



Department of
**Primary Industries and
Regional Development**

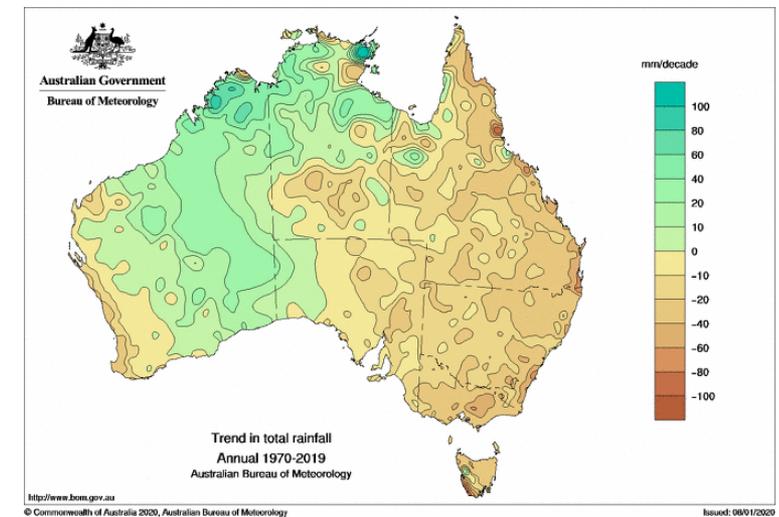
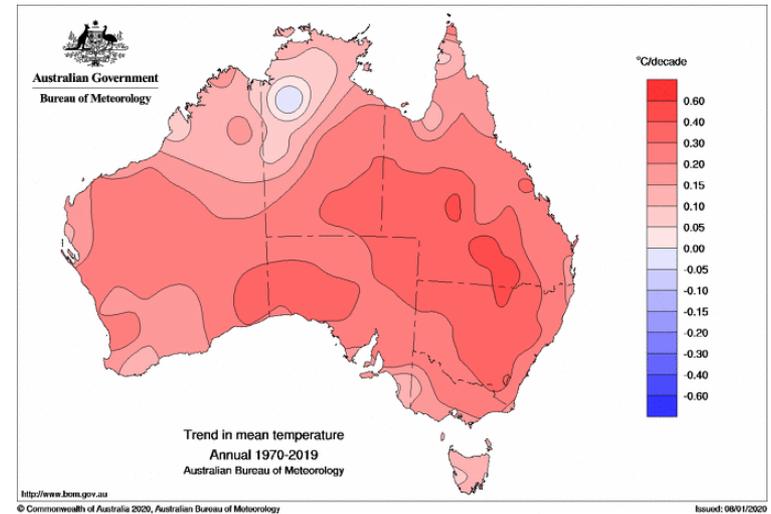
Climate change and DPIRD's priorities



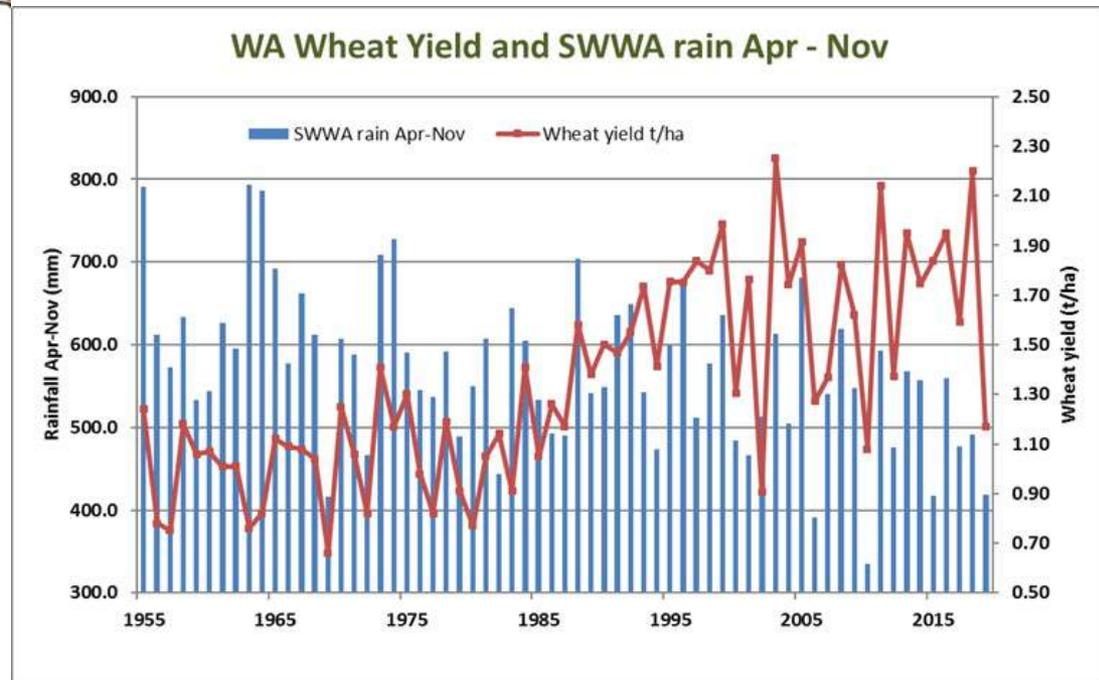
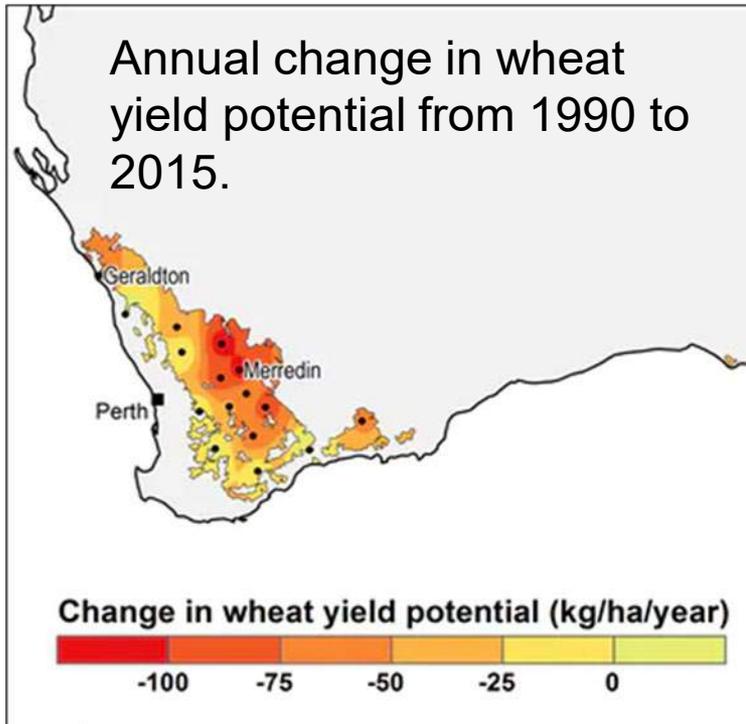
Agriculture particularly exposed to the risks and opportunities climate change presents

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>

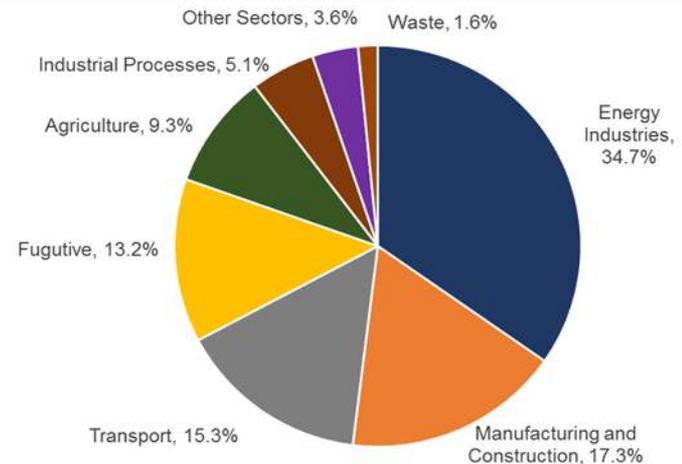
Agriculture particularly exposed to the risks and opportunities climate change presents

DPIRD's stakeholders are significant emitters of GHGs

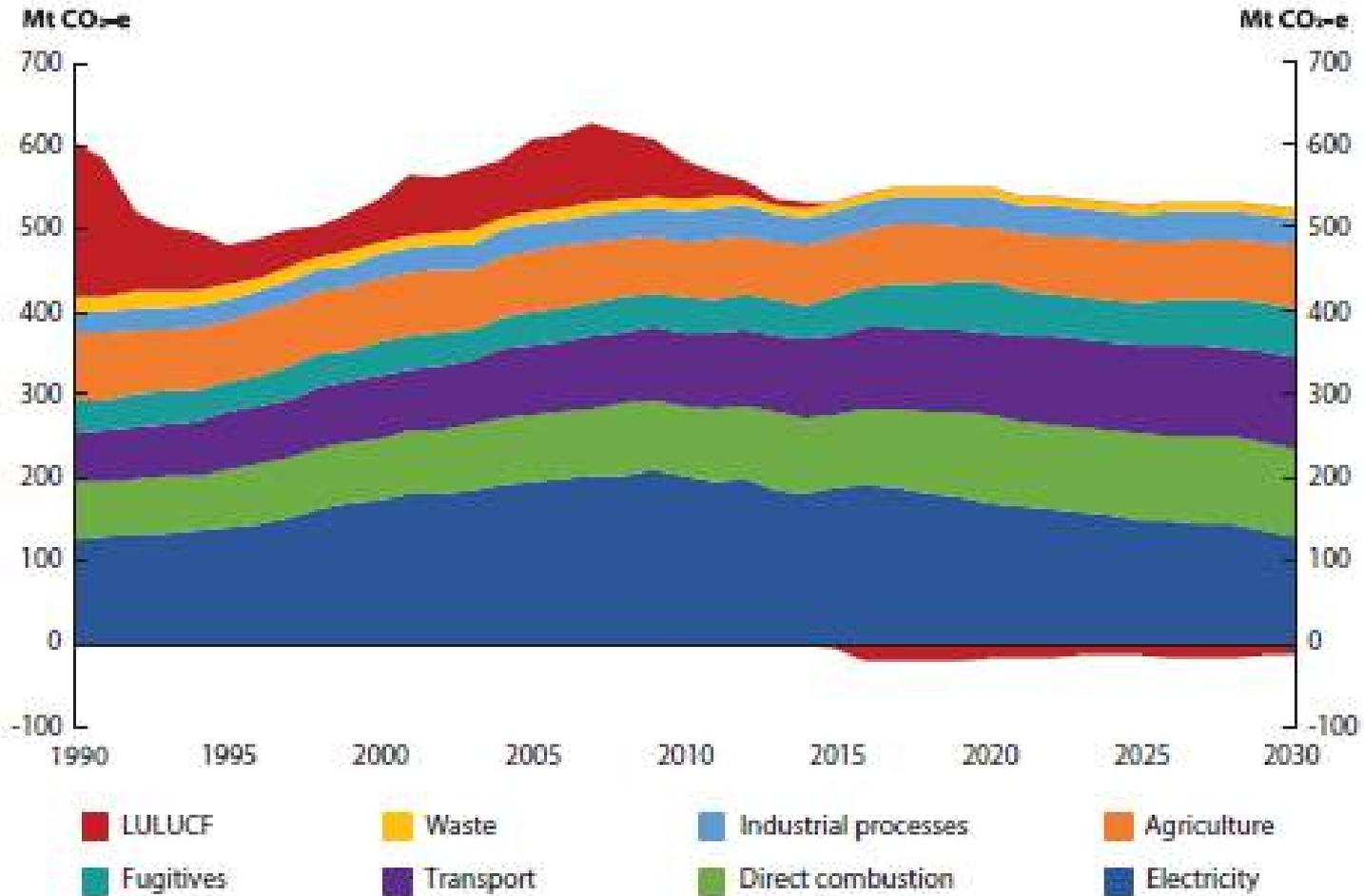
Subject to policy and market forces

- Market access
- Prices
- Investment

WA emissions 2017



Australia's emissions 1990-2030

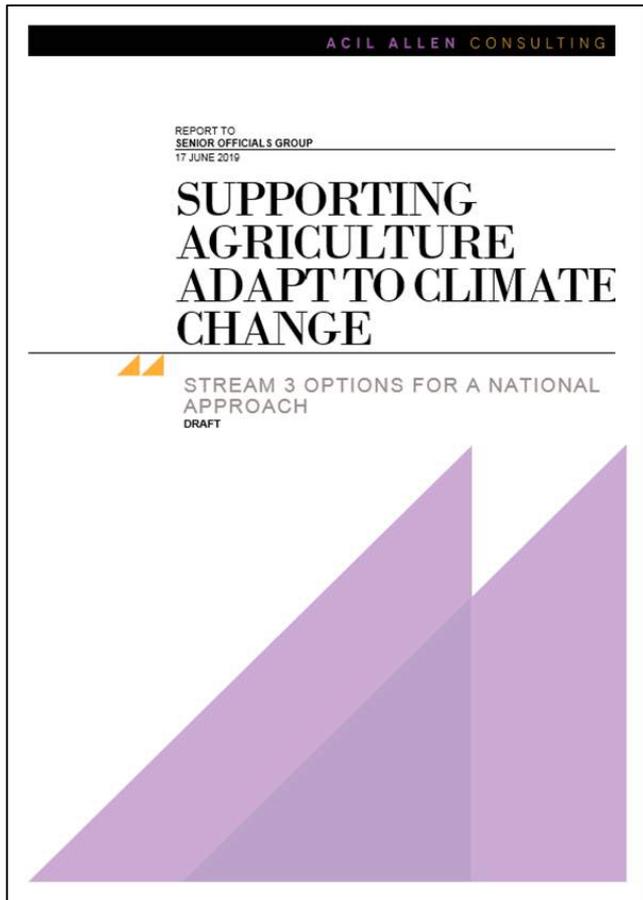


Primary industries are addressing these issues

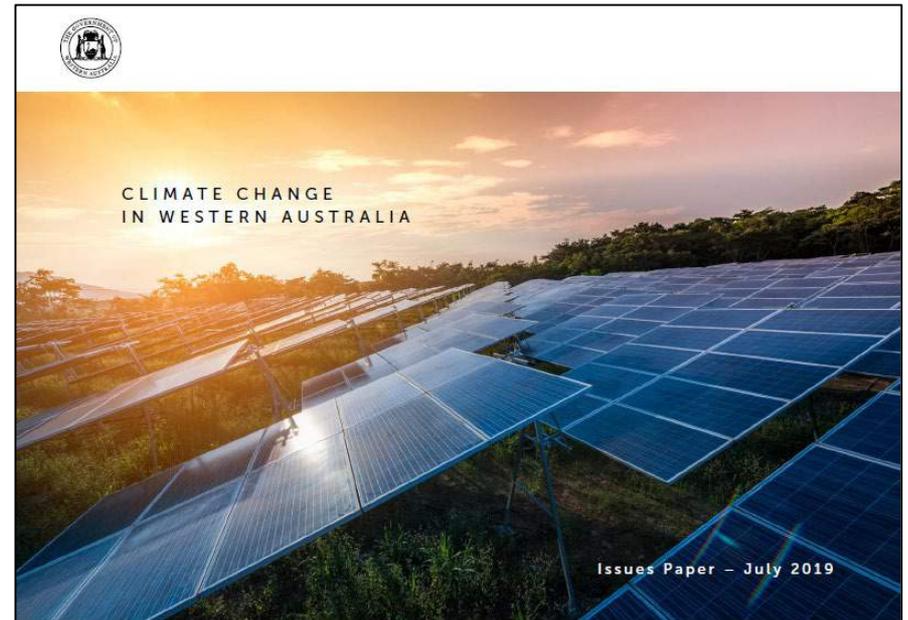
- Peak bodies and industry are planning and investing in climate change resilience and emissions mitigation



so is Government



WA state climate Strategy

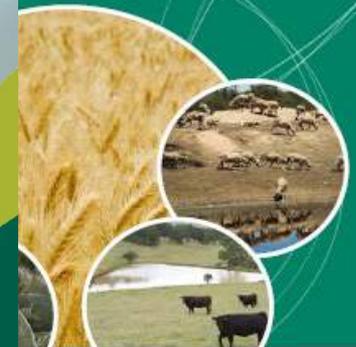
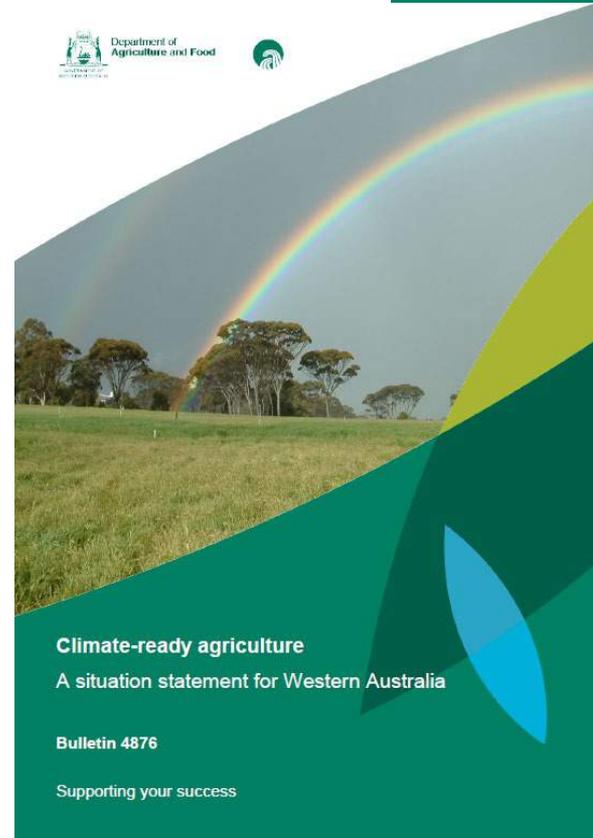


AGMIN climate change and agriculture initiative

<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

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Important disclaimer

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