

Raising the steaks

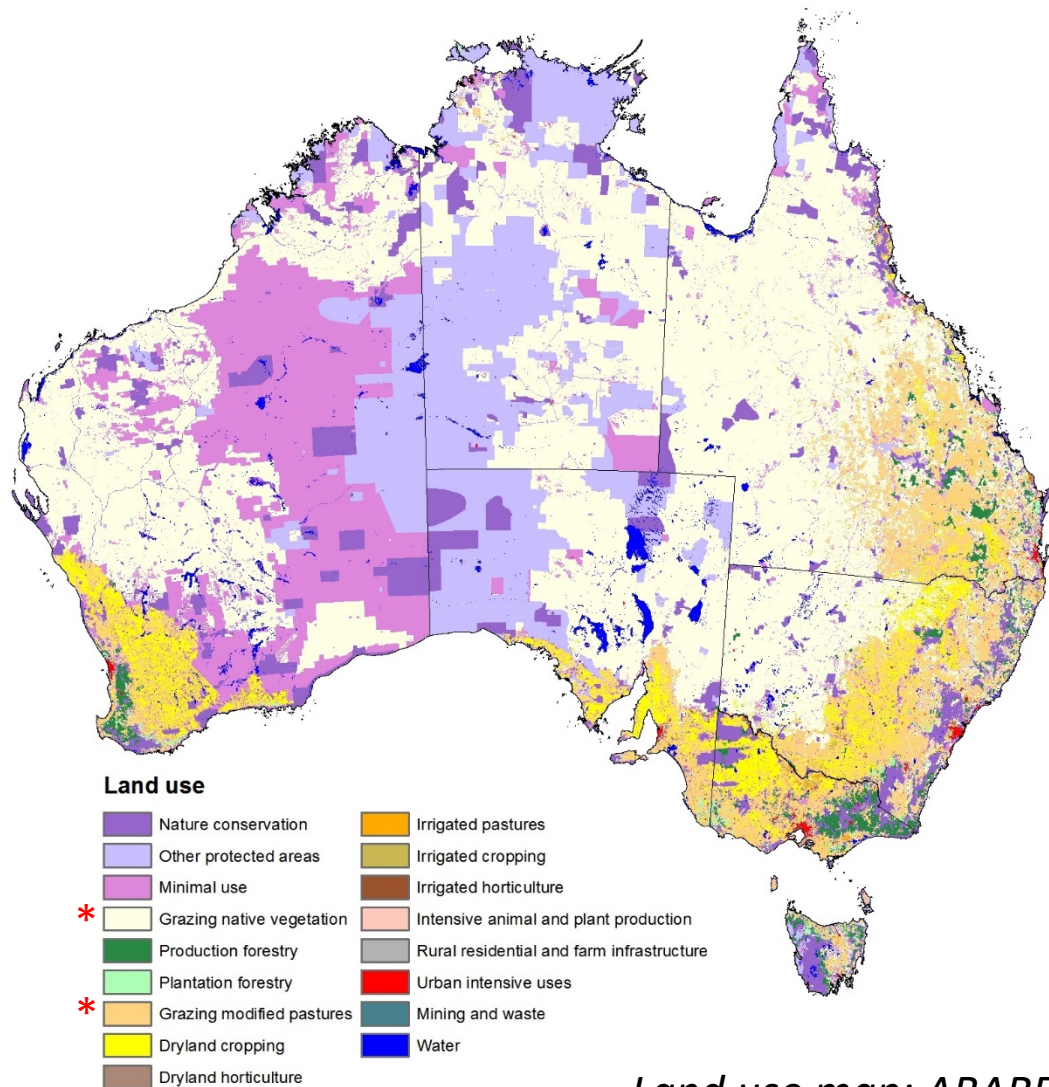
Reducing greenhouse gas emissions from red meat

Di Mayberry

The red meat industry is important



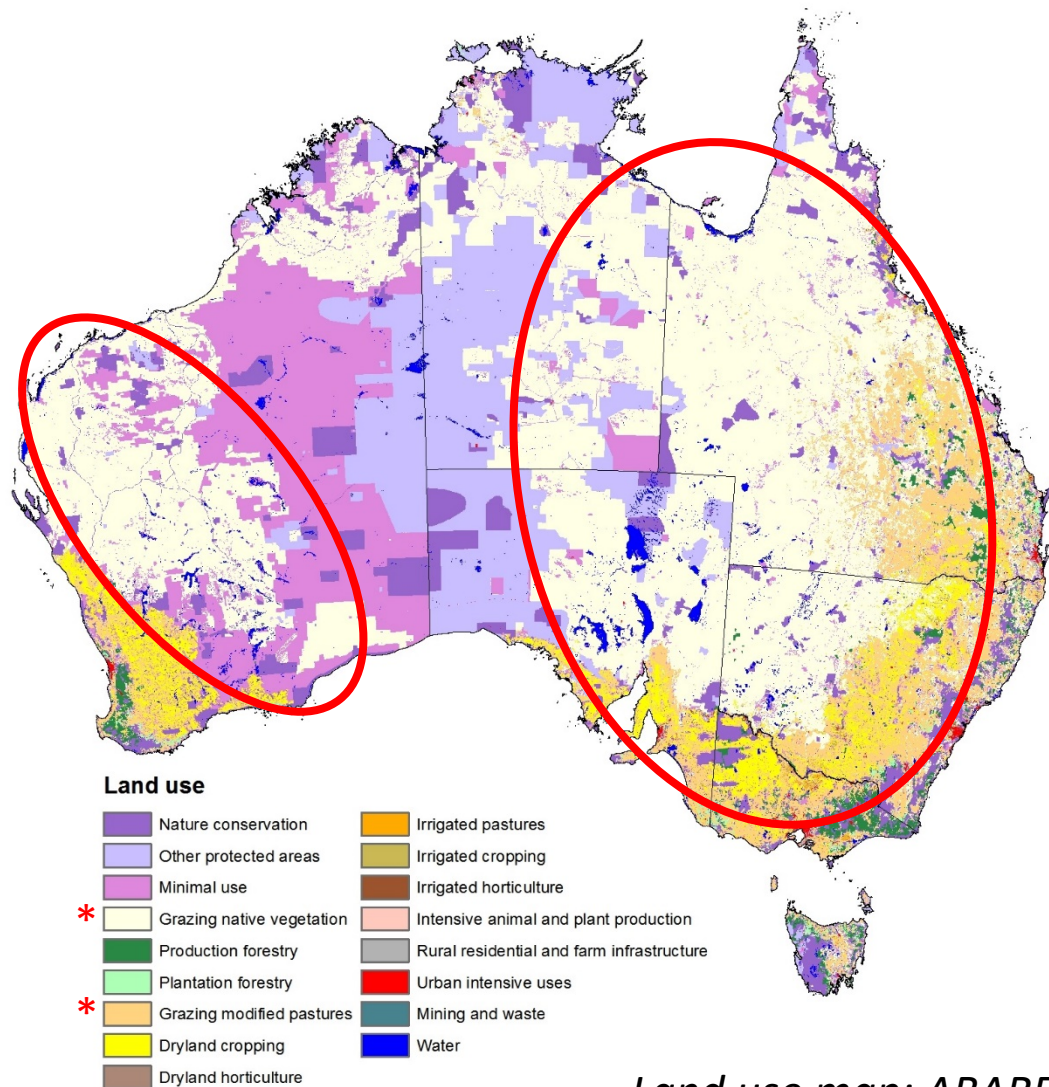
Red meat production in Australia



Land use map: ABARES

- Major land use in Australia
- 24 million beef cattle
- 71 million sheep
- Most animals are managed in extensive production systems

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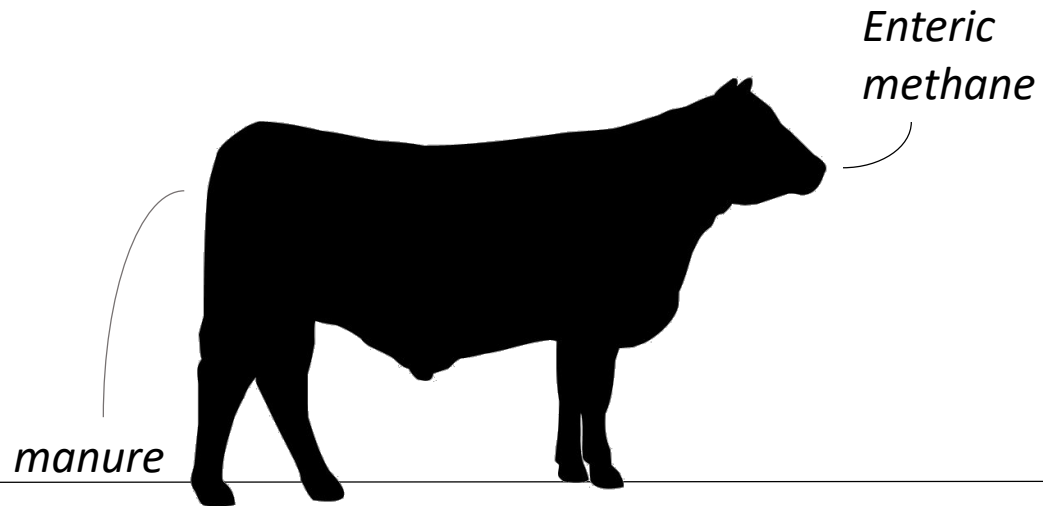
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Red meat production in developing countries

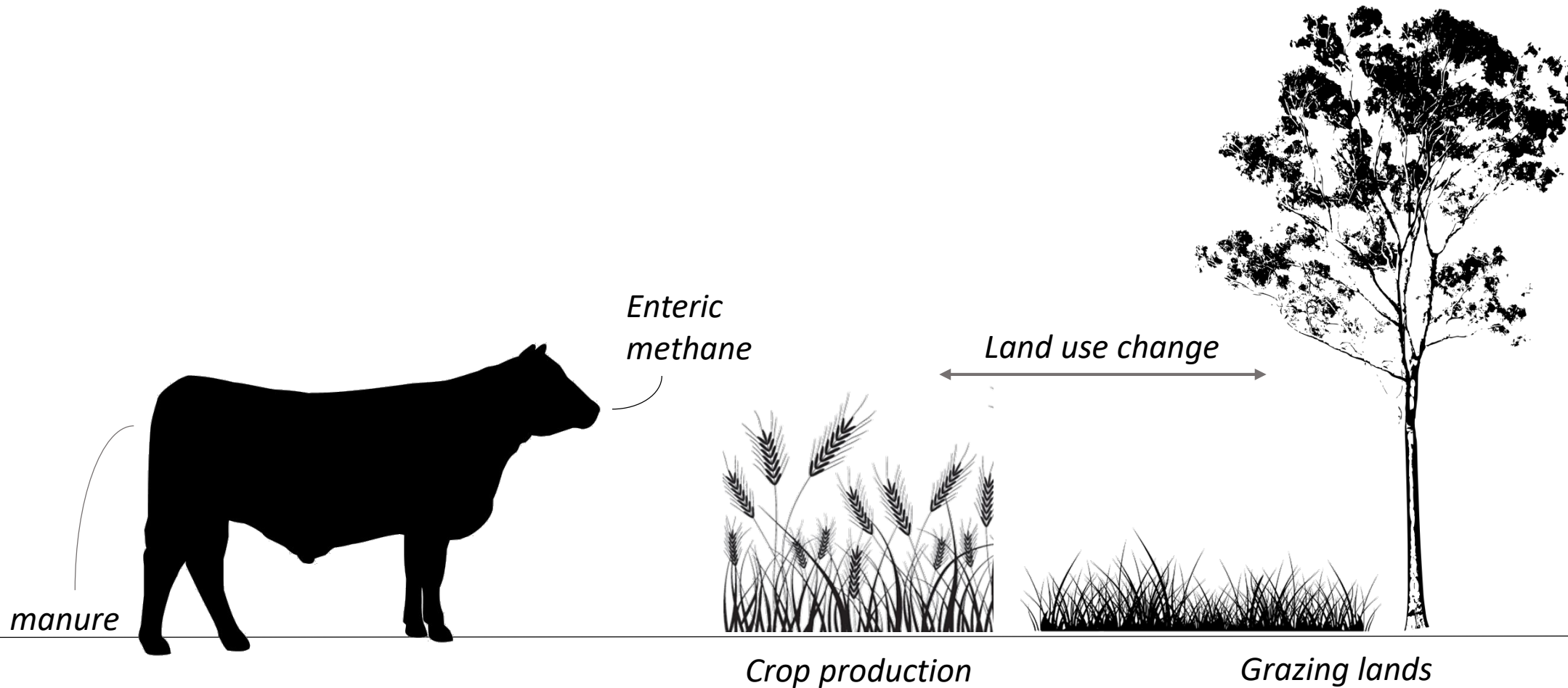
- Large numbers of farmers with small numbers of livestock
- Limited feed resources – crop residues & common land
- Low animal productivity



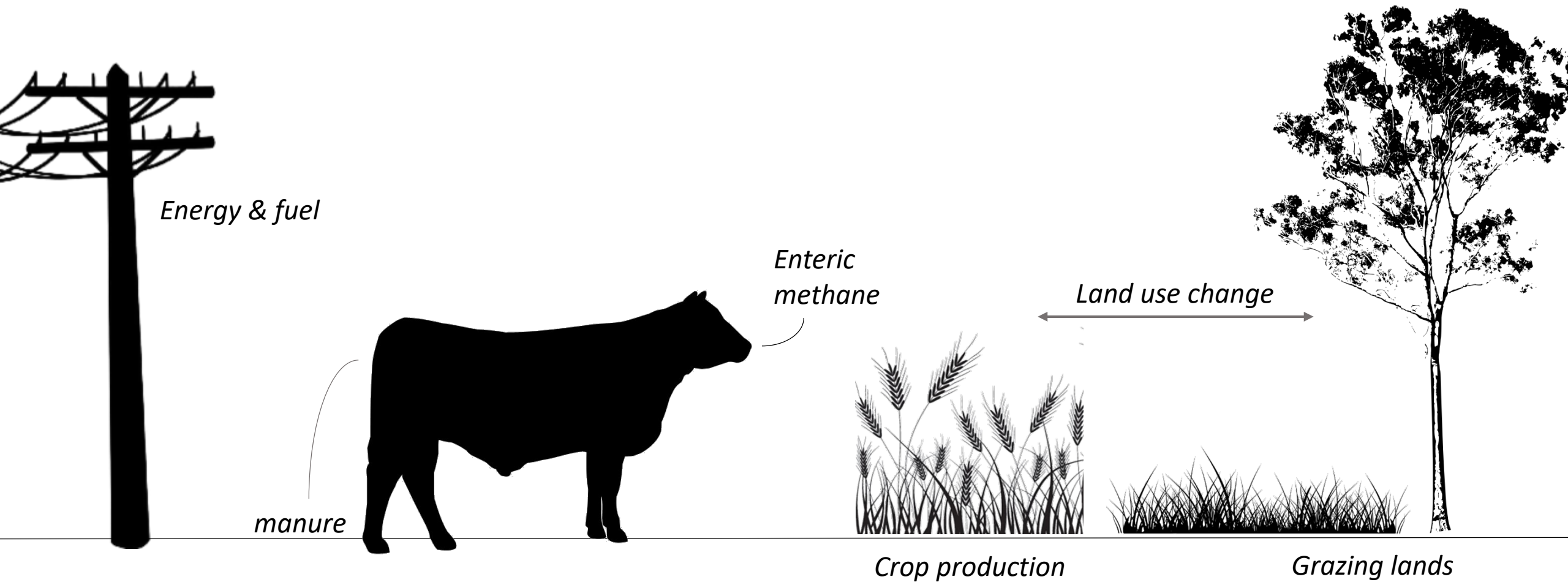
GHG emissions from red meat



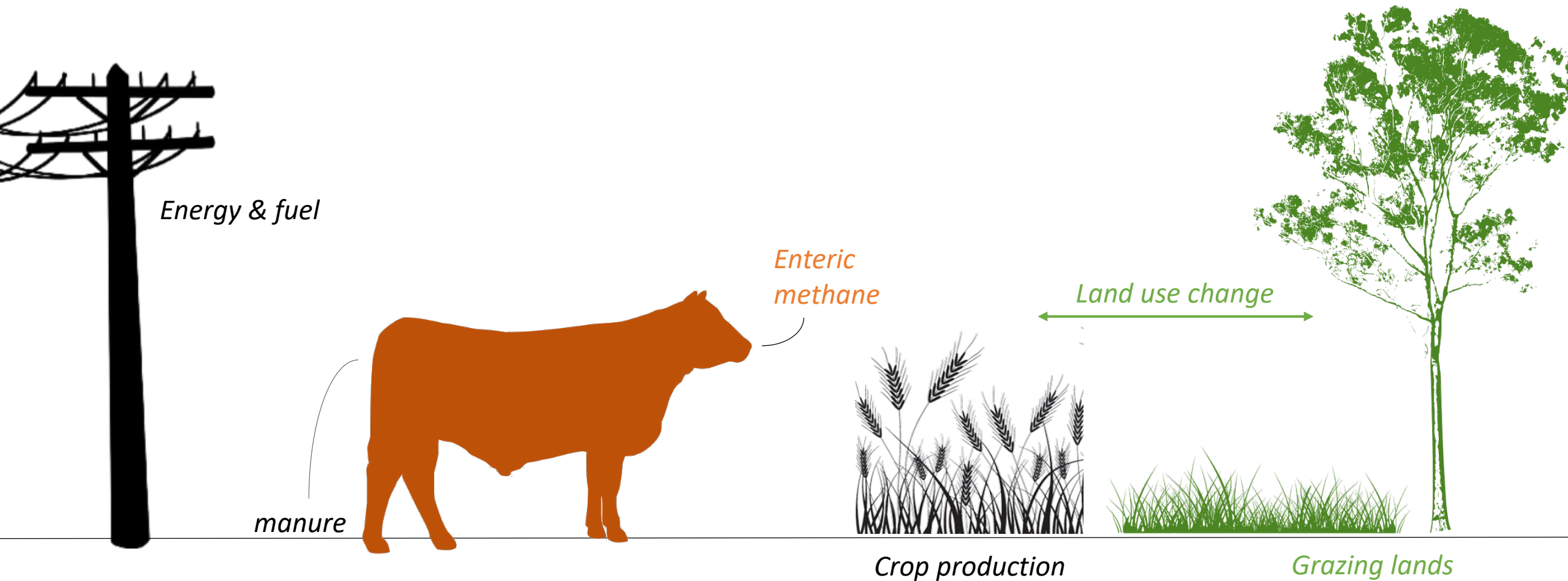
GHG emissions from red meat



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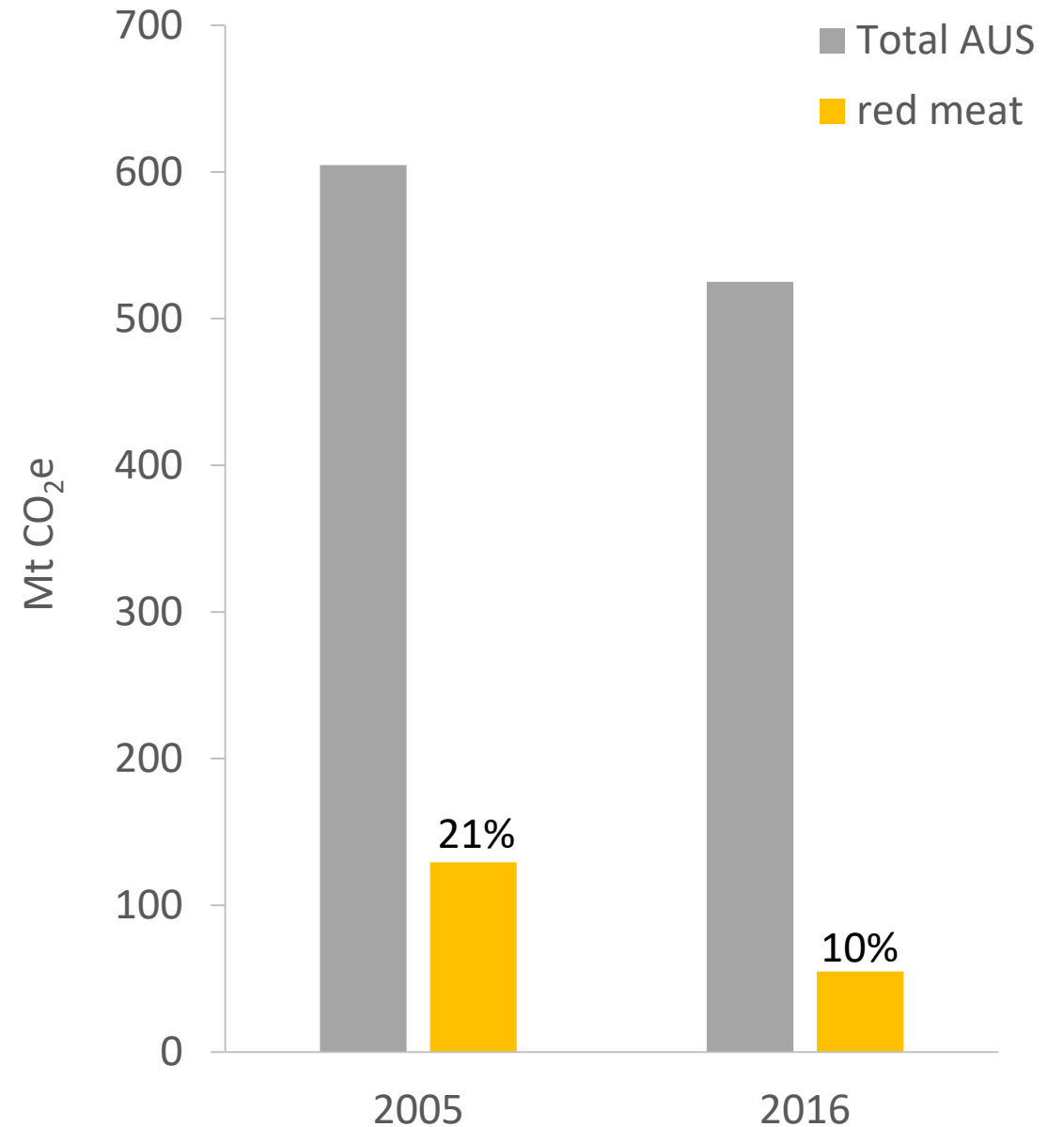


GHG emissions from red meat



GHG emissions from the Australian red meat industry have decreased since 2005

Further reductions will rely on decreasing emissions enteric methane and land management



Reducing enteric methane

- Diets
 - Feed additives and supplements
 - Legumes (e.g. Desmanthus)
- Vaccines
- Breeding low methane-emitting animals
- Animal husbandry
 - Reduced animal losses
 - Increased growth & reproduction



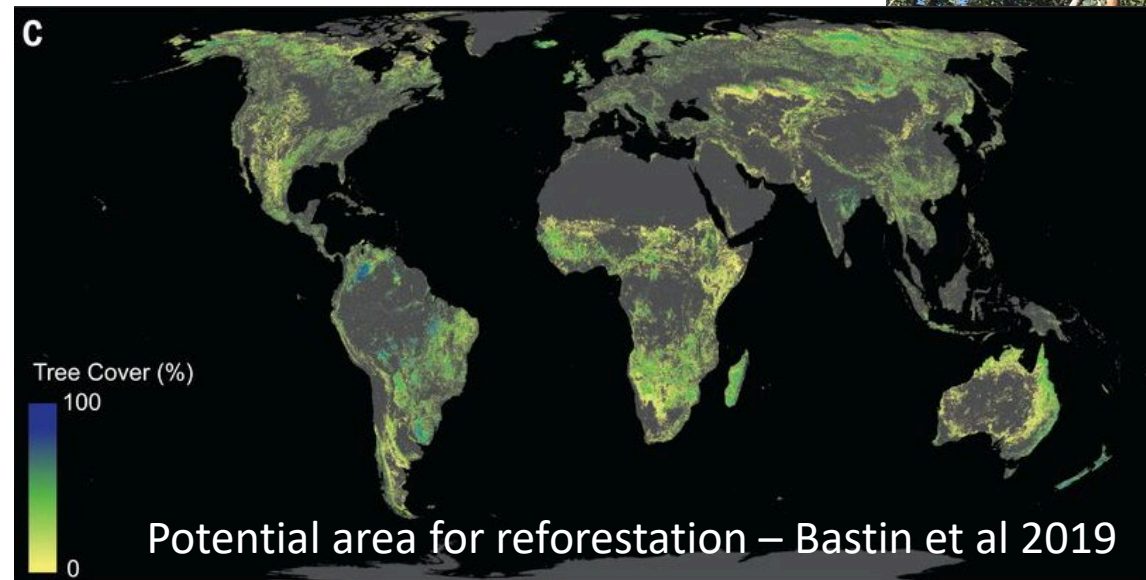
Reducing GHG emissions from land

- Continued focus on land management
 - Vegetation management
 - Fire management
- C sequestration in biomass



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Enabling change

- Reducing GHG emissions from red meat requires support from policy makers and markets
- Policies and pathways to reduce GHG emissions should consider multiple dimensions of red meat production
- Reductions in GHG emissions in red meat need to be accompanied by change in other sectors

Mayberry D, Bartlett H, Moss J, Davison T, Herrero M (2019) Pathways to carbon-neutrality for the Australian red meat sector. *Agricultural Systems* **175**, 13-21.