



CARBON
MASTERS

Case Study: UK Universities & Colleges

August 2012

Who are we?

Carbon Masters are a carbon management company based at the University of Edinburgh. Our consultants all have postgraduate qualifications in carbon management and/or sustainable energy systems. Our mission is to assist organisations to measure, manage, reduce and report their carbon emissions.

Our work with universities and colleges

Since our foundation in 2010, Carbon Masters have worked with several universities and colleges and have developed skills and expertise unique to the challenges faced by this sector.

What challenges do higher education institutes face?

Challenge: Reporting on carbon to an increasing number of different stakeholders.

Universities and colleges face increasing scrutiny on their carbon performance from a variety of external stakeholders. They are encouraged to report their carbon performance through reporting initiatives such as the People and Planet Green League Table and legally required to do so under legislation such as the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme and the European Union Emissions trading scheme (EU ETS).

Solution: Carbon Masters can provide universities and colleges with a road map that lays out how to follow best practice in measuring their carbon footprint whilst also satisfying the requirements of mandatory and voluntary reporting initiatives. We can also assist in the development of a carbon management strategy and in the identification of carbon reduction opportunities. Our Environment Agency approved carbon emission reduction and certification scheme, the [Carbon Masters Standard](#), helps to ensure universities get appropriate recognition and reward for taking the right steps to manage and reduce their emissions year on year. Carbon Masters assist organisations in applying for the Standard (including assistance in data gathering and providing feedback on applications). Our audit-partners Grontmij, one of Europe's leading environmental and engineering consultancies, will then independently verify the organisation's carbon footprint in line with ISO 14064 (part 3) and assess whether the organisation meets the requirements for the Standard.

Challenge: Managing the data

Universities and colleges often find it difficult to collate the comprehensive data required to calculate their carbon footprint as the data is usually spread over numerous different sites and departments, each with their own data collection methods. Many organisations measure their emissions using spreadsheets which becomes increasingly problematic as the number of emission sources and different reporting requirements grow.

Solution: Carbon Masters are able to assist with our unique Carbon Guru for Organisations tool - an industry leading carbon accounting software platform which allows organisations to enter data at a site or department level which can then be compiled for the university as a whole. Once the data has been entered onto the software platform, every individual data entry is quality assured by one of our expert Carbon Masters analysts to ensure it is as reliable, consistent and accurate as possible. The software platform is maintained by industry experts so has all the relevant emissions factors built in and can generate carbon footprint reports at the press of a button.

Challenge: Reducing the energy and carbon across their building portfolio

Universities we have worked with to date have shared a common challenge of ageing and inefficient buildings combined with increasing electricity use from upgrading their ICT infrastructure.

Solution: Carbon Masters have experience in carrying out portfolio energy assessments of buildings and identifying opportunities for improvement. We also have expertise in measuring and minimising the carbon impact of ICT - our company director Kevin Houston has been advising the European Commission on this issue as an independent expert since January 2010.

Case Study 1: The University of Edinburgh

Having originated from the University of Edinburgh's landmark Carbon Management MSc programme, where the two co-founders of the company (Kevin Houston and Som Narayan) met, Carbon Masters have always held strong links with the University of Edinburgh and are proud to count them as one of our first clients. Using our unique Carbon Guru for Organisations tool we helped the University to calculate their organisational carbon footprint from their buildings, owned vehicles, waste and water use. We moved the university's legacy carbon footprint data (stretching back to 2007) from spreadsheets onto the Carbon Guru platform to make it easier for them to compare their carbon footprint accurately year-on-year and measure their progress against carbon targets.



Case Study 2: Edinburgh Napier University



Edinburgh Napier University is the first university to have achieved the Carbon Masters Standard - our UK Environment Agency approved carbon emission reduction and certification scheme. This scheme aims to encourage, recognise and reward best-in-class carbon management, which Edinburgh Napier - having reduced their carbon emissions by 24% since 2006/7 - have demonstrated great commitment to. Napier underwent a rigorous process of assessment for the Carbon Masters Standard carried out by independent 3rd party assessors Grontmij who also independently verified 3 years of Napier's emissions data in line with ISO 14064(3). Carbon Masters worked closely with Napier to ensure their achievement was successfully publicised (see example [here](#)) including arranging an awards ceremony with Scotland's Environment & Climate Change Minister, Stewart Stevenson. University Secretary Dr Gerry Webber, said: *"Gaining the Carbon Masters Standard is an important step in the development of our carbon and wider environmental management initiatives at Edinburgh Napier."*

Case Study 3: Scottish Agricultural College

Scottish Agricultural College (SAC) also successfully achieved the Carbon Masters Standard in July this year, having demonstrated a 10% absolute reduction in their carbon emissions in 2011/12 compared to the average of the previous two years. Carbon Masters are currently working with SAC to carry out an energy and carbon assessment of one of their largest buildings using our innovative Carbon Guru for Low Carbon Buildings solution. The tool carries out sophisticated 3D modelling of the building in question enabling in-depth, accurate energy and carbon analysis of the building as a whole. Carbon Masters will provide recommendations for improvements to lower the carbon and asset rating of the building. SAC's Chief Executive and Principal, Professor Bob Webb said: *"SAC has been committed to sustainable development and climate change for many years through our research work, degree programmes, training courses and consulting work. In the background we have been working hard to minimise our own environmental footprint - to be as sustainable as we can. Achieving the Carbon Masters Standard is a fantastic achievement and underlines our determination to play a key role in delivering the Scottish Government's carbon reduction targets and to help rural businesses and communities to thrive"*



Get in touch

For more information about our services or to discuss how Carbon Masters can assist your university to measure, manage, reduce and report their carbon emissions, **please contact:**

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