Warehousing the World Responsibly – UK

breeam

Certification: **BREEAM Excellent 2008**

Royal Mail

the United Kingdom's postal service provider

Park Name:	**Swan Valley**
Location:	**Northampton**
Building type:	**Hub and distribution center – build to suit**
Size:	**201,934 square feet**

Opportunity

Royal Mail wanted to replace several aging mail-sorting facilities and consolidate operations in the East and West Midlands. The company wanted to build a facility that would meet strict environmental criteria, satisfy its specific business needs and permit maximum efficiency during operations.

The Solution

An undeveloped site at Swan Valley, Northampton, offered positioning next to junction 15A of the M1 motorway, which connects London to the Midlands and the northern part of the country. The park's owner, Aviva Investors, funded the development, and ProLogis designed and managed the construction. ProLogis delivered a certified carbon-neutral building that achieved BREEAM "Excellent" accreditation.

All new ProLogis buildings in the UK are designed to function with low CO_2 impact, extensive use of daylight, and high levels of air-tightness and insulation to reduce potential heat loss by more than 50 percent. For Royal Mail, intelligent lighting with low-energy fluorescent fittings, daylight linking and motion sensors were added, resulting in building-related operational carbon emissions 46 percent lower than other new builds.

Water use in the building was reduced by more than 60 percent through rainwater harvesting and water conservation; 98 percent of construction waste was reused or recycled.

Royal Mail's need for temperature control in the staff sorting hall provided further opportunity for energy reduction. A biomass boiler, solar wall and solar thermal hot water system reduced operational energy use by a third and achieved a further reduction in operational carbon emissions of 174.6 tons per annum.

ProLogis significantly reduced the carbon embodied in the structure and fabric of the building. The remaining embodied carbon footprint was entirely offset through a fully audited carbon-offsetting scheme. The resulting building is specifically tailored to Royal Mail's exact business requirements and will reduce the overall carbon footprint of the hub by 77 percent over its 30-year life span.

"A quality building, fully completed when promised. Well done and thank you," said Jon Howard, programme manager, Mail Centre Strategy, Royal Mail Group Property.

Key Sustainable Features

- Optimal orientation of the building to reduce effects of solar gain and prevailing winds
- Intelligent lighting with low-energy fittings, rooflights, daylight linking and motion sensors
- Biomass boiler
- Solar wall
- Thermal hot water system
- Rainwater harvesting and conservation