



# Farming and climate change

Make the most of Environmental Stewardship

[www.naturalengland.org.uk/es](http://www.naturalengland.org.uk/es)



Farmers, land managers and farm advisers all have a part to play in ensuring a healthy natural environment which is essential for sustainable farming.

#### **Your farm has environmental value**

Your farm has wildlife, natural resources, farmland birds and historic features that need your protection.

#### **You make a difference**

By adopting the options in this leaflet you can help reduce Greenhouse Gas emissions and adapt to climate change by protecting soil and water, increasing tree cover and protecting wildlife.

#### **Right options, right location, right management**

Entry Level Stewardship (ELS) options are designed to protect wildlife, birds, soil, water, the historic environment and landscape. Many of the options also support climate change mitigation and adaptation. This leaflet helps you to choose the right options and put them in the right places to make the biggest difference. If you need additional help locating or managing these options, please contact Natural England to arrange a free ELS farm visit from an adviser or book onto an ELS farm event in your area.



## **Why is your farm important for tackling climate change?**

The climate is already changing: according to the Met Office, central England temperatures have increased by 1 °C since the 1970s. The latest UK Climate Projections are for warmer, drier summers, wetter winters and more extreme weather events in the future. These changes are already affecting farming practices. For example, a greater risk of extreme events such as drought and prolonged rainfall increases the need to protect soils and water from flooding and erosion.

**Mitigation** – Taking action to reduce the scale of climate change, by reducing Greenhouse Gas emissions and protecting carbon stored in soils and vegetation.

**Adaptation** – To enable the natural environment to adapt to climate change there must be space for wildlife: a variety of habitats will enable different species to find suitable conditions. Farmers are in an important position to help provide those conditions.

## **What are the benefits for you?**

#### **Cost savings**

Many of the actions that reduce Greenhouse Gas emissions also reduce the cost to you. For example increasing the efficiency of nutrient usage may reduce the need for bought in fertilisers.

#### **Healthy soils**

Soil is your farm's most valuable resource. By carefully managing your soils you will be protecting the productive capacity of this resource and building its resilience to climate change.

#### **Prepare your farm for the future**

By starting to consider Greenhouse Gas emissions, carbon stores and protecting wildlife you will help to prepare your farm for climate change. We cannot know at this point exactly what the full impact of climate change will be, but by starting to think about it now, you will be better placed to respond to future changes.

## What can you do to combat climate change?

Whilst there are many uncertainties about how climate change will affect us in the future, there are actions that we can take now.

### **Investigate and reduce your emissions**

Use the new CALM-ES Calculator (Carbon Accounting for Land Managers – Environmental Stewardship), to estimate the emissions from your farm and consider how to reduce them. CALM-ES is an entirely voluntary tool that does not earn you ELS points, but will help you make the right choices in tackling climate change. So far, more than 7,000 farmers have chosen to use it to assess their Greenhouse Gas emissions. [www.calm.cla.org.uk](http://www.calm.cla.org.uk).

### **Protect soil and water**

Tackling soil erosion and increasing soil organic matter levels will protect soil and improve water quality. It will also protect soil carbon. The Centre for Ecology and Hydrology estimates that over 95 percent of the UK land carbon stock is located in soils. Soils that are protected in this way will be more resilient to climate change. Our leaflet on *Farming for cleaner water and healthier soil* (which can be obtained from the Natural England website), provides further information.

### **Increase tree cover**

During their growth phase, trees absorb carbon dioxide from the atmosphere. Mature trees store this carbon and provide additional shade and shelter for livestock in the anticipated warmer, drier summers.

### **Protect wildlife**

Buffering hedges, ponds and watercourses, creating habitat patches in field corners, all help to provide the space and variety of conditions that wildlife will need if it is to adapt to climate change.

**Use the farm illustration overleaf to help you choose the best options for your farm.**

## Need further help and information?

ELS is just a start. Higher Level Stewardship (HLS) provides further options to support mitigation and adaptation to climate change. Outside of Environmental Stewardship there are other sources of advice and information relating to issues such as water management and energy conservation. Here are some further sources of information.

### **Natural England**

To arrange an ELS farm visit from an adviser or book onto an ELS farm event in your region:

Tel: 0300 060 1695

Email: [farmevents@naturalengland.org.uk](mailto:farmevents@naturalengland.org.uk)

[www.naturalengland.org.uk/farめvents](http://www.naturalengland.org.uk/farめvents)

For further information on ELS, HLS, other schemes and to apply:

Tel: 0300 060 0011

[www.naturalengland.org.uk/es](http://www.naturalengland.org.uk/es)

### **CALM (Carbon Accounting for Land Managers)**

[www.calm.cla.org.uk](http://www.calm.cla.org.uk)

**Tried and Tested** – Nutrient Management Planning that can reduce emissions by increasing efficiency of nutrient use. [www.nutrientmanagement.org](http://www.nutrientmanagement.org)

**Efficient use of water** – For advice on water management see the Environment Agency website: [www.environment-agency.gov.uk/business/sectors/32759.aspx](http://www.environment-agency.gov.uk/business/sectors/32759.aspx)

**England Woodland Grant Scheme** – Forestry Commission funding for woodland creation. [www.forestry.gov.uk/england-farmwoods](http://www.forestry.gov.uk/england-farmwoods)

**Farming Futures** – For a series of Fact Sheets and Farmer's blogs on farming and climate change. [www.farmingfutures.org.uk](http://www.farmingfutures.org.uk)

### **Campaign for the Farmed Environment**

Support the CFE while addressing climate change issues.

[www.cfeonline.org.uk](http://www.cfeonline.org.uk)

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We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

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