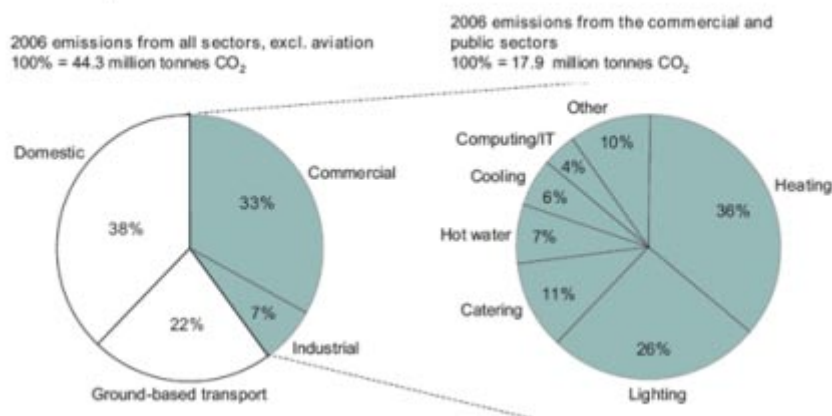




Impact of *eLighting™ for Niagara AX™ and DALI®* on your Carbon Footprint and Energy Consumption

Recent studies of CO₂ emissions from commercial and public buildings by the Mayor of London concluded that around 62% of the total emissions are attributed to lighting and heating. Clearly this must be a big target area when considering the design of modern office space and other commercial / industrial buildings if we are going to achieve the target set by Government and advisory bodies such as CIBSE (Chartered Institute of Building Services Engineers).

2006 CO₂ emissions from the commercial and public sectors



eLighting™ for Niagara AX™ delivers entirely web based lighting solutions based around the principle of constant light control with intelligent presence detectors (multi sensors). The system will dim lighting against natural daylight levels maintaining the design level of luminance at the working plane. This strategy can achieved around 60% energy savings on typical office areas.

By using the world's only standard for intelligent lamps, DALI® luminaires, automatic dimming against measured daylight levels is achieved across an office floor plan, creating a comfortable internal environment whilst at the same time saving energy. Lamp manufacturers consider that dimming a lamp by a value is proportional to the reduction in energy consumed by that lamp so a 50% dim value could result in a 50% saving in energy consumption.



Control Network Solutions

O P E N I N G N E T W O R K F R O N T I E R S

Very often luminaires within open plan offices can be dimmed to low levels or even selectively switched off whilst still maintaining the design level of luminance and therefore achieving large energy savings during daytime hours. A further benefit of this dimming is the lengthening of the lifetime of the lamp so further adding to saving in operational cost and sustainability targets.

Niagara AX™ provides a framework for the seamless integration of any building system on a convergent web based platform. **eLighting** enables Niagara AX to integrate DALI lighting systems seamlessly with HVAC, Access Control, Security, Safety & Emergency and many other systems. This offers opportunities to improve user experience whilst reducing capital, energy and operational costs.