

Change in action

From solar panels to waste management, **Meredith Jones Russell** explores how settings can ensure they are an eco-friendly business

While there are currently no official requirements for early years settings to be sustainable, many are already considering how they can make a difference to the environment, and hopefully benefit their business at the same time.

Mark Bird, health, safety and environment director at Childbase Partnership, says, 'From a management perspective, the most important thing is to ensure environmental sustainability is to set your agenda via policy.'

'You're not going to change the world, but by setting yourself targets which are achievable, you can make a difference. What's measured is managed.'

SAVING ENERGY

Mr Bird says the most obvious place to start is utility bills.

'Settings may just be receiving estimates of how much energy they're using so won't have real visibility of their usage,' he explains. 'A smart meter for gas, water and electricity is usually free from energy providers and helps settings reduce usage in all three areas. You cannot manage your sustainability if you don't know the context.'

Reducing energy usage can save providers money. Simply switching off lights will reduce costs, while the Carbon Trust says switching to energy-efficient LED bulbs and replacing an old boiler can shave 30 per cent off energy bills, with a typical payback of just three years.

Everton Nursery School and

Family Centre in Liverpool has gone a step further and installed 96 solar panels on its roof.

Head of centre Dr Lesley Curtis explains, 'We had panels installed through a company called Lightsource. We now have significantly cheaper bills and receive a small sum of around £340 per year as a Feed-In Tariff for the electricity we produce that is exported to the grid. Each panel gives 230 watts, which is an overall CO2 saving of 34.65 tonnes, the equivalent of 9,625 trees planted or 22 houses powered.'

Since April, more large companies have been required to disclose their energy and CO2 emissions thanks to the Government's Streamlined Energy and Carbon Reporting policy.

Childbase Partnership works with a carbon accountancy company called The Planet Mark (<https://theplanetmark.com>), but Mr Bird says smaller settings can audit their carbon footprint themselves. 'There are plenty of websites which provide spreadsheets to calculate how many kilowatts per hour you use, and come up with a standard for what



Primrose supplies a wide range of raised beds and growing troughs



Children at Childbase benefit from an environment with a reduced carbon footprint

your footprint looks like. It's something that should be doable from the smallest to the largest setting.'

CONSIDERING FOOD CHAINS

At Childbase Partnership, staff wanted to ensure food was more sustainable and organic by considering its supply chains. All the meat and fish served is now Red Tractor or RSPCA assured.

Mr Bird says, 'This undoubtedly comes with costs, but we have offset them with a more flexitarian diet, with meat-free days and a broader protein offering to include things like tofu and even the dreaded quinoa! This brings a range of benefits, from eating less beef, which has been proved to be bad for the environment due to the water and land used, to ensuring animal welfare.'

Shepperton Organic Day Nursery is certified as organic by the Soil Association. All fish served is either line-caught or wild, while all food is free from additives and genetic modification, freshly made and, wherever possible, sourced from local providers. Children grow food and the setting makes its own bread and jam every day.

Director Kimberley Foster says,

'We never allow economic considerations to guide our policies. We do not budget for anything but strive to make good "housekeeping" decisions – we don't waste money, but if we need something, we get it. Luckily people like Jamie Oliver raising the profile of eating organic has helped people jump on the bandwagon quickly.'

MINIMISING WASTE

Further environmental considerations when providing food relate to waste disposal; both of the food itself and its packaging.

Many nurseries use compost bins for food waste. Mr Bird says, 'If you can separate your waste into different types of recycling, finish or reuse as much as possible and bring your general waste down, you can bring costs of disposal down too.'

While there are not yet any official restrictions on the use of plastic in early years settings, many are considering reducing their consumption or banning it altogether as the dangers of plastic waste are more widely publicised.

The NDNA's tips include:

- Swapping plastic and cardboard milk cartons for glass bottles.
- Using metal travel water bottles.
- Swapping plastic food wrap for beeswax.

- Swapping plastic cutlery and toothbrushes to bamboo.
- Using paper, bamboo or metal straws.
- Swapping plastic handwash and shampoo containers for soap and shampoo bars.
- Swapping plastic hairbrushes for wooden brushes and bristles.
- Glitter – either ban entirely or use biodegradable versions.
- Choosing toys and furniture made from natural materials.
- Using washable cloths or bamboo terry wipes rather than disposable ones.

Melanie Pilcher, quality and standards manager at the Early Years Alliance, says, 'As a sector we have become increasingly reliant on the convenience of single-use items in running our settings.'

'Items such as plastic aprons and wipes only ever end up as waste and set a pretty poor example for the next generation, and of course they have cost implications too.'

Perhaps the most pressing waste issue in early years settings is nappies. In the UK, eight million nappies are thrown away every day, and each one takes 200 to 500 years to degrade.



NBB's colourful cube planters are made from recycled plastic



Childbase uses nappy waste disposal company Green Bottoms (<http://greenbottoms.co.uk>), which ensures none of the waste goes to landfill, but Mr Bird acknowledges disposal poses a challenge for many.

'Domestically of course it's better to swap to cloth nappies, but on a nursery scale where so many need to be named, labelled, washed and folded, you're not only running washing machines round the clock but you practically need a member of staff responsible only for that. This becomes a recruitment issue, and suddenly doing deeper environmental work becomes slightly counter-intuitive.'

Sylvia Roberts, co-owner of Little Earthworms in Brighton, which uses only reusable nappies, says it is important to trial different options.

'We used to use nappies that had to be folded, which really wasn't good for staff when they were dealing with lots in a row. Now we use Motherease (www.mother-ease.com), which we find much easier.'

COMBATING AIR POLLUTION

When it comes to reducing car use, Mr Bird says larger nursery groups may benefit from having more oversight of transport options. 'If you have fleet cars, moving to plug-in hybrid electric vehicles is more tax-efficient and better for the environment.'

Unitots at the University of Worcester participates in the university's car-sharing scheme, although manager Hazel Rutherford admits it can be challenging for some members of the nursery community. 'We do have staff who come in from very far away, which makes it difficult for them to share their journey,' she says.

However, where possible, managers can encourage the use of initiatives such as Living Streets' Little Feet (<https://www.livingstreets.org.uk/walk-to-school/early-years>) to get children and families walking to nursery and improve health and fitness levels as well as air quality.

In London, another option for improving air pollution has been piloted, with 20 nurseries helping to trial new air-quality filtration systems as part of an initiative by the Mayor of London.

A starter grant of £4,500 will be available on completion of the air-quality audits.

resources

Books

- **Understanding Sustainability in Early Childhood Education** edited by Diane Boyd, Nicky Hirst and John Siraj-Blatchford (Routledge)
- **Education for Sustainable Citizenship in Early Childhood** by John Siraj-Blatchford and Lynnette Brock (SchemaPlay Publications)
- **Early Childhood Education and Care for Sustainability** edited by Valerie Huggins and David Evans (Routledge)
- **Education in Times of Environmental Crises** edited by Ken Winograd TBC



- **Global Childhoods** by Monica Edwards (Critical Publishing)
- **Research in Early Childhood Education for Sustainability** edited by Julie Davis and Sue Elliott (Sage)
- **Make It and Mend It** by Clare Flynn, Hilary Bruffell, Clare O'Brien and Anne Caborn (David & Charles)

Equipment

Composters such as bokashi bins which use inoculated bran to ferment food waste into a safe soil builder can be added to nursery kitchens:

- www.ethicalsuperstore.com
- www.unwins.co.uk

Water butts – one water butt holds

enough rainwater to fill a watering can 25 times and can be filled an average of 450 times a year:

- www.tts-group.co.uk
- <https://evengreener.com>

Wooden grow beds and planters provide a natural opportunity for children to grow their own fruit and vegetables and understand the world:

- <https://www.primrose.co.uk>
- www.recycledfurniture.co.uk

Training

The *Plastic not so Fantastic* webinar from Early Years Alliance is available on YouTube:

- <https://bit.ly/2HfnFJM>

Luke Page, head of school at Triangle Nursery School in Lambeth, which took part in the pilot, says the process inspired them to do more to reduce toxic air.

'We are awaiting results and have therefore not made any changes as yet, but if we receive any funding, I would like to create a barrier between the road and the nursery with plants,' he says.

STAFF TRAINING

Perhaps most importantly, to create and maintain a sustainable setting, staff must be on board.

Neil Degg, managing director of the Early Years Training Hub, which offers a course entitled *A Green Sustainable Workplace*, says the training was developed in response to feedback from early years practitioners who wanted more support with going green.

'The increasing demand for this type of course is a reflection of a growing level of awareness across society of how what we do affects the planet, and recognition of our responsibility to make a difference,' he says.

Ms Roberts says it is vital to communicate with staff. 'It's about getting them thinking differently and retraining their brains,' she says. 'Lots of staff who come to us are not necessarily eco-friendly. Childcare does attract young girls straight out of school or college so they don't always have awareness of these issues already.'

Childbase Partnership runs sessions with *Eco Action Games* (<https://ecoactiongames.org.uk>), a company specialising in

educational games to teach staff about the environment.

Meanwhile, some staff are finding support within the sector. Unitots has produced sustainability guidance (<https://www.worc.ac.uk/documents/unitots-go-green-guidance.pdf>) as part of the National Union of Students' Green Impact Scheme. The local council disseminates the guidance on their behalf to nurseries in the area, and it is available online.

Ms Roberts agrees with this approach, commenting, 'Because nurseries are often private businesses, people don't want to give away their secrets. But it's really important to reach out and support each other, share and build our resources.'

Mr Bird says now is the time for providers to act, in their own interests as well as those of the children they look after. 'Young children take these messages very personally, and will go home and tell their parents to choose the right bin and turn off the lights. They grow up with innate knowledge as a result of hearing about it at nursery.'

'Meanwhile, very soon all customers are going to want eco-orientated childcare providers. As people who are now in their 20s have children, they will expect to see nurseries responding to climate change, and will make choices accordingly.'

CASE STUDY: Maples Day Nursery, operated by University of Birmingham

Manager Heather Bench says,

A child at Childbase absorbs knowledge about conservation; and a water butt from TTS (bottom)



'Nurseries generally use a huge amount of single-use plastics including gloves, aprons and plastic wipes, and we saw that a lot of impact could be made by reducing these alone. Though our reasoning was purely based on the environmental impact, there has been a huge reduction in costs too.'

'All our children eat from ceramic bowls and plates, glasses and with stainless steel cutlery. Parents provide and launder reusable wipes and we do not use any disposable plastic wipes.'

Ms Bench adds, 'We do not yet use reusable nappies, however. While we've had almost no negative reaction to the wipes, the nappies are a lot more effort for parents who work full time or have more than one child, and storing a supply in nursery all the time, providing space for sluicing, washing them at 90°C and drying them each night through the winter is just not practical.'

'We did realise we were producing an awful amount of waste paper so we now encourage mark-making on reusable sensory equipment such as in sand or cornflour, or chalk on walls. We only use recycled paper in printers and have a regular audit of our photocopying and printing. Many of our documents are now only in online folders.'

'The university's car-sharing scheme means parking spaces are only available for people who participate. We provide space for bike storage but no parking spaces, so a huge proportion of our visitors use public transport.' ■