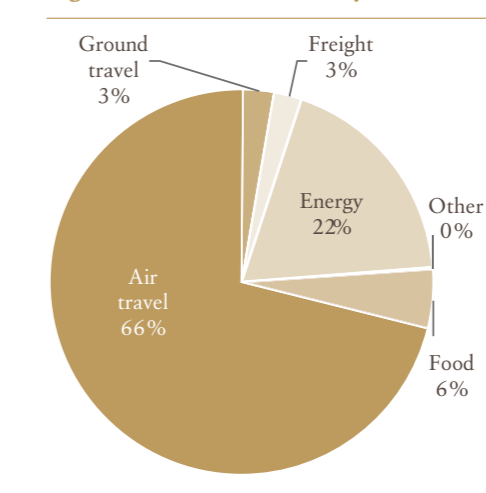
## Carbon Footprint

Soneva had a total carbon footprint for 2014-15 of 32,637 tonnes CO<sub>2</sub>. This represented a decrease of 22% on the 2008-09 baseline figure of 41,715 tonnes CO<sub>2</sub>.

Guest and host air travel emissions represent the vast majority of Soneva emissions with 66% of the total, while energy emissions are the second largest contributor to the overall footprint with 22% of measured emissions. Remaining emissions account for 12% of the total carbon footprint seen in Figure 2.

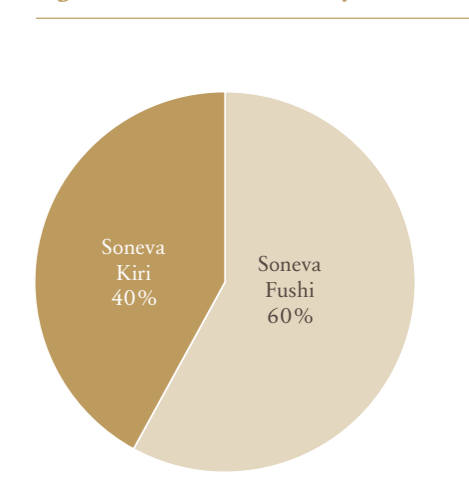
The distribution of the total emissions is 60% for Soneva Fushi and 40% for Soneva Kiri seen in Figure 3.

Figure 2: Soneva emissions by source



Source: Soneva Carbon Calculator

Figure 3: Soneva emissions by resort



Source: Soneva Carbon Calculator

Table 1: Breakdown of 2014-15 emissions

Tonnes of CO <sub>2</sub> unless otherwise stated	Scope 1	Scope 2	Scope 3							Totals		Per-resident-night			
			Air Travel	Ground Travel	Freight	Food	Waste	Paper	Water	Total emissions Scope 1&2	Total emissions Scope 1-3	Per-resident-night Scope 1&2 in kg	Per-resident-night Scope 1-3 in kg	Per-resident-night excl. air travel in kg	
Resort	Resort direct energy consumpt.	Electricity imports													
Soneva Fushi	4,107	0	12,691	818	685	1,284	-51	11	0	4,107	19,545	22	107	37	
Soneva Kiri	3,182	0	8,909	143	198	669	-14	4	0	3,182	13,092	30	123	39	
<b>Soneva</b>	<b>7,289</b>	<b>0</b>	<b>21,600</b>	<b>960</b>	<b>884</b>	<b>1,954</b>	<b>-65</b>	<b>15</b>	<b>0</b>	<b>7,289</b>	<b>32,637</b>	<b>25</b>	<b>113</b>	<b>38</b>	

Source: Soneva Carbon Calculator

### Per-resident-night comparisons

Another useful approach for comparing the carbon footprints of each property is to interpret the emissions through a measure of “per unit” emissions such as per-guest-night or per-guest-stay. We use *per-resident-night*. This is defined as:

$$\frac{\text{Total carbon footprint}}{\text{Total guest nights} + \text{Total host nights}}$$

The reason for favouring a per-resident-night measure is that it is relatively effective at neutralizing the impact of changing occupancy or host levels on the overall emissions data. A per-resident-night approach also has an advantage over a per-guest-night perspective in that it neutralizes the impact of different resourcing policies and hosts residing on or off resort.

Table 1 provides a breakdown of emissions by source for each of the Soneva resorts. The columns on the right of the table illustrate the emissions per-resident-night for each property.

Soneva had a footprint of 113 kgs CO<sub>2</sub> per-resident-night in 2014-15. Excluding air travel the carbon footprint per-resident-night was 38 kgs CO<sub>2</sub>.

### Emissions reductions

Soneva reduced its total carbon footprint by 22% against the baseline emissions of 2008-09.

The majority of these emissions increments were through lower air travel emissions, largely reflecting an increase in average length of stay at both properties.

Adjusting for the contribution of air travel emissions, the overall performance of Soneva was slightly up. On a per-resident-night basis (excluding air travel) emissions were 2% higher than in 2008-09. Considering only energy, Soneva emissions increased by 15% overall and 7% per-resident-night. This largely reflects the bigger villas constructed at Soneva Fushi.

**Table 2: Change in emissions relative to 2008-09 base-year**

% change relative to 2008-09	Scope 1	Scope 2	Scope 3							Totals		Per-resident-night		
			Air Travel	Ground Travel	Freight	Food	Waste	Paper	Water	Total emissions Scope 1&2	Total emissions Scope 1-3	Per-resident-night Scope 1&2	Per-resident-night Scope 1-3	Per-resident-night excl. Air travel
Resort	Resort direct energy consumpt.	Electricity imports												
Soneva Fushi	+20%	0%	-33%	+12%	-4%	+32%	-227%	-4%	0%	+20%	-22%	+13%	-25%	+10%
Soneva Kiri	+9%	0%	-30%	-55%	+4%	-16%	-722%	-39%	0%	+9%	-23%	-1%	-30%	-10%
<b>Soneva</b>	<b>+15%</b>	<b>0%</b>	<b>-32%</b>	<b>-9%</b>	<b>-2%</b>	<b>+11%</b>	<b>-269%</b>	<b>-17%</b>	<b>0%</b>	<b>+15%</b>	<b>-22%</b>	<b>+7%</b>	<b>-27%</b>	<b>+2%</b>

Source: Soneva Carbon Calculator

### Breakdown of 2014-15 emissions

**Table 3: Breakdown of 2014-15 emissions**

Scope	Source	Quantity	Unit	CO <sub>2</sub> (kg/yr)	Percent of total resort emissions
Scope 1 (Direct emissions)	<b>Energy consumption</b>				
	Charcoal	20,548	kg	47,610	0.15%
	Methanol	7,988	L	10,224	0.03%
	Kerosene	1,520	L	3,846	0.01%
	Diesel for power consumption	2,561,630	L	6,865,168	21.04%
	Liquified petroleum gas	119,524	kg	362,158	1.11%
Scope 2	<b>Imported electricity from local electricity supplier</b>	0	kWh	0	0%
Scope 3 (Indirect emissions)	<b>Air travel</b>				
	Long haul international (>5,000km)	83,707,226	km	17,590,236	54.90%
	Medium haul international (1,000-5,000km)	12,087,510	km	2,257,584	6.92%
	Short haul international (<1,000km)	303,757	km	101,172	0.31%
	Jet fuel (own plane)	652,498	L	1,650,819	5.06%
	<b>Ground travel</b>				
	Motorcycle/scooter	91,401	km	6,672	0.02%
	Diesel for transport	134,787	L	361,230	1.11%
	Petrol for transport	255,900	L	592,409	1.82%
	<b>Food</b>				
Non-vegetarian meals	901,698	Meals	1,577,972	4.83%	
Vegetarian meals	300,566	Meals	375,708	1.15%	

Scope	Source	Quantity	Unit	CO <sub>2</sub> (kg/yr)	Percent of total resort emissions
Scope 3 (Indirect emissions)	<b>Freight</b>				
	Air – long haul (>5,000km)	370,380	ton km	93,848	0.29%
	Air – medium haul (1,000-5,000km)	418,756	ton km	552,757	1.69%
	Air – short haul (<1,000km)	50,729	ton km	222,228	0.68%
	Road	71,343	ton km	8,775	0.03%
	Ship	480,561	ton km	6,247	0.02%
	<b>Paper</b>				
	Office paper (0% recycled content)	133	kg	377	0.00%
	Office paper (100% recycled content)	5,821	kg	10,419	0.03%
	Toilet paper / tissue paper / serviettes	4,322	kg	4,322	0.01%
	<b>Waste</b>				
	Landfill – mixed solid waste	222,850	kg	26,742	0.08%
	Organics dumped at sea	0	kg	0	0.00%
	Biochar produced	16,952	kg	-8,476	-0.03%
	Recycled food scraps (organic)	405,179	kg	-48,621	-0.15%
	Recycled garden waste	419,030	kg	4,190	0.01%
	Recycled glass	19,108	kg	-1,720	-0.01%
	Recycled metal	10,242	kg	-14,748	-0.05%
	Recycled plastic	2,386	kg	-1,002	0.00%
	Recycled paper	20,093	kg	-21,299	-0.07%
<b>Water</b>					
Rainwater collected	39,746	m <sup>3</sup>	0	0.00%	
Deep well	55,524	m <sup>3</sup>	0	0.00%	
On-site desalination	94,140	m <sup>3</sup>	0	0.00%	
<b>Total emissions for 2014-15</b>				<b>32,636,849</b>	<b>100%</b>

## Our methodology

The Soneva Carbon Footprint Report is modelled on the World Resources Institute / World Business Council for Sustainable Development (WRI/WBCSD) *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition*.

The Soneva Carbon Calculator collects and analyses emissions data from Soneva resort and spa properties and this information is then reported in an annual Carbon Inventory Report for each property.

### Our operational boundaries

Soneva’s operational inventory follows the ‘control’ approach and includes carbon emissions from sources over which it has operational control.

The GHG Protocol identifies three Scope categories for common classification and comparison of resort emissions:

- **Scope 1:** Direct Carbon Emissions from sources that are owned by resort/spa
- **Scope 2:** Indirect Carbon Emissions from the generation of purchased electricity
- **Scope 3:** Indirect Carbon Emissions that occur as a consequence of the activities of the resort/spa, but occur from sources not owned or controlled by the resort/spa

According to the Greenhouse Gas Protocol, Scopes 1 and 2 must be included in any carbon footprint assessment. The inclusion of Scope 3 emissions is optional and Soneva has opted to include it in our Carbon Footprint analysis. Carbon dioxide (CO<sub>2</sub>) is the primary greenhouse gas that is included in this inventory. Other gases, such as CH<sub>4</sub> and N<sub>2</sub>O are more minor contribution sources based on Soneva’s activities and are included as part of the CO<sub>2</sub> results.

### Inclusions and exclusions

- Emission sources are identified with reference to the methodology described in the GHG Protocol and the ISO 14064-1 (2006) standard.
- Soneva accounts for all of its direct and indirect emissions and no emissions have been intentionally omitted from this report.

### Good practice

A number of good practice guidance documents are used in the calculations of the Soneva Carbon Footprint Report. These include:

- Greenhouse Gas Protocol Corporate Standard
- Guidelines to DEFRA’s GHG Conversion Factors: Methodology Paper for Transport Emission Factors (2008)
- Environmental Defense Paper Calculator

- US-EPA Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks
- US-EPA – Direct Emissions from Mobile Combustion Sources

Note that for ease of general interpretation we have adopted a convention of ignoring the equivalence “e” in our presentation of emissions and merely refer to CO<sub>2</sub> emissions.

### Base year selection

In order to set a reduction target and to measure performance against that target, Soneva has set a base year which acts as a reference year against which to assess its progress reductions targets in the future years.

The base year has been established as the period July 2008 – June 2009. This period is in line with Soneva’s financial year.

### Data collection and quantification methodologies

#### Emissions factors

Each emissions source has an associated emissions factor which indicates the average emissions from the source relative to the intensity of that activity.

These emissions factors are used to derive estimates of greenhouse gas emissions based on the amount of fuel combusted on industrial production levels, distances travelled or similar activity data.

Emission factors assume a linear relation between the intensity of the activity and the emissions resulting from this activity.

Table 4 on page 105 details the sources of the relevant data and the emissions factors which have been used. The volume of CO<sub>2</sub> emissions has been calculated by multiplying the activity data from the resort by the relevant emissions factor.

### Other assumptions

The following assumptions were made in calculating resort emissions:

- **Flights:** Precise routing was not known and estimated based on guest’s country of residence. As a result, those flights were categorised as either short (<1,000 km), medium (1,001-5,000 km), or long (5,000 km+) haul. Distances were then estimated based on Carbon Foresight Flight Distance Calculator.
- **Seaplane** average occupancy assumed to be 15 passengers per flight (maximum capacity 16), in calculation of total flights from total passengers flown.
- **Soneva Kiri plane** emissions were calculated based on Jet A fuel consumption.



- **Petrol** was assumed to be used exclusively for vehicles and so was classified as ground travel combustion, Scope 3. This includes company owned boats, which could have been put in Scope 1.
- **Charcoal** is considered Residential/Commercial Coal with an emissions factor of 2.317 kg CO<sub>2</sub> / kg.
- **Canned heat** is considered as methanol with an emissions factor of 1.28 kg CO<sub>2</sub> /L.
- **Water** desalination and pumping: energy use was already included in energy figures so desalination and water pumping does not have a specific carbon impact.
- **Laundry:** All laundry energy and water was already included in energy and water figures.
- **Freight:** At present freight is measured from source port to resort, but no account has been taken of the transport of the product from its place of origin. Work to improve the measurement and reporting of emissions from freight is ongoing.
- **Paper:** Recycled paper was considered to be made of 100% recycled content. Non-recycled paper was considered to contain 0% recycled fibres.
- **Food:** meals were estimated to be 25% vegetarian and 75% non-vegetarian. Each



- meal was estimated as an average composite meal with its carbon impact estimated using the low carbon diet calculator (<http://www.eatlowcarbon.org/Carbon-Calculator.html>).
- The emissions from the properties' Six Senses Spas are included in the Carbon Footprint Inventory.

#### Quality Assurance

The data provided by Soneva Fushi and Soneva Kiri presented in this report was obtained under the supervision of Soneva Social & Environment Conscience and is assumed to be accurate and complete.

In many instances accurate measures of emissions are not possible, and estimates have had to be made. Soneva continues to strive towards improving the accuracy of its measurement and reporting.

This voluntary disclosure of our process and the calculation of our carbon emissions has been independently reviewed and verified by Orbis Carbon Management.

**Table 4: Emissions factors used in estimating carbon footprint**

Emission Source	Units	Emissions Factor	Factor Source
<b>Energy</b>			
Coal – residential/commercial (charcoal)	kg	2.317	California Climate Action Registry – General Reporting Protocol – v3. 1 Jan 2009
Methanol (canned heat)	L	1.28	EPA – Direct Emissions from Mobile Combustion Sources
Kerosene	L	2.53	EPA – Direct Emissions from Mobile Combustion Sources
Diesel	L	2.68	EPA – Direct Emissions from Mobile Combustion Sources
Liquefied petroleum gas (LPG)	kg	3.03	EPA – Direct Emissions from Mobile Combustion Sources
<b>Air travel</b>			
Long haul (>5,000km)	Tonnes km	0.1106 (0.211 with RFI of 1.9)*	DEFRA 2008. RFI DEFRA 2008
Medium haul (1,000-5,000km)	Tonnes km	0.0983 (0.187 with RFI of 1.9)*	DEFRA 2008. RFI DEFRA 2008
Short haul (<1,000km)	Tonnes km	0.1753 (0.331 with RFI of 1.9)*	DEFRA 2008. RFI DEFRA 2008
Jet fuel (own plane)	L	2.53	EPA – Direct Emissions from Mobile Combustion Sources
<b>Ground Travel</b>			
Motorbike – small (moped/scooter - approx 120 c.c.)	Km	0.073	carboncounted.com values
Diesel for transport	L	2.68	EPA – Direct Emissions from Mobile Combustion Sources
Petrol for transport	L	2.315	EPA – Direct Emissions from Mobile Combustion Sources
<b>Freight</b>			
Air – long haul (>5,000km)	Tonnes km	0.60	carboncounted.com values
Air – medium haul (1,000-5,000km)	Tonnes km	1.32	carboncounted.com values
Air – short haul (<1,000km)	Tonnes km	1.85	carboncounted.com values
Ship	Tonnes km	0.013	carboncounted.com values
Road: truck	Tonnes km	0.123	carboncounted.com values

\* The Soneva Carbon Calculator includes a Radiative Forcing Indicator (RFI) to reflect the added global warming effect of greenhouse gases when emitted in the stratosphere.

**Table 4: Emissions factors used in estimating carbon footprint**

Emission Source	Units	Emissions Factor	Factor Source
<b>Food</b>			
Non-vegetarian meals	each	0.00175	Estimate based on low carbon diet calculator
Vegetarian meals	each	0.00125	Estimate based on low carbon diet calculator
<b>Paper</b>			
Office paper (0% recycled content)	kg	2.844	Environmental Defence Fund Paper Calculator: papercalculator.org
Office paper (100% recycled content)	kg	1.79	Environmental Defence Fund Paper Calculator: papercalculator.org
Toilet paper / tissue paper / serviettes	kg	1	Wuppertal Institute's MIPS data tables.
<b>Waste</b>			
Landfill – mixed solid waste	kg	0.12	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-6
Organics dumped at sea	kg	0.06	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-8
Biochar produced	kg	-0.6**	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-8
Recycled food scraps (organic)	kg	-0.12**	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-8
Recycled garden waste	kg	0.01	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-8
Recycled glass	kg	-0.09**	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-8
Recycled metal	kg	-1.44**	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-8
Recycled paper	kg	-1.06**	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-8
Recycled plastic	kg	-0.42**	EPA Solid Waste Management and Greenhouse – Sept 2006, Exhibit 8-8
<b>Water</b>			
Rainwater collected	m <sup>3</sup>	0	carboncounted.com values
Deep well	m <sup>3</sup>	0	carboncounted.com values
On-site desalination	m <sup>3</sup>	0	carboncounted.com values

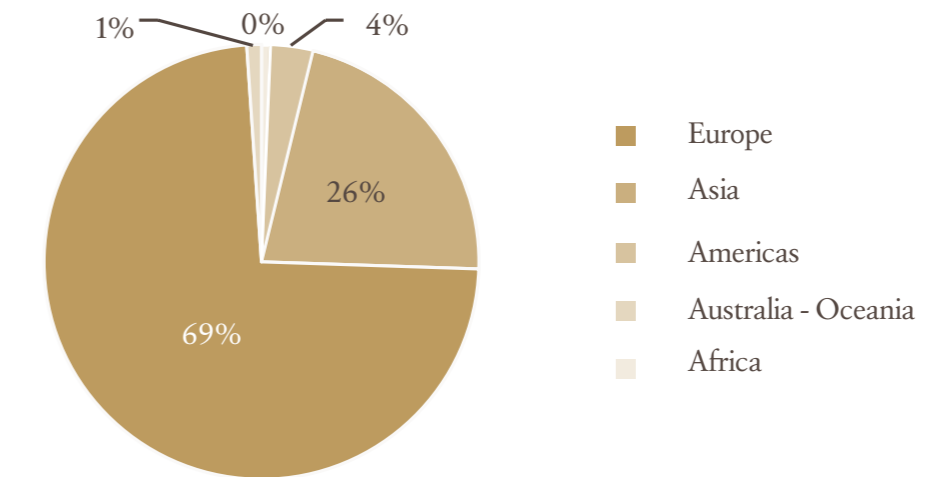
\*\* Under the sign convention used in this report, the negative value indicates that emissions are improved as it represent the incremental change in GHG emissions involved in recycling or composting compared to landfill.

## market

The majority of our guests are from Europe (69%) followed by Asia (26%), Americas (4%), Australia-Oceania (1%) and Africa (0.2%). This makes our resorts long haul destinations for most of these guests and it means that the environmental impact of our resorts begins before our guests arrive on our islands and continues after they leave.

Our resorts had 17,176 room nights from July 2014 – June 2015. We employ 716 Hosts. Our total revenue for fiscal year July 2014 – June 2015 was US\$ 33.3 million\*.

\* Revenue refers to Soneva Holdings Pte Limited



**SONEVA**  
 19/F Two Pacific Place, 142 Sukhumvit Road, Bangkok 10110, Thailand  
 Phone: +66 (0) 2631 9698 Fax: +66 (0) 2631 9699  
[www.soneva.com](http://www.soneva.com)

This is Soneva's fifth sustainability report. It follows Soneva's fiscal year from July-June. The currency used in this report is US dollars unless otherwise stated. This brochure has been printed on 100% recycled FSC Certified Cocoon Offset paper with vegetable based ink. CO<sub>2</sub> emissions incurred during printing have been offset through the Soneva Foundation. The brochure is also produced for online viewing. Photographers to include: Adam Oswell, Adrian Alston, Antonina Gern, Arnfinn Oines, Asit Manesarn, Bill Curry, Bruno Aveillan, Cat Vinton, Chanchai Piromrak, Dan Kulberg, Fabio Giungarelli, Federica Siena, Jerome Kelakopian, Helicam, Herbert Ypma, Kieattipong Panchee, Kitti Attakitmongkol, Martin Whiteley, Moritz Krebs, ONE DROP/Terry Highes, Paul Raeside, Peter Marshall, Sandro Bruecklmeier, Supachart Parisudhiyarn and Thomas Abbott. Layout Artist: Sittida Neamsom Printed in Thailand Copyright © Soneva Resorts, Residences & Spas - 2015. Soneva Resorts, Soneva Fushi, Soneva Kiri, the Sun crest, are registered marks belonging to Soneva Resorts, Residences & Spas.

