

Full details

All details held on the selected case study are shown below.

Went live on	Title	Reference
6 Aug 2008	Carbon offsetting could fund regeneration of UK uplands and cut emissions	SID0064

Synopsis

Working with a carbon offsetting company could reduce carbon emissions and pay for upland regeneration.

Description

In 2007, researchers on the Rural Economy and Land Use programme identified a way of reducing carbon emissions from UK uplands. They have also suggested a radical new way to fund the work.

Peat deposits in England and Wales could store up to 41000 tonnes of carbon per year, if it were in pristine condition. But erosion and damage could mean that peatlands are actually releasing carbon into the atmosphere at a rate of 381,000 tonnes of carbon annually. So if damaged and eroded peats were restored to a pristine state, then they would store significantly more carbon. Researchers have worked out this is equivalent to two per cent of car traffic in England and Wales per year.

The immediate problem is how to fund such an extensive programme of restoration. Vast systems of drainage ditches were dug across the uplands during the 1950s in an unsuccessful attempt to increase the productivity of the land. If these could be blocked then peat would begin to reform, but the Department for Environment, Food and Rural Affairs suggests that the cost of blocking one hectare of peat drains is at least £188.

However, Dr Fred Worrall, from Durham University's Department of Earth Sciences and colleagues from the University of Leeds, on the RELU project, have come up with the idea of working with a carbon offsetting company. This would allow consumers to offset their carbon footprint by paying for upland regeneration.

Dr Fred Worrall said: "These drainage ditches contribute to the degradation of upland areas all over Britain."

"They encourage the release of carbon into the atmosphere by drying out the peat; they increase fire-risk; reduce the biodiversity of these unique habitats; and, contribute to discolouration of water supplies and downstream flooding."

The research is supported by NERC's RELU programme.

References and links

Hyperlinks

- [1. Rural Economy and Land Use](#)
- [2. Rural Economy and Land Use - Peak district project](#)
- [3. Rural Economy and Land Use - Sustainable uplands: learning to manage future change](#)

Impacts

Research and funding

Funding type

Research Programme

Classification

Science themes

Climate system, Sustainable use of natural resources, Earth systems science

Science areas

Terrestrial