



AMPC STRATEGIC
PLAN SUMMARY
2013



AMPC

FOREWARD

Over the next five years, the Australian Meat Processor Corporation (AMPC) will potentially make new investments of \$60 million in research, development and extension (RD&E) and \$30 million in marketing to support a competitive Australian meat processing sector and broader red meat supply chain.

Our investments will be guided by the strategic research priorities of the Australian Government and the Australian red meat processing sector and supply chain. To identify these priorities, AMPC engaged in and conducted extensive consultations with our stakeholders.

Our primary stakeholders, the Australian Government, Meat and Livestock Australia (MLA) and the Australian Meat Industry Council (AMIC), have worked very closely with us to identify their strategic research priorities and we would like to thank them for their commitment and contribution.

Other stakeholders with whom we consulted included all AMPC members (154 processing establishments), regional processing networks including the Queensland Country Meat Processors, the NSW domestic processors and the Australian Processor Council, scientists and technicians involved in processing and red meat supply chain RD&E activities, supply chain organisations, including CattleCouncil, Sheepmeat Council, the NFF and the Red Meat Advisory Council (RMAC). The AMPC team sincerely thanks all of our stakeholders for taking the time to participate and for providing advice on the priorities impacting our red meat processing sector.



How we will invest in and direct this research is outlined in this Red Meat Processing Strategic Research, Development and Extension Plan 2013–17 and we commend this plan to you. As our stakeholders have requested, over the next five years AMPC will place a greater emphasis on directed research and on ensuring that research outcomes can be adopted by our stakeholders, as well as focusing on enhanced extension, adoption and commercialisation approaches. Our stakeholders also requested greater scientific inputs towards enhancing and addressing major issues such as food safety, new product development, market access, industry sustainability and climate change.

It is recognised that this Red Meat Processing Strategic RD&E Plan is to be considered interim until 2015 on the basis that other industry and stakeholder Strategic Plans that influence the direction

of AMPC investment will be developed during this time. These plans include the Beef Industry Strategic Plan, the Red Meat Industry Strategic Plan and Meat and Livestock Australia's Strategic Plan. The high degree of co-investment and collaboration across organisations in the red meat supply chain dictates that the outcomes of these other planning processes must be taken into account as part of the annual review of this (AMPC) Red Meat Processing Strategic RD&E Plan for 2013-2017.

AMPC looks forward to working with all of our key stakeholders over the next five years to continue strategic investment towards sound, scientific solutions, industry capability building and marketing activities that will contribute to an Australian meat processing sector and broader red meat supply chain that remains profitable, competitive and sustainable. meat industry and the broader Australian community.

AMPC AT A GLANCE

The Australian Meat Processor Corporation (AMPC) is the national Research & Development Corporation that represents the red meat processing Industry throughout Australia. We are governed by a Board of Directors, and our national operations are directed from our Sydney location.

AMPC's mandate is to support Research, Development and Extension (RD&E)

initiatives that are directed at improving the profitability, sustainability and efficiency of the meat processing industry.

Red meat processor levies are strategically invested in RD&E and Marketing programs aimed at delivering improvements to the processing sector and that provide significant benefit to the whole of the red meat industry and the broader Australian community.

AMPC's vision is for a sustainable, profitable and competitive red meat processing sector that meets national and international customer, consumer and community expectations.

STAKEHOLDER CONSULTATION

AMPC is committed to working with its partners and stakeholders to achieve the efficient application of levy funds to required RD&E and Marketing activities. This is supported by focusing where possible on enhancing co-investment and collaboration. AMPC works closely with:

- The Australian Government;
- The AMPC Processor membership;
- Meat and Livestock Australia (MLA) – AMPC's major RDC partner;
- The Australian Meat Industry Council (AMIC);
- The partner organisations of the red meat industry Memorandum of Understanding and the Red Meat Advisory Council (RMAC) that form the structure of the red meat industry.

These collaborations ensure that processor levy funds are appropriately and strategically invested to deliver tangible results for processors, Government, the red meat industry and the Australian community.

CONTEXT FOR THIS PLAN

There are many plans and strategies that inform the investment, direction and priorities of the red meat sector broadly. Below are some of the prominent plans, although it is noted that further plans in this arena also influence direction of investment, such as the Sheep Industry Strategic Plan,

the Beef Industry Strategic Plan and the relevant cross sectoral Strategies under the National RD&E Framework.

For AMPC, particular focus as part of the preparation for this AMPC Strategic RD&E Plan, was placed on The Commonwealth

Government priorities and those in the Meat Industry Strategic Plan, as well as MLA's strategic planning on the basis that MLA and AMPC planning alignment contributes to ensuring whole of industry outcomes.

NATIONAL RESEARCH PRIORITIES	RURAL RESEARCH PRIORITIES	MEAT INDUSTRY STRATEGIC PLAN PRIORITIES	MEAT AND LIVESTOCK AUSTRALIA RD&E PRIORITIES	NATIONAL BEEF AND SHEEPMATE RD&E STRATEGY PRIORITIES
An environmentally sustainable Australia	Natural Resource management	Environment and ethics	Improving market access	Enhancing food safety, product integrity and biosecurity
Safeguarding Australia	Climate variability and climate change	Market access	Growing demand	Increasing natural resource use efficiency and reducing environmental impacts
Promoting and maintain good health	Biosecurity	Our industry	Increasing productivity across the supply chain	Increasing cost efficiency and productivity (including adaptability and risk management)
Frontier technologies for building and transforming Australian Industries	Supply Chain and markets	Our people	Promoting industry integrity and sustainability	Enhancing integration and value adding in supply chains (including cost efficiency)
	Productivity and adding value	Innovation	Increasing industry and people capability	Improving beef and sheepmeat eating and nutritional quality
	<i>Supporting the priorities</i>	Marketing and promotion		Developing new and existing beef and sheepmeat markets
	<i>Innovation skills Technology</i>	Economics and infrastructure		Aligning animal welfare practices with consumer and community expectations

STRATEGY RESOURCES AND INPUTS

Whilst a series of plans informed the development of this AMPC Strategic RD&E Plan, AMPC also conducted its own research and consultation to ensure that processor priorities and those of Government, policy makers, researchers and technical experts were also reflected (a reference list is provided in Annex 1).

In this regard, an Environmental Future Scan was conducted in 2012 by McKinna et al. The intent of the environmental future scan was to identify external or uncontrolled factors that are likely to impact on, in this case, the Australian red meat industry, over the horizon of the strategic plan. In developing the environmental future scan, the consultant, with industry, applied the PESTEL framework, which examined the issues through the lenses of: Political, Economic, Social, Technological, Environmental and Legal/Legislative.

The process to develop the Environmental Future Scan 2012 began by scanning relevant databases to identify factors that will impact on the red meat industry, guided by these headings. Subsequent to this, a range of interviews with representatives from industry, Government, trade, finance, science/technical, supply chain, customer, retailer and consumer, were held.

The approach taken in reporting on the results of the review and the interview process was to divide the Environmental Future Scan results into two basic streams, 'Demand' and 'Supply.' At the next level, the 'supply' factors have been analysed along a supply chain line, breaking down the information into the key links: On-farm, Processing, Value – adding and Whole-of- Supply Chain. The 'demand' section is broken down into the

domestic and export markets. The full environmental future scan is one of the underpinning documents for AMPC's Red Meat Processing Industry Strategic Plan.

The Environmental Future Scan 2012 was utilised for two industry workshops to identify the research, development, extension and marketing implications for AMPC and its partner organisation MLA on the basis of a fully integrated and shared investment portfolio between the RDCs. The outtakes from the workshops were filtered, grouped, prioritised and integrated to form the basis for this Strategic plan.

The megatrends relating to red meat processing that have been taken into account for the development of this AMPC Strategic RD&E Plan are listed below.



MEGA TREND 1: GROWING AND SHIFTING DEMAND IN GLOBAL MARKETS

Global demand for food will need to increase by 150% by 2053 to feed 9 billion people. This will grow two markets: low cost commodities for third world countries and premium differentiated brands for affluent consumers in developing economies. Because of cost structure and lack of global competitiveness, Australia must focus on the second market.

MEGA TREND 2: CHANGING PATTERNS OF CONSUMPTION DOMESTICALLY, DRIVEN BY SHIFTS IN DEMOGRAPHICS AND SOCIAL VALUES.

The combination of an ageing population, the growing ethnicity of Australia and intergenerational behavioural differences will produce shifts in demand patterns for red meat. This could result in changes such as reduced per capita consumption of red meat, growing demand for secondary cuts for slow cooking methods or growing demand for Halal-certified meat.

MEGA TREND 3: RISING PRODUCTION COSTS AS THE INDUSTRY RESPONDS TO CLIMATE CHANGE, WATER AVAILABILITY AND RESULTING GOVERNMENT POLICIES

Production costs will rise due to increased water costs, the impact of climate change on-farm, the direct and indirect impact of a carbon tax and overall business input costs.

MEGA TREND 4: RISING LABOUR COSTS DUE TO SHORTAGES OF SKILLED WORKERS AND EMPLOYMENT COMPLIANCE.

The shortage of skilled and unskilled labour (particularly in regional areas) is limiting the ability of the agri-food sector to grow, adding to the cost of production and reducing Australia's global competitiveness. This situation is being exacerbated by the mining boom.

MEGA TREND 5: THE SHIFT TO CLOSED-LOOP SUPPLY CHAINS

Supermarkets and large corporate food service users are driving the adoption of closed-loop supply chains. Closed-loop supply chains remove volatility and risk for processors, but they also transfer market power to retailers and foodservice companies. This shift in market power is changing the whole economic dynamic of the industry.

MEGA TREND 6: AUSTRALIA'S DECLINING GLOBAL COMPETITIVENESS

Australia's agri-food sector is experiencing deteriorating global competitiveness due to a high Australian dollar, labour availability, regulation and cost, inadequate infrastructure and rising input costs.

MEGA TREND 7: RISING CONSUMER EXPECTATIONS OF SOCIAL RESPONSIBILITY AND ACCOUNTABILITY

The consumer and societal expectations regarding industry and corporate accountability are progressively rising, due to changed value systems. This has been reflected in animal welfare, environmental sustainability, business ethics and workplace practices. The trend is being accelerated by the impact of social media.

MEGA TREND 8: UNSUSTAINABLY LOW PROFIT MARGINS AT ALL LEVELS IN THE MEAT INDUSTRY

Returns in the meat-processing sector are not at the level required to support the ongoing investment in new and emerging technologies that are necessary to ensure continued competitiveness.

MEGA TREND 9: RISING COST OF COMPLIANCE

Rising compliance costs are reducing the profitability and competitiveness of the processing sector. The problematic areas include customer standards and protocols, market access protocols, OH&S, transportation, financial reporting, environment, biosecurity, traceability and animal welfare.

MEGA TREND 10: INCREASING COMPLEXITY OF MARKET ACCESS

In theory, market access should be improving through FTA developments. In practice, however, technical and border security barriers are being put in place which compromise market access and significantly increase compliance costs.

KEY PRIORITIES AND DRIVERS FOR THE MEAT PROCESSING SECTOR

The RDC model is designed to advance innovation in rural RD&E, particularly where there is market failure, through appropriate industry and government investment. Each RDC has a significant focus on translating research outputs into practical outcomes that provide economic, environmental and social benefits to the RDC's industry and the Australian people.

To help determine where investment should be focused for the best possible impact, AMPC conducted an analysis of the drivers for change in the red meat processing industry which presents key areas where investment should be focussed into the future. It is noted that the degree of investment is dependent on the risks to industry and the value proposition and

it is also recognised that some drivers will warrant more than an RD&E response, where the roles of other organisations along the red meat processing and supply chain as well as AMPC's will come into play.

A summary of the drivers and influences challenging the red meat processing sector is illustrated below:

SUPPLY FACTORS				DEMAND FACTORS	
On-farm drivers	Processing drivers	Value adding drivers	Supply chain drivers	Domestic demand drivers	International market drivers
Climate change	Climate change, natural resource utilisation	Cutting technologies	Carcase quality	Domestic demand consistency	Global economy and outlook
Water availability	Water availability and use in manufacturing	Packaging technologies	Food safety and integrity	Drivers of consumption	Global demographics and community/ consumers
Labour availability & succession planning	Labour availability & succession planning	New product development	Freight and logistics/ infrastructure	Changing customer and consumer expectations	Maintaining and demonstrating food safety/ integrity, disease free status
Land use and sustainability	Infrastructure sustainability	Value adding to existing products	Purchasing and acquisition of livestock and the trading environment	Competition for demand	Market access and trade agreements and the movement of global standards
Farm productivity	Global competitiveness	Product attributes	Information technology and data management	Changing demographics of the community	Influences of technical and biosecurity barriers to trade
Corporate investment	Low margins and profitability	Ingredient composition and use	Livestock management, production, logistics and health	Changing food choices, lifestyles and eating styles	Compliance burdens relating to international trade
Social responsibility and accountability	Compliance requirements for market access	Value adding from waste/bio products	Biosecurity and mitigation of disease threats	Nutrition and health trends	Australia's global competitiveness
Competing industries and trade disruptions	Emerging technologies and their impact	Alternative products from raw materials	Improvements in yield and quality	Retail dynamics	Food security
	Competitiveness and value adding	Improvements in measurement and demonstration of yield, quality and integrity	Social media developments	Proprietary brand and private label emergence	industry cost base compared with other low-value commodity markets

KEY STRATEGIC IMPERATIVES

ENHANCING DOMESTIC AND GLOBAL COMPETITIVENESS

Strategies for unlocking market potential and research to address current or emerging market access barriers is of major importance to the red meat processing industry's sustainability, profitability and

future net value. The viability of industry is dependent on ensuring global markets remain accessible, efficient and attractive for investment by trading partners.

STRATEGIES	MEASURES OF SUCCESS
Research, identify, prioritise and address trade and technical market access barriers to develop agreed strategy in industry and with Government	<ul style="list-style-type: none"> Minimal or no reduction in market access through 2013-2017 as a result of technical or regulatory issues Removal of at least 2 market access barriers identified in the benchmarking stocktake and priority analysis process from 2013
Apply sound, scientific solutions to mitigate and remove trade barriers and enhance opportunities into existing markets	<ul style="list-style-type: none"> Market access is improved in 2 developing markets by 2017 Priorities for action are defined, analysed and communicated to Government The red meat processing Market Access Strategy is established and responds to regular review and benchmarking of market access issues
Build capability in key technical and trade disciplines to support ongoing response to market access, trade negotiations, technical and regulatory issues as they arise	<ul style="list-style-type: none"> Strategic trade reform agendas are established for agreed high priority market access issues and challenges Initiatives to improve market access are supported by well-considered and strategic investment in RD&E
Maximise the market access options for red meat processors through effective trade reform activities	<ul style="list-style-type: none"> Initiatives to improve and/or develop market access have ongoing research, technical and developmental support Independent evaluations demonstrate that AMPC investment with MLA has contributed to improved market access against processor priorities
Respond to domestic and international market expectations by effectively demonstrating and 'describing the system' under which red meat is processed (and produced)	<ul style="list-style-type: none"> Capability and capacity to address and respond to market access activities is increased between 2013-2017 Customers, trading partners and the general domestic and international community are informed and engaged in relation to the processing of red meat and systems supporting its integrity and wholesomeness

Delivering to customers and consumers

In relation to increasing the demand for Australian meat products, global demand is estimated to increase by 150% by 2050, this will result in three markets: the first being low cost commodities for third world countries, the second premium

differentiated brands for affluent customers in developing countries and the third adding value through the adoption of technologies that provide options for lower value cuts. Due to the cost structure and current challenges with global competitiveness

as a consequence of rising input costs, compliance burdens, aging infrastructure and labour availability, Australia will be heavily focussed on the second market.

STRATEGIES	MEASURES OF SUCCESS
Understand what consumers and customers want in relation to red meat products and how these expectations would be met	<ul style="list-style-type: none"> • Development and refinement of a predictive model for ongoing change over time analysis of changing consumer, community and customer attitudes to red meat products, social influences and product attributes • Develop and prove interventions for eating quality, nutrition, consistency and productivity • Develop and maintain standards and measurement tools to underpin guarantees of eating quality • Establish at least 5 post-graduate programs in meat science disciplines • Measurable improvements in the eating quality and consistency of Australian beef and sheep meat
Demonstrating the importance of red meat in the diet	
Delivering wholesome and consistent eating quality	
Enhancing and communicating the value proposition of the red meat category to the customer, consumer and community	



Product integrity, safety and wholesomeness

It is critical that Australia be considered a leader in the supply of safe and wholesome red meat products and that the systems employed can validate and communicate these outcomes. Furthermore, freedom from major diseases underpins Australia's access to the world's premium meat markets

and our ability to quickly and effectively quarantine and manage any disease incursions can significantly reduce the costs associated with such an incident in terms of eradication expenses, lost market access and damaged reputation. Provision of a response capability to manage unforeseen food

safety and integrity issues is also a necessity therefore the meat processing industry will provide further consideration to investment into building capability and capacity in microbiology, epidemiology, veterinary and meat science disciplines within the future planned research programs.

STRATEGIES	MEASURES OF SUCCESS
Research and development to ensure food safety systems and practices are the landmark of Australian product	<ul style="list-style-type: none"> Development and refinement of a predictive model for ongoing change over time analysis of changing consumer, community and customer expectations and information needs to enable timely and accurate industry responses
Maintain and enhance efficient product integrity standards and quality assurance systems	<ul style="list-style-type: none"> Establish agreed baseline performance measures for food safety, product integrity, quality assurance processes and verification
Maintain and enhance world class traceability systems	<ul style="list-style-type: none"> Promote the safety and integrity of Australian red meat products to our international and domestic customers while minimising food safety and product integrity related incidents
Biosecurity, residue management and animal health standards are underpinned by sound science	<ul style="list-style-type: none"> Provide monitoring and issues management capacity to avoid loss of market access due to meat safety, product integrity, traceability, biosecurity or animal welfare concerns
High standards of animal welfare are demonstrated	<ul style="list-style-type: none"> Demonstration of standards and practices underpinning animal health, traceability and animal welfare

Improving meat processing productivity, products and processes

Processors operate complex businesses in an environment characterised by highly variable seasons and markets. It is essential that research and development delivers new tools, manufacturing practices and technologies that support producers to become more productive and efficient. New and emerging challenges include

labour and skills shortage, competition brought by emerging international technologies, climate challenges including drought, increasing regulatory pressures, the decline in RD&E expenditure, slower technology outputs and slower rates of adoption all impact the rate of productivity growth in the industry. Consequently, new

technologies, processes and practices that enhance efficiency and profitability are becoming increasingly important for all processing businesses. There are opportunities to address these issues through research and development applied at an industry-wide level.

STRATEGIES	MEASURES OF SUCCESS
Increasing the productivity of red meat processors to compete on the global scene through new technologies and manufacturing practices	<ul style="list-style-type: none"> Developed technologies and management practices that demonstrate a high rate of return on investment, that enhance productivity whilst reducing worker health and safety risks
Examining novel and efficient technologies and processes for whole carcass measurement and monitoring	<ul style="list-style-type: none"> Enhanced objective carcass measurement leads to improvement in productivity and yield
Developing new meat products	<ul style="list-style-type: none"> Platform technologies are established to align real time data capture with new technologies in automation and robotics
Examine opportunities to value add from meat and meat products	<ul style="list-style-type: none"> New products are developed, researched and tested and engagement with processors enables companies to take the products to market through effective brand strategy development programs
Enhance the adoption and commercialisation of new technologies and innovations in industry	

Improving sustainability

Sustainability in the industry relates to a multitude of influences that may be social, economic, infrastructure and environmental in nature. The red meat processing industry is Australia's largest food manufacturer and Australia's largest food exporter. It generates annually \$16.2 billion in GDP, \$7.6 billion in household income, \$5.8 billion in exports

and 148,000 jobs when flow-on effects are included. The industry is heavily export dependent with over 60% of its production exported. Similar to most other agricultural industries, red meat processing businesses face considerable challenges, including international competition, volatile markets and trading conditions, declining resources

and capability, labour shortages, changing customer and trading partner requirements, climate variability and other issues. These challenges continue to place increasing pressure on the ability for industry to remain productive and competitive in the world market.

STRATEGIES	MEASURES OF SUCCESS
Investigating, understanding, communicating and responding to changes and influences in the red meat processing industry	<ul style="list-style-type: none"> • Evaluate performance against the Red Meat Processing Climate Change Strategy and revise the Strategy • Determine industry wide targets for improvement and for monitoring of environmental performance
Technologies, practices and procedures that contribute to improved waste management systems and that add value to waste products	<ul style="list-style-type: none"> • Development of tools for determining suitable technological approaches for future integrated wastewater treatment systems and processes • Develop at least 1 industry tool/program that contributes to improving processor understanding of available mitigation technologies, systems and processes
Improving industry knowledge and capability to achieve sustainable resource management and adapt to climate change	<ul style="list-style-type: none"> • Investigate at least 2 alternative processing practices that demonstrate savings in water and energy use • A business sustainability program assists industry in collaboration with Government to address future challenges and develop long term strategies
Examining options to integrate new technologies and improve industry infrastructure	<ul style="list-style-type: none"> • Collaborative partnerships with other RDCs and Government, together with the VET and University system enable broader engagement and greater attraction of skilled people into the red meat industry
Business sustainability and continuity is enhanced	<ul style="list-style-type: none"> • There is recognition of the skillsets available and operating in industry and the types of career paths available • Strategies and tools are established to respond to the industry need for casual, contract, labour and seasonal workers

Building capability and influencing practice change

The value of research and development is only delivered when outcomes are taken up and successfully implemented by enterprises along the value chain. More attention is now being paid to improving the capacity of the primary industry representatives in both industry and Government to apply the products of science and research and to understand how boosting this capacity and improving their business models will better serve market and customer needs and secure productivity benefits.

The direct involvement of industry and individual businesses in RD&E activities has demonstrated the importance of highly skilled personnel in specific disciplines for meat processing companies. Companies are

increasingly seeking to employ personnel with environmental, science, microbiology, engineering, marketing, economics and business degrees in order to advance their business strategies, deliver projects and new products and engage with customers on complex issues including the role of science underpinning industry standards and systems. Challenges faced in the future include the decline in agricultural graduates seeking to work in the primary industries and perhaps a lack of awareness of the professional career pathways available. Investment in post-graduate, post-doctoral and Masters programs by industry, particularly where these RD&E programs provide for both fundamental and

applied activities, will be key to attracting high calibre, young scientists into industry for the future. For processing companies, the recognition of integrating science (scientists, method, data, knowledge and systems) into our business for enhanced communication with stakeholders and the broader community is increasing.

STRATEGIES	MEASURES OF SUCCESS
Engaging key stakeholders to create awareness and demonstrate value	<ul style="list-style-type: none"> Published reviews of industry adoption and extension mechanisms provide for new initiatives to be identified and implemented in industry, with at least 2 new engagement & adoption programs trialled by 2017
Increasing industry capability and capacity	<ul style="list-style-type: none"> RD&E projects are accompanied by defined extension activities to engage AMPC processor members
Increasing research capability and capacity	<ul style="list-style-type: none"> Delivery networks are reviewed and further developed to ensure industry engagement.
Biosecurity, residue management and animal health standards are underpinned by sound science	<ul style="list-style-type: none"> Approximately 30 industry representatives are supported through leadership development, capability and/or innovation training by 2017
Evaluation of RD&E outcomes	<ul style="list-style-type: none"> Approximately 4 executive professionals undertake leadership development in meat processing trade and market access reform and are positioned within the industry At least 15 Post-graduate students are supported by AMPC research initiatives by 2017 AMPC maintains recognised investment in cross sector RD&E through the National RD&E Framework A new Consortium of RD&E providers is established as part of a strategic investment program in areas of scientific capability decline such as meat science, food manufacturing and microbiology There is a program evaluation conducted each 3 years against one of AMPC's Strategic imperatives



Annex 1

- Demographic Snapshot of the Red Meat Industry, SG Heilbron Economic & Policy Consulting, July 2012.
- Developing the new AMPC Five-year Research and Development Plan 2012–17, survey of priorities. Australian Meat Processor Corporation, Suite 205, Level 2, 460 Pacific Highway, St Leonards, NSW 2065. www.ampc.com.au.
- Evaluation of AMPC performance against the Meat Industry Strategic Plan (MISP), 2009-2012, Australian Meat Processor Corporation, Suite 205, Level 2, 460 Pacific Highway, St Leonards, NSW 2065. www.ampc.com.au.
- Evaluation Report for Technology and Process Efficiency and Automation, Program 2.3, ACIL Tasman consulting, 2012, Australian Meat Processor Corporation and Meat and Livestock Australia.
- Meat and Livestock Australia's Annual Operating and Strategic Plans, accessed at www.mla.com.au.
- Meat Industry Strategic Plan, Red Meat Advisory Council, 2009.
- National RD&E Priorities, accessed at <http://www.innovation.gov.au/Research/Pages/AustraliasNationalResearchPrioritiesandGoals.aspx>
- RD&E Strategies (SheepMeat, Beef cattle, Animal Welfare, Water, Climate Change), accessed via the Department of Agriculture, Forestry and Fisheries dedicated website for the National RD&E Framework at <http://www.daff.gov.au/agriculture-food/innovation/national-primary-industries>
- Rural RD&E Priorities, accessed at <http://www.daff.gov.au/agriculture-food/innovation/priorities>
- The AMPC Environmental and Future Scan to 2030: Mega-Trends for the Red Meat Processing Industry, Mc Kinna et al.
- The Department of Agriculture, Forestry and Fisheries Science Strategy 2013-2018.
- The Department of Agriculture, Forestry and Fisheries strategy and policy statement, accessed at <http://www.daff.gov.au/about/publications/introducing-strategic-statement/strategic-statement>