



UNIVERSITY OF EAST ANGLIA
SUSTAINABLE CAMPUS

✦ Facts at a glance

- One of the greenest university campus in UK
- “Strongest School of Environmental Sciences in the world”
- Innovative Student Switch Off campaign
- Low Carbon Innovation Centre
- World’s first Strategic Carbon Management MBA programme
- World class energy efficient buildings
- Fairtrade campus
- Award-winning Travel Plan
- Commitment to low carbon excellence

Our Vision

The University recognises the impact that its activities have on the environment and are constantly seeking new ways in which to reduce its carbon emissions.

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The commitment to environmental sustainability has led to setting the goal of becoming an exemplary 'Low Carbon Campus' with the ambitious target of achieving a 60% carbon reduction by 2025.

We are well on the way to achieving this. When our latest combined heat and power unit comes on stream at the end of 2009, we will have reduced our direct CO₂ emissions (from power, heat and cooling) by 70% on a per capita basis from a 1990 baseline. We already operate one of the most efficient power stations in the country.

Established in 1967 the University of East Anglia was the first institution to bring together natural and social scientists in its School of Environmental Sciences. For over forty years we have been driving the agenda forward helping the world to understand the course and causes of climate change, developing sustainable responses to the potential impacts of climate change and the promotion of carbon reduction practices.

The University operates a campus-wide recycling programme and is currently working with contractors to enable composting of University waste. Wherever possible we source biodegradable/ recyclable materials as part of a five year plan to increase the amount we recycle from 50% to 75% of our waste.

Whilst we benefit from our attractive parkland setting, the volume of traffic coming to the site presents us with serious challenges that must be faced if we are to continue to thrive and grow. Our Travel Plan has been recognised, on a local and national level, as an example of best practice, resulting in a Green Gown Award and further awards from the Association of Commuter Transport.

Research and Training

School of Environmental Sciences

The School of Environmental Sciences is one of the longest established, largest and most fully developed Schools of Environmental Sciences in Europe and includes The Climatic Research Unit. Established in 1972 this was the first centre in the world established to specifically study climate change and is now widely recognised as one of the world's leading institutions concerned with the study of climate change.

The School is regarded as a global centre of excellence for interdisciplinary environmental sciences. In the 2008 Research Assessment Exercise seventy percent of our activity was classified as internationally excellent (3* or 4*), and 25% as world leading (4*).

At a lecture at the John Innes Centre in December 2005, Professor Sir David King, the UK Government's Chief Scientific Advisor claimed that "The School of Environmental Sciences at UEA is the strongest in the world".



Climatic Research Unit

Strategic Carbon Management MBA

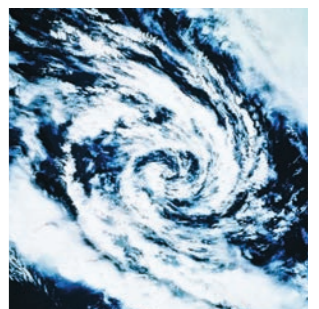
Norwich Business School, situated within UEA, offers the world's first Strategic Carbon Management MBA, with the second cohort beginning their studies in January 2009. The primary aim of the MBA is to prepare the next generation of managers to lead confidently in the global transition to a low carbon business environment.

Managers develop an understanding of the current climate change debate, policies, regulations and the role of business in reducing carbon emissions, whilst also learning to create innovative business models to lead towards emerging low carbon market opportunities.

Tyndall Centre

Established in 2000 as the national centre for identifying sustainable solutions for climate change the Tyndall Centre brings together scientists, economists, engineers and social scientists, who together are working to develop sustainable responses to climate change through trans-disciplinary research and dialogue on both a national and international level. Its purpose is to research, assess and communicate from a distinct trans-disciplinary perspective, the options to mitigate, and the necessities to adapt to, climate change, and to integrate these into the global, UK and local contexts of sustainable development.

Tyndall°Centre
for Climate Change Research

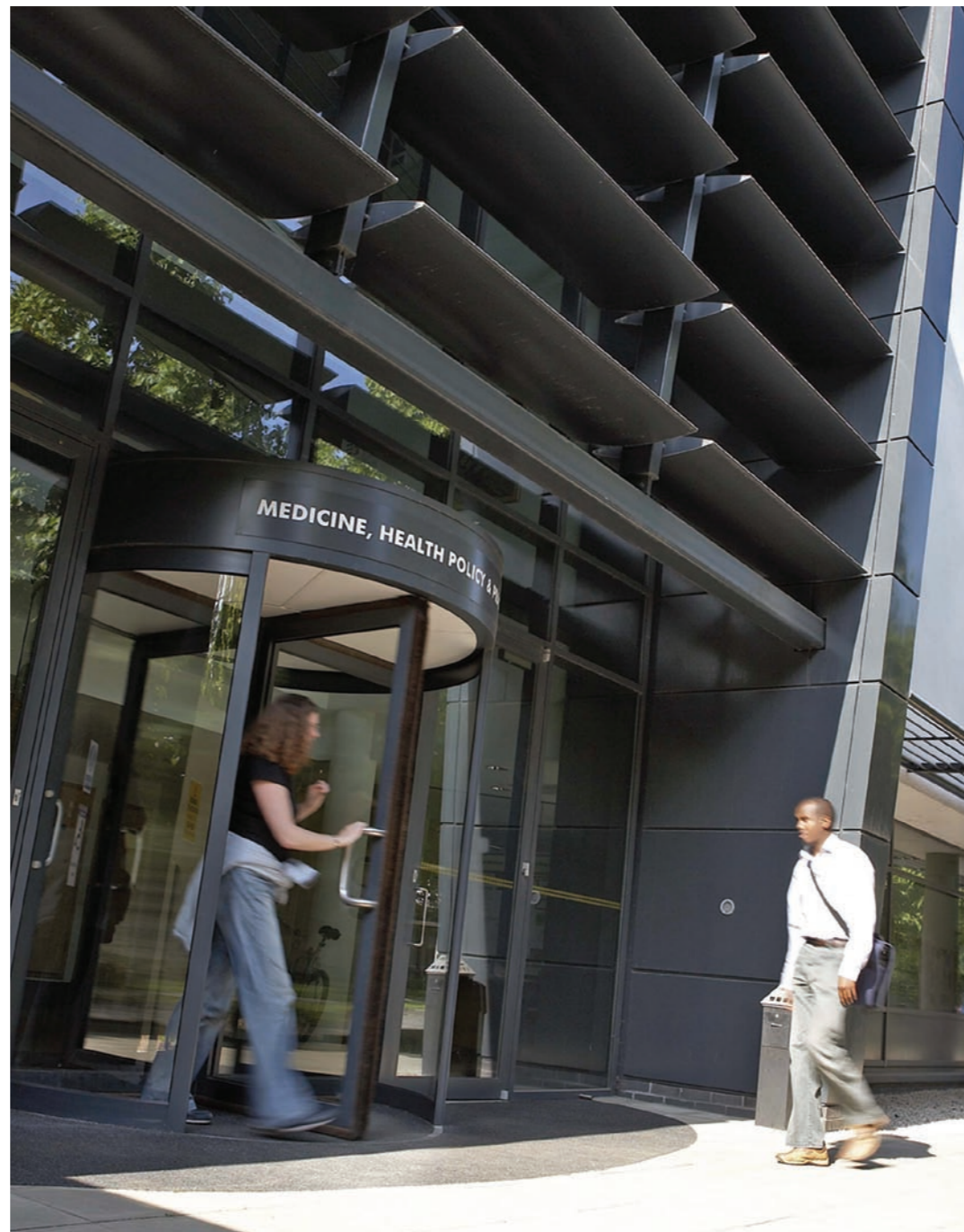


Energy Efficient Buildings

The University of East Anglia has been addressing environmental concerns for nearly a quarter of century through a multi-pronged approach using technical means of low-energy building design, incorporating renewable energy sources, good energy management, awareness raising and the encouragement of behavioural change.

The campus is home to a number of award-winning low-energy buildings which meet and exceed current building standards. The installation of a combined heat and power plant in 1998 has led to a 33% reduction in the university's carbon dioxide emissions.

Elizabeth Fry Building



Ground breaking buildings

In 1994 the University of East Anglia (UEA) built its ground-breaking Elizabeth Fry Building, which was described as "The Best Building Ever" for its efficiency and comfort. One of the latest, the Zuckerman Institute for Connective Environmental Research (ZICER), has surpassed UEA's own exacting benchmark. Within the building, auditable sustainability credentials demonstrate minimum Whole Life Cycle costs, particularly with respect to energy use.

The building achieves excellent comfort conditions within the office areas without the use of air-conditioning. Winner of the Low Energy Building of the Year Award, organised by Building Magazine (sponsored by the Carbon Trust). The development of the ZICER building forms part of UEA's wider commitment to the development of sustainable low energy buildings on the UEA campus. This includes a series of ongoing improvements within the ZICER building to improve its already leading energy performance. Energy efficiency is incorporated into its conservation and development strategies for all refurbishment projects and new buildings.

Pioneering plant for UEA

The University is building a Biomass Energy Centre – the first of its kind in England. The power plant will help the University achieve its ambitious target of a 60 per cent reduction in carbon emissions. We are already one of the most efficient generators of power in the country and our biomass centre will be one of the greenest power plants in the country, 'gasifying' timber and converting it into electricity. Housed in a new building on the main car park, the innovative plant will be fed by two daily lorry loads of sustainable timber from local sources.



Above: Artists impression of the Biomass Energy Centre

Above: Zuckerman Institute for Connective Environmental Research (ZICER)
Left: School of Medicine

Strategic CR Programmes

Student community actively engaged in saving energy

The Student Switch Off campaign was pioneered at the University of East Anglia by Neil Jennings, a PhD student at the Tyndall Centre for Climate Change Research. Student Switch Off challenges halls of residence to compete against each other to see which hall can reduce their energy usage by the greatest amount from the previous years (after taking into account variations in temperature). Meter data is used to establish the baseline electricity usage and the usage during the competition in order to compare the energy usage when behavioural change is encouraged. The programme which has now rolled out to other campuses has included the recruitment of 120 Eco-Power Rangers reducing electricity usage by 10% over the course of the academic year and preventing 92 tonnes of CO₂ going into the atmosphere.



Travel Planning from Scratch

Since 2003 the University has significantly reduced car journeys through tried and tested methods including charging for parking, investing in cycling, and ensuring very low cost travel on the local bus operator.

Our Travel Plan commits further investment and development of initiatives that support alternatives to single-person car journeys to the site. Whilst the Plan seeks to balance personal choice against what is good for the environment, wherever possible the options are also realistic in promoting more restrictive measures that will be necessary to continue sustainable development of our University. In the past decade we have seen car usage decrease by 42% with increases in bus travel of 43% and cycle usage increasing by over 35%.



A Fairtrade campus

A part of its commitment to developing a sustainable supply chain we have recently been awarded Fairtrade status promoting the ethical procurement of products from around the globe.



Business and Enterprise

Low Carbon Innovation Centre

The Low Carbon Innovation Centre has been established by the University of East Anglia to provide the strategic, administrative and academic umbrella for all its low carbon and climate change innovation activities.



The Centre houses two existing and highly successful initiatives:

- **The Community Carbon Reduction Programme, CRed** launched in May 2003 is a 'community' of individuals, partners and organisations who have pledged to reduce their energy usage and thus cut their carbon dioxide emissions by 60% by 2025. Since its inception the 'CRed system' has been adopted by many local authorities including Suffolk, Essex, Chester, North Norfolk, Fylde, Camden and Birmingham and collectively these have built up a database of around 30,000 individual contacts with an estimated savings of 69277 tonnes of CO₂ per annum.
- **The Carbon Connections Programme**, established in 2006 with funding from the Higher Education Innovation fund supports and invests in low carbon innovation projects that draw on expertise and intellectual property from English universities. The Programme stimulates the formation of partnerships between universities and private sector (and other non-university public sector) organisations to bring low-carbon innovation to market. With over 300 expressions of interest in the first 12 months of operation, the programme has invested in 26 projects ranging from renewables technology to behavioural change mechanisms.

BRE

To help drive the UK towards a sustainable built environment the Building Research Establishment (BRE) has established a permanent base on UEA campus which enables them to work with the University, enhancing the reputation of both organisations in serving the built environment sector. Its unrivalled knowledge in regard to sustainability and innovation is now used across the construction industry and in the corporate world, creating better buildings, communities and businesses. The collaboration with UEA will help address the demands of new legislation introduced in 2016 which will require developers in the UK to build only 'zero-carbon houses' with progressively tougher standards being introduced in the coming years.

InCrops

Based at the University of East Anglia with partners across the eastern region the InCrops Enterprise Hub promotes crop derived bio-renewable near market research, supply chain development and product development through to destination with local businesses and entrepreneurs. InCrops targets opportunities that exist in the Alternative and Non Food Crop sectors by establishing an applied research network that can develop new crops and promote plant products in new markets and through this stimulate business activity through grower and supply contracts, spin out commercialisation and knowledge transfer.