

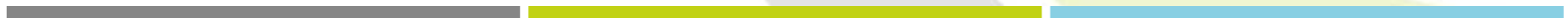


Committee on  
Climate Change

**Independent** advice to government  
on building a low-carbon economy  
and preparing for climate change

# The role of the UK Adaptation Sub- Committee

Baroness Brown of Cambridge  
Chair, Adaptation Sub-Committee



# The Adaptation Sub-Committee of the Committee on Climate Change

Statutory roles under the  
2008 UK Climate Change  
Act:

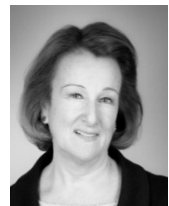
- To provide independent advice to the government on climate risks and opportunities
- To report to Parliament on progress in preparing for climate change



Baroness Brown  
of Cambridge (chair)



Professor Jim Hall



Rosalyn Schofield



Ece Ozdemiroglu



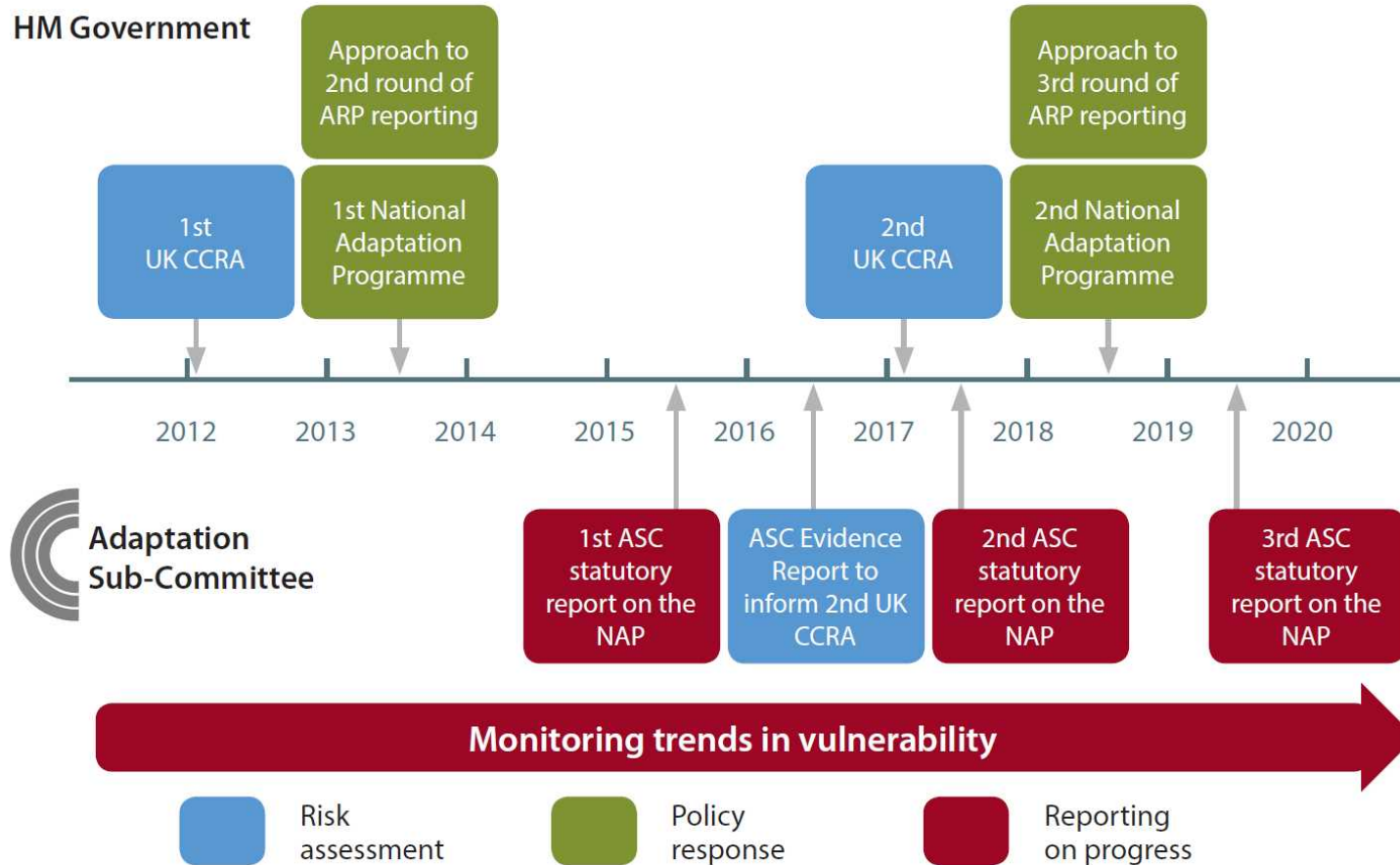
Professor Dame  
Anne Johnson



Sir Graham Wynne



# The ASC's role in the UK adaptation policy cycle



## The Climate Change Act puts in place a statutory:

- UK climate change risk assessment (CCRA: every five years)
- National Adaptation Programme (NAP: every five years)

## The ASC:

- Provides advice on the risk assessment (every five years)
- Scrutinises the National Adaptation Programme (every two years)



## Aim of the UK Climate Change Risk Assessment 2017 – question set by Government to the ASC

### **‘EXAM’ QUESTION FOR THE CCRA EVIDENCE REPORT :**

“Based on our latest understanding of current, and future, climate risks/opportunities, vulnerability and adaptation, what should the priorities be for the next National Adaptation Programme and adaptation programmes of the devolved administrations?”

# CCRA2 was more comprehensive than CCRA1

	Direct effects	Indirect effects	Major effects & discontinuities
<b>International:</b> Other international areas of concern	Loss of small island states	Impact on global economy	Large scale global tipping points
<b>UK (imported):</b> Impacts in the UK from international effects	Disruption to trade routes and supply chains	Volatility of food and feedstock prices in the UK	Major shifts in global patterns of food production
<b>UK (domestic):</b> Impacts arising directly in the UK	Flood risks, water scarcity, etc  Focus of CCRA1	Cross- sectoral, wider economic	High++ scenarios, major sea level rise  Focus of CCRA2



# The ASC highlighted six key areas for urgent action in the next NAP

The government endorsed in January 2017 the ASC's six priorities for the second National Adaptation Programme

<p><b>Flooding and coastal change risks to communities, businesses and infrastructure</b></p>	<p><b>MORE ACTION NEEDED</b></p>
<p><b>Risks to health, wellbeing and productivity from high temperatures</b></p>	
<p><b>Risk of shortages in the public water supply, and for agriculture, energy generation and industry</b></p>	
<p><b>Risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity</b></p>	
<p><b>Risks to domestic and international food production and trade</b></p>	
<p><b>New and emerging pests and diseases, and invasive non-native species, affecting people, plants and animals</b></p>	<p><b>RESEARCH PRIORITY</b></p>
<p><b>NOW</b> -----&gt; <b>FUTURE</b></p>	

RISK MAGNITUDE: LOW MEDIUM HIGH

# Structure of the UK National Adaptation Programme

The National Adaptation Programme

Making the country resilient to a changing climate

July 2013

[www.gov.uk/defra](http://www.gov.uk/defra)

 HM Government

## 7 themes

- Built Environment
- Infrastructure
- Health
- Agriculture and Forestry
- Natural Environment
- Business
- Local Government

Each theme has 4-6 broad **objectives** (**31** in total)

Each objective has specific **actions** (**370** in total)

NAP states: *“there is a need for a **monitoring and evaluation framework** that will identify whether the actions and policies contained in the Programme are **making a difference** to our **vulnerability** in the **near term**”*



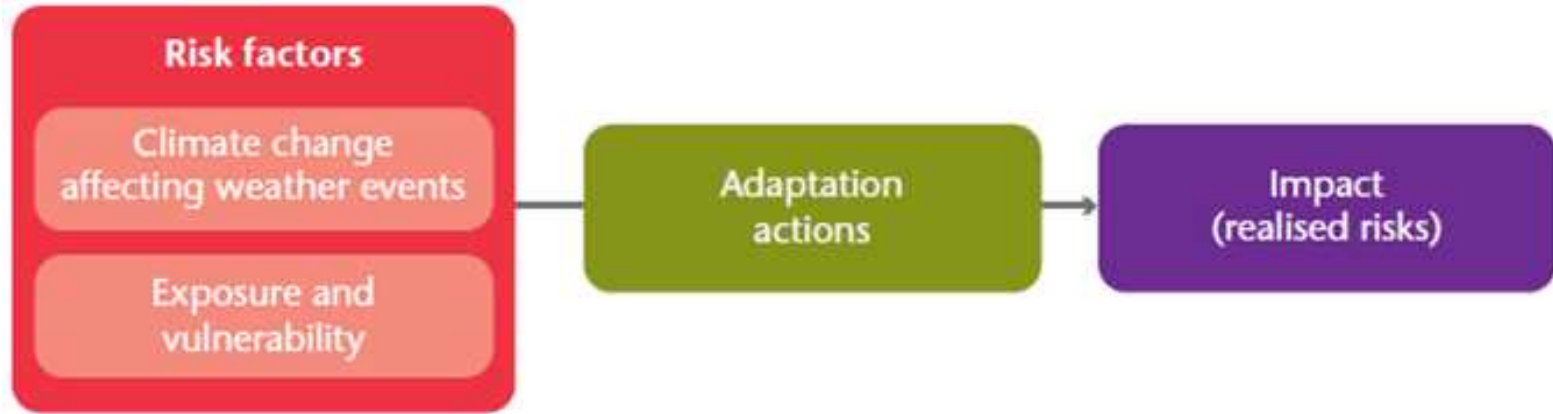
# Measuring progress in adaptation is challenging

	<b>Mitigation</b>	<b>Adaptation</b>
Targets and metrics	Clear national target: 80% by 2050 Standard metric exists to measure progress across all sectors (carbon emissions)	No national-level targets. No standard metric across sectors
Uncertainty	Most emission sources identified, being monitored & addressed	Uncertainty in climate projections. Not all risks understood
Context	Global atmosphere	Climate impacts are national, regional and local



# Assessing vulnerability

Indicator  
framework



Policy  
analysis



Actions with no/low regrets



Factoring climate change into decisions that create 'lock-in'

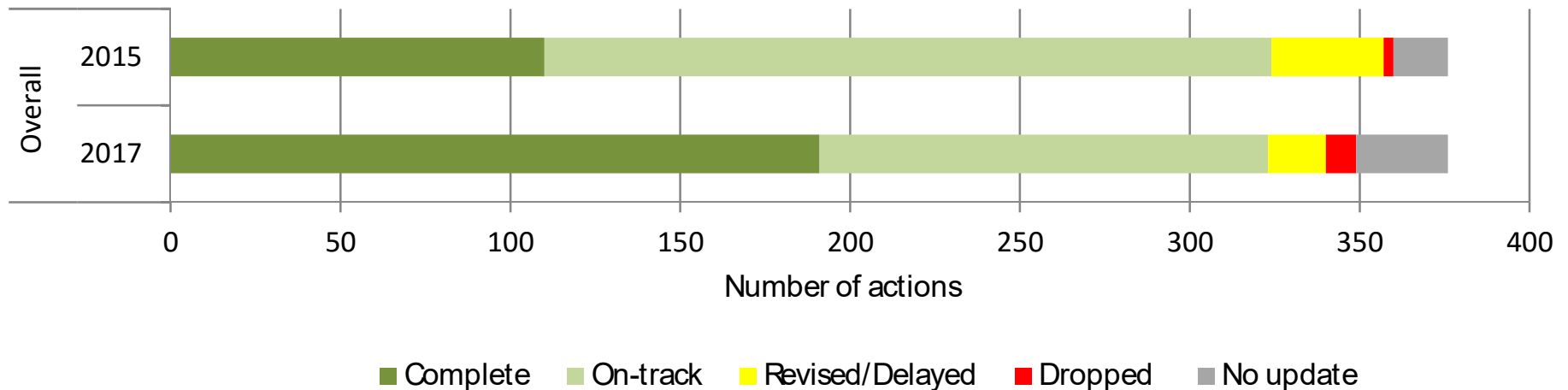


Preparing now for options with long lead-times

## Approach to assessing the NAP

- Is there a plan?
- Are actions being taken?
- Is progress being made in managing vulnerability?

Status of actions in the current National Adaptation Programme



## Latest ASC progress report to Parliament on the NAP: key messages

### Risks posed by climate change have increased since the ASC's last report in 2015

- Communities are becoming increasingly vulnerable to climate change:
  - Flood risk, in particular surface water flooding
  - Health and wellbeing impacts from overheating

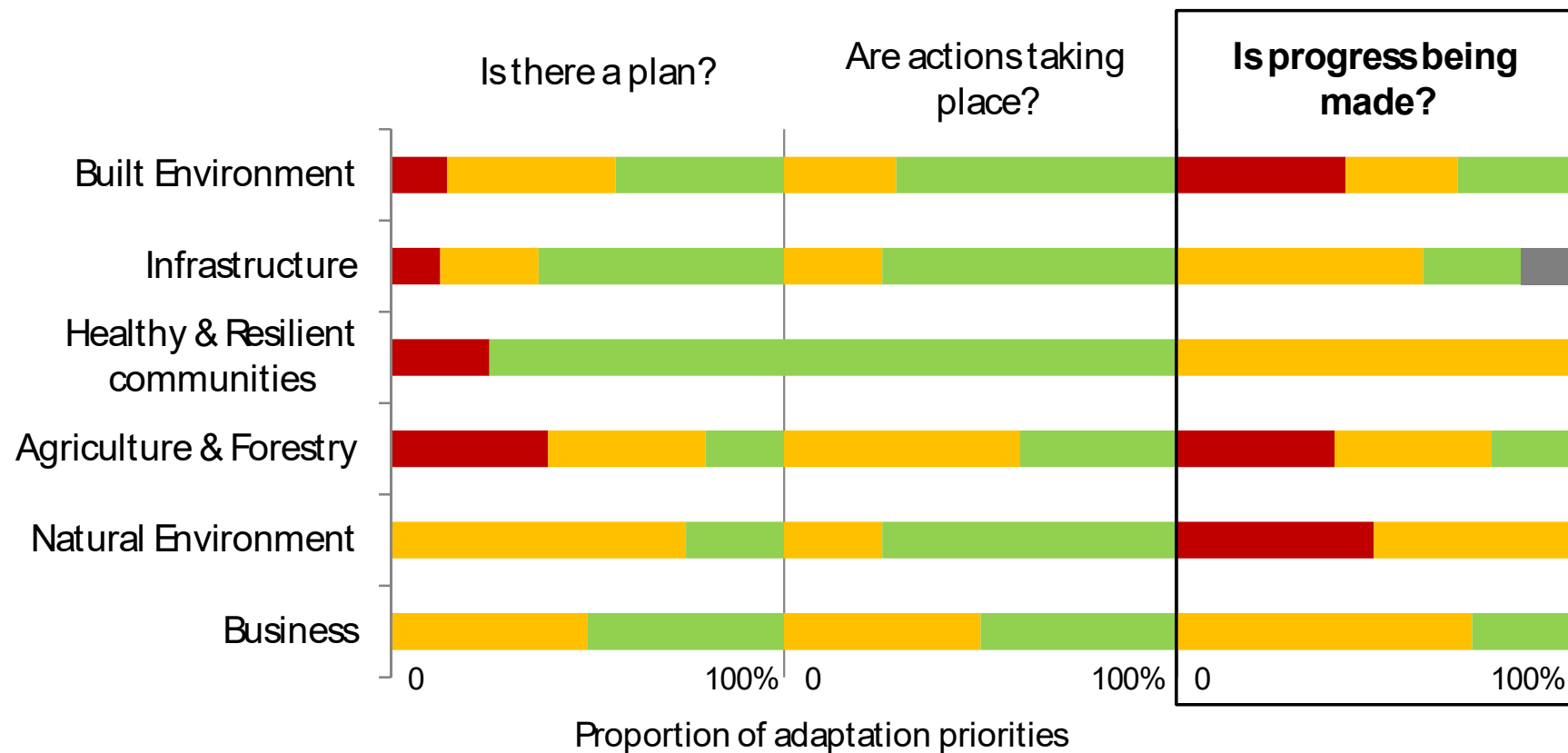
- The natural environment can be expected to deteriorate further as the climate warms:
  - Deterioration in freshwater habitats and upland peat
  - Declines in important indicator species

As a result climate change risks serious costs and in some respects irreversible damage to the country

# Results of ASC assessment

Despite areas of progress, more priorities flagged as 'red'

Summary of progress by the National Adaptation Programme



# The progress report identifies 10 specific areas of concern

Top 10 areas of concern in the ASC's report

- Development and surface water flood risk (n/a)
- Soil health and carbon sequestration (↑)
- Property-level flood resilience (n/a)
- Surface water flood alleviation (↑)
- Resilience of terrestrial habitats (↑)
- Resilience of freshwater habitats (↑)
- Biodiversity in the farmed countryside (↔)
- Health impacts from heat and cold (n/a)
- Commercial fisheries and aquaculture (new)
- Resilience of digital and ICT infrastructure (↑)

		Is there a plan?		
		RED	AMBER	GREEN
Is progress being made in managing vulnerability?	RED	<ul style="list-style-type: none"> <li>• Development and surface water flood risk (n/a)</li> <li>• Soil health and carbon sequestration (↑)</li> </ul>	<ul style="list-style-type: none"> <li>• Property-level flood resilience (n/a)</li> <li>• Surface water flood alleviation (↑)</li> <li>• Resilience of terrestrial habitats (↑)</li> <li>• Resilience of freshwater habitats (↑)</li> <li>• Biodiversity in the farmed countryside (↔)</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
	AMBER	<ul style="list-style-type: none"> <li>• Health impacts from heat and cold (n/a)</li> <li>• Commercial fisheries and aquaculture (new)</li> </ul>	<ul style="list-style-type: none"> <li>• Marine and coastal habitats (n/a)</li> <li>• Resilience of port and airport infrastructure (↓)</li> <li>• Infrastructure interdependencies (↔)</li> <li>• Business supply chain interruptions (↔)</li> <li>• Business opportunities from climate change (↑)</li> </ul>	<ul style="list-style-type: none"> <li>• Development in areas at river and coastal flood risk (n/a)</li> <li>• Capacity of people to recover from flooding (↔)</li> <li>• Coastal change risk management (new)</li> <li>• Pathogens, air quality and UV radiation (↔)</li> <li>• Effectiveness of emergency planning system (↑)</li> <li>• Water management in the natural environment (n/a)</li> <li>• Commercial forestry (↑)</li> <li>• Design and location of new infrastructure (↔)</li> <li>• Resilience of road and rail infrastructure (↔)</li> <li>• Business impacts from extreme weather (↔)</li> </ul>
	GREEN	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Water demand in the built environment (↑)</li> <li>• Crops and livestock (n/a)</li> </ul>	<ul style="list-style-type: none"> <li>• River and coastal flood alleviation (↓)</li> <li>• Resilience of water and energy infrastructure (↓)</li> <li>• Water demand by industry (↓)</li> </ul>
	GREY	<ul style="list-style-type: none"> <li>• Resilience of digital and ICT infrastructure (↑)</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>

↑ Increased concern since 2015

↔ same as 2015

(n/a) scope of assessment changed

(new) not assessed in 2015

# Advice regarding the new National Adaptation Programme due in 2018



- Set clear priorities for adaptation
- Ensure objectives are outcome-focused, measurable, time-bound
- Prioritise the core set of policies and actions that will have the biggest impact
- Include effective monitoring and evaluation



Thank you

**Committee on Climate Change**

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



@theCCCuk  
@manuela\_dimauro

