

Eco Residents Programme Review

The Eco Residents Programme (delivered as part of our Eco Living Project, funded by Cadent Foundation) involved four local residents, who have met regularly (September 2021 to June 2022). Each time, they have looked at a different topic and discussed the relevant environmental impacts and possible improvements. They have all made affordable, achievable changes in their own lives to be more eco-friendly.

Carbon Footprints

Not all of the group were familiar with carbon footprints. They were supported to use the online WWF calculator to work out their own carbon footprints. Simple tools like this are never especially accurate, but they are useful to open discussions. It allowed the residents to start thinking in terms of carbon footprints and consider which areas of their lives might be responsible for large parts of their own carbon footprints.



Food

Everyone needs to eat, but what and how can significantly change how much impact our food has on the planet. Residents reviewed their typical weekly diet and discussed which areas were high impact and how they could be improved.

Plans were made to reduce meat and dairy intake, to have fewer takeaways and to switch from cans of coke to bottles of squash. A case study was written on the cans and is available on the Middleport Matters website (www.middleportmatters.co.uk).

"I tried a few milk alternatives (starting with the cheapest). I really like the oat one on cereal and soya in tea."

There were detailed discussions on choosing, storing, preparing and cooking food. Each member of the group identified actions they could take, ranging from using the microwave more, to using lids on pans. One member switched from using a large oven to almost exclusively using a smaller, more energy efficient air fryer.

There was a discussion on food labelling and how confusing it can be. A list of labels and logos to look out for was shared, including vegan, RSPO and Soil Association.

Household Cleaning

Members were provided with various eco cleaning product samples to try, including laundry sheets and kitchen spray refills. All the products were found to be effective, though the laundry sheets did trigger a minor skin rash for one participant. The residents found it difficult to swap to permanently, as the products are not always available in supermarkets. One group member did switch to using soap nuts (a berry from the sapindus tree) instead of laundry powder, which she found was easily ordered online. Some good tips were shared, such as using diluted fabric conditioner instead of soft furnishing spray, and generally being sparing when using household chemicals.



Personal hygiene

Solid bars are almost always better for the environment than bottles of liquid product, whether it's soap, shampoo, or toothpaste. Bottled versions typically contain similar ingredients to bars, but with a lot of added water and significantly more plastic in the packaging. This means the environmental cost of production and shipping is far higher product use.

Residents independently found, bought and tried a variety of solid personal hygiene products. Two have switched over completely to solid shampoos and one now uses solid "tooth soap". It was found that these products were often expensive to buy, but as they lasted much longer than the bottled products, they worked out more economical. This was also the case with electric toothbrush heads, as one resident found out when she switched to bulk buying branded heads online – although each head cost a little more, they lasted twice as long.

"It's great to learn about all these products that I didn't know were out there."

Some of the group also tried reusable period pads. Feedback was mixed, as they are typically bulkier than modern disposable towels. One resident has stated that she is happy to use the reusable pad at home, but prefers disposables when out, as she is concerned the bulk of the reusable pad might be visible.

Christmas

The group discussed the high amount of excess waste produced at Christmas. All agreed that it was very easy to get just one more gift, and just one more... It is especially easy to get more than needed

where children are concerned, because parents naturally want major celebrations like Christmas to be special.

Ways to reduce waste were discussed and everyone in the group shared tips, ranging from limiting the number of gifts bought to reusing the same artificial tree for multiple years.

“Even if the lights stop working, you could just get some new lights instead of a whole new tree.”

After the holiday season, the group engaged in crafts making paper chains from saved wrapping paper and gift tags from saved cards. This saved these items from being binned and also provided new decorations for next year.

Summer Holidays

One of the group asked about sun protection. The group did some online research and discovered that there are eco-friendly sun creams available, but they are typically expensive and difficult to find.

This led to a wider conversation about summer holidays. Two of the group had planned holidays and the carbon footprints of these were calculated and compared. Both calculations included travel, accommodation and food, but not activities. A week in a caravan in Wales had a carbon footprint of 500Kg CO₂e, while a week in Menorca was calculated to be 3,600Kg CO₂e. The main differences were in the travel (flying v car) and in the accommodation, as hotels typically do not focus on their environmental impact. While the residents had expected the Menorca holiday to have a higher carbon footprint, they were quite shocked by just how big the difference was. A case study was written on this and is available on the Middleport Matters website.

“I’m shocked honestly. It’s a big difference.”

Results and savings

The group members have made a number of long-term changes. The environmental impact of a selection of them was calculated, in terms of plastic and carbon footprint. The financial cost was also worked out.

Most of the carbon calculations were based on figures from the book *How Bad are Bananas?* (Mike Berners-Lee). Financial costs were either reported by the group members or taken from www.asda.com and www.amazon.co.uk. Energy usage estimates were based on the known wattage of appliances or from www.confusedaboutenergy.co.uk and energy unit prices were from the British

Gas website. Some figures, such as the chemical content and carbon footprint of cleaning products, proved very difficult to find and had to be left out of calculations.

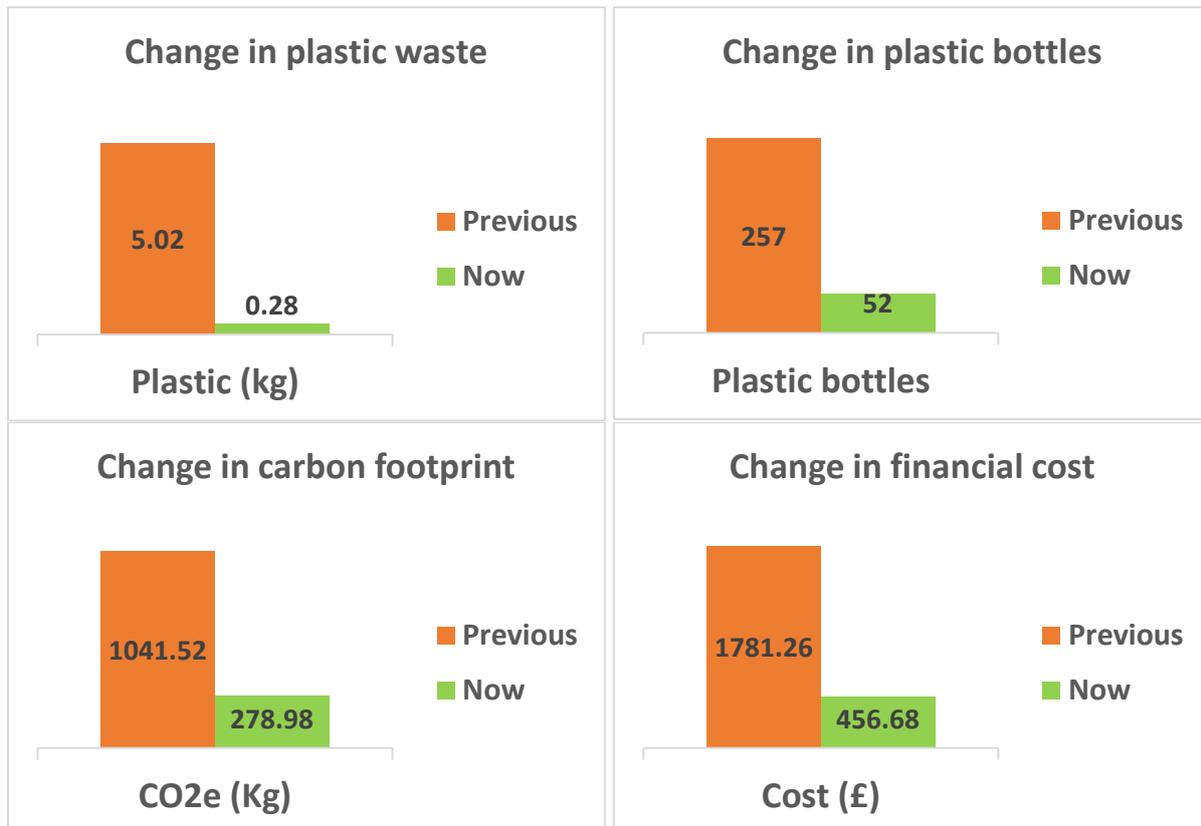
This table lists environmental and financial savings across various purchases and activities where residents have made changes.

Overall, the group are making annual savings of nearly 5Kg plastic (including over 200 single-use bottles), nearly ¼ ton of CO₂e, and over £1,300. They are also saving significant quantities of water and reducing chemical use, though these were not quantified.

Description of change	Plastic saving (g)	Plastic bottle saving	CO ₂ e saving (Kg CO ₂ e)	Cost saving (£)	Other change
Swapped pop for squash	-0.99	-52	119.60	234.00	Healthier
Switch to shampoo bars	2065	110	44.00	206.00	Saves water
Energy saving lightbulbs	-	-	0.56	466.03	-
Microwaving veg	-	-	59.59	187.82	Saves water
Plugs off at night	-	-	22.10	18.20	-
Single oven only	-	-	3.54	2.91	-
Fabric conditioner spray	475	25	10.00	72.00	Reduced chemicals
Branded toothbrush heads	60	-	2.40	23.00	-
Air fryer instead of oven	-	-	52.74	43.21	-
Refill toilet cleaner	89	6	1.60	-0.25	Reduced chemicals
Refill washing up liquid	89	6	1.60	0.70	Reduced chemicals
Homemade cleaning spray	89	6	1.60	17.00	Reduced chemicals
Soap nuts	-	-	-	23.00	Reduced chemicals
Soya / oat milk	1872	104	343.20	-53.04	-
Reduced tumble drier use	-	-	100.00	84.00	-
Total	4.74	205	762.53	1,324.59	

The group have significantly reduced their plastic and carbon costs across the areas where they have made changes, as well as saving money.

The combined carbon footprint of these purchases and activities has dropped to around a quarter of what it was. Plastic bottle use has dropped to around a fifth of the previous levels. These charts compare the current values for plastic waste, plastic bottles, carbon footprint and financial cost, with equivalent values from prior to making the changes.



Conclusion

All members of the group engaged with the conversations and found the topics interesting. They all reported having learned about some of the key concepts such as carbon footprints and climate change. The residents regularly reported that they had seen green products advertised, which led to good discussions around what ‘green claims’ mean and how to assess them. This also showed that they were embedding environmental thinking in their daily lives. Another aspect of this is that they often reported having talked to friends and family, encouraging them to also try some of the changes. This “ripple effect” is impossible to measure, but is likely to be a vital part of environmental changes across society.

There is a bewildering array of eco-friendly options available in all aspects of daily life, made all the more complex by greenwashing – companies making green claims that often don’t stand up to scrutiny. Making big changes can be daunting and difficult to stick with. The personal guidance available through the Eco Residents Programme empowered the individuals involved to find changes that fit their lifestyle and budgetary constraints. The ongoing nature of the support enabled them to make the changes over time, instead of being overwhelmed by trying to do them all at once.

We have proven that significant overall environmental savings can be achieved by making affordable, achievable lifestyle changes, and that the right choices can also offer financial savings. Repeating the scheme with a new group is likely to see similar benefits and is therefore highly recommended.