

## Peatland code for the UK



## Aletta Bonn IUCN UK Peatland Programme

Launch of the global 'Organic Soils and Peatlands Climate Change Mitigation Initiative' 17 May 2012, Bonn Climate Change Conference, side event, Ministry of Environment,

## UK Peatlands - Distribution & Condition





- 9.5% of UK land area
- 95% blanket bog
- Largest remaining semi-natural habitat
  < 20% undamaged</li>
- Single most important carbon store of 3.2 billion tonnes of carbon
   = 20 x carbon storage in UK forests
- Loss of 5% UK peatland carbon
  ≈ total annual UK anthropogenic GHG emissions

### **UK Peatlands - Condition**







## Opportunities for conservation & rewetting









## The UK has world leading expertise in peatland restoration





# Large avoided losses of carbon through Peatland Restoration





### Peatland Restoration cost-effective





Illustrative GHG mitigation costs and abatement potential

## Commission of Inquiry on Peatlands





- 300 contributors from 50 organisation
- Parliamentary launches, Ministerial meetings
- Peatland Gateway development, Input into Scottish Moorland Forum peat group, Input into policy developments and delivery, e.g.
  - Natural Environment & Water White Paper
  - Scottish Land Use Strategy
  - •UK and Scotland Climate change Acts
- Target:

10,000 km<sup>2</sup> peatland restored by 2020

savings of 2.5 million tonnes  $CO_2eq./$  year 1% of the annual GHG reductions / year

## **Peatland Code**





#### **Public & Private Funding**

- **Peatland Code road map** development with Valuing Nature Network and Defra (Dept for Environment)
- Voluntary market s
- Corporate social responsibility (CSR) schemes
- Payments for Ecosystem Services (PES)
- Initiation of working groups for Defra
  - Science base of GHG emissions from peatland
  - Payments for Ecosystem Services
- BES/IUCN conference ' Investing in Peatlands' June 2012









## Peatland Carbon Code





- **Provide an open, consistent, credible and verifiable basis** for peatland managers and traders to work to
- **Provide a register** to allow projects to be accounted for and avoid double counting
- Establish standards to ensure projects are of high environmental quality and genuinely additional
- **Provide the technical guidance** to allow projects to calculate emissions savings



# Thank You www.iucn-uk-peatlandprogramme.org

## **Commission of Inquiry**





## **Commission of Inquiry**







## Evidence Base – 12 Technical reports



## **Commission of Inquiry Process**





## **Science Needs**





- More baseline data from demonstration restoration projects
  - change in vegetation & water level
  - quality long-term GHG monitoring
  - across transition period of restoration
- Standardised methods on
  - good practice for GHG recording methodology
  - vegetation description
  - water monitoring
- Pan EU project

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- to develop & calibrate proxy models across EU
- For UK atlantic peatland system
- establish ongoing monitoring



• **Development of better techniques** for remote sensing that work well in our UK situation

Region	Site	Туре
East Anglian Fens	Wicken Fen	Intact tall fen
	Rosedene	Arable on deep peat
	Redmere	Arable on wasted peat
	Bakers Fen	Extensive grassland on ex-arable peat
Somerset Levels	Tadham Moor 1	Extensive grassland on deep peat
	Tadham Moor 2	Intensive grassland on deep peat
Anglesey Fens	Cors Erddreiniog 1	Intact tall fen
	Cors Erddreiniog 2	Nutrient-enriched/drained degraded fen
Norfolk Broads	Sutton Fen	Intact tall fen
Manchester Mosses	Astley Moss	Intact raised bog
	Chat Moss 1	Arable on deep peat
	Chat Moss 2	Active peat extraction site
Humberhead Levels	Thorne Moor	Re-wetted raised bog

## Lowland peatland systems in England and Wales – evaluating greenhouse gas fluxes and carbon balances Defra project SP1210

- Four year intensive GHG measurement programme on lowland peats (fens and raised bogs) under across England and Wales, starting in 2012.
- 13 sites under contrasting management/condition, including intact bog and fen, drained and nutrient enriched systems, extensive and intensive grassland and arable
- Primary research sites are the Cambridgeshire Fens, Manchester Mosses, Anglesey Fens and Somerset Levels. Secondary sites in Norfolk Broads and Humberhead Levels.
- Measurements will include eddy covariance CO<sub>2</sub> and CH<sub>4</sub> (fixed and roving systems), static chamber gas fluxes and fluvial carbon losses.
- Collaborative project involving 7 institutions following consistent measurement protocols, with centralised data management by CEH