

SUSTAINABILITY REPORT 2022



Sustainable Solutions

Letter from our MD ↓

Sustainability Triumphs Amidst Challenges.

Never in recent memory has the need for domestic, green energy been so accepted. Our green energy assets offer, carbon negative, baseload power produced from waste from local homes and businesses. This green energy was extremely welcome given the uncertainty we have all been facing.

Our commitment to environmental stewardship extends beyond coexistence; it strives to enhance local ecosystems wherever possible. Over the past year, we witnessed remarkable biodiversity gains as the heathland restoration project continued and we were able to track the increase in rare wildlife surrounding our Eco Park.

Our safety record is one of the greatest ongoing achievements. It's been a journey, over several years, and I'm extremely proud to say that it's one which every person across the business has bought into. At the time of writing, we're sitting in a run of nearly five hundred days without a Loss Time Injury, and well over a thousand for our Operational Team. A quite astonishing feat given the inherent risks in our industry. There's no room for complacency and we remain motivated to keep on improving here. We are a community, bound together by a shared responsibility to ensure that each member returns home safely to their loved ones.

As we continue to invest in safety, it's the team who are essential to identifying and implementing improvements. At Eco, we recognise that our people are our greatest asset. Our continued commitment to learning and development is a testament to this belief. We invest in their growth, fostering both personal and professional development, which is reflected in the 174 days of training through the year.

We are also developing our product range and recycling activities through the construction of a new Aggregate Washing facility. A plant which will dramatically increase the amount of material we are able to recycle, displacing 20,000 tonnes of primary aggregates annually. This plant stands as a symbol of our dedication to growth as a business and our unwavering commitment to offering our customers and stakeholders always more sustainable solutions.

As we embark on the challenges and opportunities that 2023 presents, I have every confidence in our ability to replicate and exceed the achievements of the past year. With unwavering focus on our core values and the dedication and hard work of our exceptional team, we will continue to exceed the high expectations of our stakeholders and leave a positive imprint on our environment. In closing, I extend my heartfelt gratitude to each and every one of you, whether directly involved or a partner in our journey. Your unwavering support and tireless effort are the lifeblood of our organisation. Without you, there would be no Eco. Thank you.



Justin Dampney
Managing Director



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REDUCING CARBON EMISSIONS



Our Achievements Over The Years

From the beginning of 1996, Eco's operations have prevented almost 1.78M tonnes of CO₂ from being emitted to the atmosphere [1]. Recycling over 1.2M tonnes of green waste, 1.2M tonnes of soil, 0.88M tonnes of wood waste and 0.58M tonnes of food waste. Savings from individual waste streams are below.

Our own scope 1, 2 & 3 emissions in this time equate to approximately 67,000 tonnes of CO₂ and we are committed to continually measuring and implementing techniques and technologies to reduce these to zero.

[1] Compared to waste sent to landfill.



GREEN WASTE

From 1996 to 2022, Eco has recycled 1,211,576 tonnes of green waste.

The compost produced has been supplied to local farmers, landscapers and growers. This has prevented 690,633 tonnes of CO₂ from being emitted to the atmosphere.



FOOD WASTE

Eco has recycled 580,310 tonnes of food waste of which 346,220 tonnes has been fed to our Piddlehinton AD facility.

The AD facility alone has prevented 213,945 tonnes of CO₂ from being emitted to the atmosphere. In the process **generating over 80,000 MWh of electricity which is enough to power 27,000 houses for a year.**



STREET SWEEPINGS

Since 2005 we have prevented 185,445 tonnes of street sweepings waste.

Between 2015 to 2022, we have prevented 21,451 tonnes CO₂e from being emitted, 10.13 tonnes CO₂e being from recycling aggregates.



WOOD WASTE

Eco has recycled 881,544 tonnes of waste wood which has prevented 711,171 tonnes of CO₂ from being emitted to the atmosphere.

Our own Biomass CHP plant has consumed 44,853 tonnes of wood waste to generate 4,724 MWh of green electricity to power our processing plants and to be fed back into the grid for use on site and to be fed back into the grid.



SOIL WASTE

From 1996 to 2022, Eco has recycled 1,210,428 tonnes of soil saving 20,083 tonnes of CO₂ from being emitted to the atmosphere.

This soil has been reprocessed to create soils for use in local construction projects.



INVESSEL COMPOSTING

Before the construction of our AD facility, we used invessel composting to recycle food waste.

This process recycled 234,090 tonnes of food waste, accounting for a further 144,364 tonnes of CO₂ savings. We used the compost to grow turf supplied to local landscapers.

Reducing Carbon Emissions

Carbon reporting is new to many businesses, particularly SMEs (small-medium sized enterprises) like us; there is currently no legal obligation and only basic guidance for us to do so, but this will likely change in the coming years.

As we have learned more about reporting our emissions since our first sustainability report in 2020, we have made improvements in our reporting accuracy. For example, emissions from business flights and staff commuting were not included in our 2021 carbon footprint, but they will be from 2022 onwards.

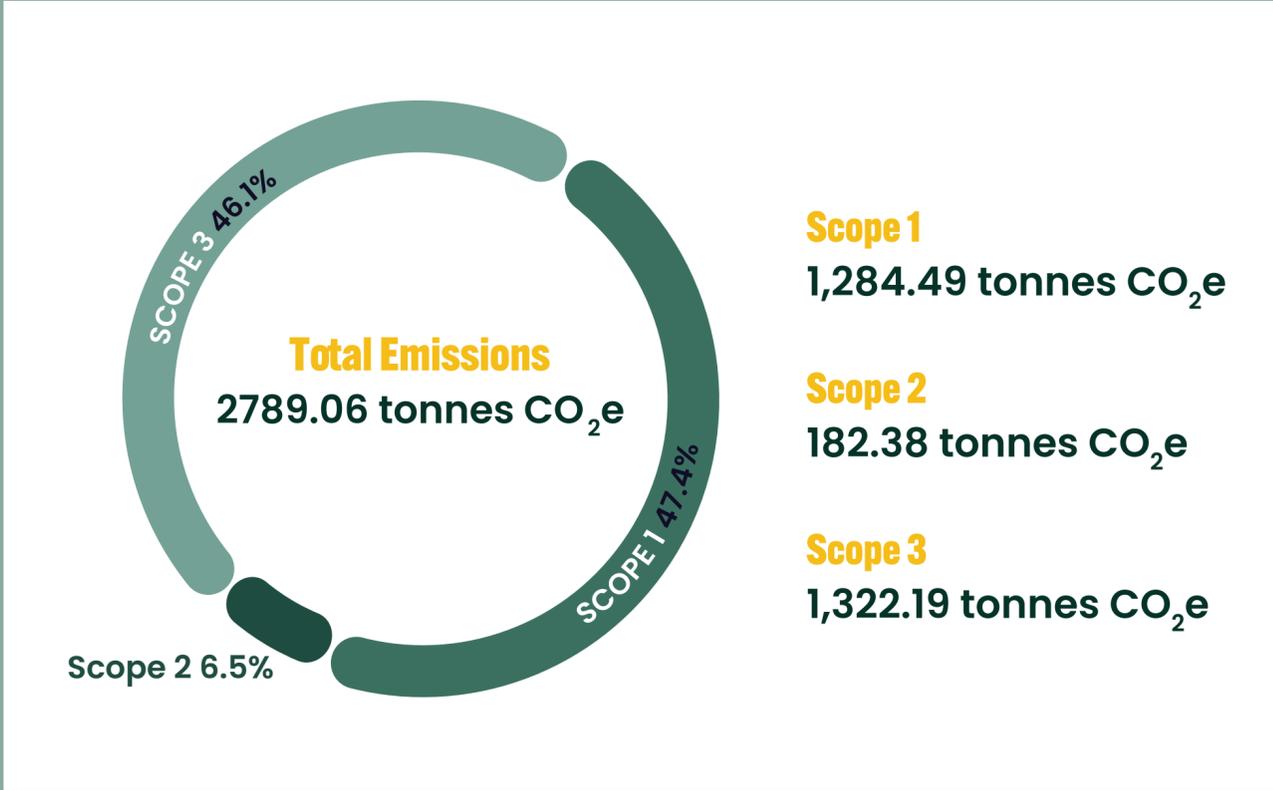
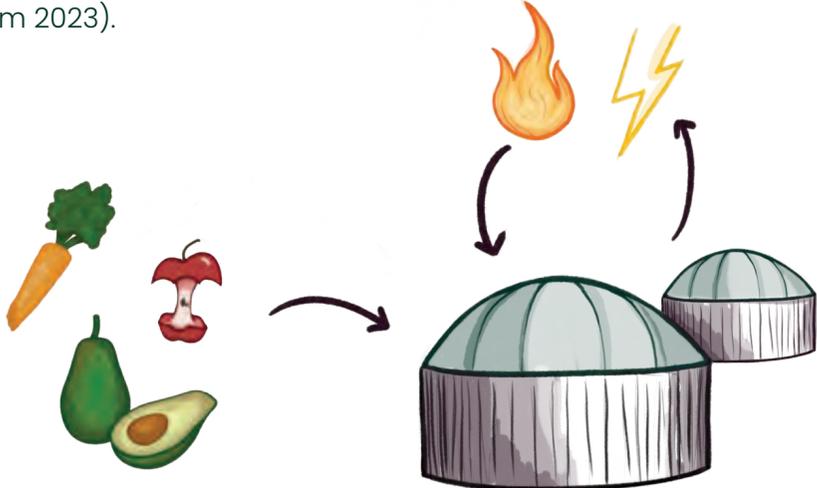
While this results in our Scope 3 footprint appearing larger than in our last report, transparency and accurate reporting is key to understanding, managing, and reducing our business's emissions now and in the years to come.

→ CHP & AD Performance

Together, in 2022, our anaerobic digestion (AD) and combined heat and power (CHP) renewable energy plants produced enough energy to power the equivalent of over 5600 homes[1].

This number is down slightly from 2021 due to greater periods of shutdown for essential maintenance; the CHP's performance was reduced by 8.9% and the AD produced 6.8% fewer kWhs in 2022. Nonetheless, our plants are continuing to play an important role in the vital transition away from our reliance on fossil fuelled electricity.

[1] Based on medium household electricity use of 2900 kWh per year (Ofgem 2023).



2022 Total Emissions

→ What are Scope 1, 2 & 3?

The circle illustrates how our carbon footprint is made up of three types of emissions which helps us to assess which areas have the biggest impact and how we can improve in the future.

The graphic shows that while our direct (scope 1, e.g., diesel usage) emissions are the most obvious source of GHGs, our indirect (scope 3, e.g., business trips including flights, transport of waste between sites, electricity generation from our CHP and AD) emissions make up half of our footprint, and thus is essential to manage if we are to reduce emissions in the future.

Recycling & Recovery Operations



52,667

tonnes of green waste recycled



89,435

tonnes of CO₂e prevented from entering the atmosphere by diverting waste from landfill



4,281

homes worth of electricity

35,050

tonnes of food waste recycled



61,944

tonnes of excavated soils recycled

42,971

tonnes of wood waste recycled

33,500 tonnes of wood for Energy Recovery off site
9,400 tonnes of wood for Energy Recovery on site



5,162.248 MWh
of electricity produced



19,343

tonnes of street sweepings recycled

10,554 tonnes of aggregate output

Enhanced Quality Output



Peat-Free by 2023

In 2023, we are planning on further developing our peat-free product range to include peat-free multipurpose alongside our peat-free Eco mix.

The importance of conserving peat in its natural habitat is becoming ever more significant when working towards carbon reductions, flood prevention and water preservation; peat holds more carbon than the combined forests of Britain, France, and Germany, as well as up to 20 times its own weight in water[1].

By using alternatives to this material in our products, we are keeping carbon in the ground and offering a more sustainable option to our customers.

[1] National Trust (2023) <https://www.nationaltrust.org.uk/our-cause/nature-climate/climate-change-sustainability/preserving-our-peatland> [accessed: 21/06/2023].

Investing in New Technology

In 2022 we commenced construction of our new street sweepings wash plant. With the new plant, we will be able to recycle more of the street sweeping material brought in by the local council by separating it into its various components and transforming it into a new product – from it, we will derive aggregates, sand and compost like output.



Recycled aggregates maintain the same strength and durability of virgin aggregates, but with a much less carbon-intensive and environmentally disruptive production process. We are proud to provide a sustainable option for the local construction industry and promote a more circular economy.



Bright Ideas

After a bright idea from a member of our Operations Team, a redundant screening plant was repurposed and modified to make it suitable for our wood processing department.

Not only does this support a circular economy by repurposing old plant rather than buying new, but as this screener is powered by the electricity made at our on-site Biomass CHP, the plant has also cut our fuel usage. In 2021, the diesel-powered screener consumed over 17,000 litres of fuel – therefore, upon its replacement in 2022, we have reduced our carbon footprint in this area by 46 tonnes CO₂e per year.

ENHANCING BIODIVERSITY



Biodiversity Enhancement

One of our targets for 2022 was to improve biodiversity in and around our sites. High levels of biodiversity benefit us and our environment in a variety of ways by providing many ecosystem services, for example, increased levels of flood prevention and carbon sequestration, as well as improvements to mental health from spending time in green, biodiverse spaces. This section of our 2022 Sustainability Report highlights our efforts to work towards this important target.

→ Pond

During the same period in which we created our reptile hibernacula, we dug out a pond in one of the compartments. This pond will bring benefits such as acting as a natural holding tank to aid in flood prevention and providing a water source for local birds and mammals. Furthermore, the pond will offer habitat, particularly for frogs, toads and newts, as well as insects so in the springtime it can be a great location for breeding and egg laying.

→ Owl Box

November of 2022 saw the addition of an owl box to one of our environmental compartments. Dorset is home to several species of owl: the short-eared owl, long-eared owl, small owl, tawny owl, and most famously, the barn owl. We hope one of these breeds will see the box we have set up as a home fit to lay their eggs in during the next breeding season.

→ Vegetation

Over the past year, local fauna and flora became more established in our compartments. In 2022, our compartments hosted various bees, butterflies and moths, bee orchids, heathland wildflowers and heather, while the pond proved popular with a variety of insects including damselflies, dragonflies, and diving beetles. As we continue our conservation of this area, we are excited to give nature a chance to do its thing and populate the land further with beautiful plants, animals and insects.



Slow Worm Spotted at Eco Park!

→ Reptile Hibernacula

In April 2022, we created nine reptile hibernacula bunds totalling over 130m in length throughout our heathland compartment. The main bund area, which is almost 100m², has been used as a relocation zone for reptiles found in the development spaces of our site which can no longer be a safe habitat for these creatures. These range from the common slow worm to the protected smooth snake.

These bunds can be used by the reptiles year-round as habitat for both winter, when they can burrow deep into the warm earth to hibernate, and summer, during which the bunds will provide the perfect spot for sunbathing.



Our Commitment in 2023

After seeing what we achieved in 2022, we are excited and motivated to continue our efforts in 2023. As an SME, of which make up 99.9% of UK businesses, we recognise that while 'small' by name, we still have a big role to play. At Eco, we strive towards continuous improvement; with the importance of environmental protection and enhancement ever more prominent, we are committed to future endeavours in boosting biodiversity and reducing our carbon footprint.

→ Create a Wildflower Bund at our Weymouth Site

After the vibrant success of the wildflower bunds at Piddlehinton, in the Spring of 2023 we will sow a further 200m² of wildflower seeds at our Weymouth site. Not only will this be an injection of colour to the site, but it will also help to support insects and birds in the vicinity. Every flower counts.

→ Bird House Installations

We also pledge to support our local bird populations by installing bird houses around our Weymouth site to complement the already popular bird feeders. We also plan on fitting bird houses at our Parley site once our development plans have been finalised. Birds are an essential natural pest control, and also help to pollinate plants and spread their seeds, so it is key that we help them out where we can.

→ Tree Planting Along the Bridleway

As to further our efforts in increasing biodiversity levels in and around our sites, in 2023 we will plant fifty native tree and hedgerow saplings. We will receive these plants from The Conservation Volunteers 'I Dig Trees' initiative, in which three million trees have been given away for planting in public spaces. So, look out for our saplings along the bridleway path adjacent to our site and solar farm in the coming months!

→ Further Reptile Conservation

We are committed to continuing the relocation of as many reptiles as we find on our development area. To aid us in ensuring the space is uninhabited, we will install a reptile fence around the area. This will prevent any further reptiles from entering, with the hope of clearing the area before construction begins in the summer.

[Sustainability Report 2022](#)



Over 25 varieties of wildflowers at Piddlehinton!

→ Wildflowers at Piddlehinton

In 2022, we sowed 1000m² of wildflowers at our Anaerobic Digestion facility in Piddlehinton, bringing life and colour to the site. Wildflowers are hard wearing and self-reproducing plants which help support declining bee populations and other pollinating insects by providing food and habitat for them.

Furthermore, the root systems of these flowers can help to retain nutrients in the soil, as well as increasing its stability. Stable soils are essential in reducing the impacts of drought, an environmental condition which is becoming a more frequent occurrence as climate change warms our planet, making efforts like this crucial.



PEOPLE



People

→ Team Training

We rolled out our bespoke behavioral safety program to our operatives across all three of our sites, which was carried out in conjunction with a local training provider. The training focused on improving our already well established safety culture, concentrating on team work and the importance of looking out for ourselves and each other whilst at work.

We continued to challenge ourselves during 2022 to improve safety wherever possible on all three of our sites in conjunction with our operatives. Although we did not hit our target of zero RIDDOR reportable incidents, this only helped us strengthen our resolve in improving safety further and achieving our target in 2023.

→ Safety Culture

In Spring 2022 we launched a new Health and Safety initiative called 'Permission Granted'. At Eco we expect and encourage our employees to support and further develop our H&S culture and constantly strive for a safer working environment.

The program - which every member of Team Eco signed up to - aims to create an environment in which every individual has the permission and therefore the confidence to positively challenge any unsafe practices, likewise giving colleagues permission to challenge them. This has created a culture where individuals feel comfortable discussing H&S issues with their peers and leaders, and is something we will continue to foster and develop.

→ Helping the Local Community

Throughout 2022, Eco donated over 28 tonnes of product to over 13 different organisations, including The Big Yellow Bus Garden Project in Shillingstone, High Mead Therapy Farm in Ferndown, and The Parks Foundation - the local charity enhancing BCP's green spaces.

We also host a yearly event for our team to raise money for the Macmillan caring locally unit in Christchurch. In 2022 we ran our 'Miles for Macmillan', where we encouraged the team to walk, run or cycle as many miles as they could in a month. We reached a grand total of 633 miles, raising £338.



An Evening on the River Stour

→ Health & Wellbeing

At Eco we have a strong focus on 'the team'; we feel this is incredibly important as it helps promote job satisfaction, personal growth and creativity, and helps reduce stress.

We organised a series of social events outside of work, picked specifically to provide experiences that promote teamwork and boost people's mental health. We achieved this by incorporating physical activities that took place outside in nature. One of the highlights of the year was paddle boarding in Christchurch Harbour, which was so successful, that we committed to making it an annual event.

We also encourage all our staff to take a break from their daily routines and take a walk in the local countryside during their working day which promotes a number of health and wellbeing benefits.



ecoTM

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