## Reducing greenhouse gas emissions





Boost a range of incentives to reduce agriculture's greenhouse gas (GHG) emissions, by driving productivity, improving energy efficiency, and reducing the impact of inputs like feed, fertiliser and fuel, while producing more climate-friendly food and increasing green energy use.

## Why it's needed

Agriculture is uniquely placed to be part of the solution to climate change, as it is both an emissions source and a sink. Farmers also protect carbon reserves already present in soils and vegetation.

About 11% of the UK's GHG emissions currently come from agriculture. But, in stark contrast to the rest of the economy, only a tenth of this is carbon dioxide ( $CO_2$ ). More than half of agricultural GHG emissions are methane ( $CH_4$ ) and nearly 40% are nitrous oxide ( $N_2O$ ). Reducing these emissions is more difficult than cutting fossilfuel carbon dioxide emissions because they result from complex and natural soil and animal microbial processes.

The NFU wants to see new actions under the Sustainable Farming Initiative (SFI) to specifically target net zero. Farmers and growers should be incentivised to scrutinise every part of their systems to seek the most climate-friendly methods of producing our food. Net zero is not included explicitly in the current SFI actions, and yet the government's own Net Zero Strategy flags the future Environmental Land Management schemes, of which the SFI is a key part, as a "powerful vehicle for achieving net zero".

Adequate investment in infrastructure is also vital to enable the use of new technologies which support a net zero transition. This includes mobile and broadband access, electric vehicle charging points, fast tracking of electricity grid network connections to allow decentralised renewable energy generation and battery storage.

In addition, the planning system needs to facilitate the upgrading and modernisation of existing agricultural buildings, as well as the construction of new buildings, for better energy efficiency, emissions reductions, and business resilience in the face of a changing climate. Planning authorities' local plans should include agricultural improvement projects to take place as permitted development, subject to prior approval, and local planners require increased resources to understand, and support, the evolving needs of the agricultural sector.



NFU SUPPORTED BY

NFU Mutual







Many farmers are taking a keen interest in understanding their GHG footprint and where they should be focusing their efforts to reduce emissions further. The next government must support the development and uptake of GHG footprinting, including collection of the required data to better reflect the diversity of UK farming systems, capture on-farm sources and sinks, and enable product and farm business calculations.

Greater transparency of different carbon calculators would allow better comparison between them and give users more confidence. Farmers also need access to reliable methods of soil carbon measurement, reporting and verification (MRV), with incentives for a nationwide comprehensive soil-testing programme, backed by advisory support.

Consistent benchmarking and regular tracking of progress in building and maintaining soil carbon will boost take-up, enabling farmers and growers to make informed management decisions.

Crucially, all these developments will help both farmers and the government establish a baseline to measure improvements year on year.

## What it would deliver

Agriculture can contribute hugely to achieving the UK's net zero ambitions and the NFU is proud that so many farmers are already doing so.

Improving farming's productive efficiency will enable farmers and growers to produce the same quantity of food, or more,

with fewer inputs and in smarter ways. This, in turn, will enable the sector to reduce its GHG emissions to meet the country's net zero objectives.

Resource use efficiency is all about productivity improvements. This not only saves money but also reduces the GHG footprint of the product and farm system. We estimate that wholesale take-up of productivity improvements across farmers and growers could see a 25% reduction in agricultural GHG emissions.

NFU SUPPORTED BY

NFU Mutual

National Farmers' Union, Agriculture House, Stoneleigh Park, Warwickshire CV8 2TZ



Tel: 024 7685 8500



www.nfuonline.com

Produced by: NFU, AGRICULTURE HOUSE STONELEIGH PARK, STONELEIGH, WARWICKSHIRE CV8 2TZ December 2023



