National Livestock Methane Program II

PLAN ON A PAGE

MEAT & LIVESTOCK AUSTRALIA

GOAL — To bring profitable livestock methane mitigation technologies to market

HOW? — *Some* product discovery and screening ▶ Feasibility assessments ▶ Product scale-up and delivery ▶ Facilitate adoption

WORK AREAS (CN30)

EMISSIONS AVOIDANCE (ON FARM / ANIMAL)

ACTIVITIES building on work conducted as part of NLMP (2012–2015) and RELRP (2009–2012)

OUTPUTS

SUPPLEMENTS AND ADDITIVES

- Technologies to avoid methane emissions from livestock (anti-methanogenic compounds, natural marine and terrestrial bioactives)
- Supplement delivery system design – feedlot and grazing

FORAGES

- Assessing new pastures, shrubs and legumes that offer co-benefits of livestock productivity and lower enteric methane emissions
- Facilitate adoption of known methane-reducing legumes and forages

LOW METHANE LIVESTOCK

- Improvement in animal genetics and husbandry practices to increase production efficiency and lower enteric methane emissions
- Manipulating rumen microbiome and fermentation

INTEGRATED MANAGEMENT SYSTEMS

- **Licence** to operate (CSR, regulatory, markets)
- **Technical and economic analysis** of farming systems to determine appropriate combinations of emissions avoidance (and carbon storage) technologies and practices
- Incorporating emissions avoidance (and carbon storage) practices into **existing extension and adoption platforms;**
- Developing **resources and tools** to support adoption and proper execution of emissions avoidance (and carbon storage practices)
- Developing new **scientific methodologies** to generate carbon credits
- Aligning outputs with generation of GHG accounting frameworks (so that we deliver environmental and productivity benefit)

DEVELOPMENT REQUIREMENTS

- Collaborators and partners
- Timelines and budgets
- Outcomes from previous research

- Demonstrate commercial viability and path to market
- All value chain partners
- Collaborators and partners
- Timelines and budgets
- Existing extension and adoption platforms
- Existing tools and resources (gaps)

VALUE PROPOSITION

- Economic benefits (increase productivity gain, improved drought resilience etc)
- Environmental benefits (reduce methane emissions, improved soil health etc)
- Social benefits (nutritious, red emissions diet)
- Animal health and welfare benefits (improved diet and nutrition)

- Demonstration of commercial viability
- Repeatable adoption pathways
- Scalable manufacturing

ENABLERS — GHG emissions accounting framework, carbon credit methods, certification/accreditation services