The best green design marries passive principles with spatial quality and aesthetics, says Hattie Hartman

'I am an eco-fundamentalist,' declared Sarah Wigglesworth last week at the AJ’s Delivering Green Design seminar, part of Green Sky Thinking, Open-City’s week-long programme of seminars about greening London’s built environment.

Speaking at the event held at O’Donnell + Tuomey’s BREEAM ‘Outstanding’ London School of Economics (LSE) student centre, Yeoryia Manolopoulou of Ay Architects neatly summed up the essence of green design while describing the practice’s Stephen Lawrence prize-winning Montpelier Nursery (pictured): ‘We were interested in how passive design could be beneficial to architecture itself, how it could help us sculpt the building envelope to the advantage of spatial experience and aesthetics.’

Our panel of one client and four architects resulted in surprisingly little consensus about what it takes to deliver a green building. More differences than similarities emerged from the debate.

The one point of unanimous agreement, however, was the need for an integrated team with a collaborative approach. Whether a practice is large like Sheppard Robson, or tiny like Ay Architects, delivering a green building demands an integrated design and a vigilant watch over the sustainability brief from concept design through to handover and beyond.

Julian Robinson, director of estates at LSE, argued against selecting an architect with a specialist track record in sustainability as too limiting. A key to success is appointing the whole team and teasing out how the architect works with them at interview stage. Robinson described the LSE’s New Academic Building (NAM) – the retrofit of an Edwardian building by Grimshaw in 2008 – as a wake-up call. Despite its BREEAM ‘Excellent’ rating, NAM achieved a Display Energy Certificate (DEC) of ‘E’ for actual performance.

To address this, Robinson introduced a contractual requirement for BREEAM ‘Outstanding’ and Energy Performance Certificate (EPC) and DEC ‘A’ ratings for its O’Donnell + Tuomey student centre.

Sheppard Robson’s Alan Shingler advocated a stick approach rather than carrot for creating a culture of sustainability within a large practice. Sheppard Robson’s 14-year journey to embed green design has resulted in an intranet matrix tool and four mandatory design reviews for every project, which must include a member of the sustainability team. For the practice, the government’s 2007 zero-carbon agenda was a watershed moment, shifting the focus away from spreadsheets to a building’s passive elements. Today its design work is increasingly informed by parametric and environmental modelling.

Both Paul Hinkin of Black Architecture and Wigglesworth bill themselves as sustainable architects. For Wigglesworth, eco-fundamentalism means ‘getting the basics right and keeping it absolutely simple: the right orientation, good thermal mass, insulation, a narrow plan for good daylighting, correctly sized operable windows and simple controls. Hinkin argues for a user-centered approach to designing buildings inside-out as the key driver.

Elsewhere retrofit dominated Green Sky Thinking, with an engaging event hosted by Hawkins\Brown on its pre-planning scheme for the Bartlett’s Wates House, and an informative panel discussion to mark the launch of Penoyre & Prasad’s excellent book of retrofit case studies. For a full transcript of Delivering Green Design, go to TheAJ.co.uk/Footprint