

How ready is the legal and governance framework in the United Kingdom to meet the challenge of climate change?



Sectoral summary: nature conservation

Q1: Is climate change expressly recognised in the legal framework for nature conservation?

There is a mixed picture across the UK as nature conservation is a devolved competence, with the framework in Wales being the most developed in terms of its recognition of climate change.

Natural Resources Wales' climate change functions focus on management, mitigation, and adaptation in keeping with the sustainability agenda derived from the Well Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016.

Neither Natural England nor Nature Scotland have specific references to climate change in their governing statutes and there is no equivalent body in Northern Ireland. The UK-wide Joint Nature Conservation Committee's remit also contains no specific mention of climate change.

The Climate Change Committee's [recent report](#) on agriculture and land use, land use change and forestry sectors however is of particular relevance to nature conservation. All the devolved nations feed into the CCC's reporting on greenhouse gases, including on the way land use, forestry and land use change will contribute to climate change, so although there is no express recognition, the linkages are beginning to appear.

Key legislation in England, such as the Wildlife & Countryside Act 1981, the Natural Environment and Rural Communities Act 2006 and the Marine and Coastal Access Act 2009 do not refer to climate change. The biodiversity provisions of the Environment Bill are also largely silent on climate change, although it is indirectly recognised in the new due diligence obligation which aims to tackle deforestation in global supply chains by prohibiting the use of forest risk commodities from illegally deforested land.

In Scotland legislation seeks to forge the link between climate change and nature conservation at the strategic level. For example, the [UK Withdrawal from the European Union \(Continuity\) \(Scotland\) Act 2021](#) sets out that in preparing the Environmental Policy Strategy Scottish Ministers must have regard to the desirability of securing

that environmental policy responds to global crises in relation to climate change and biodiversity (see also s.4 of the Forestry and Land Management (Scotland) Act 2018).

Q2: What are the main issues arising from climate change for the sector?

The 2019 [UK State of Nature Report](#) described climate change as having the second largest impact on nature, after agriculture. The changing climate is already altering the range of habitats and species and changing migratory patterns, with a tendency within the UK for mobile species to shift northwards, potentially leading to extinctions for those from montane or northerly regions. Important coastal habitats may be lost due to sea level rise and coastal squeeze. These changes can lead to protected areas seeing shifts in their typical species and due to changes in species' distribution, designated protected areas may no longer be appropriately situated.

Conversely, the warming climate can also support the colonisation of the UK by species with a more southerly distribution, some of which can be invasive and harmful to resident wildlife. Invasive non-native species (INNS) pose a complex regulatory challenge, with some species, e.g. Pacific oyster, being commercially important and also providing ecosystem services such as carbon/nitrogen sequestration, habitat provision and, if reef forming, coastal protection.

Immobile species risk becoming trapped in fragmented habitats and changing temperatures can lead to asynchronicity of prey and predators. Weather patterns can change and for example increased wet and cold spells in spring can wreck breeding success. Building resilience by protecting and expanding habitats and improving their connectivity can give species the space in which to flourish and help counter some of the negative impacts of climate change.

Renewable energy projects, for example offshore wind farms, as part of climate mitigation, and nature based solutions to climate change, such as increased tree planting, may however place pressure on vulnerable habitats and species if sited inappropriately.

Q3: What initiatives are taking place within the sector to further the goal of achieving Net Zero and how might other sectors learn from that?

Nature based solutions to support climate change mitigation, i.e. the restoration, creation and maintenance of carbon capturing habitats such as unimproved grasslands, woodland, peatlands, saltmarshes, seagrass and biogenic reefs, have risen up the political agenda but they have no express recognition in law.

The UK government's commitment to the "30 by 30 target" to manage 30% of land and sea for nature by 2030 forms part of its advocacy for a strengthened global biodiversity framework that will be set under the Convention on Biodiversity when parties meet in 2022. Managing land and sea for nature will, for most habitats, have the concomitant benefit of delivering nature based solutions for climate change. Key to delivering this target will be effective legislation and sustainable resource management.

For England, the Environment Bill creates a framework for the preparation of Local Nature Recovery Strategies (LNRS) by local authorities and these will include the mapping and definition of habitat restoration priorities. Government [intends](#) that these support the delivery of nature based solutions to challenges including climate change mitigation. The [Programme for Government](#) in Scotland proposes a Natural Environment Bill with statutory targets to restore and protect nature.

Q4: What initiatives are taking place within the sector to adapt to climate change and how might other sectors learn from that?

Nature based solutions (see above) are also being enlisted to help adapt to floods and drought arising from climate change, for example by restoring flood plains and creating barriers to slow run off. Naturalising rivers and their catchments is not only beneficial for biodiversity, but also provides more resilient and effective flood defences than hard engineering, as well as economic benefits in terms of water purification, soil restoration and drought resistance. Where such approaches have been employed, they have proven extraordinarily successful and cost effective (see e.g. the [Wild Ennerdale](#) project in Cumbria). Uptake in the UK has however lagged behind many other countries due to disincentives for landowners and farmers, i.e. ponds, bogs, marsh and wetland areas were ineligible for subsidies. This may be rectified by initiatives under the Agriculture Act 2020.

The Nature Recovery Network is intended to be a national network of wildlife-rich places across England but it is a policy tool that lacks legal underpinning. The NRN is needed to create healthy, resilient ecosystems, which will help species move in response to the changing climate, but local delivery mechanisms (such as LNRS and Environmental Land Management schemes under the Agriculture Act) will need to be effectively implemented and aligned with national priorities for biodiversity.

Q5: Is the regime effective in light of future challenges?

In England it remains to be seen the extent to which the Environment Bill's provisions for biodiversity, with their co-benefits for climate change mitigation and adaptation, are successful and much of its implementation relies on secondary legislation.

In Scotland the promised Natural Environment Bill, including statutory targets for nature, offers a significant change in the legal approach to conservation, whilst the launch of Environmental Standards Scotland provides a means of ensuring the effective implementation of existing legal protections.

Q6: What are the top additional interventions (of any kind) that would improve the legal and governance framework in the sector?

1. Plant trees, but in the right place. There needs to be appreciation that tree planting can be bad for biodiversity. For example, non-native coniferous plantations have very limited benefits for biodiversity. Actions on Net Zero, biodiversity net gain (BNG) and sustainable resource use must be aligned.
2. Develop and implement management plans for the national sites network (Emerald sites) and protected areas in general (a whole site approach), to adapt to the local and regional conditions of a significantly warmer world – in line with the [Bern convention recommendation](#) on nature based solutions and protected areas.
3. Take action in neglected areas. Expand the protection of peat in England (and take similar action in Scotland, Northern Ireland and Wales) to cover all peatland, not just blanket bog in protected sites. Take action to protect and enhance marine and coastal habitats, acknowledging that they can have greater sequestration rates than woodland where the current policy focus lies.