

Energy and Sustainability Statement

Ivy House Café and Padel — Ivy House Farm, Broad Lane, Markfield, LE67 9TB

July 2026

This statement supports the planning application for the conversion of an existing agricultural barn at Ivy House Farm to form a café (50 covers) with ancillary facilities and outdoor padel courts. The development follows a clear sustainability hierarchy: reduce energy demand through the building fabric first, meet that demand efficiently, then generate some renewable energy on site.

Key Green Credentials

- **Reuse of existing barn.** Converting part of the existing barn rather than demolishing the existing agricultural structure significantly reduces embodied carbon compared with a new-build equivalent. This is the single largest sustainability benefit of the proposal.
- **High-performance building fabric.** Enhanced insulation throughout the converted and extended barn, to help reduce heating demand.
- **Natural Daylight-Led Design.** The proposed café has been carefully designed to maximise natural daylight and reduce reliance on artificial lighting. The building incorporates six strategically positioned roof lights which introduce significant levels of daylight into the centre of the café space throughout the day. In addition, the design includes large glazed windows to the front elevation and side elevation, allowing daylight to penetrate deep into the building and creating a bright, welcoming environment for customers and staff. The combination of roof lights and extensive glazing reduces daytime electricity consumption associated with artificial lighting and enhances occupant comfort and wellbeing.
- **Air Source Heat Pump (ASHP).** All space heating and cooling provided by ASHP via ceiling-mounted cassette units. No gas connection is required; the building operates entirely on electricity. ASHPs deliver 2.5–3.5 units of heat per unit of electricity consumed.
- **Roof-mounted solar PV panels.** On-site renewable electricity generation to offset building electricity demand. Any surplus can be exported to the grid via the Smart Export Guarantee.
- **LED lighting with sensor controls.** Energy-efficient LED throughout, with occupancy detection in WCs and daylight programmable linked external lighting.
- **Durable low-maintenance materials.** Cladding selected for longevity and minimal whole-life maintenance, reducing the long-term environmental footprint.
- **Low-energy padel court.** The outdoor padel court requires no heating and minimal operational energy. A green floor finish integrates it visually with the rural landscape. Programmable LEDs will be used during dark hours only.

Planning Policy Compliance

The proposal responds positively to the National Planning Policy Framework requirement to plan for new development in ways which reduce greenhouse gas emissions and to actively support energy efficiency improvements to existing buildings. The combination of barn reuse, low-carbon

heating via ASHP, and on-site renewable generation via solar PV demonstrates strong environmental credentials appropriate for this rural setting.