Case Study 2012

G.H. Sheldon and CyberPharm have teamed up to see how much carbon this North West bakery can save by using Eco3D, a software solution designed to assist companies in their pursuit of carbon neutrality.

The main area examined during this case study was the outdoor lighting; virtual efficiency improvements were found by simulating the existing lighting systems in combination with geographically accurate sunrise and sunset times. The cost and schedule for on-going maintenance was also included before the simulation was then run over periods of 1, 5, 10 and 20 years.

This determined the cost of ownership for the existing system and then the simulation was altered to incorporate alternative lighting technologies to see what their impact would be. The final selected system improves the amount of useful light through better positioning, whilst also improving the image quality on the existing CCTV system. It also introduces the capability of using motion detection to only have the lights on when needed.

Once implemented the carbon savings will be immediate. Eco3D has shown reduced carbon emissions of 80%, and should lead to a 50% reduction in the total cost of ownership.

More data is now being collected so that more areas of the bakery are examined in this new way, allowing for year on year savings to be made through continuous improvements specific to the bakery's own methodologies, and making implementations when the time is right for the business, saving time, money and carbon.

"Eco3D has helped us to understand how we can achieve significant reductions in our carbon emissions!" *Lee Sheldon Director G.H. Sheldon Wholesale Bakers Ltd.*

G.H Sheldon is a Family Bakers which has grown from a small bakery into two industrial bakeries providing morning goods to the major supermarkets across the country. Producing over 40 million packets per year, they are committed to finding more sustainable ways to deliver their much loved goods to their loyal customers.

CyberPharm have been developing Eco3d since 2008. It has been designed for Energy Managers who wish to identify and refine sustainable solutions. The ability of Eco3d to predict results make it perfect for risk reduction on future developments, and for improving understanding. By understanding the implications of higher energy prices and carbon taxes, organisations can find the best route to carbon neutrality and sustainability.