

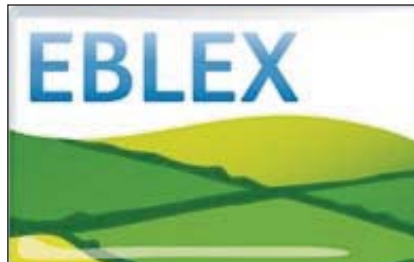
Beef, sheep and climate change

Reducing the environmental impact of beef and sheep meat production, in particular greenhouse gases, is one of the biggest challenges facing the industry today.

EBLEX works closely with other industry organisations and producers to look at ways of reducing that impact, while increasing efficiency.

Here are some key facts regarding the industry's contribution to climate change:

- There are 2.6 million cattle and 16.7 million sheep slaughtered annually in the UK, supplying over 1.1 million tonnes of meat to the human food chain, with a farm gate value of nearly £3 billion.
- 60% of UK farmland is only suitable for growing grass - without grazing ruminant animals (cows and sheep) we could not use this land to feed our growing population.
- Actively managed pastures are a good carbon sink, storing carbon which would otherwise be released into the atmosphere.



Current emissions position

- Emissions from agriculture make up 7% of the UK's greenhouse gas footprint* - much lower than the global figure of 18%** due to the industry's efficient production systems.
- Livestock production is responsible for 5% of the UK's total emissions.
- English beef production currently generates a GWP100+ of around 13.9 kg of CO2 equivalent GHG emissions per kg of beef and English sheep production currently generates around 14.6 kg per kg of sheep meat.

The emissions challenge

- The UK Low Carbon Transition Plan requires that by 2020 emissions from farming are at least 11% lower than the GWP100 levels currently predicted.
- To meet the 11% reduction target for beef, an

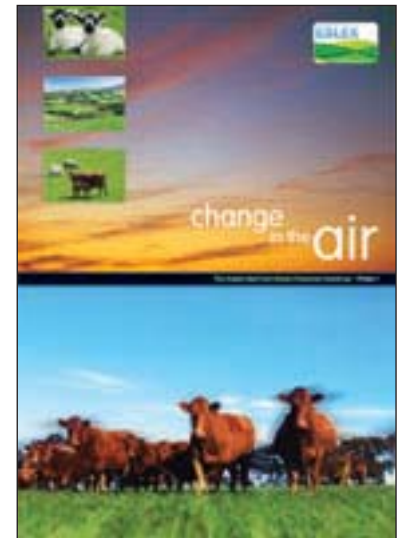
efficiency gain equivalent to 320g per day extra growth and 5 extra calves per 100 cows per year is needed – and is

technically achievable.

- To meet the target for lamb, an efficiency gain equivalent to 20% per day extra growth and 7.5 extra lambs per 100 ewes per year is needed – and again is technically achievable.

Meeting the challenge

- Reducing GHG emissions and improving efficiency go hand in hand.
- Steady improvements in production efficiency have taken place over the past decade, with 5% fewer prime cattle and lambs required to produce each tonne of meat in 2008 than in 1998.
- Research indicates the three main areas of breeding, feeding and management offer opportunities to make the required reductions.
- The genetic potential for progress in beef and sheep breeds for improvements in feed efficiency is largely undeveloped, but modern breeding techniques will allow rapid progress.



For a more in-depth look at the environmental impact of the beef and sheep meat industry download *Change in the Air: The English Beef and Sheep Production Roadmap* at www.eblex.org.uk/roadmap/roadmap-phase-1.pdf



* The UK Low Carbon Transition Plan
** Livestock's Long Shadow

+ GWP100 is a way of expressing the Global Warming Potential of a

number of gases- notably CO₂, methane and nitrous oxide - in one currency, namely CO₂ equivalence over a fixed time period of 100 years