

Case Study

Carbon Literacy Week (October 2022) and Carbon Net Zero Project (September 2022 – January 2023)

Key Points

- The use of an authentic real-world environmental business problem to direct student learning
- The integration of environmental learning and training within the student curriculum.
- Problem based learning pedagogy underpinned application of learning from Carbon Literacy Week to authentic real-world problem solving.
- Technical environmental teaching and learning augmented with project-based skills development.
- Opportunities for student accreditation via carbon literacy certification

Who?

The Carbon Literacy Week is an integrated teaching week within the MSc International Business Management award, a one-year full time postgraduate qualification. The week was developed to support student learning while investigating a project focused upon sustainability and the attainment of zero-carbon within the university. The week's teaching/training initiative was part of the Carbon Literacy Project based at Manchester Metropolitan University and aimed at getting students to offer environmental pledges and commit to environmental change. The week, if successfully completed, and the appropriate pledges made, resulted in the student receiving recognition of their commitment, and awarded a nationally recognised qualification for carbon literacy training delivery.

Why?

In November 2019 the Cardiff Metropolitan University (CMU) committed itself to achieving net zero carbon by 2030 and formulated an appropriate strategy to attain this goal. A New Estates Masterplan looked to upgrade university buildings, the creation of an Environmental Management System (EMS) sought to oversee all areas of sustainability from activities such as energy and utilities, waste management and recycling. In addition to these activities, the EMS sought to embed sustainability into the teaching curriculum and promote the development of environmental research inside and outside of the university. *"The aim is to develop a socially cohesive, environmentally responsible and all-inclusive work and study environment, which looks to engage staff, students and the wider community."* Report on Sustainability and the Environment (2020), Cardiff Metropolitan University. The project set for students was to determine how the zero-carbon target might be achieved. What would be an appropriate approach and strategy to achieve this goal? From this the Carbon Literacy Week had a dual role. First, it was to add to the technical knowledge required to understand more fully the extent of the challenge that the attainment of zero carbon presented. Second, there was a marked deficit in environmental awareness and engagement amongst the students, especially international students. The week was designed to establish the importance of adopting a clear environmental mindset, raising such awareness and emphasising the need for environmental change at a collective and individual level.

How?

The week-long training programme was delivered via a blended approach of face to face and online delivery. It involved both large group lecture sessions and smaller group workshop events. Students were also required to complete tasks in their own time, and prep for sessions. The final day of the week was arranged as a conference day, where key speakers from a range of environmental initiatives were invited to come and speak. The role of the circular economy, environmental community involvement and waste management were part of the day's content. At the end of the week all students were invited to complete the environment pledge process and receive national recognition for their involvement in the week's activities.

Positively Impacted!!!!.... The world is currently facing the great threat of Climate Change. We are facing a man-made disaster on a global scale (Sir David Attenborough). These words could not have resonated more to me than they did during the carbon literacy week of my module course MSM7039 in the second week of October 2022.

The task we were given to come up with solutions that could help the University achieve its 2030 carbon neutrality target was an eye-opening research work for me. It was interesting to discover companies building their entire corporate strategy around the issue of climate change. This module has spurred me to act! by taking responsible personal/individual steps that will hopefully, for instance in waste disposal, ripple into bigger and better things when we all get involved. It's also moved me into action in my community by educating those in my immediate locality on the environmental impact of certain actions they take.

*The carbon literacy week and the module have had such a positive impact on me that I have decided to build my post graduate research project around the subject matter and who knows, perhaps even my doctorate! **Florence Oluchi, Esendu – MSc International Business Management.***

"The module has been a fantastic opportunity for me to not only broaden and deepen my knowledge about one of the most important human challenges - climate change - but also to actively work on potential solutions for Cardiff Metropolitan University to achieve carbon net zero by 2030. The Carbon Literacy Week with its professional guest speakers and very insightful presentations helped me to reflect on my individual behaviour, especially how I can make more sustainable decisions and consume in the future. Overall, I really enjoyed this module and learned a lot for my personal and professional future."

Tim-Niklas Gernot, Schumann – MSc International Business Management

