

The Institution of Agricultural Engineers

Founded 1938 – Incorporated 1960

IAgrE Award for Contribution to the Land-based Sector

Gareth Ellis

CEng CEnv MIAgrE

The criteria for an Award for Contribution to the Land-based Sector is defined as a “Member or a person well-respected in the industry who has made a sustained contribution to the landbased sector throughout their career”.

Gareth has a BSc in Agricultural Engineering from Cranfield University. He began his career as a mechanisation advisor with ADAS, first in Kent and later at Wrest Park. He began to specialise in energy through his work with glasshouses.

He became the national renewable energy specialist in 1991, and then in 1995 left to work at the National Energy Foundation, developing renewable energy projects and promoting the importance of renewable energy to communities and schools in the South East Midlands region.

Following a spell with Enviros, an environmental consultancy, he went to work at Cranfield University in 2008, firstly as Energy Manager and then in an extended role

as Energy and Environment Manager. He reports progress to the University Board for Energy and Environment (a sub-committee of the University Executive) keeping the importance of the environment and sustainability high on the University agenda despite many competing issues.

Gareth’s achievements at Cranfield include:

- A 50% reduction in carbon emissions by 20/21 compared with 2005 (and was well on track to achieve this even before the pandemic)
- realisation of the Living Lab and the Urban Observatory on Cranfield campus
- An increase in conservation areas from 10,000 m² in 2012 to nearly 90,000 m² in 2019 and bird nest boxes across the campus
- Developed a woodland walking trail for staff and students at the University, with bug boxes and deadwood piles for insects
- Developing a transport plan and reducing single-car occupancy from 70% in 2012 to 59% in 2018
- 4 awards over 4 years from the Wildlife Trust (Wildlife at Work Awards)
- Awards for staff and student engagement in environmental issues
- Installing a (1Mw) 2 ha solar farm, saving 400 tonnes of CO₂ per year
- Installing a (1Mw) biomass boiler and fuel store



- Installation of 1.4Mw combined heat and power plant, along with upgrade and replacement of almost the entire district heating mains across campus.
- Replacement and installation of a host of energy improvement measures using the £400,000 SALIX revolving fund which Gareth secured for the University.
- Successfully negotiating and delivering with the local authority the installation of the southern cycle path to Cranfield village
- University representative and Trustee of the Forest of Marston Vale Trust
- Achieved ISO 14001 certification for the University in 2012
- Achieved ISO 50001 certification for the University in 2018

When not working at Cranfield, Gareth spends his spare time working for the environment in his local community through being a Parish Councillor, where he has achieved

- Traffic calming measures to improve safety and wellbeing
- A new Community Orchard
- A cycle path to link the village to the nearest town and railway station

Has been a Green candidate at three recent general elections and is more than willing to debate environmental politics with anyone brave enough. He was briefly elected as a Green District Councillor, before Mid Beds District Council was abolished, but continues to keep the Central Bedfordshire councillor on his environmental toes!

During lockdown, he bought a new electric bike and is now cycling the 13 miles to work when he has to be on campus.

Gareth is the embodiment of a chartered environmentalist, and both works and lives – as best as his family allows – according to sustainable principles.

John Street, Director of Facilities at Cranfield University commented:

From being the only Energy related member of Facilities in 2008 Gareth has created a team of six Energy and Environmental specialist providing direction across the university, setting a series of challenging objectives and targets and then proceeding to galvanise support from across the University to deliver against these targets.

Gareth's commitment to supporting and improving the University's environmental standards, driving down energy usage and waste whilst increasing renewables and recycling is recognised and supported at the highest level within the University.

From a personal point of view working with Gareth and seeing so many great opportunities being nurtured from an acorn of an idea into reality has been inspirational and rewarding.

Professor Jim Harris
Cranfield University
November 2020

