



Department of
**Primary Industries and
Regional Development**

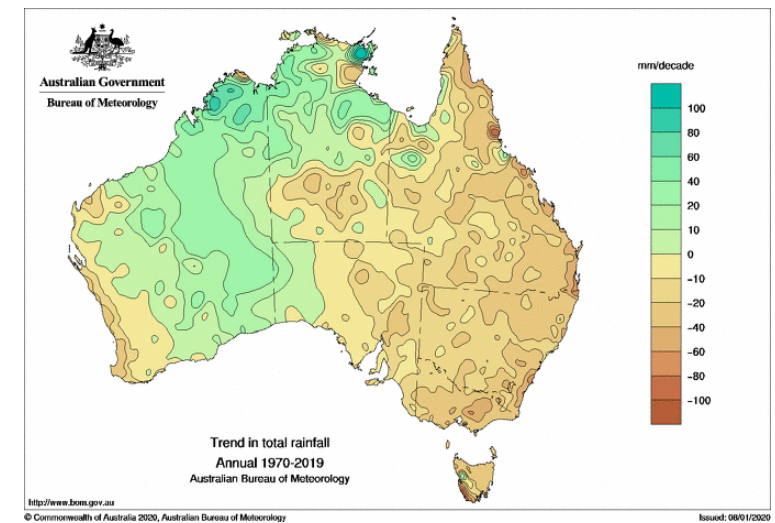
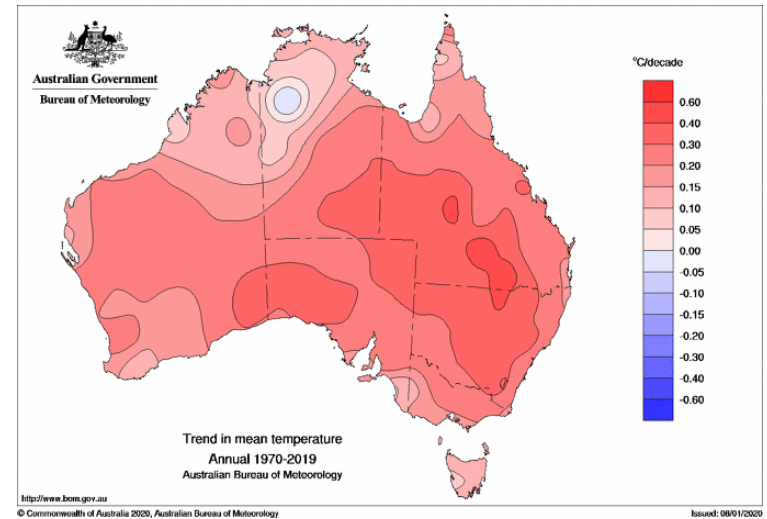
Climate change and DPIRD's priorities



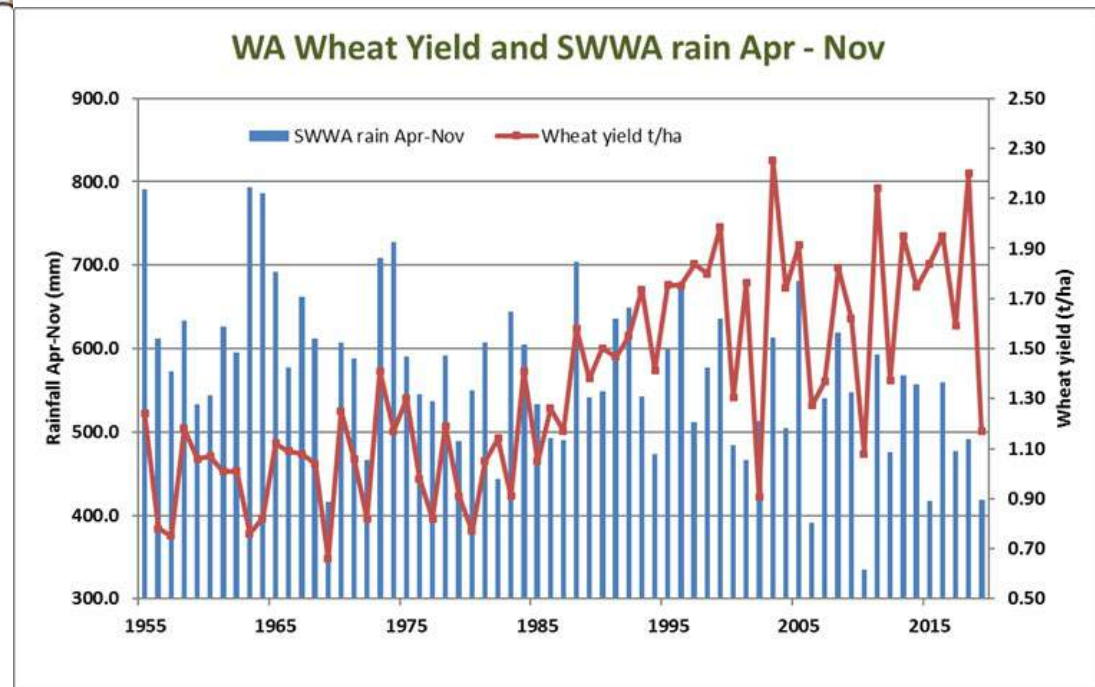
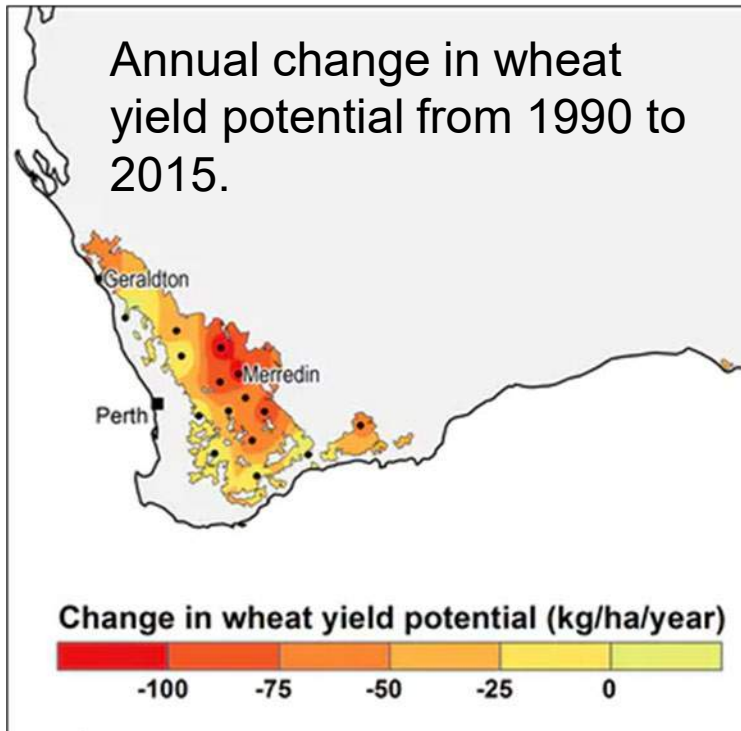
Agriculture particularly exposed to the risks and opportunities climate change presents

Physically impacted by climate change

- Productivity
 - Infrastructure
 - Environment
 - Regional liveability
-
- Increasing temperatures
 - Declining rainfall in SW
 - Increasing rainfall in north and centre
 - Increased extremes
 - Heat waves
 - Frost
 - Fire weather
 - Storms
 - Drought



How increasing temperatures and declining rainfall is squeezing water limited yield potential



Gobbett et al.

<https://theconversation.com/changing-climate-has-stalled-australian-wheat-yields-study-71411>

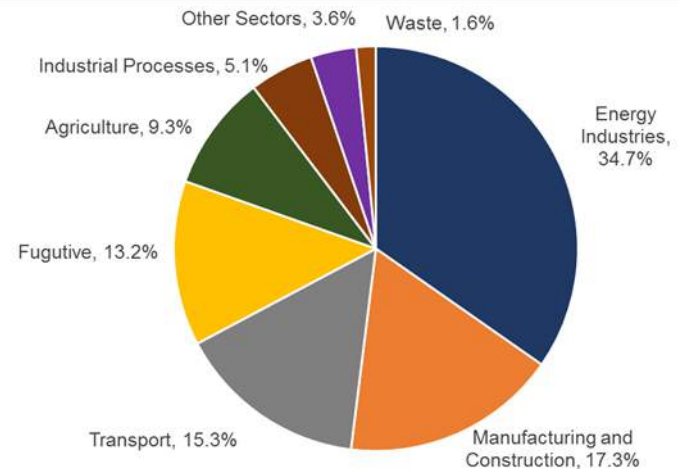
Agriculture particularly exposed to the risks and opportunities climate change presents

DPIRD's stakeholders are significant emitters of GHGs

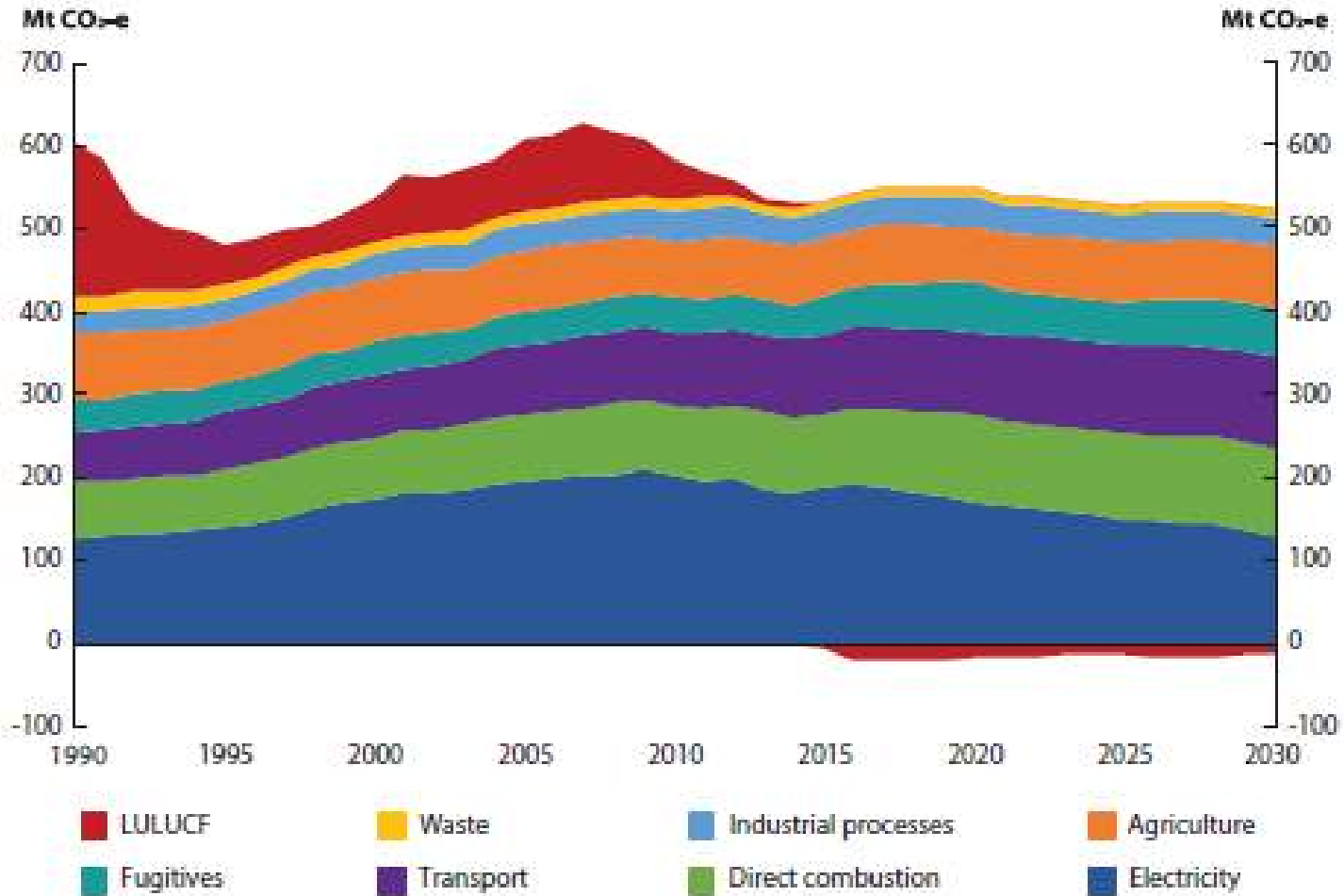
Subject to policy and market forces

- Market access
- Prices
- Investment

WA emissions 2017



Australia's emissions 1990-2030

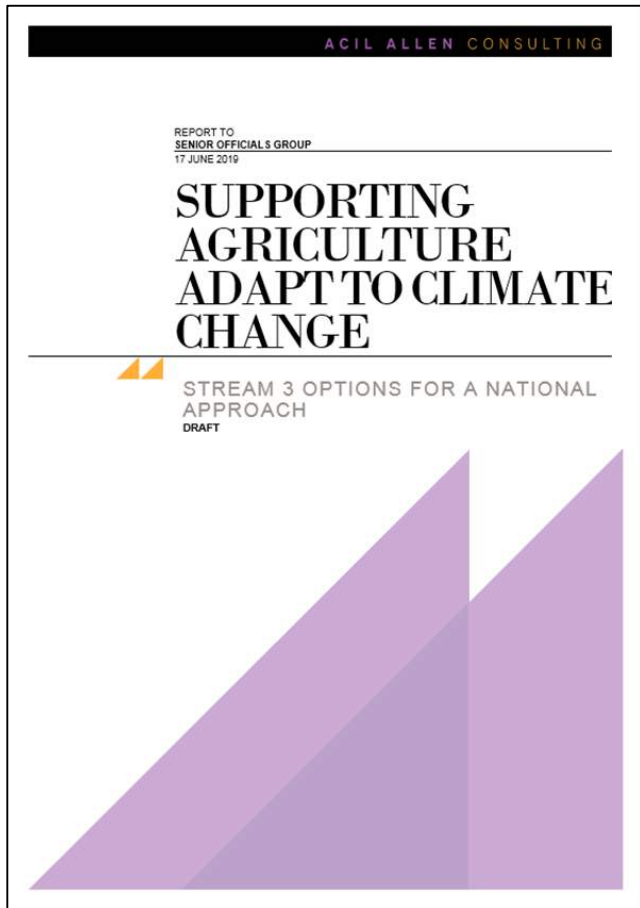


Primary industries are addressing these issues

- Peak bodies and industry are planning and investing in climate change resilience and emissions mitigation



so is Government



WA state climate Strategy

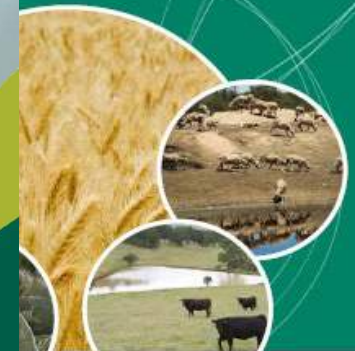


AGMIN climate change and agriculture initiative

<https://www.agriculture.gov.au/ag-farm-food/climatechange/climate/national-approach-agriculture>

DAFWA/DPIRD climate change strategies

- **Climate Change Response Strategy (2010)**
- **Climate-ready Agriculture- situation statement (2016)**
- **Climate Ready Primary Industries and Regions (2020)**



The central premise of the DPIRD's Climate change response

- Climate change presents significant risks and opportunities to DPIRD stakeholders and directly affects the operations of the Department.
- Policies and activities must align with State, National and international aspirations to keep global warming below 1.5°C and work with government and industry stakeholders to achieve this goal.
- Keeping global warming below 1.5°C, while not impossible, is becoming increasingly difficult and therefore work with stakeholders to prepare for a situation where global temperatures may increase to 2-3°C above pre-industrial levels.

DPIRD's current climate change priorities for agriculture

- 1. Provide information to stakeholders to enhance their understanding of future risks associated with climate change**
- 2. Assist land managers to benefit from carbon capture opportunities**
- 3. Support development and commercialisation of technology to increase the resilience of agricultural businesses to climate change**
- 4. Support research to enable adaptation to a changing climate, such as new crop varieties that can thrive in hotter and drier climates**
- 5. Provide leadership, policy advice and strategic analysis of climate change issues for agriculture**

Climate Ready Primary Industries and Regions (2020) actions currently being discussed

- **Landscape recovery**
 - Revegetation programs driven by stewardship payments for carbon pollution abatement and ecosystem services
- **Carbon accounting (LCA)**
 - Transparent accounting methodology using approved WA emission factors
 - Baseline footprints
 - Carbon neutral accreditation of agrifood industries
- **Water security**
 - Using the best science to inform irrigation development and ensure security of on-farm water supplies
- **Livestock emissions**
 - Aligned with the MLA CN2030 goal
- **Resilient agricultural enterprises**
 - Transformative and incremental adaptations
- **DPIRD net zero**
 - Integrate consideration of Climate change in all departmental operations
 - Mitigate Department's emissions

Thank you

Visit dpird.wa.gov.au

Important disclaimer

The Chief Executive Officer of the Department of Primary Industries and Regional Development and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

© State of Western Australia 2018