What does this sector include?

The LULUCF sector covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities. Carbon is sequestered by forestry and grassland, while carbon losses occur on existing cropland and natural land (e.g. grassland) that is converted to cropland or settlement.

Since 1998, this sector has been a net carbon sink. In 2013 net removals of emissions reached 5 MtCO₂ (Figure 1). The sector is projected to remain a net carbon sink beyond 2050.

What can be done to reduce emissions in this sector?

There are a range of options to increase carbon sequestration and reduce emissions in the LULUCF sector:

- **Afforestation.** Forests sequester carbon in dead and living vegetation (below and above ground) and in the soil. However, only around 13% of the UK is covered by woodland compared to a European average of 44%. Planting rates could be increased beyond the 10,300 per hectare that was planted in the year to end March 2015.

- **Reduce horticultural use of peat.** Horticultural use is the largest cause of peat extraction in the UK. Prohibiting the use of peat for such use would deliver emission savings, equivalent to about 0.4 MtCO₂ annually.

- **Peatland restoration.** This involves the re-wetting of degraded peatland. However, the emissions savings of this practice is unknown at present, although current UK and International studies should improve our understanding.

What is Government doing?

- **Forestry.** Government has declared an ambition to increase woodland cover to 12% in England by 2060 (equivalent to an average rate of 5,000 ha per year), on the basis that it will be mainly delivered by private sector investment.

- **Peatland.** Government is addressing gaps in the LULUCF inventory which does not currently take account of emissions from upland peat and the savings potential from the restoration of degraded
peatland. They are also considering the best methods for restoring peatland in order to maximise emission savings.

**What is the CCC’s position?**

- **Policy.** In the Fourth Carbon Budget we recommended increased tree planting rates, equivalent to an additional 10,000 hectares from 2015 to 2030. This would absorb 1 MtCO$_2$ by 2030. To ensure this policy is on track, England and the devolved administrations will have to progress plans to increase tree planting rates.

**Links to recent work by the CCC**

- **2015 Annual Progress Report,** Chapter 5 – Progress reducing emissions from agriculture and LULUCF

- **Fourth Carbon Budget,** Chapter 7 – Reducing emissions from agriculture and land use, land-use change and forestry.

- **The 2050 target,** Chapter 6 – Reducing Emissions of Non-CO$_2$ Greenhouse Gases.
  [http://www.theccc.org.uk/reports/international-aviation-a-shipping](http://www.theccc.org.uk/reports/international-aviation-a-shipping)