



giving
nature
a home

Adaptation – integrating climate change into peatlands action.

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In the next ten minutes...

- How serious is climate change?
- How does this help peatland conservation?
- A few thoughts about adaptation



What we are already living with: climate trends in Scotland since 1961

27 fewer
days of frost



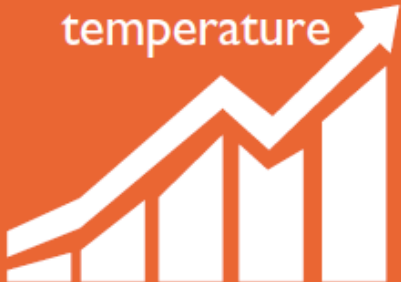
32
fewer
days of
snow cover



33 day long
growing season



1°C rise in
temperature



21%
more rain

Sea-level rising
3mm per year
(and speeding up)

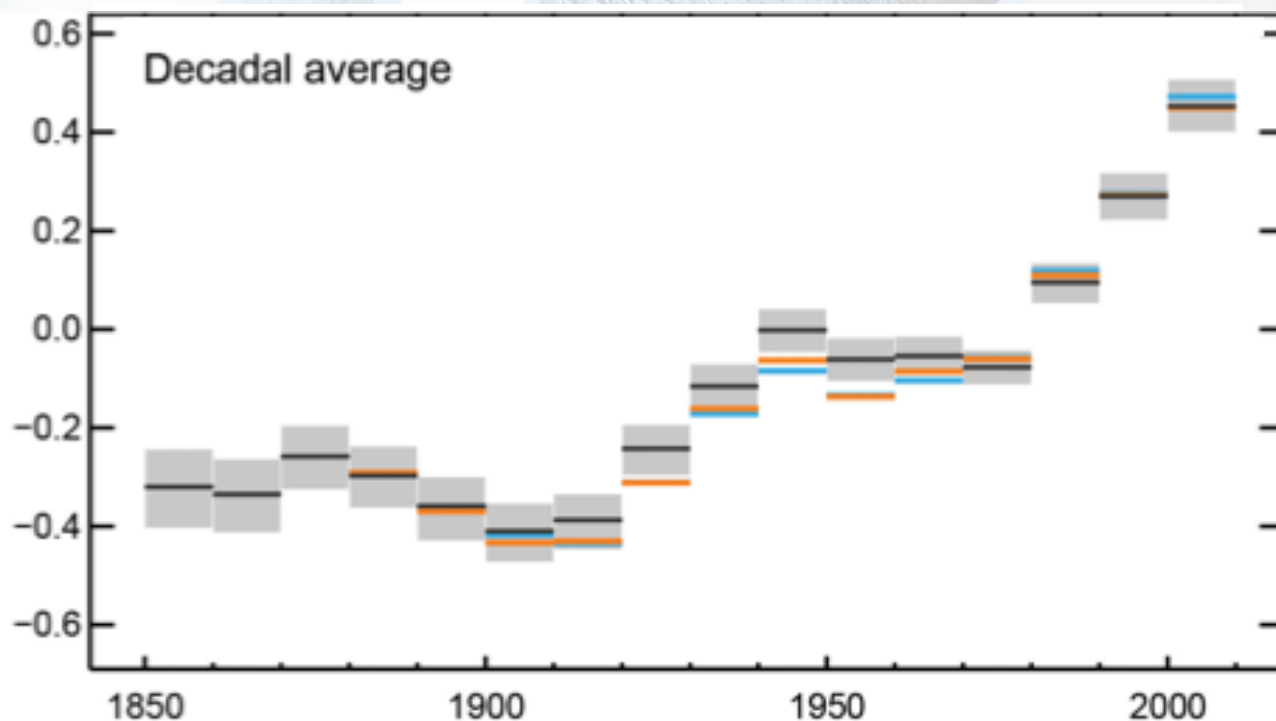


Average annual
change observed in
Scotland since 1961
(Scotland's Climate Trends
Handbook, Sniffer 2014).

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Temperatures continue to rise

Each of the past 3 decades has been successively warmer than the preceding decades since 1850

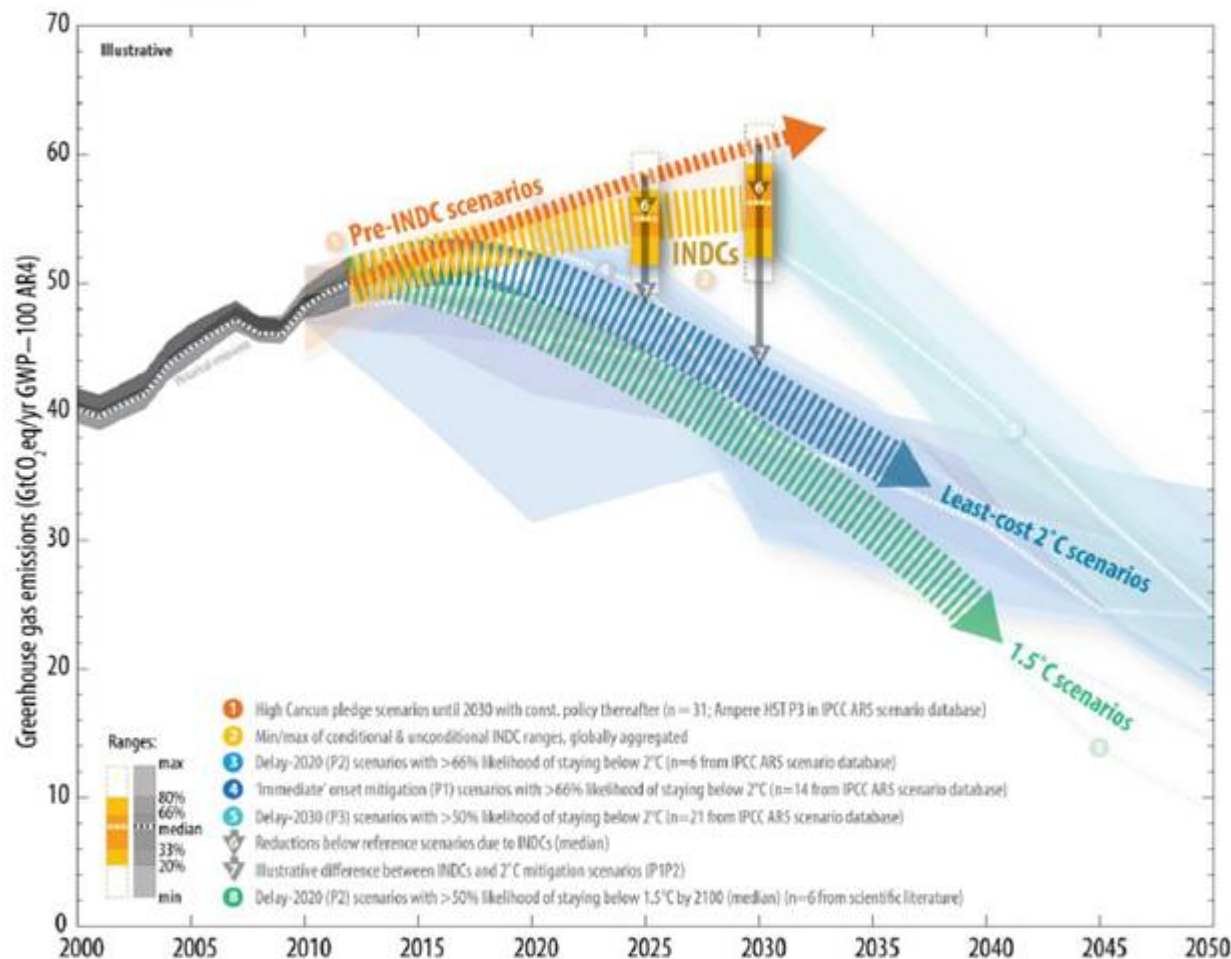


Globally averaged combined land and ocean surface temperatures

AR5 WGI SPM

Approx 1.1 °C average global temperature rise since late 19th century

Figure 2
Comparison of global emission levels in 2025 and 2030 resulting from the implementation of the intended nationally determined contributions and under other scenarios



Sources: Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report scenario database, 1.5 °C scenarios from scientific literature (see footnote 18), IPCC historical emission database and intended nationally determined contribution quantification.

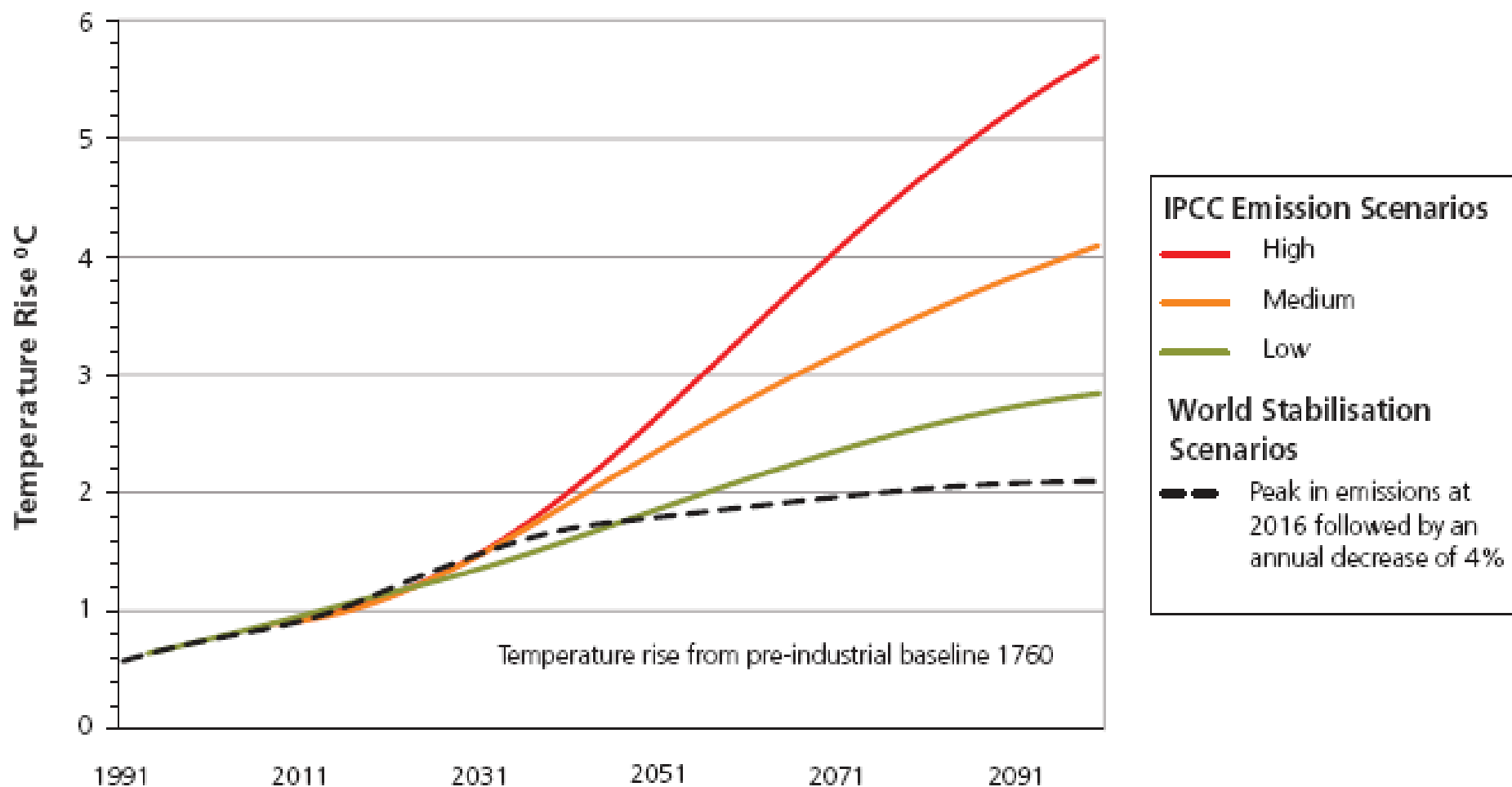
Abbreviations: AR4 = Fourth Assessment Report of the Intergovernmental Panel on Climate Change, GWP = global warming potential, INDC = intended nationally determined contribution, IPCC AR5 = Fifth Assessment Report of the Intergovernmental Panel on Climate Change, n = number of scenarios, yr = year.

Won't Paris solve the climate problem?

New 1.5°C target

Two Celsius around 2040, within 25 years

Global Mean Temperatures



UKCP09 uplands 2°C climate projections

- Temperature
 - Summer average 1°C to 3°C warmer
 - Summer maximum up to 5°C warmer
 - Winter average 1°C to 2°C warmer
- Precipitation
 - Summers 40% drier to 30% wetter
 - Wetter winters: by up to 40%
- More extreme / unseasonal weather – droughts, hot spells, heavy rain



The nature of climate change

Europe's wildlife at risk

Lit review & case studies

- Shifting ranges
- New arrivals
- Populations and communities
- Interaction between species
- Extreme weather
- Protected areas
- Managing sites
- People

So what does this mean for looking after our peatlands?



Peatlands are our major carbon store



Loss of peatland soils must end

- Some great initiatives – especially uplands
- Lowland raised bogs also
- Agricultural soils – the next challenge



Peatlands hold water

- Slow flooding
- Improve quality

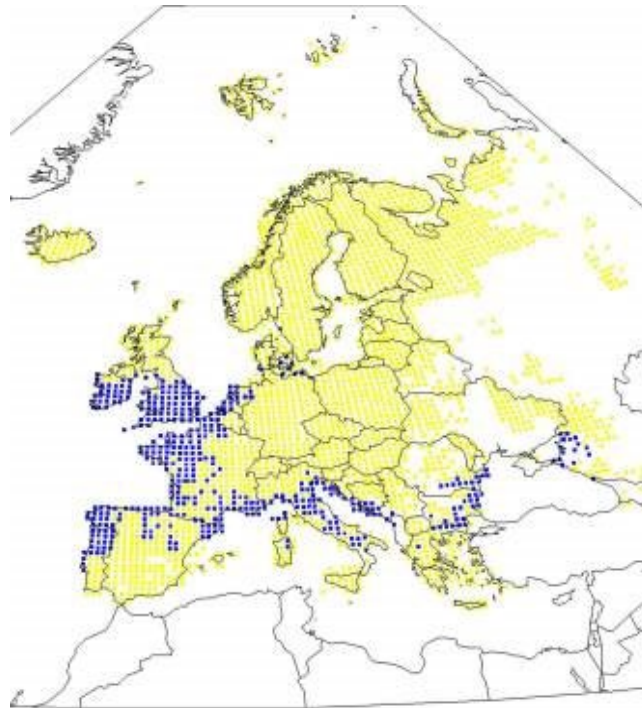
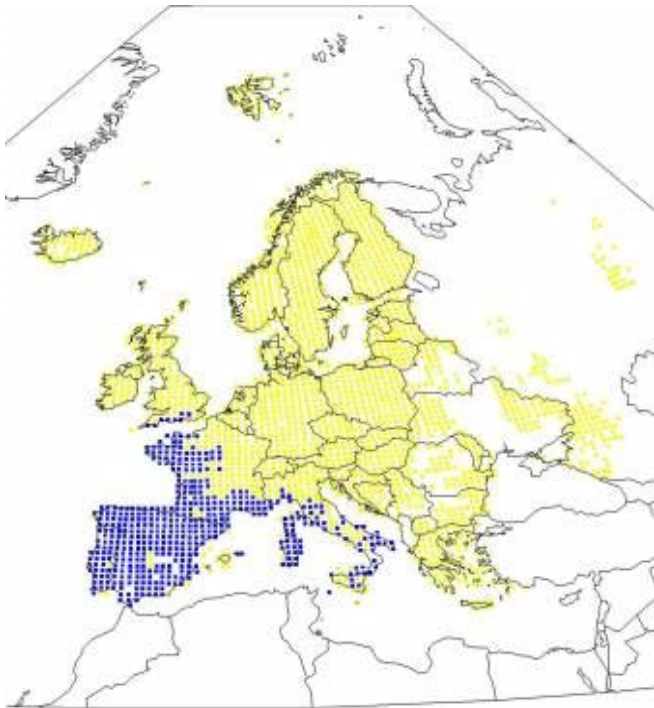


Wetlands resist wildfires



Large areas of nature friendly land needed to help wildlife shift range

- Europe's breeding birds need to shift range by 550 kms north-east to stay within favourable climate conditions for 3 C world



Adaptation for ecosystem services

- **Maintain, enhance, develop current**
- **What other nature based adaptation benefits can peatlands provide?**
- **Climate vulnerable ecosystem services?**

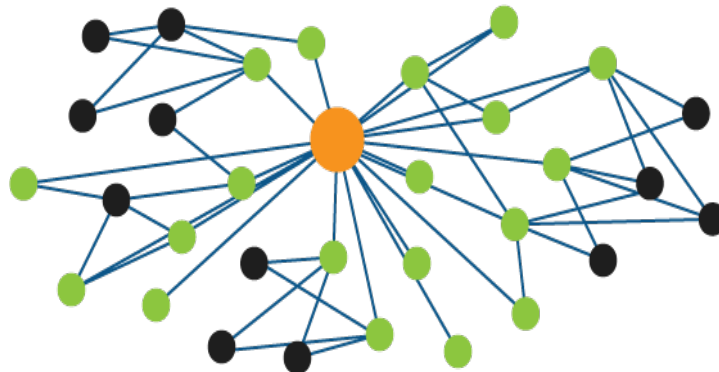


Climate change influences everything with implications for our interests



Adaptation at three scales

- **Specific needs for local biodiversity and situation**
- **Wider perspective to include neighbouring areas**
- **Strategic / network regional / country overview**



Don't take impacts and adaptation for granted!



Urgency to get on with this now

- Carbon storage not release
- Develop robust, functioning habitats before climate change makes this more difficult



**IUCN UK
Committee
Peatland
Programme
*Briefing Note
No10***

**Peat Bogs,
Climate and
Climate
Change**



Peatland Programme

