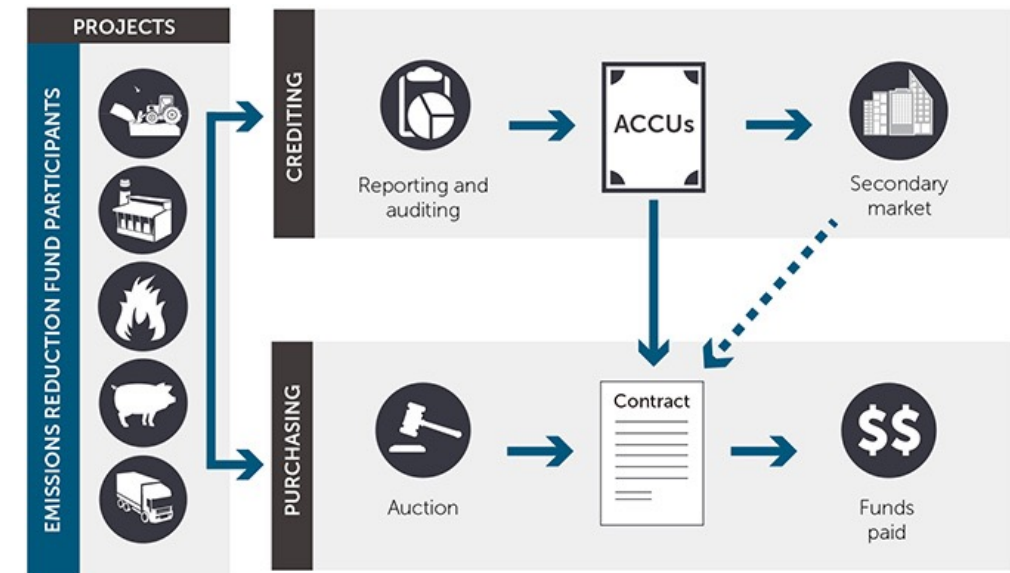


# Requirements on farmers towards low emissions Agriculture in Australia

Richard Eckard

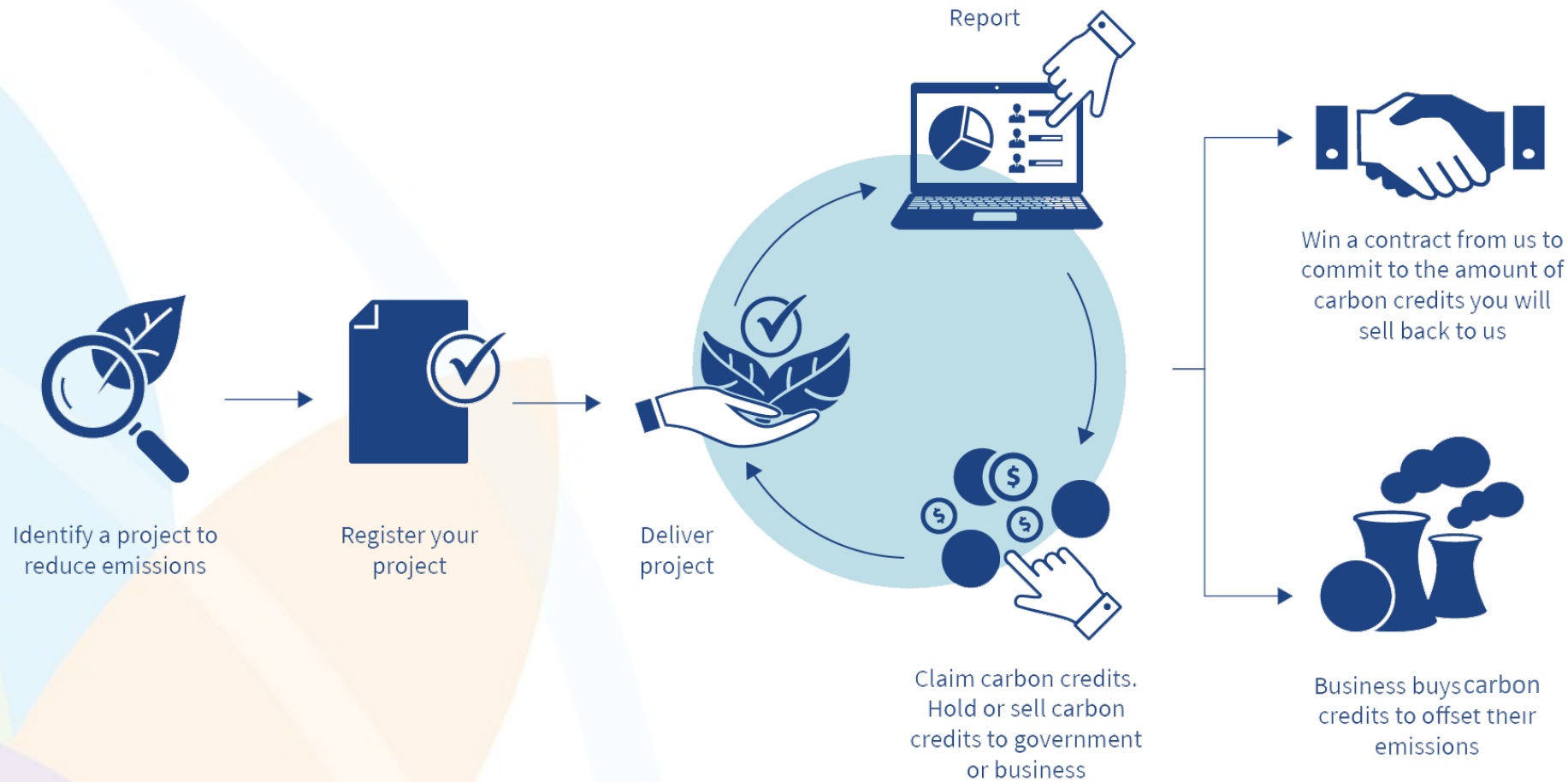
- National emissions target
  - 43% by 2030 and net zero by 2050
- Key agricultural policies
  - **Climate Active Carbon Neutral Standard certification**
  - **The Emissions Reduction Fund (ERF) \***
  - **Reinforcing the Safeguard Mechanism \***
    - The National Greenhouse and Energy Reporting (NGER) scheme
  - Research
    - Reducing methane from livestock (MERiL)
    - Improving soil carbon storage and measurement



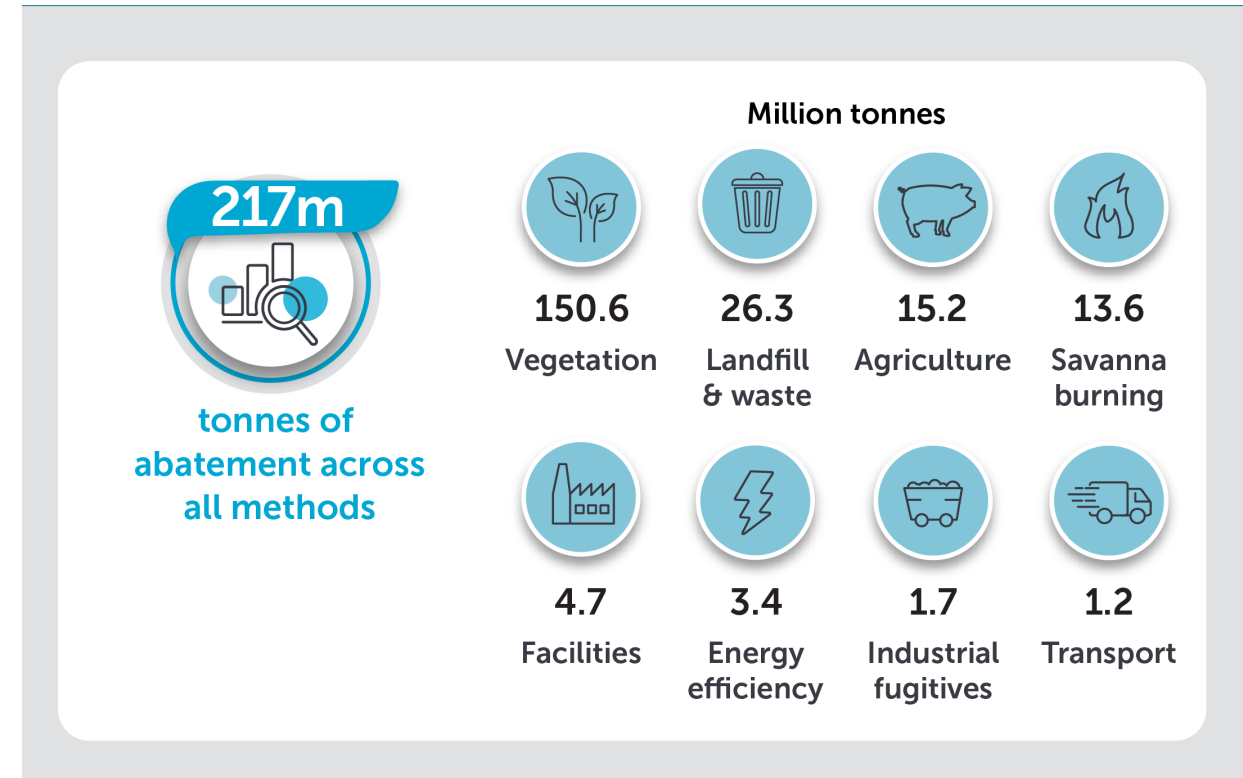
- Emissions Reduction Fund (ERF)
  - Carbon credits (ACCU) allocated for
    - Reducing GHG emissions
    - Increasing carbon stored in soils and vegetation
- Government was sole purchaser
  - 6 monthly reverse auction
    - BUT
  - Secondary ACCU market now bigger
- Participation is voluntary



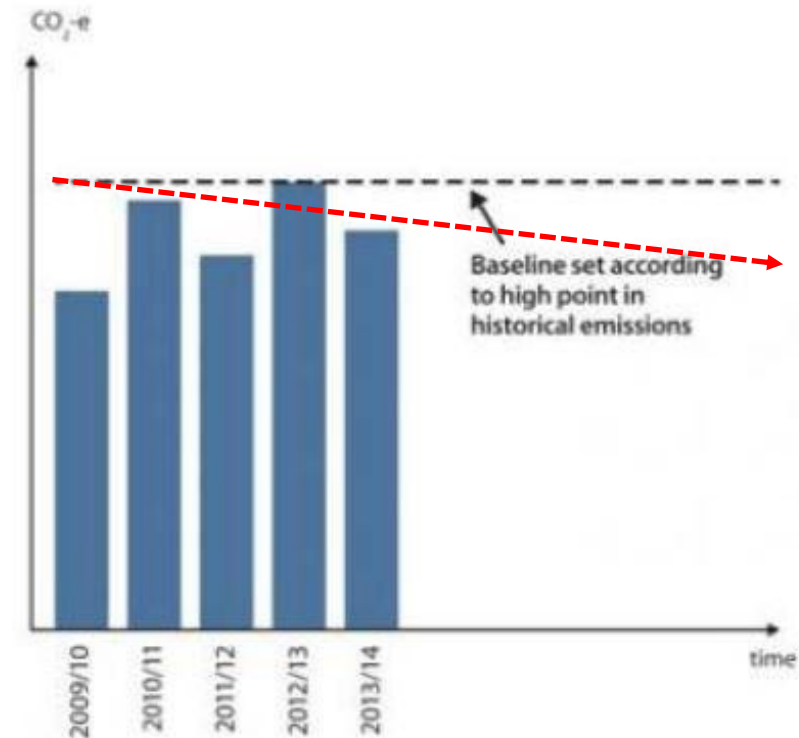
# Australian Climate Change Policy: Emissions Reduction Fund



- Industry
  - Carbon capture and storage (1)
  - Energy efficiency (6)
  - Landfill and alternative waste treatment (6)
  - Mining, oil and gas (2)
- Transport (2)
- Agricultural (7)
- Savanna fire management (2)
- Vegetation (9)



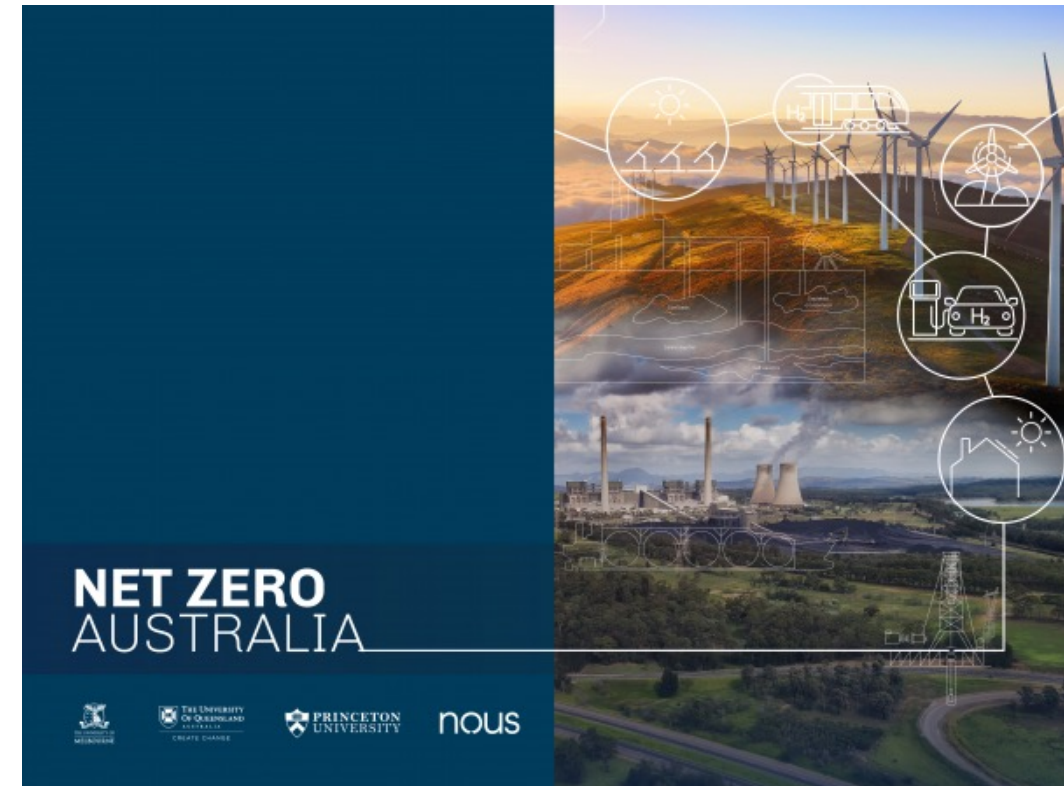
- Safeguard required
  - Emitters over 100,000 t CO<sub>2</sub>e/y
  - Cap determined by historic reporting
- Secondary market
  - Need to surrender ACCUs above their cap
- Proposal to include 4.9% declining cap
  - Trade Exposed facilities 2%
  - Becomes standard baseline and credit market mechanism





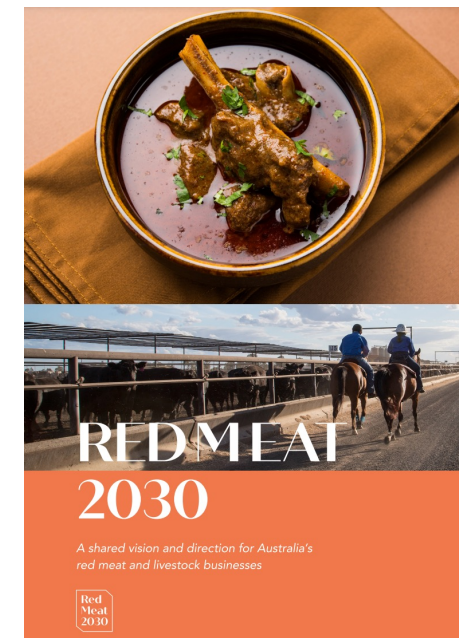
- Fonterra
    - Climate-neutral growth to 2030 for pre-farmgate emissions from a 2015 base year
  - Unilever \*\*
    - Reducing the GHG impact of their products by 50% by 2030, compared to baseline of 2010
  - Mondelez
    - Reduce absolute GHG from manufacturing 15%
    - 100% renewable energy
  - Nestle \*\*
    - Zero environmental impact in our operations
  - JBS
    - Net-zero GHG by 2040 and zero deforestation across its global supply chain by 2035
  - Heineken
    - Carbon neutral barley-malt supply chain
  - Rabobank & NAB
    - Net zero financed emissions by 2050
    - Hold 50% of Australia agri-debt market
  - Mars
    - Reduce GHG across our value chain 27% by 2025 and 67% by 2050 (from 2015 levels)
  - Kellogg Company \*\*
    - 65% reduction by 2050
    - 100% renewable energy
  - Pfizer
    - 60 to 80% by 2050
  - Wilmar international
    - 89.72% less GHG from 2013 to 2020
    - 100% renewable energy
  - Olam
    - Reduce GHGs by 50% by 2030 both in our own operations and in our supply chain
    - By 2050, we aspire to be carbon positive in operations, requiring a 5% emissions reduction per year from 2031 – 2050
- \*\*committed to increasing plant-based protein
- 
- Of the 100 largest economies 69 are companies and 31 are countries
  - *Government policy may now be less influential than market forces*

- Agriculture will need to **inset** ALL their own soil and tree carbon
- Maintain supply chain access post 2030
- Climate Active certification
  - Insetting framework for consultation
  - Allows 10-year rolling mean on sequestration





- Australian Red Meat Industry (RMAC 2030 strategy)
  - Australian red-meat can be carbon neutral by 2030 (CN30)
  - Language switching to climate neutral
- Most other industries have intensity targets still
- Global Methane Pledge
  - 30% less methane by 2030 by 105 countries
  - Australia now a signatory



- Livestock

- Arcadian Organic & Natural's Meat Co
- Flinders + Co Meats
- NAPCO
- COLES

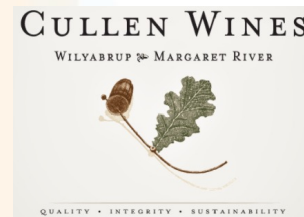


CERTIFICATION #NC370



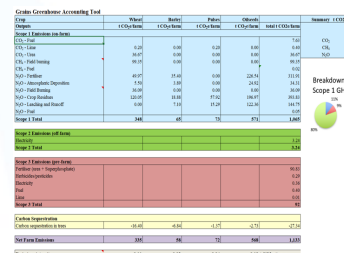
- Wine

- Ross Hill
- Tulloch
- Cullen



- All suppliers will conduct GHG audit
  - QR code sent through blockchain to purchaser

- Purchaser starts buying at lowest GHG
  - The higher GHG they purchase costs them more carbon offsets



[piccc.org.au](http://piccc.org.au)



Sector	Category	Methods (projects)	Credits issued
Agriculture	<ul style="list-style-type: none"> <li>Manure management</li> </ul>	<ul style="list-style-type: none"> <li>Animal Effluent (pigs/dairy; 7 )</li> <li>Engineered biodigesters (pigs; 1)</li> <li>Methane from piggery (10)</li> </ul>	<ul style="list-style-type: none"> <li>271,166</li> <li>49,650</li> <li>756,705</li> </ul>
	<ul style="list-style-type: none"> <li>Cattle</li> </ul>	<ul style="list-style-type: none"> <li>Feeding nitrate to beef cattle (0)</li> <li>Beef cattle herd method (14)</li> </ul>	<ul style="list-style-type: none"> <li>Nil</li> <li>593,563</li> </ul>
	<ul style="list-style-type: none"> <li>Dairy</li> </ul>	<ul style="list-style-type: none"> <li>Feeding dietary oils to dairy cattle (0)</li> </ul>	<ul style="list-style-type: none"> <li>Nil</li> </ul>
	<ul style="list-style-type: none"> <li>Cotton</li> </ul>	<ul style="list-style-type: none"> <li>Fertiliser efficiency in cotton (0)</li> </ul>	<ul style="list-style-type: none"> <li>Nil</li> </ul>
	<ul style="list-style-type: none"> <li>Soil Carbon</li> </ul>	<ul style="list-style-type: none"> <li>Measurement of soil carbon (172)</li> <li>Soil carbon in grazing (39)*</li> <li>Measurement + Modelling (159)</li> </ul>	<ul style="list-style-type: none"> <li>Nil</li> <li>1,904</li> <li>Nil</li> </ul>
	<ul style="list-style-type: none"> <li>Savanna Burning</li> </ul>	<ul style="list-style-type: none"> <li>Savanna fire management (96)</li> </ul>	<ul style="list-style-type: none"> <li>11,250,810</li> </ul>
	Vegetation management	<ul style="list-style-type: none"> <li>Regeneration of permanent native forest</li> <li>Avoided clearing of native regrowth</li> <li>Native forest from managed regrowth</li> <li>Plantation forestry</li> <li>Avoided deforestation</li> </ul>	<ul style="list-style-type: none"> <li>51,172,825</li> </ul>
		<ul style="list-style-type: none"> <li>Avoided deforestation (42)</li> </ul>	<ul style="list-style-type: none"> <li>16,076,706</li> </ul>