

Vermiculture technology in housing developments

How worm-farming supports new builds

Although vermiculture - worm-farming - at scale is uncommon in the UK, at **The Urban Worm** we believe examples from around the world show us that the practice is a perfect match for the housebuilding sector. Installations in residential settings can be a focal point engendering community cohesion, they can be visually engaging, and critically, a highly effective tool for waste management, with measurable greenhouse gas reductions.

TAKE WASTE >> FEED WORMS >> GO GREEN >> MAKE EARTH

6.6m

TONNES OF FOOD WASTE

discarded annually in the UK from domestic homes, or 12m tonnes CO₂ emissions. Worms could be deployed to convert that into soil.

90%

REDUCTION IN VOLUME

of food waste by worm composting. With the average family producing 156kg annually, that converts to 15kg of nutritious soil.

300 kg

HOUSEHOLD CO₂ SAVING

if the average household were to compost their food waste for a year within a worm farming system.

14

NUTRIENTS IN BALANCE

the soil produced by worms eating our food waste contains all the key nutrients in perfect balance to produce the planet's best organic fertiliser.

Case Study: RAF Stanford Hall Rehabilitation Centre

Since early 2022 **The Urban Worm** has been working with the hospitality, catering and cleaning company ESS-Compass to bring worms onto military sites across the East Midlands: so far, to Stanford Hall's Defence Rehabilitation Centre, RAF Waddington and RAF Coningsby. More are planned. Each site is home to four 1100-litre Wheelie Bin Worm Farms, with tens of thousands of worms transforming canteen waste into a nutrient rich fertiliser and compost for use on site. Bins are serviced monthly by The Urban Worm. To the right is first-year data from Stanford Hall alone:

4 tonnes of food waste processed in the first year, equivalent to 26 households

7.6-tonne reduction of CO₂ emissions

Produced 400kg of nutrient-rich soil

Worms thrived in weather conditions from 40°C in summer to -20°C in winter

The benefits of worm-farming in communities



Lifetime demonstrable greenhouse gas offset



Facilitates community cohesion



Supports environmental awareness



Positive ecological impact



Permanent installation easy to manage and sustain



Clean waste management produces healthy soil

Case Study: Community worm-farming in The Netherlands

Residents can apply to the Delft cooperative **WormenHotel** to have a worm farm installed in their neighbourhood. Each 'Worm Hotel' is assigned an 'hotelier', a local resident trained and responsible for worm husbandry. The hoteliers rotate every year and receive payment for their duties. From magnificent bee-hive structures made from compressed grass cuttings to converted giant cable reels, Worm Hotels come in a diversity of shapes and sizes, and they are a focal point of communities.

Each Worm Hotel transforms 2-4 tonnes of kitchen waste into nutrient-rich soil every year with 20-30 families sharing one Worm Hotel, growing strong communities. Worms bring people together, and build new earth.

There are over 2,000 Worm Hotels spanning 16 towns & cities in The Netherlands installed and managed by WormenHotel - 8,000 tonnes of processed kitchen waste annually, or **15,000 tonnes of CO₂ that wasn't emitted into the atmosphere.**



Converted cable drum wormenhotel Overtoomse Veld, Amsterdam

Installing worm farms on housing developments with The Urban Worm



The Urban Worm grew out from small community and education initiatives to promote the benefits and applications of worm-farming & composting, and after ten years is uniquely placed to develop large-scale worm-farming projects that can support developers and communities in greenhouse gas reduction.

Design, build, & install

We have designed and installed a range of different systems to suit the environments they are placed in, and can offer off-the-peg or bespoke solutions delivered from our workshop in the East Midlands.

Community development

The Urban Worm has many years experience and wide renown for our excellent education and support programs to help communities and individuals develop the skills and passion for worm-farming.

Service & maintenance

We can offer tailored programs to maintain and service worm farm installations, which do require some husbandry over time. Our plans always incorporate support and training for the community to eventually take over the reins of worm farm care.

email: info@theurbanworm.co.uk

Double oak barrel system

Westfield Shopping Centre, London



The worm bench

Severn Trent-funded school installations, Nottinghamshire



Converted 1100l. bin

McArthur Glen Outlet Park, Cannock

