

Villa in the Vineyard Climate Action Plan July 2022

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A scenic landscape featuring rolling hills under a clear blue sky. The foreground is filled with a lush field of wildflowers, including tall purple and blue stalks. A vineyard with rows of grapevines is visible in the middle ground, partially obscured by trees. The background shows a large, golden-brown field on a hillside, with a small building perched on a distant peak. The overall atmosphere is peaceful and rural.

Introduction

Villa in the Vineyard was established from the outset to be based on environmental and ethical foundations.

The holiday rental apartment is located on the ground floor of the building and I live in the apartment on the upper floor with my husband.

Baseline year - 2021

We've chosen 2021 as, despite covid restrictions, we still had a fairly good summer season and in March 2021 we moved to a renewable energy provider for our electricity.

Scope 1 (direct emissions from running our property):

Company vehicles: None but have a personal hybrid electric/petrol car

Fuel combustion: Gas for hot water which is hardly needed in summer when we have guests. This is calculated in our Scope 3 emissions

Fugitive emissions: no air conditioning

Baseline year 2021 continued

Scope 2 (direct emissions from purchased electricity)

Purchased electricity, heat and steam: Edison from Jan – March, then enostra, a renewables supplier

Photovoltaic panels for electricity with excess requirements from renewable electricity provided by Enostra, an Italian cooperative. No air conditioning – underfloor heating and cooling powered by an air to water heat exchange pump

Solar panels for hot water with excess requirements from back-up energy efficient gas boiler.

Swimming pool powered by low energy pump.

Baseline year 2021 continued

Scope 3 (indirect emissions from our supply chain and customers)

Purchased goods and services – buy local and mainly organic

Waste disposal – recycle according to local municipality guidelines

Water use – rainwater harvesting and well as well as mains water

Indoor air quality – only certified organic cleaning and personal care products used

Land use/pesticides etc – organic kitchen garden and rented out land operated using regenerative farming practices inc organic treatments

Baseline figures and carbon emission calculations



Baseline figures - 2021

We used [Compare Your Footprint](#) for our carbon calculations. I am now an Ambassador for Compare Your Footprint and can offer a **10% discount** (20% if you're a B Corp) when you register through me.

Electricity from Edison: Jan to Feb – no guests - 1505 kWh

Electricity from Enostra: Mar to Dec – guests only during June, July, Aug, Sept and from photovoltaic panels with purchased electricity from enostra renewable energy supplier.

Gas: 171 kWh from liquid gas held in our own tank (this was mainly for our personal use with occasional use for guests when no heat on the solar panels

Baseline figures 2021 continued

Chemicals: Only used organic cleaning and personal care products but they still have a carbon footprint. On Compare Your Footprint I chose the most ecological products but there were no organic options. See details of the products/companies we use below.

Computers: We had to purchase a new laptop – so this will not appear in 2022. In the past devices have lasted around 8 years.

Food and drink: This covers food purchased for guests. We buy organic and local food for our guests but there were not many organic options in the calculator so our footprint should be less

Water: We have our own septic tank for sewage, large tank for rainwater harvesting connected to the house gutters and a well for watering the vegetable garden. We use mains water in the house and for topping up the swimming pool.

Carbon emissions calculations 2021

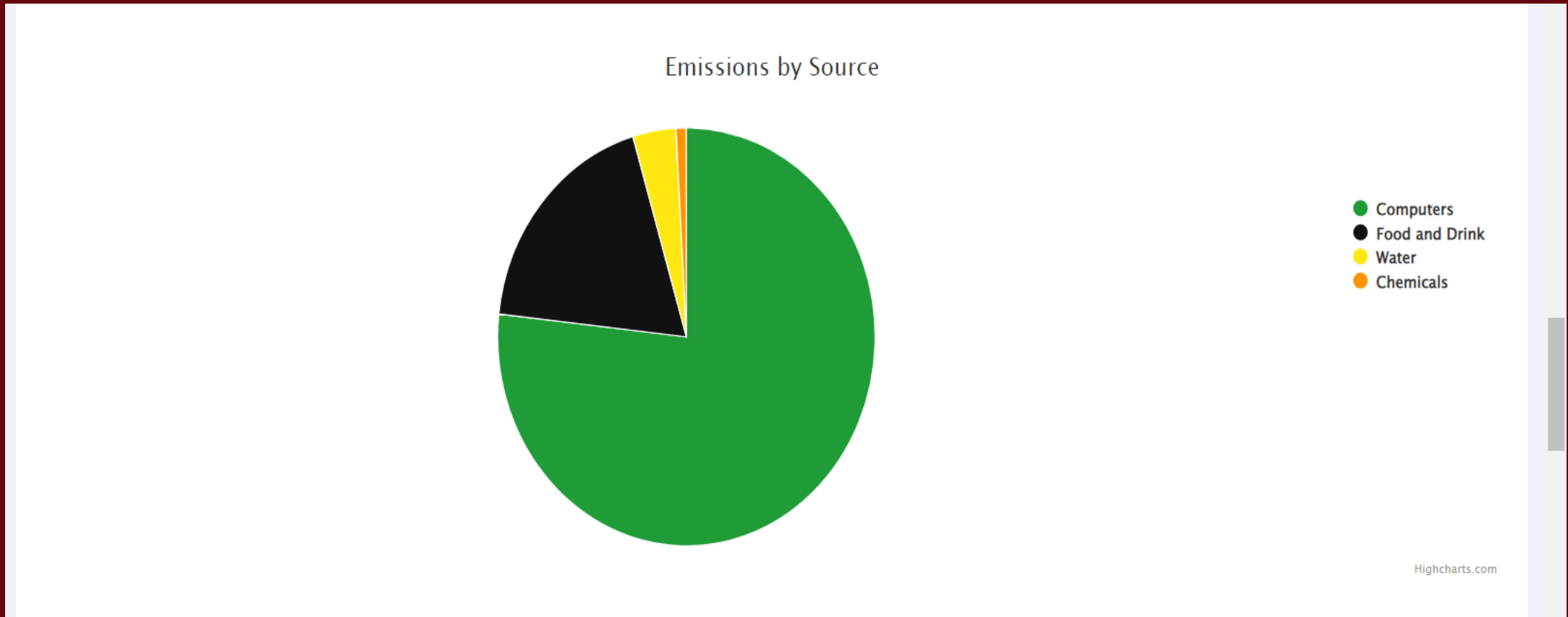
Total Reported Greenhouse Gas Emissions and Intensity Ratios

Scope	Total (tCO2e)	tCO2e / Revenue	tCO2e / m2	tCO2e / room.night	tCO2e / FTE
Scope 1	0.00	N/A	N/A	N/A	N/A
Scope 2	0.00	N/A	N/A	N/A	N/A
Scope 3	0.483	N/A	N/A	N/A	N/A
All Scopes	0.483	N/A	N/A	N/A	N/A

[Show all](#)

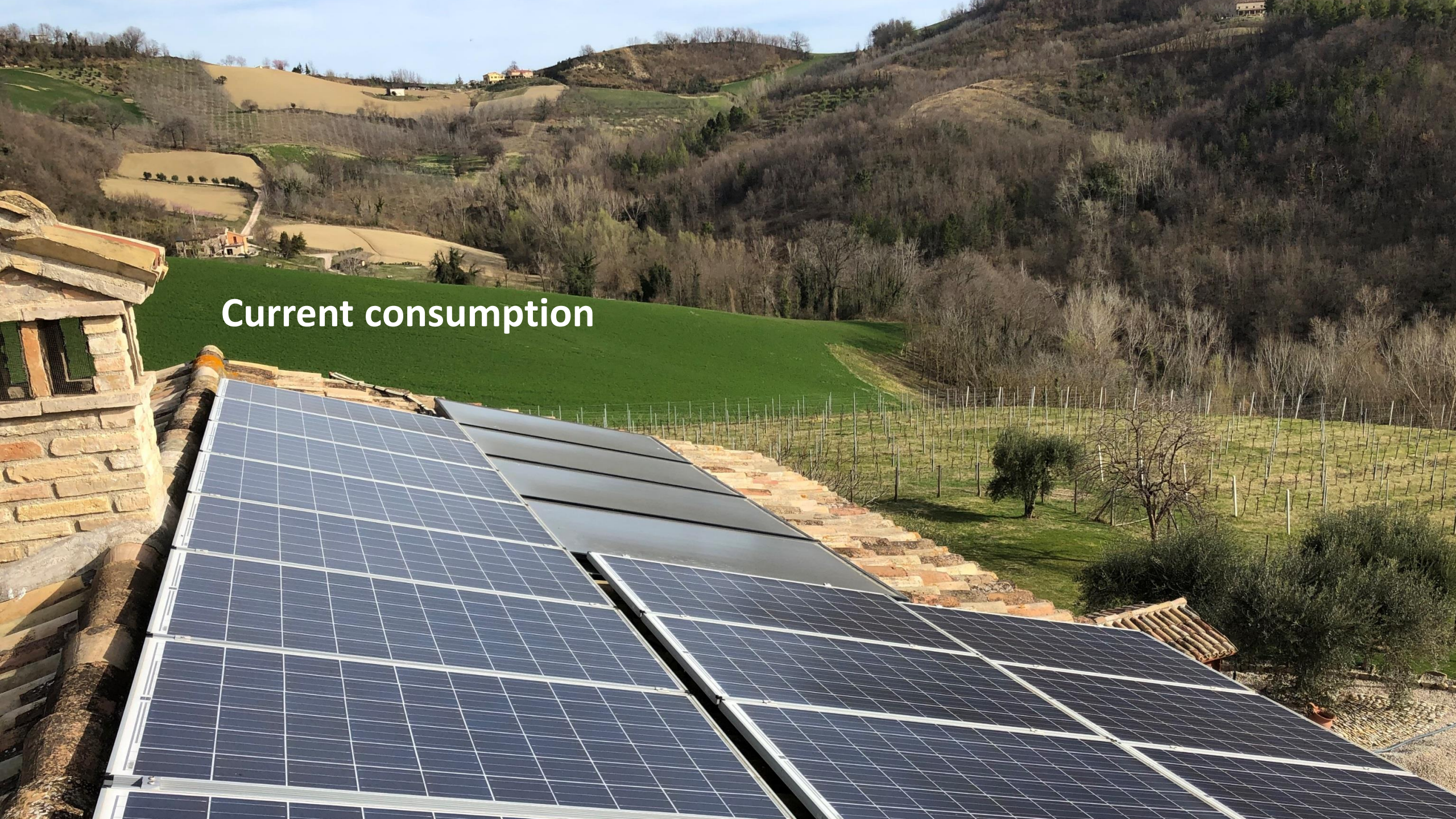
Our total emissions for 2021 were 0.483 and these were all in Scope 3, ie our supply chain. We have only calculated our downstream emissions, ie our supply chain, not our upstream emissions created by guests' travel.

Source of carbon emissions 2021



The main source of our emissions in 2021 was the purchase of a new laptop which will not happen every year (the last one lasted 10 years!)

Current consumption



Current consumption

As you can see from our carbon footprint, we have no emissions in Scopes 1 and 2 as we have a contract with a 100% renewable electricity company.

What follows is a list of the suppliers we currently work with.

Scope 3 emissions – current suppliers

Purchased goods and services

Nivel for cleaning products and toiletries: we buy in bulk to refill our containers and return the bulk containers for re-use. All certified organic, made in Lucca in Tuscany which is on the opposite coast to us in Le Marche

Ikea for bedding, towels, sundries

Local Conad store for recycled toilet paper, kitchen paper etc – one of more responsible supermarkets in Italy

Scope 3 emissions – current

Purchased goods and services cont'd

Local organic shop **Biogreen** for Welcome Pack food as well as from our own organic vegetable garden

Wine from **Casale Vitali** grown on our land using regenerative agriculture

Waste disposal

Rubbish split into plastic, paper, glass, non-recyclable and for composting ourselves. We have large bins for each at the top of our road – for the whole road!

Scope 3 emissions – current

Water use

We have dual-flush toilets and flow reducers on taps plus water efficient showers.

We have rainwater harvesting from the roof into a large underground tank and a well for capturing rainwater. This water is used to irrigate the gardens and the vegetable garden. It is not enough to use for flushing toilets due to reduced rainfall.

The swimming pool is filled partly by rainwater in the early season and then topped up using mains water.

Scope 3 emissions – current

Indoor air quality

We only use organic cleaning and laundry products without synthetic fragrance. Guests receive complimentary organic handwash, shampoo/bodywash, organic hand sanitizer and spray. We do not clean using bleach but we use organic **Castile Soap by Greenscents** (brought with us from the UK when we moved here 4 years ago and still going as it is so concentrated!) to clean surfaces followed by a 75% alcohol-based spray fragranced with organic lemon.

We do not have air conditioning but underfloor cooling by heat exchange pump. We encourage guests to open windows in the bathrooms to air the room.

Scope 3 emissions – current

Land use/pesticides

Most of our land is rented to the Vitali family who cultivate mainly vines on it. They follow regenerative farming practices: leaving wild grasses and flowers between the rows of vines to provide nutrition for the soil, use of Bordeaux mix (copper sulphate) rather than chemical sprays, sheep to 'mow' and 'fertilise' the grass.

We have our own organic kitchen garden which is entirely organic with no chemical treatments used. We also have 67 olive trees to produce olive oil which we also manage organically.

Scope 3 Action Plan



Action Plan 2022

Although we have no Scope 1 or Scope 2 emissions and very small Scope 3 emissions (less than half a tonne), we will not be satisfied! We can still use our positive experiences to inspire others. So we will concentrate our efforts on our supply chain (our downstream emissions) as well as educating and supporting our guests (our upstream emissions).

Having said that, as we live in the house all year round but usually only have guests from June to September, we do use natural gas in the winter months for hot water. We have already started to reduce the temperature of the hot water in the winter and have it on for less time. This will save us money but also conserve our gas which is a issue in Italy as it is heavily dependent on Russian gas. We are also initiating a review of our whole renewable system with the aim to get off gas entirely and be fully electrified.

For suppliers – downstream Scope 3 emissions

Cleaning products and toiletries

Ask our current supplier if they have carbon emission data for their products so that we can be more accurate.

Toilet paper etc

Investigate going direct to suppliers rather than buying at local supermarket if there are distributors in Italy. We always want to buy products made in Italy as our first choice and then second those which are distributed from a central warehouse in Italy or Europe to avoid air freight.

For suppliers – downstream Scope 3 emissions

Waste disposal

Check with local municipality what is actually done with all the items we separate for recycling

Booking platforms

We will continue to review the platforms we are on for finding guests. We are always looking for more sustainable options and would like to move away from some of the larger global ones and continue to generate more direct bookings (over 80% of our bookings are direct)

For guests – downstream Scope 3 emissions

For Guests (upstream)

This is probably where we can have the biggest impact by sharing what we do with guests and showing them how easy and satisfying it can be to lead a sustainable life.

Here are some actions we will take:

- Recommend a carbon footprint calculator so that guests can see how much carbon they are generating from their stay with us
- Investigate a carbon offset option
- Provision of glass bottles to complement the promotion of water stations for refilling at very low cost – much cheaper than buying mineral water in plastic bottles.

For guests – downstream Scope 3 emissions

For Guests (upstream)

Here some actions we will take:

- ‘Guided tours’ of our control room to explain how the various renewable technology works
- Investigate providing electric bikes to encourage less use of the car (difficult as we are quite remote)
- Consider a referral scheme linked to conservation for guests to recommend us, ie Sibillini mountain protection

Overall measurable goal by end 2023

To be fully electrified without the need for gas as a back-up to our solar powered hot water.

We are currently undertaking a full review of our renewables system and will be exploring the installation of a second heat exchange pump for hot water only and isolating one of our two hot water tanks in the winter when we have very few guests and our water consumption is a lot lower

Please feel free to contact me on nikki@nikkimattei.com with feedback and comments or if you are interested in a **10% discount on Compare Your Footprint.**

