

Independent
building control

ProLogis achieves environmental targets through actions, no better demonstrated than ProLogis Pineham.



“Our need to understand and tackle global warming is of vital importance. ProLogis achieves these environmental targets through actions, no better demonstrated than ProLogis Pineham. With dcarbon8, we will establish a legacy of low carbon buildings for the decades to come.”

Ken Hall, Senior Vice President, ProLogis



Summary

Pineham sets a new benchmark for environmentally sustainable buildings, considering both energy in operation and the construction process. This development also represents the first carbon negative supply chain globally, and will be used by Sainsbury's, the occupier, as its newest refrigerated and ambient food distribution centre.

Objectives

- Engage with the supply chain to measure gain quantities for site enabling, building and full fitout
- Measure material delivery methods and distances
- Measure onsite waste, fuel, electricity and office visitors
- Provide a full, broken down embodied carbon footprint from cradle grave for the building and onsite contractor activities
- Source carbon from dcarbon8 Supply Chain members
- Invest carbon vouchers into third party assured carbon offset projects
- Compare operational carbon emissions to embodied carbon emissions
- Recommend greenhouse gas reductions to the embodied carbon footprint for future builds
- Provide an embodied carbon benchmark for future builds.



Strategy/Delivery:

The supply chain was engaged through onsite meetings and presentations to demonstrate the importance of embodied carbon. Following this, data was collected, processed, and openly communicated back to all to share the way forward for increasing embodied carbon reductions.

After the embodied carbon footprint was measured and reductions were made, carbon vouchers were purchased from dcarbon8 to cover 110% of the remaining carbon footprint. These carbon vouchers were then passed to Sainsbury's giving them the chance to invest in carbon projects and corporate social responsibility projects in line with their sustainability agenda.

Results:

From the concept stage, this 650,000 square foot distribution centre was designed for low energy and low carbon. This includes:

- Maximised air tightness and insulation
- Tri-generation combined heat and power
- Low energy PIR lighting
- 50 percent additional daylighting
- Solar wall

Overall, these measures are expected to reduce the annual carbon dioxide emissions by over 4,000 tonnes, equivalent to the emissions from heating and powering 700 average UK homes.

Green Award

European Property Awards 2007



Pineham, the world's first Planet Positive building, has undergone full accreditation according to the Planet Positive Protocol. For a complete summary of the Protocol please see www.planet-positive.org

Approved design Consultancy were pleased to act as the Building Control Body on this project to help facilitate the exciting design standards developed both in concept and detail by the Architects RPS.

Approved Design Consultancy Ltd.

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