

Royal Mail Distribution Hub at Swan Valley



The Requirement

The Royal Mail needed to re-locate its distribution hub to a new building that would meet its strict environmental criteria, that would satisfy its specific business needs and that its staff could maintain and operate at maximum levels of efficiency.

The Solution

ProLogis designed and constructed a 212,846 sq ft certified Carbon Neutral building, fully funded by Aviva Investors, that has achieved BREEAM 'Excellent' accreditation with a score of 76.76%. Water use in the building has been reduced by over 60% through rainwater harvesting and water conservation measures; 98% of construction waste has been re-used or recycled and the building will achieve an Energy Performance Certificate (EPC) 'A' rating (CO₂ index 21)

All ProLogis buildings are designed to minimise operational carbon emissions and to achieve this, ProLogis adopts a logical approach to carbon reduction. The building was designed to function passively and then the most efficient plant available was specified for essential energy usage. These combined measures resulted in building-related operational carbon emissions 46% lower than other new buildings and 66% lower than existing buildings. This equates to an annual reduction in operational carbon emissions of 1056 tonnes.

Royal Mail's need to maintain a constant, comfortable temperature for staff working in the sorting hall provided a further opportunity for energy reduction. A biomass boiler, solar wall and thermal hot water system were installed, reducing the operational energy use by a third and achieving a further reduction in operational carbon emissions of 174.6 tonnes per annum.

As well as addressing the building related operational carbon, ProLogis also took measures to eliminate the carbon embodied in the structure and fabric of the building. As a result, the embodied carbon emissions have been reduced by 1705 tonnes or 24% in comparison with a typical new build. In addition, the remaining embodied carbon footprint of the development has been entirely offset through a fully audited carbon offsetting scheme provided by sustainability consultants, dcarbon8, further reducing the overall carbon footprint of the development by 5552 tonnes.

Extensive operations and maintenance manuals were prepared for Royal Mail and handed over with the building at completion.

The Result

By working closely with Royal Mail, ProLogis and Aviva Investors have procured a building that has been specifically tailored to Royal Mail's exact business requirements and that will reduce the overall carbon footprint of the distribution hub by 77% over its 30-year life span.

“ A quality building, fully completed when promised. Well done and thank you. ”

Jon Howard, Programme Manager, Mail Centre Strategy,
Royal Mail Group Property.