



2020 CARBON AUDIT





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INTRODUCTION

One of SuperPirates core concepts is kindness. Kindness to oneself, to each other and to the planet. As a company we want to practice what we preach at every level. This is why we are examining our organisation, finding areas in which we aren't so awesome and learning how we can do better.

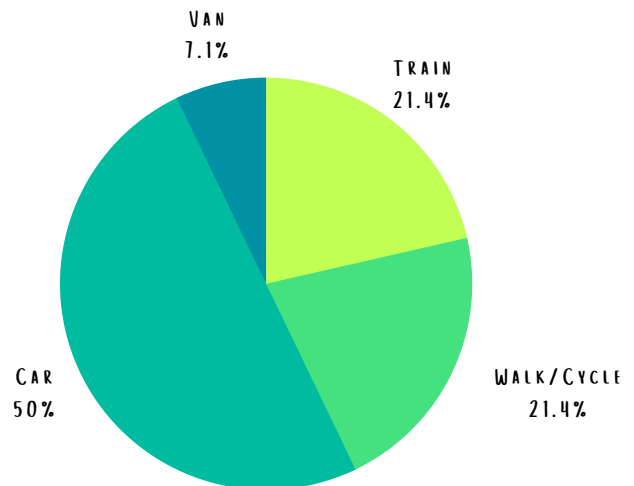
SuperPirates works across many settings permanently, but we also travel to events around the South West and sometimes further. While we know the joy we bring is definitely worth it, we want to make sure we are giving back the energy we borrow from the environment to do so.

The first step is to find out.... How big is our carbon footprint exactly?

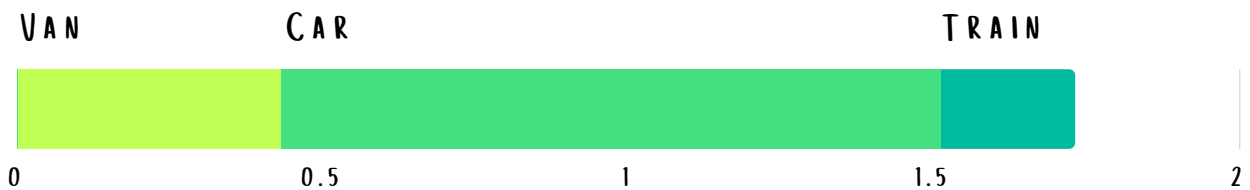
STAFF TRAVEL

We are very selective with our staff. We only choose those who embody the spirit of a SuperPirate. This means that our staff travel from various distances to deliver their awesomeness. Here we look at how people travel and the footprint it leaves.

Half of our staff travel by car, just over a fifth get the train, and just over another fifth brave the weather on foot/pedal. One of our team drives the SuperPirates van to transport all our playful goodies to events and parties.



By train, our SuperPirates travel on average 97 miles per week. Our drivers adventure 127 miles on average per week, 28 of those being via van. Using the Carbon Footprint™ Calculator, let's see our carbon impact of travel on a yearly average.



The accumulative annual carbon footprint of staff travel is 1.73 tonnes of CO2e.

RUNNING TOTAL:
1.73
TONNES OF CO2E

FOOD

We provide a healthy snack at all our afterschool clubs. Learning all day at school is hungry work, and no one can be their most awesome self on an empty stomach! We wanted to look at where we're buying our food and how far it travelled to get to us.

FOOD	WEEKLY KGS	CO2E*
Apples	2	2.36
Red Peppers	1	3.45
Tangerines	3	3.84
Carrots	2	2.3
Pears	2.7	3.19
Bananas	1.8	2.21
Cereal	1	1.2**
Soya milk	1	0.43
Biscuits	1.2	0.9
Jam	0.76	1.75**
Bread	0.6	0.52
Rice cakes	0.52	1.67**

WEEKLY CO2E KG: 23.82

YEARLY TOTAL: 928.98

TOTAL IN TONNES: 0.91

*Origin of country applied where known.
 **Estimate.

These calculations were made using The Vegan Society™ carbon calculator.

The majority of our snacks are bought from a supermarket which is committed to sustainability and loyal to local farmers. However, there are environmental limitations to using a supermarket rather than local shops. See our *Change Our Habits* section for further discussion on this topic (page 12).

$$\begin{array}{r}
 \text{PREVIOUS TOTAL} \\
 1.73
 \end{array}
 +
 \begin{array}{r}
 \text{FOOD TOTAL} \\
 0.91
 \end{array}
 =
 \begin{array}{r}
 \text{RUNNING TOTAL:} \\
 \mathbf{2.64} \\
 \text{TONNES OF CO2E}
 \end{array}$$

KEEPING WARM

We currently have three after school clubs. Although we do love playing outdoors, sometimes we like to get a bit cosy and play inside - especially in the cold dark winter! Keeping all these rooms going uses a lot of energy. Let's have a look at how we're doing:

There is limited specific data regarding the type and amount of energy used by schools. Therefore we have made an estimate based on average household usage of heating.

AVERAGE HOUSEHOLD HEATING EMISSION PER YEAR*: 2745KG

AVERAGE HOUSEHOLD HEATING EMISSIONS PER HOUR: 0.31KG

SUPERPIRATES AFTER SCHOOL CLUBS** : 641.594KG/0.63TONNES

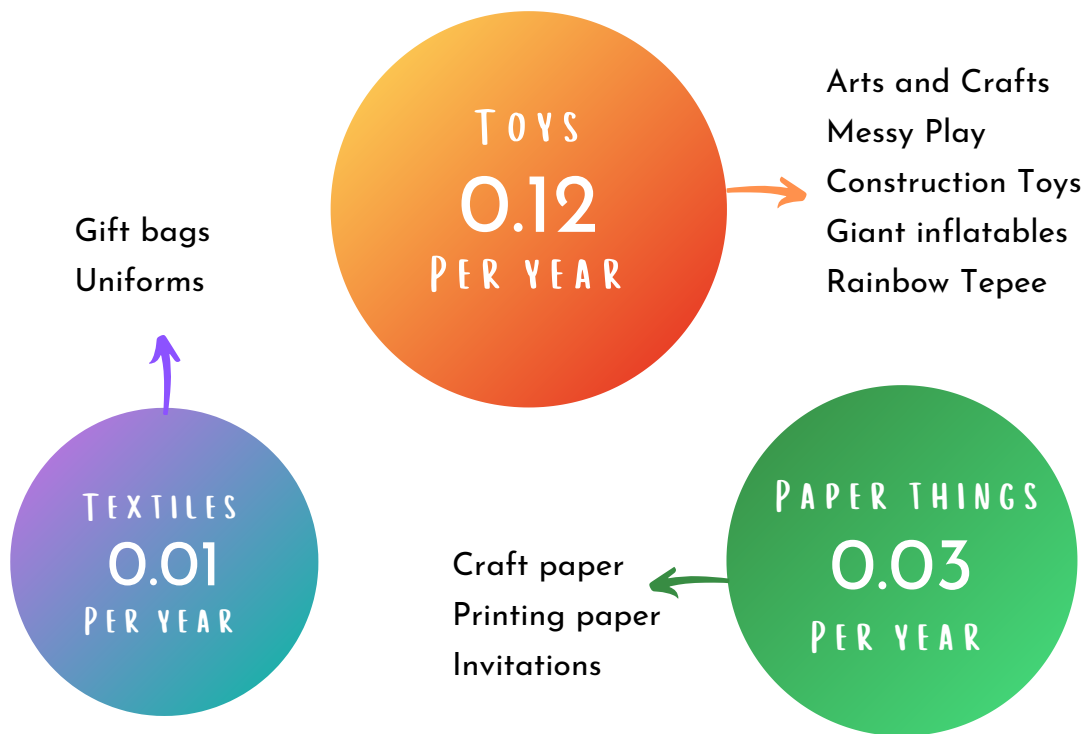
*Figure taken from the Energy Saving Trust

**SuperPirates ASC's run for 3.5h a day, 5 days a week, 39 weeks a year

$$\begin{array}{r} \text{PREVIOUS TOTAL} \\ 2.64 \end{array} + \begin{array}{r} \text{HEATING TOTAL} \\ 0.63 \end{array} = \begin{array}{r} \text{CURRENT TOTAL:} \\ 3.27 \\ \text{TONNES OF CO}_2\text{E} \end{array}$$

TOYS, UNIFORMS AND MERCH

Although we love raiding charity shops and foraging in the Scrap Store, we do sometimes need to purchase new materials to get creative and play. Though really our most awesome play resource is our team of playworkers! So what about the impact of our play resources and uniforms?



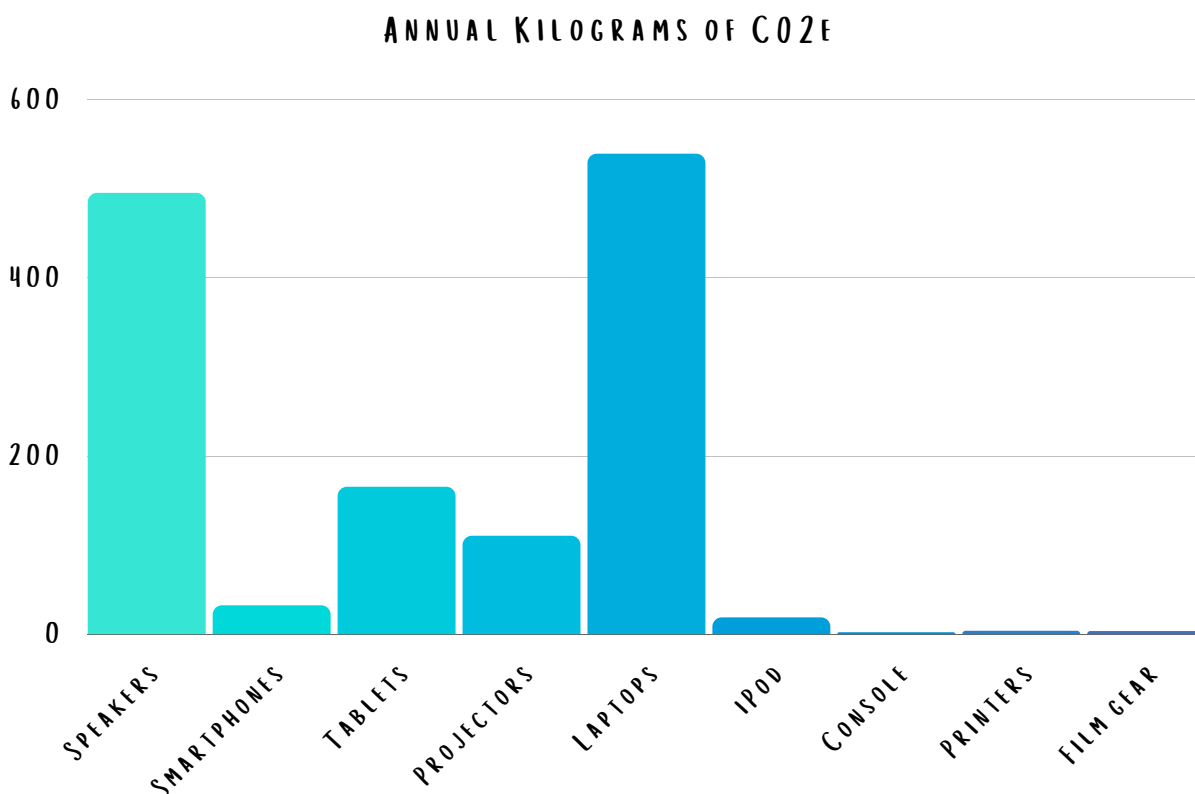
Fun fact! Our uniforms are actually already made by a carbon neutral company. The uniforms themselves are made of recycled plastic! The textiles mentioned in the picture above are about our gift bags. The giant inflatables and rainbow tepee mentioned with toys are large one-off investments, we look after these items with love! Their carbon emission has been divided over 5 years as a result.

These figures were estimated using the secondary carbon footprint section of The Carbon Footprint™ Calculator.

$$\begin{array}{r} \text{PREVIOUS TOTAL} \\ 3.27 \end{array} + \begin{array}{r} \text{TOYSETC TOTAL} \\ 0.16 \end{array} = \begin{array}{r} \text{RUNNING TOTAL:} \\ 3.43 \\ \text{TONNES OF CO2E} \end{array}$$

ALL THINGS TECH

To get us moving and dancing we love having a bit of music on the speakers and sometimes we'll wind down with a video game. Behind the scenes the SuperPirates are using laptops, smartphones and printers to get the admin done and online resources made. How are those emissions looking?



These values were calculated by looking at average wattage of these devices. 1kWh equates to 0.94kg of CO2e as put forward by Carbon Positive Life™.

Our grand annual total of technology based carbon emission is: 1369kg/1.34 tonnes.

$$\begin{array}{r} \text{PREVIOUS TOTAL} \\ 3.43 \end{array} + \begin{array}{r} \text{TECH TOTAL} \\ 1.34 \end{array} = \begin{array}{r} \text{RUNNING TOTAL:} \\ \mathbf{4.77} \\ \text{TONNES OF CO2E} \end{array}$$

WASTE

Waste to some extent is unavoidable. We play our part by using recycling in our fun. We'd rather use our imaginations to turn a cardboard box into a spaceship that can fly a million lightyears, than buy a plastic spaceship that will end up in a landfill for a million earth years! Each club already recycles paper, cardboard and anything else that can be recycled, but at the time of writing this report, none of our clubs compost food waste. This is definitely not awesome! We know therefore that the bin bags we send off to landfills are mostly filled with unrecyclable plastic (e.g. food packaging) and food waste.

All the food and plastic waste was weighed over a week at one after school club and averaged per child. The results being; 0.5g plastic waste per day and 9g food waste per day. These figures were then applied to the average attendance of all clubs per week.

ALL CLUBS PER WEEK IN KG



As seen here, currently our food waste is a significantly larger contributor of CO2! Let's look at it over the year:

	KG	CO2 PER KG	TOTAL	TONNES
PLASTIC	4.58	6kg	27.5kg	0.03
FOOD	82.485	2.5kg	206.21kg	0.20

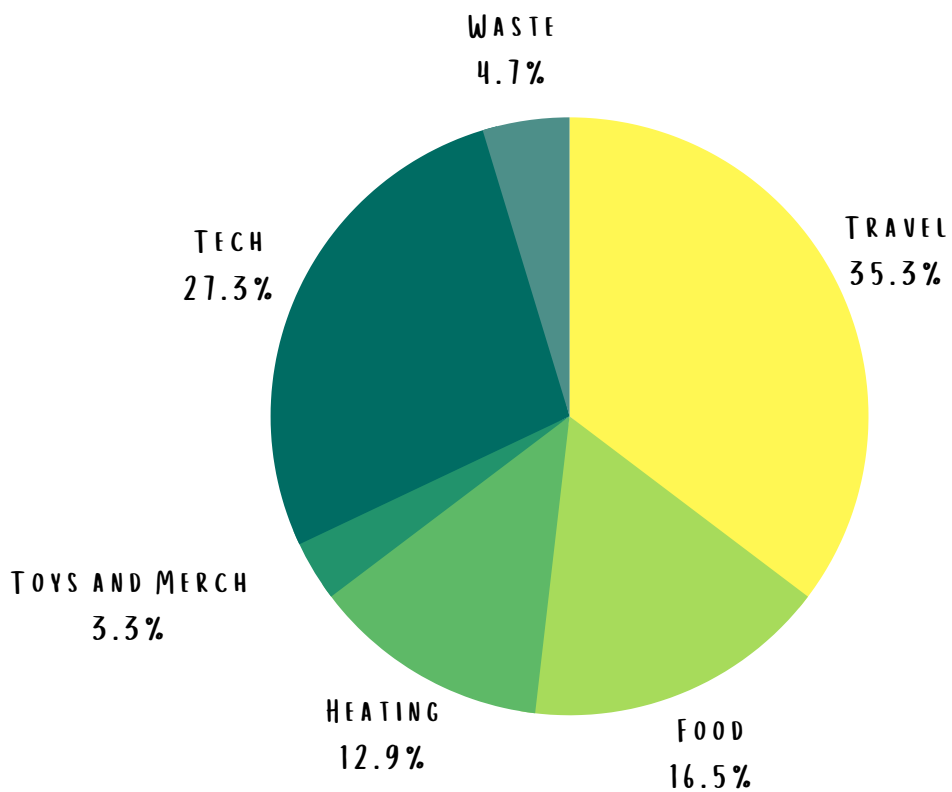
= 0.23 TONNES

PREVIOUS TOTAL: 4.77 + WASTE TOTAL: 0.23 = **5** TONNES OF CO2E

RUNNING TOTAL:

LET'S LOOK CLOSER

So far, which area of our company is contributing the most to our carbon footprint?



Our main offenders are staff travel, followed by technology use and the food we buy.

RUNNING TOTAL:
5
TONNES OF CO₂E

WHAT ABOUT OTHER EVENTS?

SuperPirates doesn't just run after school care: We also do parties, festivals, weddings and holiday clubs. Averages from a normal year would be about 11 weeks of holiday clubs, 4 festivals and about 200 events. These events vary an awful lot in terms of their location, duration, staffing and resources.

It is beyond the scope of this report to calculate the individual footprint of each of these events, but we do want a *rough* idea of how big a chunk these extra bits are adding to our emissions. So let's keep it super simple:



$$\begin{array}{r} \text{PREVIOUS TOTAL} \\ 5 \end{array} + \begin{array}{r} \text{EVENTS TOTAL} \\ 1.25 \end{array} = \begin{array}{r} \text{RUNNING TOTAL:} \\ 6.25 \\ \text{TONNES OF CO}_2\text{E} \end{array}$$

YEARLY TOTAL:
6.25
TONNES OF CO₂E

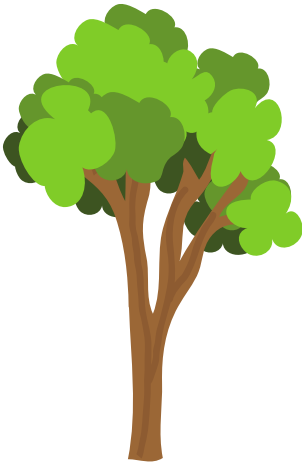
SO, WHAT DO WE DO ABOUT IT?

1. Offset our total.
2. Change our habits.
3. Continue being awesome.
4. Review each year.



1. OFFSET OUR TOTAL

There are many wonderful projects doing admirable work to help companies offset their carbon footprint. But unfortunately there are an equal amount of less wonderful projects which claim to do the same thing, but are actually more interested in profiting from guilty consciences than they are in helping the planet to heal. It is therefore very important we nominate our carbon offsetting partner companies with great care. Do they do what they say they will with our donations? Are they considering the implications of their work on the communities that they work in? There are two key ways to offset carbon. The first of which is to plant trees, the second is to invest in clean energy projects.



PLANTING TREES

SuperPirates already has a system in place with a company called TeamTrees. These lovely people have a very simple idea; people donate \$1, and they plant 1 tree. They plant trees on every continent on the planet with careful regard to the appropriate type of trees, and with respect to the communities they are working with! SuperPirates rewards their attendees with Runes for particularly courageous, kind, creative and curious initiatives, and a couple years back we decided that for every rune earned we'd donate \$1 to TeamTrees. 1 Rune = 1 Tree. We have actually already planted 105 trees!

CarbonNeutral.com estimates that 15 trees are needed to offset a tonne of carbon. Which, amazingly, means we've actually already planted more than enough trees to offset our carbon footprint for the year!

There is one downside to this lovely method of offsetting. A newly planted tree cannot absorb much carbon at all. In fact, it takes a fully mature tree to store those epic amounts of carbon that we are looking for. Additionally planting trees, although brilliant, could be seen as a reactive approach to the climate crisis, rather than a proactive one.

INVESTING IN ECO PROJECTS

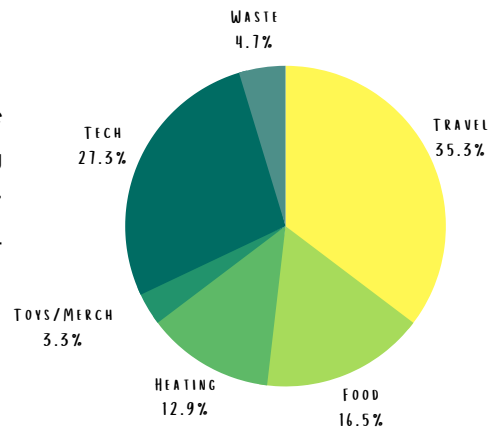
This method could be considered to be more proactive. Rather than damage control (planting trees), investing in high quality eco projects helps facilitate carbon reduction for many lifetimes, and helps developing communities in the process! Two companies which rank very highly are: NativeEnergy and Carbon Offsets to Alleviate Poverty (COTAP). SuperPirates must be continually critical of the organisations we place our trust in to ensure they meet our standards as a company and as global citizens.



It is very reassuring to presume that all we need to do is pick an eco company to offset our total for us and voilà! Our guilty conscience is cleared. But, we shouldn't rely solely on other organisations to fix our carbon emissions for us. Often larger corporations use offsetting as an excuse to continue using fossil fuels and destroying habitats. Our emissions are our responsibility. We need to lower our carbon footprint as well as offsetting it; just because we fix our mistakes doesn't mean we are permitted to keep making them! So how can we change our habits for the better?

2. CHANGE OUR HABITS

Looking back at this little graph again (leaving out the additional emissions of those extra events for now), we're going to work through each one and see what we can do to reduce our footprint. Starting with the key players through to the micro-influencers.



TRAVEL



LIFT SHARING

Seems obvious, but this can cut our car emissions in half. By investigating the routes and times our drivers travel, we can work out when they can regularly pick up a pirate or two en route.



BIKE2WORK SCHEME

This government scheme is awesome! Staff get major discounts on bikes and gear, and an opportunity to pay it off nice and slowly - tax free!

TECH



BLUETOOTH SPEAKERS

Portable little Bluetooth speakers consume much less energy than surround sound speakers. Some settings need a big sound to fill the space, but not all settings. Making the switch could see a significant reduction in CO2.



LAPTOP TOP TIPS

- Using a smartphone uses less energy, so work on a phone if possible.
- Shut down and unplug when work is finished.
- Screen savers use just as much energy as if the laptop were in use!
- Turn down the brightness and opt for power saver mode.
- One long laptop work stint is better than lots of little ones.
- Put the laptop to sleep during breaks.



REUSE/RECYCLE/DONATE

We must resist the urge to buy new technology if our old things are working fine. If we really do need to replace them, we need to either donate the old versions or ensure they are recycled properly.

FOOD



BUY SEASONAL

If a food is not native to this country, or it is not in season, it has probably come from far too far away to be any good to the planet.



LOCAL PRODUCE

We want to keep our footprint down as much as we can. While most of our fruit and veg comes from the UK, this could still be over 100 miles away. We would do much better to buy local produce from local shops.



WHY DON'T WE GROW SOME FOOD?

Why not! Gardening is amazing for the body, mind and planet. Zero downsides!

WASTE



COMPOST FOOD WASTE

By putting food waste into a compost bin, there will be a huge reduction in CO2 emissions for us! Food waste in landfill gives off CO2 and methane. Not good.



BUY LESS PLASTIC

We need to buy food with less packaging. We should see whether refill stations (zero plastic shops) can meet our needs. In any case they are definitely worth supporting.



DONATE UNUSED FOOD

Food should be eaten before it gets a chance to go off and be thrown away. Any food that may go off over the weekend should be offered to attendee parents, given to a food bank/shelter or taken home

TOYS ETC



BUY SECOND HAND

We should browse charity shops, gumtree and freecycle on a regular basis. Double whammy, reducing waste and helping other people out.



SCRAP STORE!

The Scrap Store might be the most fun place ever. It also is wonderfully eco. This should be our first stop before ordering from large corporations.



RECYCLED PAPER AND CARD ONLY

Recycled paper and card have a more rustic feel anyway.

3. CONTINUE BEING AWESOME

There are some parts of SuperPirates which are already wonderfully environmentally friendly! Here's an opportunity to celebrate the green parts of our company that don't need changing.



WE'RE A VEGGIE COMPANY!

The meat industry is a HUGE contributor to global carbon emissions. The fact that we don't buy any meat is just brilliant! Could we go even further and not buy any dairy either....?



OUR UNIFORMS ROCK!

Our SuperPirates uniforms are made from recycled plastic! Not just an awesome design, but an awesome material too!



RUNES PLANT TREES!

As mentioned above (page 11), when kids in our care do something particularly kind, courageous, creative or curious we award them a Rune. And whenever we award a Rune, we plant a tree!



WE LOVE JUNK!

Junk materials are some of the best play resources around. Using household recycling to create something amazing gives single-use plastic a chance to be multi-use!



WE WERE ALREADY CARBON NEUTRAL!

It's important to know an estimate of our footprint, and even more important to commit to changing our habits. But come on, we were neutral before we even knew it, how cool is that?



3. REVIEW EACH YEAR

We don't just want to be carbon neutral, we want to be...

CARBON NEGATIVE

This is the step beyond carbon neutrality. Not just offsetting what we emit, but offsetting even more. We'll review our progress annually and see how carbon negative we can get!

Watch this space.