



**Eden Project**  
Sustainability Report  
2012-2013

## About us

The Eden Project, established as one of the Landmark Millennium Projects to mark the year 2000 in the UK, is an educational charity and a visitor attraction featuring spectacular planting and architecture in a worked-out china clay pit in Cornwall. The Eden Project tells the story of people's dependence on the natural world, of regeneration and what people can achieve when they work together and with nature. It is designed to give our visitors a great day out while demonstrating, in a serious yet playful way, how indispensable plants and people are to each other; how we all can adapt together to this challenging new world; and how even the most barren, worked-out China clay pit can be transformed into a place of beauty. This same message underpins all of our educational and outreach projects which explore new ways of living in the 21st century. Eden is also a social enterprise, demonstrating that doing business while improving the environment and livelihoods and building stronger communities can work hand in hand.

## About this report

Every year we take stock of the key events of the previous 12 months in this report, which is publicly available on the Eden website. Our stakeholders can keep up to date with what we're up to both front and back of house and how we perform against our sustainability ambitions.

If you have any questions about what's in this report please email us: [sustainabilityreport@edenproject.com](mailto:sustainabilityreport@edenproject.com)

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## Message from David Harland, Finance Director, and Peter Stewart, Campaigns and Communications Director

The year of 2012/13 was a year of great contrast for Eden. Amongst many highlights, we celebrated the huge success of the 2012 Big Lunch (8.3 million participants), enjoyed the spectacle and drama of the London Olympics, welcomed our 13 millionth visitor and were voted the best UK leisure attraction at the British Travel awards for the second year running.

However far fewer visitors came to Cornwall in 2012 due to a combination of the Olympics, poor summer and autumn weather and the lasting effects of the recession. Visitors to our Bodelva site fell to below the million mark for the first time since Eden opened in 2001.

Sadly this meant that we ended the financial year with a deficit and have had to endure a significant staff restructure, which was designed to ensure Eden's long term future.

In almost all areas, 2012/13 will be viewed as one of the most challenging years – both negatively and positively – as we hope that you will see from this report.

All in all however, we remain committed to working through the challenges – innovatively, creatively and ultimately, successfully.

We look forward to the year ahead and to welcoming you on site at Eden!

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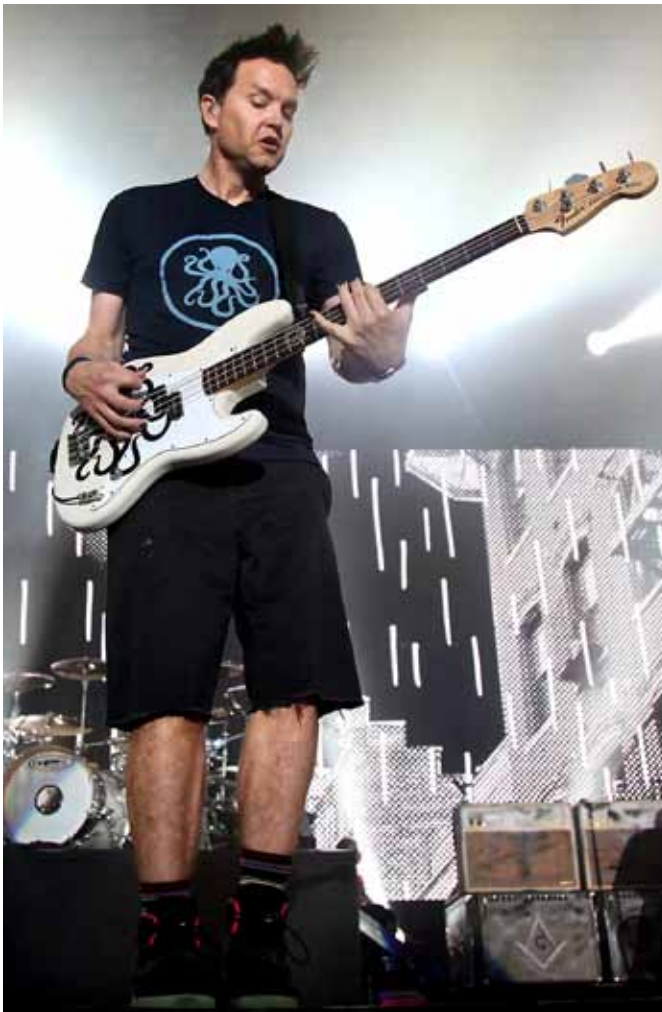
London 2012





## The Eden Project – our Stage

In around 50 hectares of once-degraded industrial land we grow over a million plants of 6,000 different plant types. Our inspiring garden at the Eden Project is at the cutting edge of sustainable horticulture. We use this stunning place as a stage: to create beauty and memorable experiences, to stir emotion and challenge concepts, to tell stories relating to global issues – and most importantly, to provide a learning environment that influences people to look after their planet and each other.



## The Olympic Torch

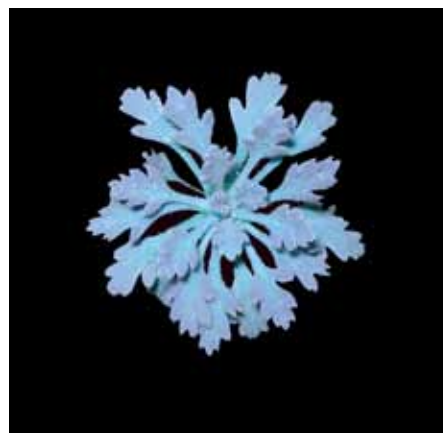
On 19 May the Rainforest Biome was one of the first pit stops for the Olympic Torch in the southwest. TV star Ben Fogle was the first person to carry a flame up into the canopy, amidst a day of activities and celebration on site.

## Eden Sessions

This year Eden hosted no less than seven sessions, including comedy from Tim Minchin, folk from former hardcore hero Frank Turner, drum and bass from Chase & Status, rap from Plan B and Example, 90s indie-rock from Blink 182 and a double-header from Noah and the Whale and The Vaccines, making it one of the most eclectic Sessions series to date.

## The Lorax

Dr Seuss's creation came to Eden this summer to bring the message behind the film of the same name: save the forests. To help the Lorax spread the word, the site was transformed: the Core was bursting with truffula trees as visitors were invited to make a pledge to help protect the world's trees. A trail led through the Biomes, where storytellers retold the tale from the book and revealed the secret of the Lorax.



## Freaky Nature

Freaky Nature turned its attention to the incredible survival mechanisms that plants use. The magnificent, pungent and slightly disturbing Titan Arum in the Rainforest Biome provided one of the focal points for the programme, which gave children the chance to mimic the burdock seed's dispersal method courtesy of a fuzzy wall and a sticky suit; explore the plant world through powerful microscopes; and discover how some plants have evolved to become sharp, toxic and even flesh-eating in the name of survival.

## Harvest festival

Harvest at Eden takes the traditional harvest festival into the 21st century, reconnecting people with their food in a global context. The festival focuses on simple food and drink propositions that link to seasonal, local, Mediterranean or tropical produce, celebrating nature's bounty and fecundity, plus the processes of preserving this bounty to sustain through the winter months. In 2012, we invited our visitors to enjoy and discover particularly wheat and barley, grapes, apples, and of course fruit and veg.



## The Arctic Gnome – the Keeper of the Ice

Independent creative company Bullet worked with established Eden sculptor Elly Voisin and Nottingham's Studio Bisque to create a large-scale, outdoor installation at the Eden Project for winter 2012. The collaboration resulted in an ebbing sea of 1000 white garden gnomes represents the extent of the disappearing Arctic sea ice – helping the public to picture the correlation between human action and the melting ice shelf.

## Circus

NoFit State Circus returned to Eden with the world premiere of the spectacular BIANCO, based loosely on Nobel Prize winner Jose Saramago's novel *The Elephant's Journey*. NoFit State produced a performance that one reviewer described as 'Shakespeare for the adrenalin junkie'. Visitors inspired by the performance could also attend circus workshops on site during the day.

## World Pasty Championships

Eden was once again the venue for the World Pasty Championships in March. Now in its second year, the event celebrates the once humble pasty's rise to stardom with the Oggy Oscars. Live music, comedy and pasty-making workshops were the order of the day, before the awards were given across eight categories.

## The Arctic Poppy

During April to July 2012 we hosted a stunning exhibition exploring the beauty and vulnerability of one of the world's most northerly plants, the Arctic Poppy. Artist Michèle Noach joined forces with one of our horticulturists to grow and photograph Arctic poppies as part of a three-year collaborative research project. Entitled *The Arctic Poppy Chronicles*, the exhibit tracked the plant's adaptive response to a warming environment as it is transplanted into progressively warmer temperatures. The exhibit also featured the book *Poppyflakes* which contains not only the photographs but the fascinating exchange of letters between the artist and the scientist during the three-year research period. The Arctic Poppy Chronicles formed part of the Slow Art programme in collaboration with Cape Farewell, a creative project that brings artists, scientists and communicators together to engage people with climate change.

## Education

Eden's experiential and engaging education programmes are designed to bring learning to life, making the curriculum real and relevant for students and inspiring teachers to take learning outside. We welcomed over 40,000 school children and students to our 'living classroom' during 2012-2013.

We hosted an extraordinary residential week for 'junior social apprentices' from Wellington College, linking their students with young people from Doubletrees Special School. We trained 200 teachers and teaching assistants on courses both at Eden and in school. In October our Schools Team took their unique brand of teacher training to the newly created roof garden on London's Southbank. Forty teachers and early years practitioners took on the challenge of building dens, writing outdoor poems and lighting fires – enabling them to share the benefits of learning outdoors with children in their schools and settings.

In November we hosted a series of team-building sessions for Plymouth University Business School, totalling about 300 students from all over the world. They stepped up to challenges across the Eden site; from abseiling to den-building and target practice in the Rainforest Biome.

This year we joined forces with the Global Sustainability Institute at Anglia Ruskin University and Change Agents UK to launch a new Masters course, 'MSc Sustainability: Working for Positive Change'. The course will provide graduates with the knowledge and skills to act as catalysts for sustainability within their respective disciplines. We will be delivering two modules here at Eden in the spring of 2014 and are looking forward to welcoming students from all over the world.

## Bringing the generations together

As part of our My Tree, My Community project, every year we send local artists and Eden staff to work with nine primary schools in the county, where they help gather stories of Christmas past and present from elders invited to a tea party. As well as producing some sparkly Christmas trees for Eden visitors to enjoy, the community art project helps bring together different generations – creating living social history, and reminding the elderly and the young what each generation can learn from the other.

One teacher said: 'Right from the beginning the children were learning, from serving teas at a party to welcoming guests – right through to realising how lucky they are to receive the gifts that they do today. It helped keep the true meaning of Christmas alive.'





## Working with businesses

In 2012-2013 we devised workshops and learning journeys for a range of large corporates including Panasonic, AkzoNobel, EDF Energy and Lilly UK. The Eden experiential approach appeals to organisations wishing to engage with and motivate staff in their roles: allowing teams and employees to reconnect with each other; making sustainability tangible; generating innovative ideas and unleashing creativity.

The Eden team also provided support and training to organisations from both third and private sectors, including Edinburgh Botanic Garden, Bristol Zoo, Leicester Botanic Garden and Westonbirt Arboretum. We worked with Cornwall Council and Cornwall Rural Communities Council to help design engagement strategies as part of the new neighbourhood planning processes.

## Clear About Carbon wins a top award

With a mission to find new ways to increase carbon and climate awareness within businesses and the public sector, Cornwall's Clear About Carbon project – of which Eden is a partner – was recognised at the prestigious 2013 European Social Fund Innovation, Transnationality and Mainstreaming Awards in March.

'Clear About Carbon winning this national award is testament to both the effective use of ESF investment bringing innovation to tackling real issues, and to the partner organisations that are taking the ideas and lessons and using them to great effect.' – Mark Yeoman, head of ESF Convergence Communication



## Horticulture

During 2012-2013 our horticultural team trialled a series of new courses for the general public, including veg growing, foraging, bee keeping and how to make wildflower meadows. Although operational requirements have put them hold, we're hoping to re-launch these courses in the future, as they seem to cater for a growing demand among the general public.





## Regenerating places & creating stronger communities

There's more to Eden than what happens on our site in Cornwall. Using Eden's story of regeneration as our touchstone we work with communities and like-minded organisations locally and nationwide on projects that strengthen people's confidence, motivation and connections with each other. Here are some we hope made a difference in 2012-2013.

## Big Lunch Diamond Jubilee

Undeterred by terrible weather, an estimated 8.3 million neighbours sat down to celebrate not only the fourth year of the Big Lunch, but the Queen's Diamond Jubilee in 2012. Bunting was hoisted and sandwiches were passed round from the Isle of Lewis in the Hebrides to Penzance in Cornwall. It wasn't just a British celebration this year: from sunrise to sunset people around the world sat down and got to know their neighbours in locations as far apart as the Polynesian island nation of Tuvalu and the Arctic Circle. The Big Lottery Fund has awarded Eden another grant to build on the success of the Big Lunch and run Big Lunch Extras, starting in April 2013. Read more about this project in the Future Plans section.

## Cornwall Together

We are proud to be one of the partners behind Cornwall Together, an initiative launched in 2011 by Ed Davey, Secretary of State for Energy & Climate Change, to help households save money on energy bills, by negotiating cheaper energy tariffs on their behalf. It is hoped that this collective buying scheme, by speaking as a single, more powerful unit, will help more than 20,000 people may be able to reduce their energy bills by 10-15%, saving Cornwall an estimated £3.7 million. A slice of the revenue generated from each energy switch goes into a fund addressing fuel poverty.

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## Planning Camps

Following the success of previous Planning Camps held at Eden, the team took the formula out on the road during the summer months of 2012. Funded by the Department of Communities and Local Government (DCLG) and managed by Locality, the Planning Camps brought the expertise and inspiration to selected audiences of Neighbourhood Planning Front Runners in Southampton, Birmingham and Leeds. In February 2013 another, larger, Planning Camp was held in Bristol, also funded by DCLG.

## Eden's outreach: supporting communities

With more than fifteen years' experience growing, maintaining and managing Eden Project, the Eden Team's expertise is in demand around the world. Closer to home, we apply these skills to support community projects locally and around the UK.


We continue to work with our friends at Grounded Ecotherapy (who we first worked with on The Key garden at Chelsea Flower Show in 2009) on the ongoing development of the hugely successful roof garden on the Queen Elizabeth Hall at the Southbank Centre in London; this year adding olive trees and perennial beds to respond to their summer 'Festival of the World.'

A team from Eden Project worked with Plymouth Community Homes to run a series of events for residents at Morley Court to develop plans for a community space and garden on top of their parking garage. We have also worked with Pensans School in Penzance on an exciting pilot project to promote outdoor learning and play; running a series of training days with teachers and playground assistants as well as having fun days in the grounds with the children. The project culminated in a celebration day outdoors and the unveiling of a master plan for the development of the grounds. Our landscape team then helped the school start the development by sculpting playful landforms and a space for play and performance.

The Horticulture Team continues to support Cornwall in Bloom as well as local communities, such as drawing up ideas to start up the Treverbyn Community Garden.







Behind the scenes at Eden – Sustainability  
We work hard to do things as sustainably as we can; from the way we water our plants and manage our waste, energy and finances to how we look after our staff and engage with suppliers and our local community.

# Social

It's been an extremely challenging year for all Eden staff. In January 2013 it was announced that up to 70 possible redundancies had to be made as part of cost-saving requirements. Over the following few months, the Eden team had to enter a painful programme of consultation, restructure and redundancy to ensure that we remained competitive in a difficult marketplace. We lost some great colleagues during 2012-2013, but luckily not as many as we feared. The launch of the new Big Lunch Extras project meant that 14 jobs which otherwise would have gone were made secure.

Following such a critical period of change, a staff programme was planned for summer 2013 aimed at reinvigorating the teams and rebuilding motivation. The team was also supported through the restructure by members of Eden's Members Assembly, an elected body of representatives from across all Eden teams.

However difficult it is to see colleagues go, the HR team is working hard to make sure that the 400-plus staff that remain are supported and given the necessary training.

Building on our existing in-house training programme and other new job-specific QCF programmes, 2012-13 saw the launch of a series of new development programmes. These include the new ILM (Institute of Leadership and Management) Management Apprenticeships and the Rotary Youth Leadership Awards (RYLA), a week-long residential leadership development programme. We have also launched new 'soft skills' courses such as Communicating Assertively, Handling Pressure Effectively and Presentation Skills. On average, each member of staff participated in 2.3 days of training in 2012-13.

## Health and wellbeing

Following the restructure Employee Wellbeing is now covered within the HR Team and by appropriate external bodies. We hosted an employee Health and Wellbeing day in October 2012 where a number of agencies attended to provide support and advice to employees. This meant easy access to a range of organisations, including Sun Safe, Simply Health, Perennial, Hospitality Action, O2, Members Assembly, Clubs and Gyms, Sensory Trust, AdAction, Legal and General, Citizens Advice. We have also provided a 3-month programme of free Shiatsu massage, available to any employee, which we are hoping to extend into the next year.





## Eden staff & sustainability

We're lucky to have team members who care so much about doing things as sustainably as possible and who are always on the lookout for ways to reduce Eden's environmental impact. This year, we've chatted to some of the Eden team members to find out what sustainability initiatives they've put in place in their teams recently.



### Emma Halliday, Events & Hospitality Manager

An example of sustainability in practice: the Events and Hospitality Team is using oilcloths more and more - easily wiped clean and ready to be reused, so saving the energy and detergent used in keeping white cloths clean. This is something we need to communicate to those customers who want white linen. Another example: we've found that Eden's cider jugs make fabulous and durable water jugs for our tables; they don't break as easily as the old ones and they look stylish too! There are plenty of opportunities to do more. The team is looking into ways of reducing paper (printing all those menus and programmes!), encouraging conference delegates to travel together to Eden, and how to get people to reuse their coffee cups at events where they have several servings - surely it wouldn't be the end of the world using the same cup twice?



### Kevin Bate, BMS Technician

My passion here at Eden is our Building Management System (BMS), or 'intelligent steering wheel' as I like to call it. This system, supplied by Priva, has enabled us to remove 47 outdated independent control systems that were spread across the site, into one unified intelligent system - the BMS. For the first time in ten years, all the systems across site are connected and 'talk to each other', and they send information back to the Energy Centre which in turn only generates the energy needed. Since we installed the BMS in 2009/2010 we have saved nearly £500,000 in electricity and gas and in 2012 we won a joint BCIA Award for 'Technical Innovation of the Year - Projects', together with Cambridge HOK our key BMS Priva partner. Next on the 'to do' list is to apply something similar to Eden's site wide water pumping systems. I see the Eden site very much as a production process, where you can always make continuous control improvements to be more resilient and to reduce energy and costs.

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## Our local community

Again during 2012-2013, Eden's Resilient Communities team continued its work to support local communities in a range of ways, from staging events to provide training for others. We worked with Polperro Renewable Energy Group on their plans for small-scale community energy projects and Plymouth Community Homes Ltd (a Housing Association) to involve a group of residents in a collaborative design process for a roof garden. Further training was provided through the Department of Communities and Local Government-funded Building Community project for neighbourhood planning front runner groups including a number of local action groups.

### Big Local

Administered by the Local Trust and funded by the Big Lottery Fund, Big Local seeks to bring together local talent, ambitions, skills, and energy from individuals, groups, and organisations who want to make their area a better place to live. Covering some of Eden's neighbouring communities, the Par Bay Big Local (PBBL) was among the first 50 areas across the UK to be awarded a share of £1m over 10 years to bring about long-lasting improvements for the community. During 2012-13, we have continued to support the PBBL partnership group, and arranged a participatory budgeting event which provides small awards to local community projects; provided content for the new PBBL website; and laid the groundwork for a more visible and permanent presence in the local community.

# Environmental

This section looks at how we try to minimise our negative impact on the environment and takes you behind the scenes for a closer look at how we do that here at Eden. Find out how our Horticultural team uses biological control to manage pests; what measures have gone in to reduce energy, water and waste; what's being done to reduce transport and carbon emissions.



## Biological control

At Eden we use beneficial insects to control pests within our enclosed Biomes wherever possible. These predators and parasites are released through the main growing season to control the major pests such as whitefly, spider mite and aphids. By releasing ladybirds and lacewings to protect our plants from aphids in the early spring in the Mediterranean Biome we are able to reduce the number of times we have to apply chemicals.

Some of the more unusual and difficult-to-control pests do not have registered beneficial insects available in the UK and we are currently testing out new bio-pesticides (fungi that attack insects) to control pests such as scale insects.

Our suppliers (BCP Certis), who produce many of the beneficial insects in the UK, have recently changed their packaging from polystyrene boxes to thick insulated cardboard boxes. This involved a large amount of research on their part to produce an environmentally friendly container which still maintains the correct cool environment that keeps the bio control safe in transit.

In addition to biocontrols, in recent years we have seen an increasing natural incidence of a fungus, *Lecaniciliium lecanii*, which attacks scale insects. We are currently studying the environmental conditions that favour this fungus with the intention of using the newly-installed Priva environmental control computer system to create conditions in the Rainforest Biome that give it a boost and increase natural control of scales insects.

## Managing water

Water is becoming an increasingly finite and unpredictable resource, taking centre stage in the way we plan and manage our gardens and landscapes. This year we have been reaping the benefits of the work a group of students from Cranfield University undertook examining Eden’s entire water system. Their recommendations have helped us to increase Eden’s water efficiency, particularly in our irrigation systems in the Biomes. We will work with the Cranfield students once again in the coming year to review our harvested rain- and groundwater system and flood resilience.

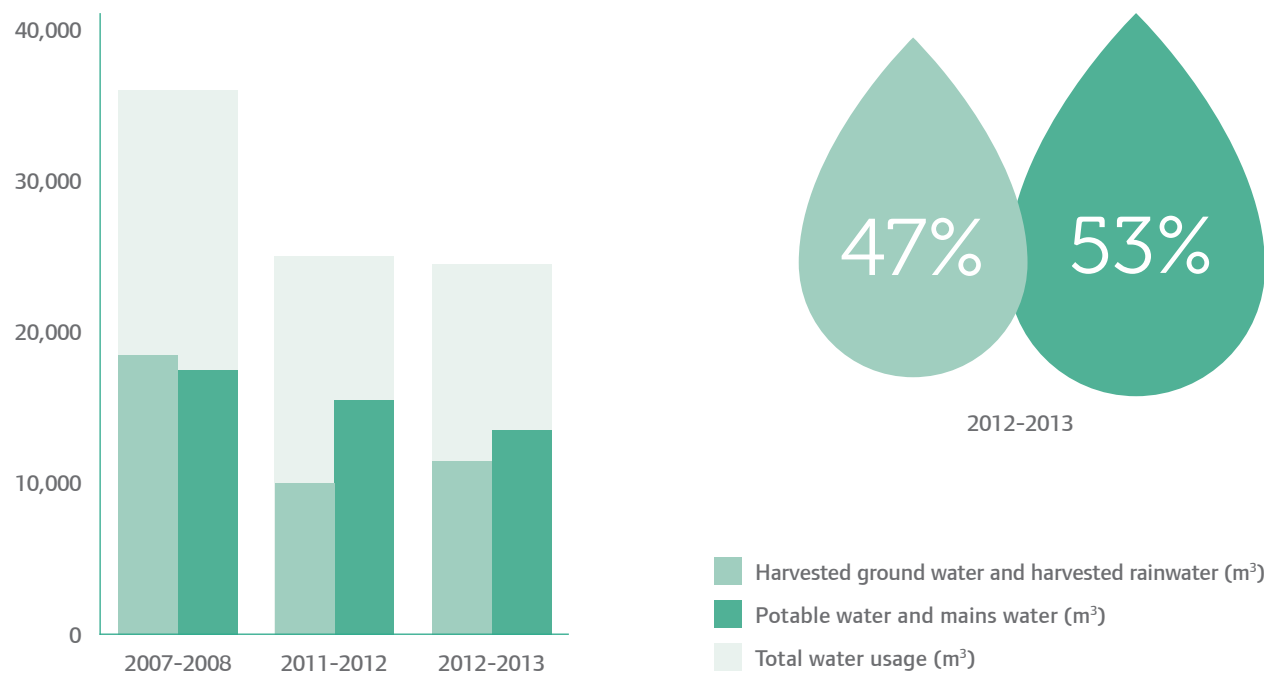
We’re pleased to see our overall water usage down by 30% compared to our base year (2007-2008), despite the investment in bigger and better food and drink outlets. However, the decrease in potable water consumption is likely to be partly due to the lower visitor numbers we had on site in 2012-2013.

Harvested rain/groundwater saw an increase due to the large volumes of rainfall on site, which we had to deal with using our existing systems.

We have decided to report our carbon emissions from water differently to previous years as we believe our new method is more accurate. We will be including emissions from both supplied ‘potable’ water and for water treatment, the latter which relates to both our potable supplied and all our grey water systems, as these are all classed as treated.

### Water usage

	2012-2013	2011-2012	2007-2008
Harvested ground water and harvested rainwater (m <sup>3</sup> )	11,734	10,145	18,466
Potable water / mains water (m <sup>3</sup> )	13,393	15,460	17,535
<b>Total (m<sup>3</sup>)</b>	<b>25,127</b>	<b>25,605</b>	<b>36,001</b>



## Carbon Emissions

Unfortunately 2012-2013 was one of the wettest years on record and this meant we used more gas and more electricity to supply the Eden site and keep our Biomes warm. Our new efficiency measures have still played a big part though, ensuring consumption and costs were slightly higher and not exponentially. We have also been adding more activities this year, such as improved catering offerings, all of which use additional energy. Starting from 2012-2013 we now include carbon emissions relating to waste water treatment too, which has contributed to the increase in total carbon emissions. Moreover, from 2012/2013 we are normalising our data, taking into account degree days, outside air temperature and even visitor numbers, so we can compare our efficiency more accurately. Although our total carbon emissions amounted to 4141 tonnes, we have been able to offset some of it by the renewable energy we have generated onsite – not enough of course, but a start. With the offset, the total came to 4099 tonnes CO<sub>2</sub>, that's an improvement of 16% compared to our base year (2007-2008) but an increase compared to previous year.



### Total Carbon Emissions



2012-2013



2011-2012



2007-2008

Source	2012/2013		2011/2012		2007/2008		
	Units	CO <sub>2</sub> e (t)	Units	CO <sub>2</sub> e (t)	Units	CO <sub>2</sub> e (t)	
Energy for electricity and heating	Electricity (kWh)	4,764,421	2,499.5 (2463.3)	4,371,876	2,293.6	5,102,640	2,740.2
	Gas (kWh)	5,671,168	1,158.2 (1152.5)	4,340,660	803.9	5,989,492	1,233.8
	LPG (l)	128,053	191	99,394	148.3	21,294.60	32.2
	Oil (l)	991	3	2,000	5.1	208,665	525.4
	Woodchip* (kWh)	286,000	5.7	[41,190]	0.8	-	-
	Bottled Gas (l)	1,923	2.9	3,023	4.5	-	-
	Gas oil (l)	-	-	-	-	-	-
	Renewable generation (kWh)**	68,924	36.2				
	<b>Total</b>		<b>3,854.6</b>		<b>3,256.2</b>		<b>4,531.6</b>
	<b>Total with offset</b>		<b>3,812.7</b>				
Fuel for transport at Eden	Diesel (l)	38,834.4	100.3	41,256.7	106.1	28,953.2	76
	Petrol (l)	9,171.4	20.6	9,472.5	21.3	10,168.3	23.5
	Biodiesel (l)	-	-	2,395	0.4	14,483	5.7
	LPG (l)	18,719	28.7	14,634.50	21.8		
	<b>Total</b>	<b>66,724.8</b>	<b>149.6</b>	<b>67,759</b>	<b>149.6</b>	<b>53,604</b>	<b>137.4</b>
Refrigerants	R134a (l)	0.004	5.4	0.003	3.4	0.016	20.7
	R404a (l)	0.004	12.4	0.009	28	0.0048	15.5
	RA407c (l)			-	-	0.0213	34.1
	R410a (l)			-	-	-	-
	<b>Total</b>		<b>17.8</b>		<b>31.4</b>		<b>70.3</b>
Business travel †	Car		55				
	Flights		42				
	<b>Total</b>		<b>97</b>		<b>171.8</b>		<b>142.6</b>
Water	Mains water supply (m <sup>3</sup> )	13,393	4.6				
	Mains water treatment (m <sup>3</sup> )	13,393	9.4				
	Grey water treatment (m <sup>3</sup> )	11,734	8.2				
	<b>Total water (m<sup>3</sup>)</b>	<b>25,127</b>	<b>22.1</b>	<b>15,460</b>	<b>2.7</b>	<b>17,535</b>	<b>3.3</b>
Total CO <sub>2</sub>	<b>Total (tonnes CO<sub>2</sub>e)</b>		<b>4141.1</b>		<b>3611.7</b>		<b>4885.2</b>
	<b>Including offset</b>		<b>4099.2</b>				

\* Offset against gas.

\*\* Offset against electricity.

† Rail is excluded in the 2012-2013 figures - impossible to measure mileage and carbon at the moment. Inaccurate in the past hence taken out.

## Electricity

Even when we take the bad weather into account and 'normalise' our data, we had a 6.9% increase in electricity use in 2012-2013. This is partly because we had some old equipment that we now know wasn't running very efficiently, and also is down to the increased catering across the sites, more ovens baking yummy things unfortunately means more electricity too!

In 2012-2013 our 5kw wind turbine, 300kw biomass boiler and two arrays of solar panels generated 1.5% of our onsite renewable energy use, meaning we offset 36.2 tonnes of CO<sub>2</sub> equivalents.

## Gas

Discounting the effects of the bad weather in 2012-2013 our gas use was down 4.3% when normalised. So despite increased catering use, we have managed our gas use more efficiently than the year before. We will continue to monitor and manage our gas use closely and our maintenance team continue to optimise the Building Management System to ensure maximum energy efficiency in the Biomes.

## LPG

22 A much cleaner and efficient alternative to oil, Liquid Petroleum Gas (LPG) now makes up an important part of our energy mix, particularly to heat the tropical greenhouse at our nursery. The slight increase compared to last year is due to it being a much colder year which meant we had to heat much more. We are also reporting our LPG use differently this year in line with GHG reporting guidelines. We will report LPG used for heating as above and for our catering outlets that sometimes require it and LPG used as fuel in our vehicles around the site.

## Bottled gas

Our bottled gas consumption is solely used for seasonal cooking facilities in peak periods and this has risen this year due to increasing our catering offering across the main site.

## Oil

We have reduced our consumption of heating oil to a minimum. It is now only used to heat one small building providing accommodation within the Eden Project site. We are looking at changing this oil fired heating system onto renewable power too.

## Woodchip

We had our best ever year using our woodchip fired biomass 2012-2013 and managed to generate 280MWh of heat within this reporting period. This helped us offset 5.7tonnes of CO<sub>2</sub> e.

## Electric bike show

This event in April displayed some of the best new bikes designed to give cyclists an extra boost when pedalling – perfect for tackling the hills and inclines of Cornwall.

'I meet lots of people who'd like to cycle more, either to cut costs, cut emissions or to get more exercise, but aren't sure where to start. The new breed of bikes on display at the show demonstrated that an extra boost up hills could give everyone the confidence to get cycling, whatever their level of ability. With no tax or insurance to pay for, electric bikes are affordable as well as efficient.'

– Janine Kelk, Eden's Sustainable Transport Coordinator



## Transport

We rely on diesel, petrol and LPG to run our fleet of vehicles for the Eden site. In 2012-13 we replaced an old, much used vehicle with a dual fuel vehicle (petrol/LPG) which meant we used less diesel. Our petrol usage has also decreased as we have been encouraging the use of LPG over petrol for both financial and environmental reasons. Therefore our LPG usage has increased but we believe it is a cleaner alternative than using petrol or diesel.

## Business travel

We calculate the carbon emission equivalents from staff and volunteers travelling by car or aeroplane for work purposes (this does not include staff and volunteers commuting to and from work). The total is an underestimate as we're not yet able to capture all business travel data, for example train journeys.

With regards to staff commuting and visitors travelling to and from Eden, our Green Travel plan seeks to reduce the environmental impact of transport and includes free bus service; a cycle-to-work scheme; a car-share scheme; a working from home policy (saving 3% of staff trips to the site per year); and discounts to visitors who arrive by public transport or other forms of low-carbon travel.



## Mining Exhibit unveiled

The new mining exhibit was opened to the public in August, telling the story of our reliance on mining and the materials in the products that we take for granted. In typical Eden style, this isn't an exhibit to be stared at; it's meant to be explored and meddled with, having been fitted with flaps to be lifted and a tunnel to crawl through. It also has a sustainability story to tell – the timber was taken from decommissioned buildings and locally sourced larch cut down as part of a forestry management programme; the stone floor came from local mines; and offcuts from the Core's sustainably sourced copper roof were used to clad it.



## Refrigerants

Refrigerant figures remain low thanks to the new fleet of fridges and freezers purchased after the flood in 2010 and the improved design of our walk-in fridges. We are looking at reducing these further by replacing our oldest units with newer, more efficient technologies.

## Waste & resources

This year, we implemented a couple of changes to the way we monitor and measure our different waste streams. As a result, food waste is now measured separately and we have a better understanding of the amount of waste we generate. The figures tell us more waste was generated in 2012-2013 compared to the year before, from 304 tonnes to 470 tonnes. It is possible that the increase is partly to do with changes in how we now calculate the total weight, but also because we had a big clean out of one of our yards this year which upped the totals. Some of the recyclables increased in weight compared to the year before, particularly glass. Compared to our baseline year, this means we're down 10% instead of 21% (last year) and considering visitor numbers were relatively low last year, the attempt to reduce waste per visitor further continues.

## ICT

A few years ago, the challenge to replace an ageing server estate provided an opportunity to invest in what at the time was an emerging technology. Instead of the traditional like for like replacement we replaced 20+ physical servers with just 3. Using server virtualisation technology and network attached storage we were able to deliver on all three aspects of the triple bottom line. Hardware and running costs were significantly reduced whilst increasing resilience. In addition, virtual desktops provided real opportunities to enable working from home. Furthermore, the efficient storage solution reduced our storage requirements by an impressive 40% from day one through de-duplication of data. This, coupled with the 75% reduction in physical servers, enabled us to deliver a saving of an estimated 44,000KG of CO<sub>2</sub> in the first 12 months.

Another significant change onsite has been the introduction of a new fleet of copiers which are best in class, utilising recycled plastics, long life components and low energy usage. This has been further enhanced by the inclusion of print management software which has enable us to reduce uncollected print waste to virtually zero by implementing 'follow me' printing. The phone system is currently under review and we are also looking at video conferencing again, with a renewed emphasis to reduce our business travel CO<sub>2</sub> whilst continuing to extend our reach.

## Responsible sourcing

Around 70% of the money we spend on catering goes to Cornish suppliers; we work with local growers and companies to develop products for sale. Low food miles, seasonal and vegetarian dishes all help reduce greenhouse gas emissions. Fairly traded, organic and other certified products from further afield demonstrate that good trade is a vital part of sustainability.

This year we approached the Cornish Bee Farm, a small family run business with some 300 hives around the county, and asked if they could produce a special wildflower honey to be sold under Eden's brand and design. We wanted to do this as a way of raising awareness and excite people about the importance of bees and pollination. The result is a beautiful wildflower honey, produced by 35,000 busy bees foraging from hedgerows and pastures across Cornwall.

We've teamed up with Cornish organic farm Roskilly's to create a wonderful range of jams and chutneys – all presented in reusable Kilner jars, just like the wildflower honey. Roskilly's have introduced a unique ingredient into their products for Eden, panela, an unrefined Colombian whole cane sugar which creates a rich depth of flavour similar to caramel. Produced in Colombia, its cultivation allows some 300,000 people to earn a living.

Baobab is an African super fruit that's six times richer in vitamin C than oranges – and also contains vitamins A, D and E. In powdered form, it can be added to all sorts of dishes and drinks as a health boost. You'll recognise the iconic stout baobab trees with their spreading canopies from pictures, but it's their large ovoid pods that contain the oil-rich seeds, powder and fibres. Because the baobab trees in our Rainforest Biome are only tiny, we work in partnership with charity PhytoTrade Africa to source the Baobab in our products. Families on the continent harvest the abundant fruits to help them pay for family healthcare, education and household basics.







## Baobab smoothie

Why not make a baobab fruit smoothie as a refreshing drink to kick start your day? We serve this tasty treat for visitors in our Rainforest Biome.

You can also gain all the health benefits of Baobab by adding it to other dishes such as curries, cakes or sprinkled on your cereal.

### Ingredients

- 400ml coconut milk
- 500ml pineapple juice
- 150ml water
- 50g sugar
- 25g baobab powder
- a few mint leaves

### Recipe:

1. Chop the mint
2. Blend the coconut and pineapple juice
3. Boil the sugar and water, add the baobab powder and mix to a smooth liquid, then blend in the coconut mix.
4. Pour into three containers and divide the chopped mint between.





## Future plans

The next phase of activity aims not only to enhance and develop our current destination here in Cornwall, but to move substantially beyond it to reach new audiences. Our ambition is to become a world-leading educational charity and in that way play a key role in bringing about positive social and environmental change.

## Our four strategic objectives over the next three to five years are:

### To maintain our successful visitor destination to deliver public education to a broad audience

To ensure we further the educational experience we provide, and to make sure visitors keep coming, we have completed the first phase of a new development project for our Rainforest Biome – the Canopy Walkway (see box). The walkway will give visitors access to the canopy and will allow them to immerse themselves in this unique environment, so encouraging them to care about its survival in the wild. Fundraising continues to secure a further £3 million to complete the project.

### To increase our educational activities and reach new audiences

Following ten years of engaging successfully with the public, local communities and schools, our next chapter promises to take us on exciting journeys into the world of business, higher education and digital. We are looking at how the Eden site can become a platform for public engagement with research being carried out within the Higher Education sphere with collaboration with both Exeter University and Anglia Ruskin University. We're collaborating with Cornwall College on a major new skills project and we continue to explore the ways in which we could create fantastic online learning opportunities.

### To develop new outreach projects that support the social enterprise model

As the economic situation continues to toughen and the competition for funding intensifies, the imperative for Eden to become as financially sustainable as possible increases. On the one hand, this involves widening our educational offer and catering for new audiences; and on the other, exploring possibilities for new Eden Projects in other parts of the world. The income from such activities will help secure the continuation of the charity's core educational work. As we have seen, this year Eden successfully secured additional funding from the Big Lottery Fund and Corporate partners to run the Big Lunch until 2015, and also launched Big Lunch Extras. This new three-year community engagement programme aims to inspire and equip individuals, friends and neighbours with the skills and confidence to bring about real positive change within their communities.

### To demonstrate good practice by using and promoting capacity for sustainable solutions

This year we are working on our plans for a deep geothermal power plant on our site, producing enough electricity and heat for ourselves and power for around 4000 households. Together with our partner EGS Energy we are seeking investors and government backing for the £35m needed to make it happen. Unlike other renewables, geothermal provides 24/7 power on a very small surface footprint, and could provide 20% of the UK's electricity needs.

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## For the coming year, our main short-term priorities are:

To bring 350 people to site to participate in the Big Lunch Extras programme

To refresh The Core building public exhibition area with a new Wellcome funded exhibit called 'The Invisible Biome'

To continue our fundraising campaign for the Rainforest Walkway and reach £3 million – enough to complete the canopy walkway

To maintain visitor numbers to the Eden site

## The rainforest walkway

The spectacular walkway was due to open to the public in June 2013. The visitor journey begins at the Rainforest Basecamp, which sets the scene for the walkway experience. The Basecamp provides an introduction from the perspective of the people who live in the rainforest and from the canopy scientists who work there. From the upper level of the Basecamp visitors will get their first spectacular views over the canopy.

An aerial walkway high above the forest floor leads visitors to the Nest: a platform with fabulous views out through the treetops. Art exhibitions are currently being created, with public participation, to bring the story of the rainforest's biodiversity to life. A second aerial walkway takes the visitors further through the canopy to a cliff path nestled in the back wall of the Biome.

Eden is working with the Sensory Trust to make the experience great for visitors of all ages and abilities.

The Eden horticulturalists are working on new plant exhibits and landscaping to accompany the installation. During the build the Rainforest Biome has remained open to visitors so they could watch first-hand as the infrastructure develops.

The first phase of the walkway has been made possible thanks to the generous support of a number of foundations and individuals, including the Garfield Weston Foundation, The Wolfson Foundation and donors to the Eddie George Memorial Fund.

### Phase 2 and future fundraising

We have secured research and development funding as well as some direct exhibit funding from a corporate partner for the Weather Station, a key component of Phase 2. We are partnering with the MET Office to develop a detailed brief and cost plan for this exiting exhibit, and are activity seeking further funding for it.



## Big Lunch Extras

Building on the success of the Big Lunch and our series of Planning Camps, we have obtained funding from the Big Lottery for a three-year programme designed to give communities ideas and some of the skills they might need to do something for their neighbourhood. Whether it's a one-off event like a festival or fête, or something regular like a film night, a sharing scheme or something more ambitious like a community shop, community transport scheme or a community energy programme, Big Lunch Extras aims to provide neighbourhoods with the skills and knowledge they might require to get them going. To this end BLE will run weekend events at the Eden Project in Cornwall and regional workshops of a day or longer around the UK. The project began its planning phase in January 2013.



# The Eden Project Governance and Funding

## Governance

Eden Project Limited (“the company”) is a wholly owned subsidiary of the Eden Trust, a company limited by guarantee and a UK Registered Charity (number 1093070). The principle activity of the company is the operation and continued development of the Eden Project, one of the UK’s top landmark projects created to promote understanding of the vital relationship between people and plants and issues surrounding sustainable development, on behalf of the Eden Trust. Eden Project Limited is managed by a board of executive and non-executive directors, who remain ultimately responsible to the trustees of the Eden Trust.

## The Board

### Executive Directors

Tim Smit – Chief Executive Officer Development

Gaynor Coley – Executive Director

David Harland – Finance Director (Joined in January 2013)

Tony Kendle – Foundation Director

Peter Stewart – Campaign Director

### Non-executive Directors

Judith Donovan – Chair (Joined January 2013)

Richard Eyre (Left February 2013)

Rosie Boycott (Left May 2013)

Maggie Carver (Left January 2013)

Julie Hill (Left July 2012)

Helen Owers (Joined in January 2013)

Andrew Peters (Joined in March 2013)

Andrew Walmsley

Geoffrey Wilkinson

## Trustees

Sir Anthony Salz – Chair

Ms Emma Harrison

Lady Mary Holborow (Joined in December 2012)

Ms Lucy Parker

Sir Ghilleen Prance

Lord Puttnam (Left March 2013)

Sir Simon Robertson

Sir John Rose

Sir Steve Smith

## Funding

During the financial year 2012-2013 the following funders provided financial support to a variety of our charitable projects, many of which have been mentioned in this report. Many other supporters have played a part in our development over the last ten years and further details of all our funders to date are available on our website. It's thanks to their help and co-operation that we are able to undertake much of our charitable work.

### Our funders

Arts Council	European Social Fund	The Big Lottery Fund (The Big Lunch and Big Lunch Extras)
Asda	Kindsmill	The Eranda Foundation
BIFFA Award	Kingfisher PLC	The Ernest Kleinwort Foundation
Bunzl Plc.	Local Action for Rural Communities Programme (China Clay LAG) - Supported by the Rural Development Programme for England	The Fidelity UK Foundation
Cornwall Council		The Finnis Scott Foundation
Cultural Olympiad	Locality	The Garfield Weston Foundation
Department for International Development	LOCOG	The Hobson Charitable Trust
Department of Communities and Local Government	Mastercard	The Hobson Charity
Department of Energy and Climate Change	Oxfam	The Kirby Laing Foundation
Eden Friends and Patrons	Radio4 Appeal	The Lennox and Wyfold Foundation
EDF Energy	Rio Tinto	The Swire Charitable Trust
English Heritage	Southbank	The Wolfson Foundation
European Regional Development Fund	The Big Lottery Fund (Big Local)	Tipping Point
	The Big Lottery Fund (Family Learning)	Trusthouse Charitable Foundation

Thank you all for helping us making a difference during 2012-2013

## Help us make a difference

Evidence shows that the work we do makes a real difference to people's lives, but we rely on the support of individuals, corporate partners, charitable foundations and other funding agencies to make these transformational projects happen.

If you like what we do and would like to help support our work, please get in touch.

Call us on +44 (0) 1726 811 932

Email: [fundraising@edenproject.com](mailto:fundraising@edenproject.com)

Or visit our website [www.edenproject.com/support-us](http://www.edenproject.com/support-us)

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