Role of government and government agencies in enabling scaling up of good quality NbS

Mike Morecroft
A global perspective on the risks and opportunities of NbS (Ecosystem-based Adaptation focus)

- **Can deliver** climate change adaptation for people with multiple additional benefits, including for biodiversity.

- To realise potential benefits and avoid harm, it is essential that EbA/NbS is deployed in the **right places** and with the **right approaches** for that area, with **inclusive governance**.

- EbA and other NbS are vulnerable to climate change. They may need to adapt if they are to remain effective and will increasingly be under threat at higher warming levels.

- There are **risks** of maladaptation and environmental damage from some approaches to land-based mitigation.
(Re)afforestation in the UK is a good illustration

Morecroft et al., Science 2019
Pathways to impact in the real world

Morecroft et al. (2014)
Nature Climate Change
<table>
<thead>
<tr>
<th>Government</th>
<th>Public bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>Implementation</td>
</tr>
<tr>
<td>Legislation</td>
<td>Enforcement</td>
</tr>
<tr>
<td>Budget</td>
<td>Advice (expertise)</td>
</tr>
<tr>
<td></td>
<td>Research and monitoring</td>
</tr>
<tr>
<td></td>
<td>Watchdog</td>
</tr>
</tbody>
</table>
Most recommendations focus on implementation. 11 out of 24 refer explicitly to public bodies. E.g.

**We recommend.....**

- …**Forestry Commission** should keep its policy on tree-planting on peaty soils under review
- Government sets a target … in line with the **Committee on Climate Change’s** recommendations....
- …. **Marine Management Organisation** establishes research programmes to investigate the cause of the decline of marine habitats
- ….long-term research and monitoring be supported and overseen by the relevant departments and their public bodies, including **Natural England** and **UK Research and Innovation**
- a **dedicated advisory service**, to help land managers engage with Environmental Land Management Schemes
- that the **budgets of the delivery bodies** be increased to allow them to support the Government’s ambitious targets
Current and potential mechanisms to support NbS in England

- Nature for Climate Fund
  - Peatland Capital Grant Scheme
  - England Woodland Creation Offer
- Environmental Land Management Schemes
  - Landscape Recovery
  - Local Nature Recovery
  - Sustainable Farming Incentive
- Green finance
- Advice and Regulation
Nature-based Solutions for Climate Change at the Landscape Scale
Shared Outcomes Fund project

- Treasury funded, sponsored by BEIS and Defra.
- Led by NE in partnership with RBG Kew, Environment Agency and Forestry Commission
- £12.5 m in total
- 4+ pilot areas (£5m by March 2024)
- Four Workstreams:
  - Programme Management and Pilot Development
  - Comparative assessment of carbon storage and sequestration (NE)
  - Carbon storage, flux and biodiversity at Wakehurst (Kew)
  - Blended Funding and Governance (EA)
Habitat priority list (pilot and chronosequence sites)

- Woodlands established by natural colonisation
- Mixed species and broadleaved woodlands.
- Wood pasture
- Hedgerows
- Scrub
- Heathlands
- Species-rich grasslands
- Small areas of peat within a wider landscape (‘peaty pockets’)
- Reversion of plantation forestry on peat back to semi-natural Peatland
- Floodplains, including floodplain mosaic habitats, floodplain grazing marsh, conversion of cropland back to semi-natural floodplain

Gregg et al., 2021
Governance and Blended Funding

• Understanding successful models for blending funding for landscape-scale NbS implementation.
• Understanding the necessary governance arrangements and legal structures
• Support development of funding plans for achieving long-term goals
• Develop tools and templates for funding plans and engagement of potential investors
Reflections

• Right policy is essential but so is implementation
• Implementation needs evidence, expertise, support, inclusion, regulation ….
• Partnership is critical: government, private sector, NGOs, local communities
• Good comparative studies are need to fill evidence gaps
• Pilot studies + evaluation are essential
• **Science and implementation need to come together: ‘learning by doing’**

With thanks to colleagues and partners