

# Climate Change and Environmental Sustainability

Dr Russell Seymour BASIS 25<sup>th</sup> May 2022





What is BASIS?



### The British Association for Sustainable Sport

- A membership organisation
- The sustainability hub for the sport\* sector in the UK
  - (\* includes sport, play, recreation and physical activity)
- Not-for-profit
- MOU with SAPCA to work on sustainability issues and projects



### The British Association for Sustainable Sport

- Harness the power of sport to build a more sustainable future
- Integrate sustainability principles into all aspects of the sector
- Facilitate collaboration between all those interested in sustainability and sport
- Educate professionals, participants and fans on sustainability issues



### The British Association for Sustainable Sport

- Training courses
  - Fundamentals of Sustainability for Sports Organisations
  - New courses being developed
- Assessment and Certification
- Conferences, Webinars, Member Forums
- Awards
- Case studies
- Support and advice to members











































































London Marathon **Events** 







































































- You are on a spaceship heading away from Earth to colonise another planet.
- The journey will take 30 years.
- You can receive energy from outside the spaceship from solar panels and similar technologies most, though not all, of the time.
- Otherwise what you take with you is all that you have to sustain you for the entire trip
  of course, you can not take everything that you will need with you.

OHow will you survive? O What essential things do you need?

O What processes must you have in place? O How are these linked?





### **Philosophical foundation**

- 1. Sport, play, recreation and physical activity happens, and will continue to happen
- 2. It has a two-way relationship to the environment
  - It has impacts on the environment
  - It is impacted by the environment and environmental change
- 3. Sport, and sport events, provide positive social and economic benefits to individuals and to communities
- 4. We need to find a position where sport can be enjoyed while minimising its impacts on the environment and maximising its social and economic benefits
- 5. Sport can also act as a trusted ambassador for messages about sustainability



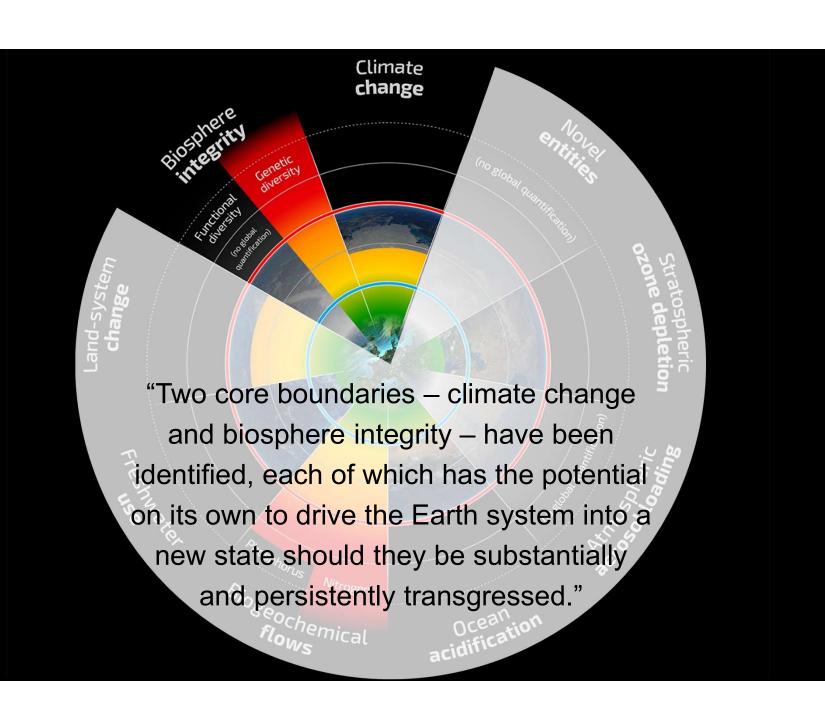


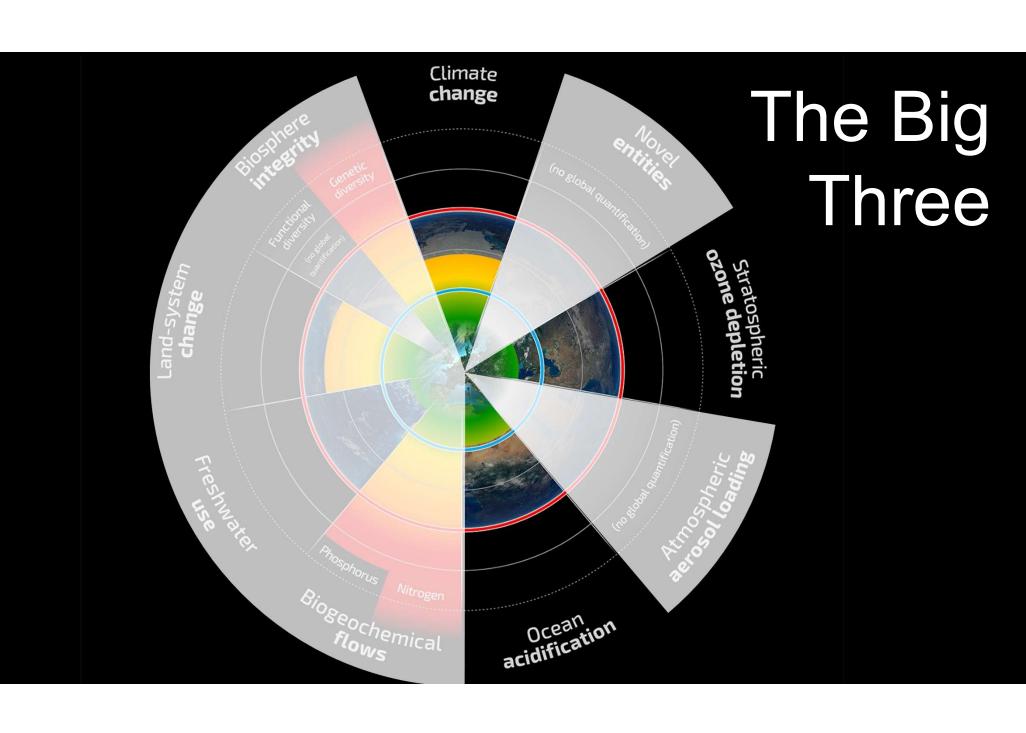
The Science Bit...

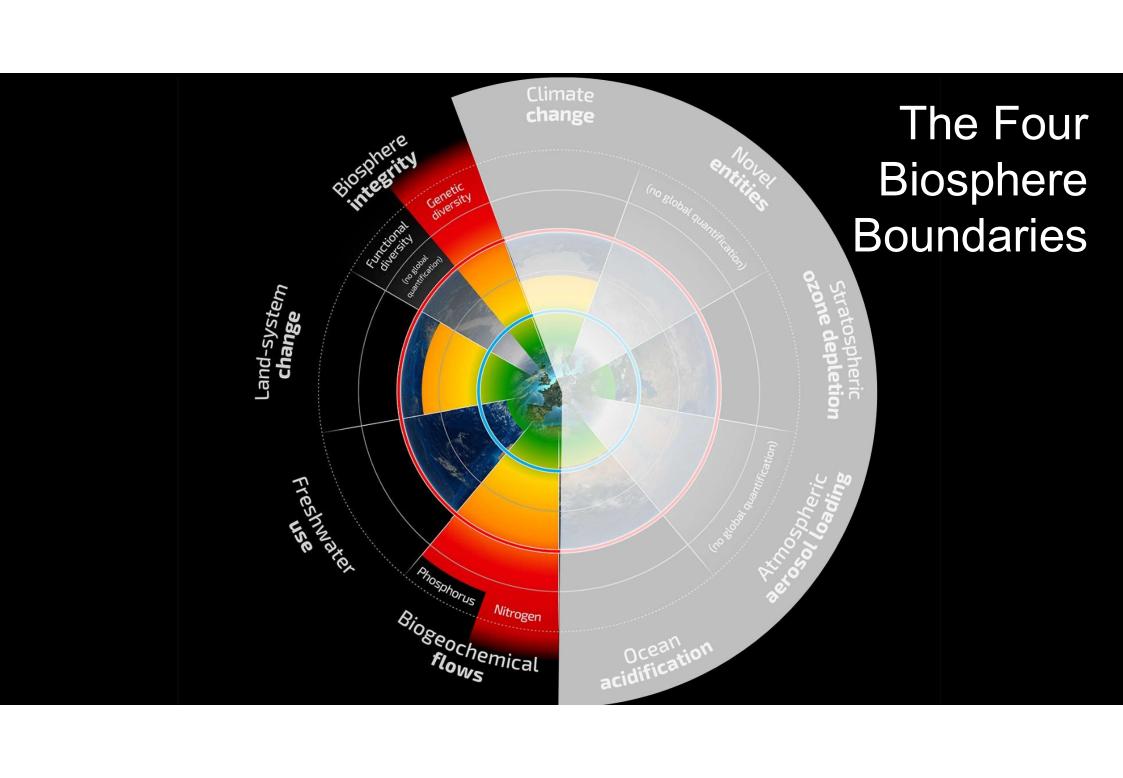
What are the key environmental sustainability issues?

**W** A NETFLIX DOCUMENTARY BREAKING BOUNDARIES The Science of Our Planet Johan Rockström Owen Gaffney **FOREWORD BY Greta Thunberg** 

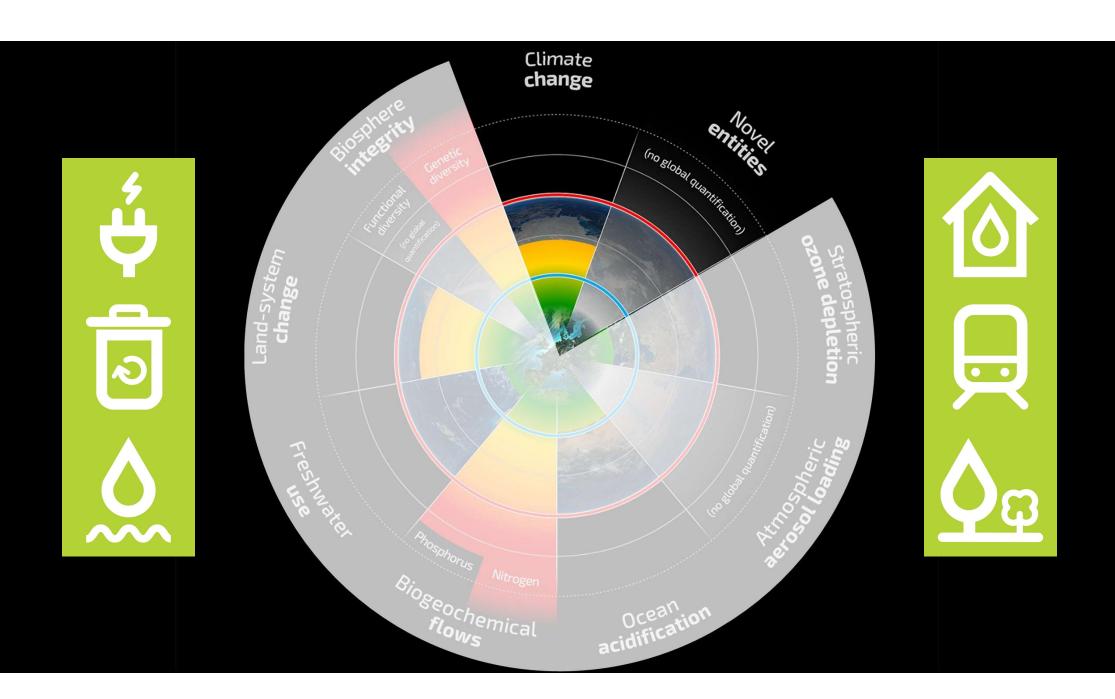
Rockstrom et al 2009. *Nature* **461** 472-475 and Steffen et al 2015. *Science* **347** (6223)

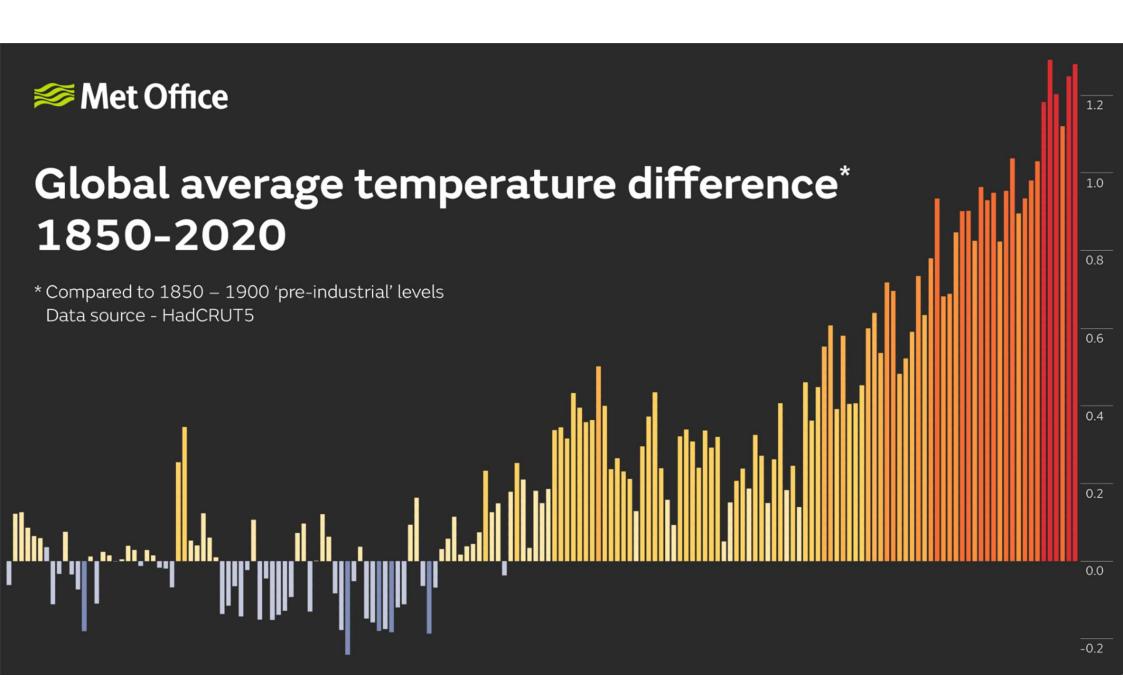












### ipcc

INTERGOVERNMENTAL PANEL ON Climate change

### Climate Change 2022

Impacts, Adaptation and Vulnerability

Summary for Policymakers



Working Group II contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change





### ipcc

INTERGOVERNMENTAL PANEL ON Climate change

# Climate Change 2022 Mitigation of Climate Change

**Summary for Policymakers** 





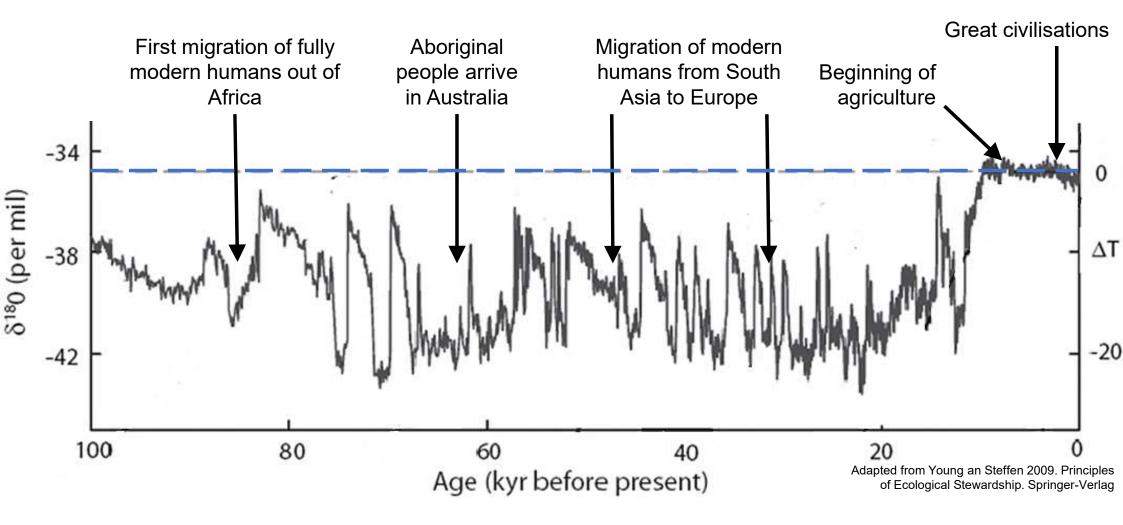
Working Group III contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change







# Climate change – the key question





# Climate Change – Impacts in the UK

- The general pattern of change for the UK is warmer, wetter winters, hotter and drier summers, with high variability.
- This will cause:
  - Increases in average and extreme temperatures
  - Changes to rainfall, leading to flooding and drought
  - Increased coastal flooding and erosion, higher sea temperatures and ocean acidification
  - Increased frequency and intensity of wildfires
- We are falling behind on adapting to climate change.







How is this relevant to sport, play and recreation and why should we care?



### Climate Change - Impacts on Sport and Play

- Physical damage to buildings, facilities and other infrastructure from extreme weather ('rain bombs', flooding)
- Reduced longevity of facilities particularly playing surfaces,
   equipment surface finishes, moving parts
- Water shortages, heat and 'unusual' weather causing changes to management regimes, especially for turf sports
- User safety (e.g. extreme heat and metal fixtures)



### Climate Change - Impacts on Sport and Play

- Cancellation of events due to adverse weather
  - Financial costs
  - Fan and participant engagement
- Disruption to seasons and tournament schedules
- Reduced quality of individual and team performance
- Health implications for participants
- Duty of care to spectators















match at Wankhede Stadiom in Maharashtra. state, right, and trains carrying emergency water, left

# India's IPL in hot water over lush cricket pitches

As drought bites, court says maintaining green grounds is criminal wastage, and relocates matches

By Andrew Marszal in New Delhi

INDIA'S star-studded IPL cricket league has been accused of wasting millions of litres of water on maintaining pristing grounds and pitches despite the country facing its worst drought in decades.

The Indian Fremier League got under way at Mumbal's Wankhede Stadium periencing a crippling lack of rainfall.

The Lobottia Movement on NGO

ready running dry. It accused the glamorous league - where clubs backed by Bollywood stars pay crick | eters from around the world millions b of dollars to play for just two months of placing commercial interests before the state's own residents.

"The IPL is just about a commercial establishment minting money while the city of Mumbai runs dry," said Arsheel Shah, a lawyer representing the Loksatta Movement,

Yesterday, the court ruled that all matches scheduled to take place in the f parched state after April 30 must be relocated elsewhere in the country.

But with 10 of India's 29 states allast weekend on an emerald-green play-ready in the grip of severe drought, and ing surface that more closely resembled monsoon rains still at least two months an English village green than a state ex- away, the situation is expected to deteriorate.

Indian cricket officials told the Bom-

gardens and for everything else," a lawver argued.

The position received short shrift from the Mumbai judge, who described

more important than the people?" On Tuesday, cricket officials pledged to use treated sewage water to maintain the cricket pitches at Mumbal and

past two years, in part due to El Niño supplies to the city of Latur, in eastern weather conditions, meaning many Maharashtra, where officials took the

back-to-back-failed monsoons for the been laid on to ship in badly needed reservoirs in central India have already drastic step of banning congregations





Share

SPORT

abandoned

#### Australia fires: Dalila Jakupovic 'scared I would collapse' because of 'unhealthy' air quality

O 14 January 2020 Tennis ■ 383



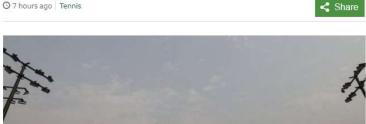
Dalila Jakupovic says she was "really scared" as she retired from her Australian Open qualifying match because of the "unhealthy" air quality from ongoing bushfires in the country.

The Slovenian world number 180 had to be helped off court after she retired



Sport Weather iPlayer

BBC (a) Your account

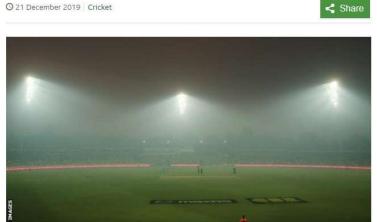




Smoke haze over Melbourne was visible on Wednesday morning

Australian Open qualifying was cancelled for the day because of rain after earlier delays caused by the "very poor" air quality from ongoing bushfires in the country.

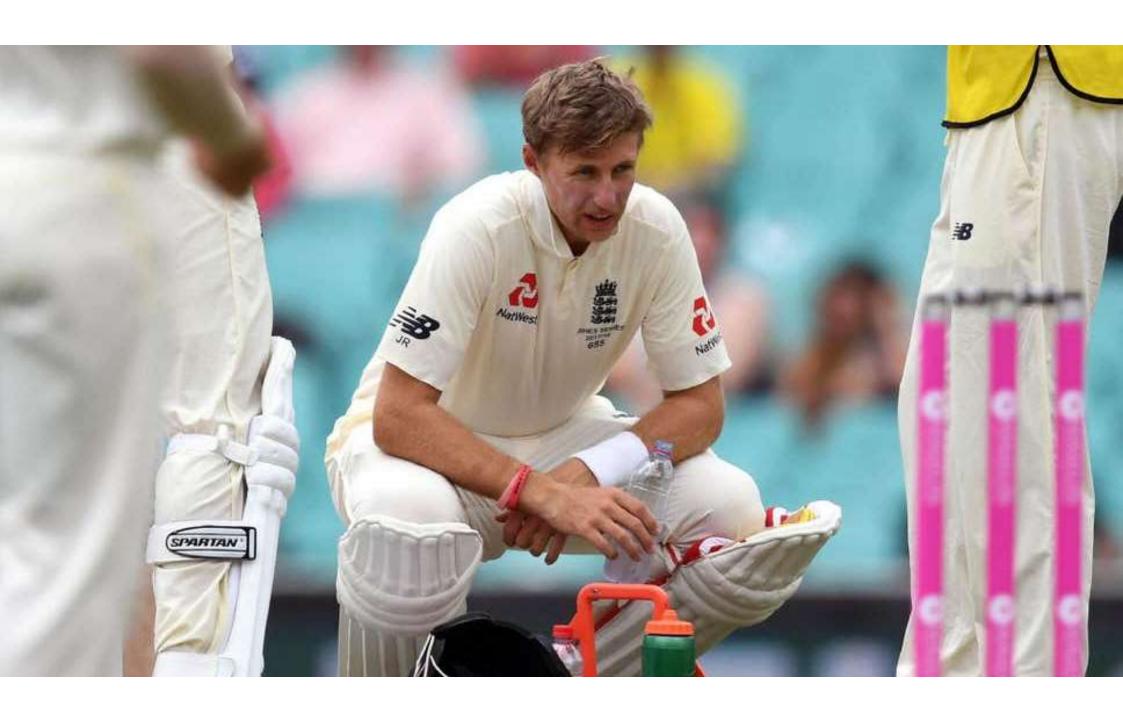
Play was delayed by three hours after the air quality was rated "unhealthy".



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Big Bash: Bushfires cause Adelaide Strikers v Sydney Thunder to be

Smoke engulfed the Manuka Oval in Canberra













What are others doing?











