

# ESG

Environmental consideration was put at the forefront of the design for KYN BICKLEY.

As part of their wider role, our Mechanical, Electrical and Sustainability consultants were brought on board to undertake pre-planning reviews and concept designs to ensure the design development incorporates environmental and sustainable elements wherever viable and feasible. The environmental ethos for the design of the development follows the recognised energy hierarchy to “Be Lean, Be Clean, Be Green”, i.e. to minimise the building’s energy usage and carbon impact through good design and passive measures before applying low carbon and renewable technologies to the design.

To achieve KYN’s ESG objectives, as part of the detailed design development we explored the feasibility of and implemented the following:

- All existing mechanical and electrical plant has been removed from the building, allowing for newer and more efficient plant to be installed throughout the whole development, not just the new extension.
- Enhanced building fabric performance has been targeted through improved thermal performance and improved air permeability.
- Utilisation of the existing building structure itself ensures that embodied carbon during the construction is reduced.
- Use of low carbon technology to contribute to a minimum of 35% reduction in CO2 emissions against Part L2a 2013 of the new build/extension element of the building. This exceeds the minimum requirement of building regulations and local planning policy.
- Energy efficient controls for HVAC and lighting to minimise building in-use energy.
- The existing lighting has been removed and will be replaced with new high efficiency LED luminaries being installed throughout the building. PIR sensors have been fitted to those rooms with infrequent access is required to ensure that energy consumption is kept to a minimum when those rooms are not occupied.
- The new external lighting has been designed to also use high efficiency LED luminaries, with suitable low level lighting to limit light pollution and sky glow. The external lighting will be programmed in such a way that the amount of lighting is reduced as the night progresses to a minimum requirement for H&S, and will be on day light sensors so that the lighting does not come on during daylight hours.
- The envelope of the building was designed to ensure high energy efficiency in line with the above ‘Be Lean, fabric first approach’.
- Large glazed sections in communal seating areas to reduce dependence on artificial lighting (limiting solar gains through the use of solar control glass);
- Sustainable drainage systems to manage rainwater on site and ensure discharge of surface water is kept at low rates;
- Consideration of sustainably sourced materials.
- Focus in good design of external spaces, thus increasing mental health and physical health.
- Following a clear KYN brief to maintain a strong portfolio strategy.
- Water efficiency will be achieved through the selection of sanitary appliances and fittings that limit water consumption, where appropriate.
- Electric Vehicle charging points have been specified covering 20% of all car parking spaces on site. However, the design team have also gone a step further and ensured that passive infrastructure for all spaces to have EV charging points is also included, to allow for further electric vehicle charging points to be added in the future.

With the above measures taken into account, the building is designed to conserve energy, to prevent pollution and to limit the impact of the building and the eventual operations on the surrounding environment.