

**Energy**

- PenCarrie warehouse roofs have a large array of solar panels: around 400kw worth which creates 20% of our electrical use yearly.
- Completion of our third phase of solar panels will see a further 10% added to our yearly use.
- 95% of our lighting is LED - we are actively working on the last 5%!
- Over 50 % of our lighting is smart lighting - motion and lux levels sensitive with fade technology further reducing energy usage and increasing staff comfort.
  - <https://www.dextragroup.co.uk/luminaires/verteco-3/>
- Changing our external lighting to PIR dark sky compliant - reducing light pollution and energy use, 70% completed at HQ. This has already been installed on our new warehouse.
- Non-essential power is shut down out of working hours with a 'last person out' control.
- Energy monitoring has been installed on all our central distribution boards to allow accurate monitoring of energy use in different areas.
- Digital heater and water boiler controllers installed.
- Our Facilities Team use battery powered cleaning equipment, which uses less energy than mains powered.
- We are ESOS compliant.

**Heating, Ventilation and Cooling**

- Our high-level warehouse areas have had destratification fans installed to reduce the energy required for heating.
- We use heat recovery systems for ventilation in the warehouse and offices.
- Centralised AC controls to reduce our energy use for cooling and heating by 50%.

**Vehicles and Transport**

- Our Sales team use hybrid vehicles.
- Except for one forklift, our warehouse truck fleet is electric with fast-charge air pump technology meaning faster, shorter charges: saving energy and maintenance frequency.
- By using custom designed systems to efficiently centralise our bulk stock, we have reduced our van mileage dramatically. To illustrate, we moved 4234 boxes in Jan 2023, with this figure dropping to just 141 in Jan 2025.
- Our van fleet has vehicle tracking, speed limiting and telematics fitted to monitor drive behaviour, reduce fuel use, and limit vehicle wear and tear.
- Our van fleet have been fitted with long lasting tyres that give a higher fuel efficiency, extending the life span of the tyres by 16%.
- We have installed a bank of 4 electric vehicle chargers to support visitors and team members.

- We work with a sustainable delivery partner:
  - <https://green.dpd.co.uk/>

## **Waste**

- We bale all our waste cardboard and polythene into mill-size bales for sale into the recycling market. On average, each year we send 14t of baled poly and 160t of baled cardboard for recycling.
- Our waste is handled by licensed waste handlers, where as much as possible is separated for recycling or RDF (refuse-derived fuel.)
- We reuse supplier boxes and source second-life boxes where possible to send your orders, reducing the amount of virgin cardboard used.
- We have centralised all printing at HQ to save toner and paper.
- A large amount of our emergency lighting is powered by a central battery system, reducing battery waste.
- All food waste is taken to be composted.
- By changing how we have our milk delivered we save use of 2,184 four-pint bottles a year.
- We use responsibly sourced, concentrated cleaning chemicals with dosing systems to reduce packaging and waste.

## **On the horizon**

### **Energy**

- Further motion-controlled lighting in more areas of the business.
- Culture change initiatives around waste and energy use.
- Changing our external lighting to PIR dark sky compliant - reducing light pollution and energy use, remaining 30% to go at HQ. This has already been installed on our new warehouse.
- The energy project will be rolled out this year to only turn on essential power for the area in which personnel are working, thus saving further power.

### **Waste**

- Increased separation of waste across the business to further improve the percentage of waste material being recycled.
- Review of plastic packaging materials and usage.
- Waste reduction review.