Chicken Meat Industry Strategic Plan 2025 for Victoria

December 2014

An interim report prepared for the Victorian Chicken Meat Council Incorporated, for consultation purposes, by Gap Dev Corp Pty Ltd, 76 Wimborne Avenue, Mount Eliza. 3930. Australia.
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Executive Summary:

The VCMC seeks to work with investors and government to realise the vision of becoming Australia’s premier chicken production State. This industry driven strategic statement is compiled and endorsed by the VCMC. The VCMC seeks to identify what procedural development and infrastructure needs to be planned for and delivered by the industry and government, in order to respond to credible growth projections in Victoria over the next 10 year timeframe.

ABARES predicts that chicken meat will maintain its number one position as the most consumed meat in the country. An ABARES outlook report singles out the competitive pricing of chicken meat as the main factor, noting that over the past five years to 2012-13, chicken was on average 21 per cent cheaper than pork, 22 per cent cheaper than beef, and 45 per cent cheaper than lamb. ABARES is of the view that this price advantage will persist in the medium term and notes that the price differential reflects “strong productivity growth achieved in the Australian chicken meat industry over successive decades”.

ABARES (March 2012) released an outlook for chicken meat production to 2018-19. It noted that the industry has grown at a steady 4 per cent a year over the past decade and now makes up one-quarter of all meat production, compared to 18 per cent 10 years ago. ABARES forecast that the chicken meat industry would increase its share of total meat production to 28 per cent by 2017.

From a peak of 30%, Victoria now only produces approximately 22% of Australia’s chicken meat. By comparison, South Australia’s production has grown from 9% to 15%, two times faster than the national average during the past 10 years (40 million birds per annum in 2004, to 77 million in 2011, projected to 90 million in 2015).

Victoria has had the lowest growth rate during the past 10 years, and is declining in national production share.

Victoria must also arrive at a competitive position compared to the other States, in order to address its net import position, and grow employment in peri-urban, regional, and rural areas. Otherwise, the farm production could become unviable, and primary and further value added processing would consequently have little future in Victoria.

For Victoria to grow back to 30% of national production by 2025 it needs to increase chicken production by 138 million birds (at ABARES projected 4% per annum over 2014 levels). This would require a doubling of production in this State alone.

A complete re-think and overhaul of the current regulatory and approvals system may be required in order for Victoria to be the leading producer in Australia of chicken meat for domestic and export markets. A piece meal case-by-case approach is currently being followed, with separate Departments and Authorities creating conflict and uncertainty.

Such an overhaul may take several years to realise and implement within the context of this Strategic Plan timeframe, but to do nothing but continue in the manner of strict regulatory interest now evident in Victoria could well lead to the practical demise of chicken meat farming in this State.

Combining consolidated ABS and “commercial-in-confidence” data guidance from the VCMC stakeholders, and the ABARES and RIRDC data projections, this Strategic Plan relies upon the following assumptions:

- Continued strong production growth over the 10 year timeframe,
- Chicken meat retaining its price competitive position (compared to the other meats),
- Chicken meat production grows to hold around 28% share of total meat market,
- Domestic growth to continue at a national average of 4% per annum,
- Victoria becomes an economically competitive location for chicken meat production within a national context when compared with the other States, and
State and Local governments partner with the chicken meat sector in the immediate to medium term in relation to infrastructure planning and development approvals.

In summary, Victoria’s targets based upon 3 scenarios:

1. A conservative 3% pa demand growth,
2. An ABARES forecast 4% pa growth, and
3. 9% pa to regain 30% of national production, within 10 years (2015-16 to 2025):

<table>
<thead>
<tr>
<th>Unit / year</th>
<th>2014 ABS data</th>
<th>2016</th>
<th>2020</th>
<th>2025</th>
<th>(Increase over ABS 2014)</th>
<th>Sheds additional</th>
<th>Gross Value Production (2014 $’s)</th>
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<tr>
<td>Production (ADW 1.9 kgs)</td>
<td>242.2</td>
<td>256*</td>
<td>289</td>
<td>335</td>
<td>93 at 3%</td>
<td>180</td>
<td>$726m</td>
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<tr>
<td>Chickens million</td>
<td>127.5</td>
<td>135</td>
<td>152</td>
<td>176</td>
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<td></td>
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<td>Feed grain Ktonnes</td>
<td>574</td>
<td>609</td>
<td>685</td>
<td>794</td>
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<td></td>
<td></td>
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<td>Water ML</td>
<td>1,695</td>
<td>1,799</td>
<td>2,024</td>
<td>2,347</td>
<td>651</td>
<td></td>
<td></td>
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<tr>
<td>Waste Ktonnes</td>
<td>84</td>
<td>89</td>
<td>100</td>
<td>116</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: The assumed growth from 2014 to 2016 (when this Plan might begin to be implemented) is 3% pa, however if Victoria continues to lose national share of production the 2016 production figure could be lower.

Victoria’s own consumer demand could increase to around 176 million birds grown per annum in 2025. This represents a 33% increase in production over 10 years (an additional 45 million chickens), but could leave Victoria possibly producing less than 20% of Australia’s production. At the ABARES forecast rate of 4% pa, Victoria would need to produce an additional 64 million chickens to meet demand. It is estimated that Victoria would have to produce 190 million chickens pa by 2025 in order to regain its 30% share of national production.

An annual growth rate at 3% would require an additional 180 broiler sheds (or 22 new farms) to be established. The increased feed requirement would be approximately 203,000 tonnes of grain could be milled within current/planned capacity. There would be need for an additional 600 mega litres of secure water supplies. Waste recycling & disposal (116 Ktonnes of manure & litter per annum), and rendering processes (approximately 10,000 tonnes of offal and 6,000 tonnes of mortality chickens per annum) would need to be planned for.

Total employment creation could be in the order of **950 jobs**. Victorian currently employs in excess of 10,000 people to produce and process 127 million birds per annum. Victoria’s target represents a 10% increase; with many more predicted from value added processing.

These targets would translate into growth ramifications:

- New breeder farms and hatcheries
- New investment in broiler farms, processing, and value-adding processing
- Skilled job creation
- Feed grain volume increases, and expanded feed-mill operations
- Increased water usage and recycling
- Increased energy usage
- Increased waste recycling and disposal
- Road, sea, air, and rail freight transport
- Export potential, particularly to China

In summary, within a conservative and achievable 3% pa growth scenario, by 2025 Victoria could invest $284m in new broiler farms, $60m in breeder farms, $25m in a new hatchery, $25m in feed mill capacity, $210m in additional processing, and $50m in transport & distribution. More than 950 EFT additional jobs could be created, injecting $62m per annum (in 2014 dollars) directly into the Victorian economy. A capital investment of $654m to support sectoral growth within 10 years could be required. Adding an estimated $186m (22%) for road, water, electricity, gas, and waste treatment infrastructure, the total capital investment approaches $840m over 10 years.

To respond to this potential, the Victorian Government should replicate an amalgam of regime structures from the other mainland States:

- Establish a “Development Assessment Panel” comprising relevant professional Statutory Planners, Engineers, Environmental and Agricultural Scientists, under the Planning Act, that would compile and administer an ‘Integrated Development Assessment System’ (IDAS).
- The "Development Assessment Panel" could be annexed to the Victorian Building Authority, Melbourne Planning Authority, or Planning Panels Victoria (Priority Development Assessment Panel)
- An IDAS would provide a single legal administrative framework for the assessment and approval of all Intensive Animal Husbandry development in Victoria.
- IDAS should refer only to the Victorian Broiler Code (including Free Range applications), and determine Planning Permits and Development Approvals.
- The “Development Assessment Panel” should be directed by policy provisions that broadly cover:
  - All new Intensive Animal Husbandry farms
  - Expansion of existing farms
  - The information required for Planning Permit applications and Development Approvals for new farms and expansion of existing farms
  - Proposals for Residential and Rural-Residential Development in the vicinity of farms
  - Local Planning and Development controls / conditions for Intensive Animal Husbandry farms

Victoria should learn from and build upon the experiences in the other Australian jurisdictions, and aim to be a net exporter of chicken meat products by 2020, and regain 30% of the national production by 2025. Such a scenario would require large scale investment, and joint venture partnerships, eg: from Asian export markets.

Without decisive action and stakeholder investment, this is unlikely to occur, and chicken meat production will increasingly be undertaken in the other States, and internationally.
## 1. Forward

### 1.1 Glossary of Terms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABARES</td>
<td>Australian Bureau of Agricultural and Resource Economics and Sciences</td>
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<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<tr>
<td>ACMF</td>
<td>Australian Chicken Meat Federation</td>
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<tr>
<td>ADW</td>
<td>Average Dressed Weight</td>
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<tr>
<td>ALW</td>
<td>Average Live Weight</td>
</tr>
<tr>
<td>Broilers</td>
<td>Chickens grown specifically for meat consumption</td>
</tr>
<tr>
<td>DAFF</td>
<td>Department of Agriculture, Fisheries, and Forestry</td>
</tr>
<tr>
<td>DEPI</td>
<td>Victorian Government Department of Environment &amp; Primary Industry</td>
</tr>
<tr>
<td>DPTLI</td>
<td>Department of Transport, Planning &amp; Local Infrastructure</td>
</tr>
<tr>
<td>EMP</td>
<td>Environment Management Plan</td>
</tr>
<tr>
<td>EMS</td>
<td>Environment Management System</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>ERA</td>
<td>Environmentally Relevant Activity</td>
</tr>
<tr>
<td>FR</td>
<td>Free Range (chicken meat farming)</td>
</tr>
<tr>
<td>IAH</td>
<td>Intensive Animal Husbandry</td>
</tr>
<tr>
<td>IDAS</td>
<td>Integrated Development Assessment System</td>
</tr>
<tr>
<td>PPV</td>
<td>Planning Panels Victoria</td>
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<tr>
<td>RIRDC</td>
<td>Rural Industries Research and Development Corporation</td>
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<tr>
<td>RSPCA</td>
<td>Royal Society for the Protection and Care of Animals</td>
</tr>
<tr>
<td>SA CMC</td>
<td>South Australia Chicken Meat Council</td>
</tr>
<tr>
<td>SEPP’s (AQM)</td>
<td>State Environmental Protection Policies (Air Quality Management) in Victoria</td>
</tr>
<tr>
<td>VCAT</td>
<td>Victorian Civil and Administrative Tribunal</td>
</tr>
<tr>
<td>VCMC</td>
<td>Victorian Chicken Meat Council Incorporated</td>
</tr>
<tr>
<td>VFF</td>
<td>Victorian Farmers Federation</td>
</tr>
</tbody>
</table>
1.2 Background context

The Victorian Chicken Meat Council (VCMC) is the representative body of the chicken meat industry, whose membership includes the four major integrators, their contracted Farmers, and associated suppliers. The purpose of the VCMC is to promote the development of the agricultural resources of the State of Victoria, and to promote and protect the interests of the Victorian chicken meat industry.

The chicken meat sector is experiencing exponential growth across Australia, driven by consumer demand – particularly in Free Range (FR) and further processed products. As a result from various inter-related circumstances, Victoria is currently a net importer of chicken meat, ie: production in this State does not meet consumer demand. Whilst chicken meat products are routinely moved around Australia in response to production variations and market consumption, Victoria currently does not produce sufficient volumes for its growing population.

This industry driven strategic statement is compiled and endorsed by the VCMC. The VCMC seeks to identify what procedural development and infrastructure needs to be planned for and delivered by the industry and government, in order to respond to credible growth projections in Victoria over the next 10 year timeframe.

Significant data is continually collected by numerous agencies, government departments, industry bodies, ABS, and ABARES. Some of this data is more current than others, depending upon the agency source. This strategic statement utilises, reproduces, and relies upon credentialed information that is provided in the public domain, rather than seek to duplicate previous analysis and resources (refer to the acknowledgements in section 9).

This VCMC “Strategic Statement 2025” for the Victoria does not seek to duplicate prior statistical analysis and expenditure of resources. It accepts and consolidates this analysis as acknowledged accredited information and data, applies context, and depends upon assumptions (refer section 6.3) to form a baseline from which to project targets into the 10 year timeframe 2015 to 2025.

The four major industry processors in Victoria (Baiada, Turi Foods, Hazeldene, and Ingham Enterprises) are vertically integrated businesses incorporating chicken breeding, hatcheries, feed supply, chicken meat farming, processing, value adding, and export. They collectively process in excess of 2 million birds per week, and the industry sector directly employs in excess of 10,000 people in Victoria.

The chicken meat industry’s major retail customers in Victoria currently market in excess of 6,000 tonnes of fresh and value added poultry product each week to both the Victorian and Australian markets.

Australian and Victorian chicken meat production has increased steadily for more than 50 years. This mirrors the rise in domestic chicken meat production, recorded at 1,092 tonnes\(^3\) in 2013-14. Consumption of poultry (of which chicken meat is around 96 per cent) has increased from around 4.4 kg per person per year in 1960 to 41.1 kg in 2012-13\(^4\).

This consumer lead increase has been underpinned by chicken meat becoming more price competitive, and community recognition that chicken meat is a consistent, and convenient high protein / low fat product. Consumer demand is expected to escalate as chicken meat prices continue to be substantially lower than prices of alternative meats, despite the effect of forecasted high feed grain prices.

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1 Vertically integrated businesses
2 Under the Creative Commons Attribution 3.0 Australia "CC BY" licence
3 ABS Livestock Production sheet #721504
4 ABS Livestock Production sheet #721504
This strategic statement seeks to align with the objectives of the Victorian Government’s “Regional Growth Fund”:

- strengthening the economic base of regional Victoria
- facilitating the creation of jobs and improvement of career options for regional Victorians
- supporting the resilience and sustainability of communities in regional Victoria
- increasing the capacity of regional communities to drive development in their region.
- providing for better infrastructure, facilities and services in regional Victoria
- strengthening the economic, social and environmental base of communities in regional Victoria
- facilitating the creation of jobs and the improvement of career opportunities in regional Victoria
- supporting the planning for and the development of projects in regional Victoria.

1.3 Stakeholder consultation:

Direct stakeholder consultation has been undertaken during the compilation of this Strategic Plan 2025, including the current VCMC Members, VFF representatives and ACMF Executive Director.

- Inghams Enterprises (Alan Wilson, Executive General Manager Victoria & Tasmania, President of VCMC and ACMF; Scott Lewis, Farms Manager; Kevin McBain, CEO)
- Turi Foods (Chris Turner, CEO and previous President of VCMC and ACMF)
- Hazeldene’s (John Hazeldene, CEO and Vicki Gaudion, Manager Corporate Affairs)
- Baiada (Mike Govers, Livestock Manager, and Richard Blunsdon, Veterinarian)
- VFF Chicken Meat Group (Allan Bullen, Mike Shaw, and Laurie Mannix)
- ACMF (Andreas Dubs, Executive Director)

The following industry professionals have also provided general opinion and input:

- Jack Kraan (Principal Town Planner, Focus Planning)
- Tim Pollock (Principal Environmental Engineer, GHD)
- Graeme Peake (Barrister, practising in environmental, planning and local government law since 1981)
- Darren Wilkinson (Ridley Agriproducts)
- Steve Gleeson, (Executive Unit Team Leader, Golden Plains Shire Council)
2. **Overview**

Victoria currently has approximately 244 businesses involved in chicken meat production. Approximately 200 are contracted chicken meat Farmers that grow-out birds (known as a “broiler”) for the integrated processors, whilst Hazeldene’s directly owns about half its farms. The Integrators retain ownership of the birds throughout the supply chain. They also own and operate 10 breeding facilities, 6 hatcheries, plus several independent farms grow chickens in their own right.

A chicken meat farm grow-out barn/shed can typically accommodate 45,000 chickens, containing a total body mass of approximately 120,000 kilos. During a single growing batch, these chickens will consume 200 tonnes of feed, drink 600,000 litres of water, and produce 30 tonnes of chicken manure. An average meat chicken will consume 4 to 5 kgs of feed in its lifetime, which is approximately 42 days. Most farms grow 5 to 6 batches per year.

Chickens are fed a specific multigrain diet, which consists predominantly of wheat, barley, sorghum, and corn. Feed can also include chicken soybean meal, canola meal, canola seed, peas, animal proteins, and vegetable proteins, throughout their different developmental stages.

Conventional commercial broiler farming methods involve chickens being raised in large enclosed barns/sheds, with litter (wood shavings or rice hull) on the floor. Older style farms had some “soft” side walls (called curtains) that allow a degree of control over air movement and temperature within the shed. Upgrading is necessary with technological improvements and husbandry requirements (ventilation and humidity control).

Modern sheds are generally of the tunnel ventilated type, with solid insulated walls, and large fans placed at one end of the shed, and air inlets at the other end which draw the air across large pads that can be soaked with water to generate evaporative cooling of the air. Floors are either concrete or compressed clay soil, to allow thorough cleaning between batches of chickens. All chickens are removed from a shed, and the shed is cleaned and disinfected before the next batch of one day old chicks is delivered.

The break of several days between the fully grown birds being picked up, and the new batch of day old chicks being placed, is an important aspect in efforts to maintain the chickens free of disease and contamination.
The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) have released an outlook for chicken meat production to 2018-19.\(^4\)

It notes that the industry has grown at a steady 4\% per year over the past decade and now makes up one-quarter of all meat production, compared to 18 per cent 10 years ago.

Within the next five years, the chicken meat industry is forecast to increase its share of total meat production to 28 per cent.

ABARES predicts that chicken meat will maintain its number one position as the most consumed meat in the country. The outlook report singles out the competitive pricing of chicken meat as the main factor, noting that over the past five years to 2012-13, chicken was on average 21 per cent cheaper than pork, 22 per cent cheaper than beef, and 45 per cent cheaper than lamb.

ABARES is of the view that this price advantage will persist in the medium term and notes that the price differential reflects “strong productivity growth achieved in the Australian chicken meat industry over successive decades”.

New investment across the entire chicken meat industry sector is required to meet this expected market demand. The industry in Victoria has already invested $200m+ (2009-14) to expand its productive capacity in the last five years. Capital investment in South Australia has reached $575m (2005-12).

Many new farming development investments (in the order of $12-15m per site) are being advanced, with existing Farmers seeking to expand, upgrade, and improve their operations and technology, with some sense of regulatory certainty within a nationally competitive market.

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3. GLOBAL CONTEXT

The chicken meat industry worldwide has continually grown over the last 60 years. In 2005 world chicken meat production was 71 million tonnes, with the USA, China and Brazil the world's largest producers. Australia produced 760,000 tonnes (ABS, 2006).

Figure 2: Per capita chicken meat consumption kgs in 2010 (Source: ACMF)


United States of America, China, Brazil and the European Union each exported around 2 to 3 million tonnes per annum in 2007. Australia’s non-egg poultry exports in 2010-11 were worth around AUD$50 million. (Victoria accounted for approximately $12.3 million).

Over the ensuing five years to 2010, Australia exported on average 4 per cent of its chicken meat production. Australian chicken product is now exported primarily to South Africa, Philippines, Singapore and the South Pacific Islands.

A report by Morgan Stanley Research6 predicted that (a) the world population will continue to rise; (b) meat per person will continue to rise, slowly (if at all) in developed countries but very rapidly in developing countries; (c) acreage available for feed grain will be constrained (if not reduced) by the growth of biofuel demand and by pollution, climate change, and water shortages; (d) yields (grain per acreage) will rise with better irrigation, crop research, and adoption of GMO varieties, but only slowly.

Therefore, a major decline of the feed grain used per unit of meat is needed to balance demand and supply for feed grain. Morgan Stanley concluded that there needs to be a further major increase in the share of meat coming from chicken, with consequent reductions in both beef and pork.

The reason is simple: The “feed conversion ratio” (FCR) for chicken is lower than for beef and pork. For chicken, most sources now estimate an FCR of 2 or less, pork around 4.4, and for beef there is a much broader range, from 7 to over 10.

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5 Trade Data International
6 MORGAN STANLEY RESEARCH, Robert Fieldman PhD, May 21, 2008 Global Economics
4. AUSTRALIA CONTEXT

The Australian chicken meat industry has undergone enormous changes since its emergence as a specialist industry in the late 1950’s. It has grown from an industry that produced approximately 3 million chickens in 1950-51, to producing approximately 582 million in 2013-14. The vast majority of this product is now fresh (rather than frozen).

The sector has developed steadily over those past six decades, to an annual turnover of around $5.5 billion, on a conservatively estimated asset base of $6 billion. The sector nationally employs 40,000 people directly, with a further 100,000 Australians relying on the industry for their employment.

The major areas of meat chicken production are:

- NSW—outskirts of the Sydney metropolitan area, Mangrove Mountain / central coast, Newcastle, Tamworth and Griffith areas and Byron Bay
- Queensland—Redland Bay south of Brisbane, and other areas to Brisbane’s south, south west and north and in Mareeba (Atherton Tablelands)
- Victoria—Mornington Peninsula, Melbourne’s east, Geelong, and Bendigo areas
- South Australia—outskirts of Adelaide and the Murray Bridge, Gawler and Two Wells areas
- Western Australia—Perth’s outer metropolitan areas
- Tasmania—outer metropolitan areas

Figure 3: Major Chicken Meat Producing Regions of Australia (Source: ACMF)
ABS data shows that total chicken meat production has grown strongly, with that growth evident in every State:

Large capital investment, efficient integrated systems, improved production systems and feed conversion efficiencies, and a relatively disease free environment, have all contributed to the on-going growth of the industry. These improvements have led to a significant reduction in the real price of chicken meat. This reduction in the real price has been a major contributor to poultry meat becoming the most consumed meat in Australia (44.1 kg per person annually in 2012-13).

Growth in chicken meat production is expected to continue, though perhaps not at historical rates. ABARES forecasted that national chicken meat production for 2013-14 would increase by 3.3 per cent to 1.08 million tonnes (actual was 1.09 million\(^4\)), with a further 2.8 per cent growth in 2014–15 to 1.11 million tonnes. By 2018-19, Australian chicken meat production is projected to be around 1.25 million tonnes per annum.

Figure 4: Chicken meat production by State (Source: ACMF – from ABS Cat. No 7215.0)

Figure 5: ABARES forecast national production
### Table 1: Production and Consumption of Chicken Meat

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<thead>
<tr>
<th></th>
<th>Unit 2011-12</th>
<th>Unit 2012-13</th>
<th>Unit 2013-14</th>
<th>Unit 2014-15 #</th>
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<th>Unit 2016-17</th>
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<th>Unit 2018-19</th>
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<tr>
<td><strong>Production</strong></td>
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<td>Kt</td>
<td>Kt</td>
<td>Kt</td>
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<td>Kt</td>
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<tr>
<td>(carcass weight)</td>
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<td><strong>Consumption</strong></td>
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<td>Kg</td>
<td>Kg</td>
<td>Kg</td>
<td>Kg</td>
<td>Kg</td>
<td>Kg</td>
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<tr>
<td>per person</td>
<td>44.0</td>
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<td>44.7</td>
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<td>45.7</td>
<td>46.1</td>
<td>46.6</td>
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<tr>
<td><strong>Export volume</strong></td>
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<td>Kt</td>
<td>Kt</td>
<td>Kt</td>
<td>Kt</td>
<td>Kt</td>
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<td>(shipped weight)</td>
<td>33.6</td>
<td>29.3</td>
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<td>36.0</td>
<td>37.5</td>
<td>40.0</td>
<td>42.5</td>
<td>45.0</td>
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<tr>
<td><strong>Export value</strong></td>
<td>$m</td>
<td>$m</td>
<td>$m</td>
<td>$m</td>
<td>$m</td>
<td>$m</td>
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<tr>
<td></td>
<td>39.7</td>
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<td>44.9</td>
<td>47.2</td>
<td>49.1</td>
<td>52.4</td>
<td>55.7</td>
<td>59.0</td>
</tr>
</tbody>
</table>

* ABARES forecast  # ABARES projections

Figure 6: Annual and average decadal growth rates in chicken meat production (Source: ACMF – from ABARES March 2014)

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**Figure 7: Chicken Meat Production in Australia**

Around 97 per cent of chicken meat production in Australia is consumed by the domestic market. Per capita consumption of chicken meat now exceeds beef and veal (refer Figure 8). Consumption of poultry meat consumption has reached 44 kg in 2014, making Australians the second largest consumers of chicken meat per capita after Brazil.
Price competitiveness has been a major driving factor in the increased consumption of chicken meat. The perception among consumers that poultry is a healthy low fat food that is easy to prepare, has also contributed. The chicken meat industry has gained additional market advantage through value-adding to the fresh and frozen chicken meat products, and an increased consumer emphasis on convenience foods (such as take-away chicken).

In summary, the prolonged change in consumer preferences is due to:

- improved price competitiveness of chicken, compared to other meats,
- greater diversity in the range of chicken products available,
• better consistency of quality compared to competitor meats, due to more controlled means of production,
• targeted, strongly focused product marketing, at a brand level, and
• perceived and real health benefits of white meats over red meats.

The retail price of chicken is largely unchanged during the past 20 years (refer Figure 10). Consequently, the real price of chicken (ie: adjusted to account for inflation) has declined by more than 60 per cent since 1970, in sharp contrast to the real prices of other meats.

Figure 10: Retail price of Meats in 2010 dollars (Source: ACMF)

Several factors have driven very significant productivity improvements in the chicken meat industry, which has underpinned the very competitive position of chicken against other types of meat:

• increasingly automated poultry processing plants,
• improvements in how efficiently chickens convert feed into meat due to:
  o improved breeds of chicken more suited to meat production,
  o better nutrition,
  o improved health management, and
  o better shedding, and husbandry strategies.
State by State approach:

The individual states of Australia have taken varied approaches to addressing the relatively rapid industry growth.

**West Australian government** initiatives during the past 15 years have been implemented centrally by the ‘Western Australian Planning Commission’, which issued a “Poultry Farms Policy” guidance No. 4.3 in 1999 (amended in 2003)\(^7\).

The policy provisions broadly cover:

- New Poultry Farms
- Expansion
- Information required for Application for New Poultry Farms and Expansion of Existing Poultry Farms
- Proposals for Residential and Rural-Residential Development in the Vicinity of Poultry Farms
- Incentives to Relocate Poultry Farms
- Local Planning for Poultry Farms
- Development Controls

The objectives of this policy are:

- To ensure that new poultry farms are established in locations suitable to their operational requirements;
- To minimize the impact of poultry farms on residential, rural-residential and other potentially incompatible uses;
- To protect the interests of existing poultry farms in the face of encroaching development; and
- To encourage the relocation of poultry farms on land required for residential or rural-residential development.

The general buffer distance guidelines for new poultry sheds are:

- 500 m from any existing or future residential zone;
- 300 m from any existing or future rural-residential zone;

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• 100 m from the boundary of the poultry farm.

Applications to expand existing poultry farms located in a rural zone that is not identified for short or medium-term urban or rural-residential development may be permitted. New grow-out barns on an existing poultry farm should be no closer than 100 m from the poultry farm boundary (unless the nearby land does not contain an existing or proposed use sensitive to poultry farm operations, in which case the Commission could require a lesser setback distance).

In cases where there is an existing barn located closer than 100 m from a poultry farm boundary, a new shed should generally be located no closer than the existing shed from that boundary. In making its determination the Commission will consider the Environmental Code of Practice: Poultry Industry (Department of Environment Protection).

The South Australian Government similarly compiled a guidance\(^8\) for the Development Assessment Commission and Local Councils in 1998. The Objectives were:

- To ensure that noise, odour, visual impact, dust and pests do not cause unreasonable interference to the community
- To minimise any adverse impact on adjoining land uses and the natural environment of the area,
- To ensure that soil, surface and ground waters do not become contaminated,
- To ensure effective operation of the poultry farm, including feed and water supplies, pick up and delivery of birds, and avoidance of waterlogging or flooding.

The site chosen therefore needs to take into account the following factors:

- risk of groundwater pollution and prevention of degradation of surface water flooding,
- be above the level of flooding with average recurrence interval of 100 years,
- availability of suitable quality water,
- road access for feed and livestock vehicles,
- source of good quality rubble,
- sufficient area for facilities,
- manure and litter storage and disposal,
- wind breaks,
- dead bird disposal,
- quarantine issues,
- distance from existing or future residential development,
- soil type,
- proximity to processors,

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8 Guidelines for the establishment and operation of chicken meat farms in South Australia (1998)
proximity of feed mill,
availability of labour,
local topography,
local meteorology, and
disposal of stormwater.

The South Australia 'Chicken Meat Council' (SA CMC) compiled a 10 year vision statement in 2005, that sought to capture 50% of the anticipated domestic production growth and increase gross production value by $1 billion per annum to 2015.\(^9\)

The SA chicken meat industry responded by investing $575m and doubling its annual processing output to reach 77 million birds in 2010/11. In 2012 the industry expected to invest a further $80m in capital, and process more than 110 million birds per annum.

However, in 2012 the SA Chicken Meat Council subsequently identified that growth was being constrained by inadequate rural infrastructure, processing staff shortages, difficulties in complying with development regulations, and a rapid increase in the cost of utilities & waste management.

The NSW Government Department of Primary Industries compiled two manuals for Best Practice Management for Chicken Meat production in NSW.\(^10\) The manuals provide guidance for the planning, design, construction, and management of meat chicken farms in NSW, with a particular focus on minimising environmental impacts. They were developed by the 'NSW Poultry Meat Industry Committee' in conjunction with the Department of Primary Industries (NSW DPI), the Office of Environment and Heritage (OEH), the Department of Planning and Infrastructure (DP&I) and Local Government representatives, in consultation with equivalent agencies in Queensland and Victoria and industry groups.

These manuals are augmented by the ‘Industry & Invest Agency’ guidance on “Better site selection for chicken meat production” that covers buffer distances, odour separation distances, zonings, and environmental considerations. The intent in relation to appropriate buffers is to:

- Limit the risk of land use conflict by protecting against a change of neighbours and / or incompatible development of the adjoining lot, such as construction of a residence,
- Minimize the ongoing cost and stress of monitoring environmental impacts,
- Avoid the need for expensive post approval attempts to reduce odour or noise impacts, and
- Support on farm use of poultry litter.

A framework\(^11\) was released in 2006 in relation to odour separation distances. The framework is not a regulatory tool and does not introduce any new environmental requirements. It simply provides up-to-date information to help deal with this important issue. It offers:

- a system to help protect the environment and community from odour impacts while promoting fair and equitable outcomes for odour-emitting activities,

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\(^10\) NSW Chicken Farming Guideline, 2004
\(^11\) Technical Framework for Assessment and Management of Odour from Stationary Sources in NSW, DEC 2006
• a fair and transparent process for assessing odour impacts from new developments,

• risk-based approaches and strategies for dealing with ongoing odour impacts from existing activities, and

• a technical reference document for proponents and regulators.


The Queensland Guidelines for Meat Chicken Farms have been developed to provide information for the planning, design and development of meat chicken farms across Queensland. Whilst not a compliance, operational or management manual, it provides some advice on operational arrangements, where relevant, to managing the potential impact of meat chicken farms on the environment and broader community.

The purpose of the guidelines is to provide consistent information for the planning and development of meat chicken farms to:

• assist local government to include relevant provisions in Local Government Planning Schemes,

• assist proponents with the development of a new meat chicken farm or the expansion of an existing farm,

• provide information about the meat chicken production system to assist local government officers in assessing development applications, and

• provide an overview of planning frameworks and the development assessment process.

Use of the guidelines by local governments and proponents is intended to respond to the potential for environmental and health impacts associated with meat chicken farms. In addition, it contributes to a more consistent decision-making process and increased certainty for the meat chicken industry, whilst reducing community conflict resulting from the expansion of the industry.

The guidelines apply to the development of new chicken meat farms, and the expansion or renovation of existing meat chicken farms. The guidelines are not designed to cover only chicken meat production.

The general buffer distance guidelines are:

<table>
<thead>
<tr>
<th>Sensitive use</th>
<th>Non-rural zone</th>
<th>300 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural zone</td>
<td></td>
<td>100 m</td>
</tr>
</tbody>
</table>

| Public roads           | > 50 vehicles/day | 200 m |
|                        | < 50 vehicles/day | 100 m |

The ‘Integrated Development Assessment System’ (IDAS), established under the Queensland State Planning Act, provides a single legal administrative framework for the assessment and approval of almost all development in Queensland.

Local governments have devolved responsibility for administering chicken meat farm developments that are an Environmentally Relevant Activity (ERA). The Queensland

Environment Protection Act 1994 envisages that it is possible for a Development Approval to contain a valid condition that allows the emission of odour beyond the boundary of a property on which poultry farming is conducted.

Queensland chicken meat farms must develop and implement site-based Environment Management Plans (EMP) that aim to minimise the potential for operational impact on the surrounding environmental values and the amenity of neighbouring communities.

The Rural Industries Research and Development Corporation (RIRDC) has produced a national Environmental Management System (EMS) for the chicken meat industry, with an example and explanatory notes for developing an EMP.

The EMS is only considered as a starting point, and application of such framework needs to further articulate site-specific considerations, as well as identifying assumptions supporting air quality or acoustic modelling assessment.

The EMP is a formal commitment that all reasonable and practical efforts have been made to operate the chicken meat farm in an environmentally sustainable manner.

The EMP provides a system for documenting:

- environmental hazards and risks of the meat chicken farm,
- how these risks will be minimised by design and management strategies,
- the process for monitoring the effectiveness of the design and management strategies, and
- how the results of the monitoring will be reported.

The Queensland Planning Guidelines 1997: “Separating Agricultural and Residential Land Uses” provide technical advice and guidance to local government, developers, consultants, and landholders on minimising conflicts between farming activities and residential uses (Policy Principle No. 8 of State Planning Policy 1/92).

These planning guidelines were a product of extensive public consultation: two drafts were published (1993 and 1995), and the document has been substantially amended in response to comments received. In particular, the document advocates a flexible approach that is responsive to specific circumstances.

There are two primary processing plants in Tasmania: Inghams that processes 120,000 birds per week (over 4 days), and has a current capacity of 150,000 birds per week, and Nicholls at Sassafras (60,000 birds per week)

Breeder farms at Orielton and Koonya closed in 2012, and either eggs or day old chicks are now sea/air freighted to hatchery or contract grow-out farms. The Tasmanian Government regulatory regime is principally focussed upon licensing and bio security.

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5. Victoria context

5.1 Facilities – current and trends

In 2009-10, the gross value of production for Victoria’s poultry meat industry was $487 million. The 2014 figure is estimated by the VCMC to be more than $726 million pa (at $3/kg dressed weight).

Victoria now only produces approximately 20% of Australia’s chicken meat (2nd behind NSW at 32% in 2013-14). Victoria has increased its production output by 17% (2004-14). By comparison, South Australia’s production has grown more than two times faster than the national average, 145% over the same 10 year period (40 million birds per annum in 2004, to 77 million in 2011, projected to 90 million in 2015).

<table>
<thead>
<tr>
<th></th>
<th>2004 Kt (% of Aust)</th>
<th>2014 Kt (% of Aust)</th>
<th>Increase Kt over 10 year period</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>249.5 (35%)</td>
<td>351.5 (32%)</td>
<td>102 (40%)</td>
</tr>
<tr>
<td>Victoria</td>
<td>206.8 (29%)</td>
<td>242.2 (22%)</td>
<td>35.4 (17%)</td>
</tr>
<tr>
<td>Queensland</td>
<td>119.7 (17%)</td>
<td>233.8 (21%)</td>
<td>114.1 (95%)</td>
</tr>
<tr>
<td>South Australia</td>
<td>63.3 (9%)</td>
<td>155.7 (15%)</td>
<td>92.4 (145%)</td>
</tr>
<tr>
<td>West Australia</td>
<td>70.3 (10%)</td>
<td>109.2 (10%)</td>
<td>121.9 (55%)</td>
</tr>
<tr>
<td>National total</td>
<td>702.9</td>
<td>1,092.4</td>
<td>398.5 (55%)</td>
</tr>
</tbody>
</table>

Table 1: Comparisons by mainland States production increase 2004 to 2014

Victoria has had the lowest growth rate during the past 10 years, and is declining in national production share.

Approximately 220 of an estimated 244 businesses involved in chicken meat production grow chickens under contract. There are also 10 breeding facilities, 6 hatcheries, and a number of independent broiler farms growing chickens in their own right.

Contract farms are concentrated in three main regions of Victoria: Mornington Peninsula & Gippsland, the southwest, and the northwest. The majority of Gippsland farms are nearer to the Mornington Peninsula, those in the southwest around Geelong, and farms in the northwest are around Bendigo.

Approximately 23 million broiler chickens are simultaneously being raised for meat production in Victoria, and plus 970,000 chick breeding stock. Approximately 1.9 million breeding birds and 127 million meat birds go through the supply chain each year. According to the VCMC Victoria’s proportion of national production is in rapid decline.

Mortality during chicken grow-out is currently averages about 4 to 5%, but this could decline to 2 to 3% due to improved shed buildings and operational procedures. The modern chicken broiler sheds are high technology climatically controlled buildings, supplied by secure quality water and feed.

All four major processing companies in Victoria have their contracted broiler farms generally located within 1.5 hours road freight distance of the processing plants.

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\[14\] ABS, Value of Agricultural Commodities Produced Australia, 7503.0, 2009-10.
Processing facilities are generally located near to urban centres to minimise transport costs, maximize access to infrastructure and labour, and be near their customer bases.

Production is located primarily near Melbourne (64 per cent by gross value of production), and Barwon (18 per cent), Gippsland (9 per cent) and Loddon (7 per cent) regions.

The main processing plants are located at Somerville (Inghams); Laverton (Baiada); Bendigo (Hazeldene); and Geelong & Thomastown (Turi Foods).

Breeding farms are deliberately separated from chicken meat farms, to reduce biosecurity risks. They are mainly located in the Melbourne, Barwon, Loddon and Goulburn regions: Inghams (Pakenham, Nar Nar Goon, Yellingbo & Charlton), Hazeldene’s (Bald Hill and East Bendigo), Turi (Pakenham, Nagambie, Bannockburn, Anakie, and Benalla), Baiada (imported plus locally purchased under contract).

Hatcheries are also separated from the broiler farms: Inghams (Pakenham and Mornington), Hazeldene’s (East Bendigo), Turi (Bannockburn and Cranbourne), and Baiada (custom hatched under contract).

Figure 12: Victoria’s Chicken production regions (Source: DEPI website 2014)
The Victorian Farmers Federation Chicken Meat Group represents the interests of more than 90 per cent of Victoria's existing 220 contracted Broiler Farmers.

The Group is structured into four Branches reflecting each processor to which a grower is contracted. A major role of the VFF Chicken Meat Group is to assist members in negotiations of the growing fee and contract conditions with the processors to ensure a fair deal to all parties. This has the authorisation of the Australian Competition Commission.

The VFF views the challenges facing the industry in Australia being similar to all intensive livestock industries throughout the developed world. This is the increasing community awareness and interest of the health implications of food consumed and the environmental and animal welfare issues of food production.

The VFF Chicken Meat Group has developed the “Chicken Care Program”. This program sets the standard of best operating practices for the industry. Farmers seek Chicken Care accreditation, and are audited to ensure that the standards are maintained.

Chicken Care is a voluntary best practice initiative recognised by the industry as a means to improve the industry’s environmental and safety performance, and to be aware of and address community expectations.

Its key features include a 200 point best practice model, a community advisory panel, training, grower meetings and publication of industry performance.

Chicken meat Farmers participate in an introductory workshop that outlines the principles of Environmental Management Systems (EMS) for individual farms. Each Farmer develops an EMS Plan, followed by an auditing process.

Outcomes of this program include the welfare of the birds, the adoption of profitable and sustainable farm practices, improved natural resource management and enhancement of the environment, and an ability to demonstrate environmental stewardship to domestic and international markets.

Processors and Farmers seek to work in unison to strive for continuous improvement.

5.2 Matters affecting operations

5.2.1 Free Range and Organic production

Conventionally produced chicken represents about 85% of the total production in Australia. Free Range chicken makes up the remainder, with certified organic being a FR system with some additional features.

FR chicken meat therefore accounts for around 15% of chicken produced, with less than 1% of the total production also being organic.

FR meat chickens are produced using similar management, housing, and feeding practices as conventional meat chickens. The major differences are that free range chickens are given access to an outside run for part of each day (at least post the brooding period), and often have lower target stocking densities.

Depending on the accreditation program applied, the use of antibiotics to treat sick birds may preclude the meat from these birds being sold as free range.

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15 VFF website: www.vff.org.au
The main certifier of FR chicken meat in Australia is ‘Free Range Egg and Poultry Australia Ltd’ (FREPA). The standards that free range meat chickens must comply with to be certified by FREPA are at [www.frepa.com.au](http://www.frepa.com.au).

Certified organic meat chickens have two additional requirements:

- Feed must be predominantly from certified organic ingredients, and
- Birds cannot be treated with routine vaccination.

There are exceptions, such as where treatment is required by law or disease cannot be controlled with organic management practices.

Certified organic chicken meat bears a certification logo from an approved organisation, and producers must comply with ‘The National Standard for Organic and Bio-Dynamic Produce’. Chicken meat can be described as ‘organic’ without being certified by an organic association.

Chicken marketed as "chemical free" comes from birds raised in a conventional manner. The difference is in the processing plant, where no added chlorine is used. In most processing plants in Australia, chicken carcasses are placed in a water and ice mixture to wash the carcasses and to cool them to below 5 degrees Celsius. This water is generally sanitised by the addition of chlorine at levels of 3-5 ppm to control microbial contamination such as Salmonella and Campylobacter that occur naturally on meat.

Inghams and Baiada, the two largest chicken meat processors, have undertaken where possible to source soy meal that is free of genetic modification.

The emphasis in flock health programs is increasingly upon prevention rather than treatment. Vaccination, farm hygiene, and biosecurity are the most important strategies to keep flocks healthy. These are the only useful strategies for poultry diseases caused by viruses.

These approaches are insufficient for some diseases (being unavailable or uneconomical), and other methods of control are necessary. In unusual circumstances where a bacterial disease has flared and all other management strategies have failed, the Veterinarian will treat the birds with animal-friendly antibiotics.

Breeder flocks will be vaccinated against a range of diseases during their lifetime. The actual diseases vaccinated against, vaccines used, and program and timing of vaccinations, varies for each integrator company.

### 5.2.2 Bird welfare

This relates to the conditions under which chickens are housed and the way that they are managed during their growing phase, transportation, and processing. Vaccination, farm hygiene, and biosecurity are the most important strategies that the chicken meat industry needs to adopt to keep flocks healthy. These are the only useful strategies for poultry diseases caused by viruses. The emphasis in the industry’s flock health program is upon prevention, rather than treatment, and is guided by government codes of practice.

The RSPCA\(^{16}\) believes that if chickens are to be bred, reared and slaughtered for the purpose of food, they must be provided with an environment that meets their physical and behavioural needs without unnecessary suffering or distress.

As part of this goal, the RSPCA ‘Approved Farming Scheme’ has been created to provide higher animal welfare standards for the care of layer hens, meat chickens, and turkeys.

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\(^{16}\) RSPCA website: [www.rspca.org.au](http://www.rspca.org.au)
The standards stipulate that animals in these farming systems are provided with an environment that meets their physical and behavioural needs. Producers that meet and maintain the RSPCA standards can apply to join the RSPCA “Approved Farming Scheme”.

Retailers (such as Coles Supermarkets) are now requiring this accreditation for their chicken meat products.

This accreditation process is estimated to add between 7-9% on-cost to production (approximately 35 cents per kg (bone-in weight))\(^{17}\).

5.2.3 Biosecurity

Farm hygiene and biosecurity practices are being implemented at both breeder and broiler farms to reduce the risk of disease agents moving on to farms from outside sources (eg: wild and exotic bird populations, or from other farms), the movement of disease agents between barns on the same farm, carry-over of disease agents from one batch to the next in the farm environment, and carry-over of disease agents from breeding flocks to their progeny via the egg.

This effect is particularly evident where open dam water storages are used. Wild and exotic birds can transport disease into the farm’s water supply via wastes and excretions.

The VFF also regards the maintaining of Australia’s quarantine and bio security rules to prevent exotic diseases entering the country as a crucial.

5.2.4 Environmental considerations

A National Environmental Management System (EMS) for the chicken meat industry has been developed and is being implemented. This seeks to ensure that chicken meat farms minimise their environmental impact (on land, surface water, groundwater, the community and air), while farming remains economically viable.

The particular matter concerns the moves by DEPI to broaden odour emissions regulations that will result in much greater areas of productive agricultural land being required for buffer separation. The EPA Industrial Odour Emission Guidelines #1518 are being applied and implemented, with the consequent significant losses of productive land to the agricultural sector and the chicken meat industry. The same rationale on separation distances for heavy industry is being applied to Intensive Animal Husbandry. The DEPI’s proposed implementation of a Risk Assessment matrix approach is regarded by the chicken meat industry as impractical and critically flawed.

Further implications for the chicken meat industry could result from a change of the regulatory air dispersion model of the EPA from AUSPLUME to AERMOD. A RIRDC comparative

\(^{17}\) VCMC member estimate
study\textsuperscript{18} has been undertaken of the requirements of these two air dispersion models, along with that of a third model CALPUFF, with regards to the time taken for each assessment, model input requirements, and variable differences in the predicted results.

The effect of changing the regulatory model from AUSPLUME to AERMOD is to significantly increase the area and distances required to:

- meet the Broiler Code criterion at and beyond the site boundary; and
- to meet the level of acceptable risk of odour impact at nearby residences.

5.2.5 Residential encroachment upon farming areas

The encroachment of residential developments into traditional agricultural areas is creating conflicts between Farmers and new residents with an idealistic expectation of rural living\textsuperscript{19}. Many land uses have been allowed in Rural and Green Wedge Zones within (what is currently being implemented by the EPA) as appropriate odour emissions separation distances\textsuperscript{20}. These defined “sensitive uses” under the Planning Act, have retrospectively impacted upon the legal operations of existing chicken meat farms. Additionally, the existence of a sensitive use within these extended separations distances now inhibits new farm development and expansion.

5.2.6 Planning Permit and Development Approvals

This is regarded by the industry as by far the most complex and critical issue affecting the sector. This complexity involves all the preceding points in section 5.2, but in broad context can be described as a convoluted inter relationship between:

- Local Government (Councils) applying their Planning Scheme provisions and implementing Municipal Strategic Statements;
- State Government legislature and departmental policies, including Department of Planning (State Environmental Planning Policies, Regional Growth Plans, Plan Melbourne); EPA (Odour, Dust and Noise emissions); Vic Roads freight transport regulations; Regional Water Authorities (ground water management plans, farm dam permits, and bore water extraction permits); Health Department regulations (relating to food production and handling); DEPI (Biosecurity response); Victoria Building Authority (Building Classes codes); Country Fire Authority (fire prevention and services infrastructure); and economic and State development;
- The Department of Justice Victorian Civil and Administrative Tribunal (VCAT), and DTPLI Planning Panels Victoria (PPV) that are regularly involved to reach findings and make recommendations (to Ministers and Councils) in relation to Planning Permit applications and land use zoning matters;
- An industry sector that regards its rural farming operations as Intensive Animal Husbandry; and
- Some sections in the general community that regards chicken meat farms as offensive to the environment, and operating on low animal welfare standards.

Each jurisdiction has its own perspective and values, and there appears to be increased scrutiny and grounds for appeal at VCAT.

\textsuperscript{18} Odour Dispersion Modelling of Meat Chicken Farms, RIRDC Publication No 14/102, October 2014
\textsuperscript{19} VFF website: www.vff.org.au
\textsuperscript{20} EPA Guideline No: 1518 (March 2013) ‘Separation Distances for Industrial Residual Odour Emissions’
A simplistic illustration of the probable steps for a development proposal to improve, expand, or construct a new chicken meat farm:

**Planning Permit application** → **Prepared to meet the Broiler Code 2009**

**Local Council** → **Planner Officer’s assessment and recommendations**

**Decision / Appealed at VCAT** → **Hearing, with Legal & Planning experts**

**Approval (with Conditions)** → **Typically defaulting to SEPP’s (AQM)**

**Appealed at the Supreme Court** *(only as a final course of action)*

Applicants have a plethora of Regulations, Guidelines, and Practice Notes to reference when compiling development proposals, but the principle reference document is the Victorian Broiler Code 2009. The Code was originally compiled in 2000, following extensive industry and community consultation by an expert Ministerial Advisory Committee. The recommendations of that Committee were not fully incorporated into the 2000 Code, and a subsequent review in 2009 has failed to provide sufficient clarity to the permit approvals process.

The advent of FR farms and research / analysis relating to odour modelling has created a broad platform for expert witness debate and appeal.

In addition, the following changes to regulations, Planning Permit conditions, and elevated controls have further added significant cost imposts and time delays to the approval process leading to development construction:

- Increased buffer separation distances to sensitive uses (in some instance up to 8 times the rural land required in other States),

- Many farms have operated legally for more than 40 years, under Planning Permits issued by subsequently amalgamated Councils, and seek to rely upon “Existing Use” rights to upgrade their barns / sheds and / or convert to FR operations. It most cases these Farmers are being requested to submit applications for new Planning Permits, thus subjecting the current use the third party objections,

- Chicken farm barns / sheds being classified under the Australian Building Codes as “factory buildings”, requiring a higher level provision of fire services infrastructure. The Victorian Government and Building Authority have (October 2014) amended the Building Act to provide exemption for farm buildings, in relation to fire services, fire fighting water supplies, and emergency lighting requirements,
• Storage, removal, and disposal of barn floor litter and mortality birds being more controlled, (no disposal on-farm, but permitted on neighbouring land),

• Land fill charge rates have increased substantially,

• Restricted hours and curfews upon road transport on local roads (for placing chicks, delivering feed, and freighting the harvested chickens to the processing plants that routinely occurs at night for animal welfare reasons),

• Road pavement upgrades to accommodate B Double transports for chickens (when hay, dairy and other animal transport are accommodated),

• Restrictions upon bore water extractions, and tank storage for chicken drinking water and fire fighting provisions,

• Rain water harvesting, treatment, and storage (as alternate supplies),

• Environment Management Systems and Environment Management Plans that appear to differentiate between chicken farming and other intensive animal husbandry,

• On-farm audits for the VFF ‘Chicken Care Program’ and RSPCA accreditation,

• Quality control and other audits within the processing and value adding plants.

This may not be an exhaustive list, and current experience illustrates that several hundreds of thousands of dollars are being imposed upon chicken meat farm operators and applicants to reach approval to improve and/or redevelop.

5.3 Challenges and Opportunities

In the national context the Australian Chicken Meat Federation has put forward the following key policy issues that need to be addressed21:

1. Biosecurity

Biosecurity is an extremely important aspect in ensuring Australia’s ongoing food security. In the chicken meat industry, there are two main areas of biosecurity activity—global and on-farm biosecurity.

Events such as the global spread of H5N1 avian influenza (Australia being one of only a very few countries not to have experienced it) have demonstrated the impact that disease, and particularly zoonotic disease, can have on both the supply of food products and consumer acceptance and confidence in their food supply. This has implications in terms of protecting our own supply base, but also in terms of the risks such events pose for Australia’s food security should we hope to rely on imported food products—particularly from countries for which veterinary services, biosecurity arrangements and preparedness for a disease incursion may be of a lower standard than our own.

2. Access to animal health products

The use of vaccination is an important element in the prevention, introduction and spread of disease, within and between chicken growers.

Antibiotics are an invaluable resource for the industry to ensure that chickens keep or regain their health. Both in human and in animal health applications of antibiotics,

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21 ACMF “Submission to the Agricultural Competitiveness Taskforce” (Federal Agricultural Competitiveness Taskforce), April 2014, Dr Andreas Dubs.
development of resistance to antibiotics is of concern. For this reason, antibiotics of importance in human health are generally not registered for use in livestock, and use of any antibiotics in animals has to be approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA). The industry has adopted an antibiotics policy that sets out the responsible use of antibiotics (that it advocates), and ensures qualified Veterinarians are involved in the administering.

3. Animal welfare

Chicken meat growers take the welfare of their birds seriously:

- out of respect for the birds themselves, so they do not suffer,
- so that they grow as well and efficiently as possible and they are not damaged in the process,
- in recognition of, and respect for, community attitudes and expectations with respect to the humane treatment of livestock farmed specifically for their consumption.

It makes economic sense to ensure that flocks are maintained in an environment where they are comfortable, protected from injury, fed optimally and kept healthy. For example, feeding a chicken represents more than 60 per cent of the cost of raising a bird. Most feed is consumed in the latter stages of a bird’s growth when it is bigger and consuming more each day. It is not acceptable on welfare grounds, and nor does it make economic sense, to raise a bird to an advanced stage for it to die of disease or be injured en-route to the processing plant.

4. Research, development and extension

All chicken meat processing companies invest significant funds into in-house research and development, focusing on processing technologies, quality control procedures, distribution, packaging, product development and marketing, and market development.

In addition, research of a pre-competitive nature or with a significant public good component is being undertaken in a range of public and private organisations. Industry participates actively and provides funding through the RIRDC research program and the Poultry Collaborative Research Centre (CRC).

5. Rural Industries Research and Development Corporation (RIRDC)

RIRDC, through its chicken meat program, coordinates, funds and manages research, development and extension activities provided by public and private research organisations, including universities, CSIRO and state departments.

The chicken meat industry has long recognised the value of research and development and, in 1969, was one of the first of Australia’s agricultural industries to establish an industry levy for research. This levy, originally established under the Chicken Meat Research Act 1969, is matched with research funding provided by the Australian Government. Today, the RIRDC chicken meat program allocates over $3 million in research funding each year.

Distribution of RIRDC funding for research projects is guided by a five year R,D&E Plan (Research, Development, & Extension), which is developed with significant input from a range of stakeholders and is managed with the assistance of a largely industry-based advisory committee.

The RIRDC ‘Chicken Meat Program’ has a new five year RD&E Plan for 2014–19. The Objectives are to:

Increase the productivity and efficiency of chicken meat production,
o Deliver safe food and good animal welfare outcomes,
o Manage the environment for sustainable development,
o Create foundations for the future, including capacity and market insight, and
o Ensure research adoption via extension and communication

6. Poultry Cooperative Research Centre

The chicken meat industry strongly supports the Poultry CRC, both through direct company membership of the CRC and through the RIRDC Chicken Meat Program’s involvement as an essential participant. This support has been ongoing: following its initial establishment in 2003, the Poultry CRC was renewed for a further seven and a half years in 2010 with funding of million from its participating organisations, including a million dollar cash grant from the Commonwealth Government.

The Poultry CRC aims to help achieve sustainable, ethical poultry production in the face of population growth and climate change.

7. Land use planning and environmental regulation

There is an ever increasing problem associated with farming in or around both capital cities and regional centres. While planning schemes do designate rural zones, there is increasingly less understanding by local government and rural zone residents of what a rural zoning was intended for, ie: agricultural businesses and production. When combined with environmental legislation that is often not appropriate for the land use, and which can also be inconsistent across the States, this creates significant impediments to production and compliance, particularly for national companies.

For its part, the industry must continue to operate to appropriate standards to ensure that its impacts on the environment and its neighbours are minimised, through the adoption of voluntary and industry ratified environmental management systems and best practice management programs.

These challenges articulated by the ACMF to the Federal Government mirror what faces Victoria’s chicken meat industry currently, and going forward into the 10 year planning timeframe. In order to achieve cost efficient and competitive operations, the chicken meat industry has considered and addressed these matters.

Many existing broiler farms are not of a viable production capacity, and have had their separation buffer areas encroached upon by urban development. Some farms should consequently be considered for closure and or relocation to new development areas. Incentives could be provided to facilitate this, and investment secured to build larger more cost efficient farms.

Biosecurity, access to animal health products, and land-use planning & environmental regulation present considerable uncertainty for the industry. Of these, land use planning & environmental regulation appear to be the major challenges for both the industry and government in Victoria.

Bulk value added processing is regarded as a key driver in market development, and this is recognised by the major supermarkets. Coles is only receiving whole fresh chickens into its new processing plant in Sydney NSW, and portioning and packaging specialty products 7 days per week. Similar processing is undertaken in Griffiths and Tamworth. Woolworths currently does not allow chicken boning to be undertaken off-site from where the slaughtering takes place. These contradictory approaches impact upon the revenue of the Integrators, and if expanded could constrain Victoria’s ability to increase its gross product value within the 10 year timeframe.
There may be opportunity for Victoria to establish value-adding plants in joint venture partnership with the major supermarkets.

Experience within the sector has several Integrators regarding the State’s Workcover scheme as more a policing regulatory system than an insurance that assists or protect employers. Public Liability insurance has not been sufficient in some cases where contract workers have been engaged, and “Hold Harmless Agreements” have been instigated. Claims amounting to as much as $5 million have had to be met, and the VCMC suggests that government should consider Workcover in relation to contract work.

Many new farming developments are located outside regional cities and peri urban areas, and staffing these facilities consequently becomes problematic. Families need to be able to access the required levels of community infrastructure. The location of new farm developments needs to recognise that employees sometimes find it difficult to relocate to isolated areas.

A nexus between industry, community, and government must be maintained at a pragmatic and practical level in order for their respective objectives and aspirations to be achieved. It is evident that there is currently a serious degree of disconnect.

Victoria must also arrive at a competitive position compared to the other States, in order to address its net import position, and grow employment in peri-urban, regional, and rural areas. Otherwise, the farm production could become unviable, and value added processing would consequently have little future in Victoria.

The opportunity for Victoria going forward is substantively reliant upon:

1. Protecting and maintaining the legally operating chicken meat farms, while encouraging and facilitating their redevelopment to more productive and environmentally friendly operations,

2. Allow the conversion of conventional chicken meat farm barns/sheds to Free Range operations, and the reverse, if and when market driven demand requires,

3. Development of new value adding processing plants in partnership with major supermarkets in Victoria,

3. Provide for incentives (eg: Land Stamp Duty rebates) for existing chicken meat farms in peri urban areas, where residential and other sensitive use encroachment has created conflict, to relocate to more appropriate greenfield locations,

4. Identify new development zones in local government areas where new chicken meat farms can be located, with practical separation buffers, and supported by the required infrastructure,

5. Implementing an appropriate regulatory regime that is in-line with the other States, and provides a low “red tape” cost imposing environment for responsible farming, and

6. A clear and unequivocal “whole-of-government” policy position that provide greater efficiency and surety to the development approval process.

A complete re-think and overhaul of the current regulatory and approvals system may be required in order for Victoria to be the leading producer in Australia of chicken meat for domestic and export markets. A piece meal approach is currently being followed, with separate Departments and Authorities creating conflict and uncertainty.

Such an overhaul may take several years to realise and implement within the context of this Strategic Plan timeframe, but to do nothing but continue in the manner now evident in Victoria could lead to the practical demise of chicken meat farming in this State.
The potential for export into SE Asia has increased via the Free Trade Agreements recently entered into with Japan, Korea, and China. There may be opportunity for joint venture partnerships with Asian companies and State owned entities to invest in new cluster farm developments and processing plants in Victoria. Securing chicken meat supplies into the long-term future (from a disease free and green environment) to feed the rapidly increasing populations of SE Asia could be an attractive strategic proposition.
6. PLANNING FOR 2025

6.1 The industry’s perspective

It is the industry’s general view that Victoria is at a clear production disadvantage when compared to the other mainland States. Production growth is primarily being restricted by the cost imposts and uncompetitive regulatory processes (listed in Section 5).

The major supermarkets and other retailers are continually seeking to pay lower prices for fresh and value added products, and pass-on the imposts of RSPCA and Free Range accreditations, via the Farmers to the Processors (within the contract grow-out price paid to the growers).

Feed grain prices fluctuate, and generally increase with other global agriculture commodity prices (rather than reflect current supply / market demand within Australia).

The costs of environmental protection and biosecurity are rising, and Victoria DEPI & EPA are proposing the most stringent odour emissions regulations in Australia. The rural land required for the proposed separation buffers to sensitive uses in Rural Zoned land could be up to 8 times that required elsewhere in Australia.

The price and availability of suitable rural land within the 1.5 hours road transport radius of the existing processing plants is escalating, placing additional viability pressure upon new chicken meat farm development.

Waste management, recycling, and disposal are matters that affect the chicken meat sector disproportionately, when compared to beef, pork, or lamb production. This disproportionality is also evident in the approach by VicRoads and some local Councils towards feed grain and live chicken transport vehicles using rural roads. Milk trucks, livestock, and hay carting transports appear not to be subjected to the same usage restrictions.

The Planning Permit approvals process is near to being unworkable, with the majority of applications for upgrades, expansions, and new farms being routinely sent to VCAT for decision. A broad animal welfare lobby is frustrating proponents, and some in the community simply do not want chicken farming in their vicinity. Councillors are being lobbied to overturn the approval recommendations of Council’s Planning officers, and/or impose unrealistic Permit conditions.

The Permit applications and Notices of Decisions that are appealed at VCAT generally delay development by more than a year, and require a plethora of expert consultant reports and legal representation in order to reach a decision.

Despite the Broiler Code 2009 and Planning Practice Note #63, new chicken meat farm applications are referenced to the State Environmental Protection Policies, and costly odour modelling analysis is frequently requested by VCAT.

The consequential additional cost amounts to several hundred thousand dollars, plus holding cost due to delays (being heard at VCAT and receiving a decision). This does not include the probability of a decision being appealed at the Supreme Court.

The industry seeks to achieve a consensus whereby conservative growth targets for Victoria are supported by greater investment surety via the Planning approvals process. The VCMC regards the future of the sector in Victoria as being at the “cross-roads”, where much needed investment and jobs creation will be secured in the other States, unless some serious changes and commitments are made in partnership with government.

23 Practice Note 63 - Applying for a planning permit to farm chickens, Department of Planning, December 2012
6.2 A government perspective

The Victorian Government has articulated its support for the chicken meat industry, and provided significant funding for infrastructure, skills training, investment attraction, market development, and strategic planning. The relevant Departments of Agriculture; Environment & Primary Industries; Planning; Water; State & Regional Development; and Small Business & Industry uniformly regard the chicken meat industry as important to the State.

The EPA in particular is unequivocal in its regulatory role in ensuring that the industry adheres to the highest environmental protection standards in Australia (and in some cases the world). While odour emissions from primary agriculture may not be noxious and accepted as normal to many rural communities, urban encroachment into previously adhering buffer separation areas is a matter for Local Councils and industry to address. Legally operating existing farms are being required at VCAT to justify their continuance to local Authorities.

The State’s Planning Policy Framework proactively encourages rural production on appropriately zoned Farm, Rural Activity, and Green Wedge land, and differentiates Intensive Animal Husbandry from less intensive farming. Local Council Municipal Strategic Statements similarly encourage primary agriculture production and support the economic development created by value adding the produce locally.

The Metropolitan Planning Authority has carriage of the Plan Melbourne strategy, and is undertaking Precinct Structure Planning in Melbourne outer growth areas. Strategic Principles of the Plan Melbourne strategy to 2050 are that Victoria will be a State of Cities, where employment creation will be within designated employment precincts. Jobs should generally be closer to where people live, thereby reducing the need for commuting to work, and reducing traffic congestion. Much of Plan Melbourne impacts upon the current and future operations of the chicken meat Farmers and Processors, particularly the Processors located in peri urban areas.

The population of Victoria is forecast to increase by approximately 1 million people over the 10 year timeframe. This alone would add 44,000 tonnes (at 44 kg per person at current rates) to the demand for chicken meat in Victoria during the timeframe of this Plan.

Major freight transport corridors are to be created, linking from farm gate to end user markets, via logistics distribution centres and shipping & airfreight container ports.

Victoria places a high value upon its clean and green credentials, and is vigilant in its biosecurity protocols and quarantine restrictions. The State’s “Sustainability Victoria” agency also has in place a “Getting Full Value” for waste recycling, that supports organic waste recycling and bio mass energy reuse.

Security and quality of water supply and energy are important policy directions in Victoria. Low cost and secure electricity and gas supplies are crucial support sectors for the chicken meat industry.

The Victorian Government seeks to grow the industry across the State, and ensure that it becomes a leading supplier of quality chicken meat products nationally and for export.

6.3 Assumptions and forecasts

Combining ABS and consolidated “commercial-in-confidence” data guidance from the VCMC stakeholders, with the ABARES and RIRDC data projections, this Strategic Plan relies upon the following assumptions:

24 'Plan Melbourne’ - Metropolitan Planning Strategy, May 2014, DTPLI, Figure 2
• Continued production growth over the 10 year timeframe,
• Chicken meat retaining its price competitive position (compared to the other meats),
• Chicken meat production continuing to hold around 28% share of total meat market,
• Domestic growth to continue at a national average of 4% per annum,
• Victoria becomes an economically competitive location for chicken meat production within a national context when compared with the other States, and
• State and Local governments partner with the chicken meat sector in the immediate to medium term in relation to infrastructure planning and development approvals.

Some increased export demand growth can additionally be predicted and pursued by several VCMC stakeholders, but this endeavour is currently with hesitation, due to fears that Victoria may not be able to deliver upon increased cost competitive production. The recent Free Trade Agreements entered into by the Federal Government with Japan, Korea, and China provide growth opportunities for exported agricultural produce.

The following forecast methodology is based upon the ABS current 2014 data, and applying a conservative 3% notional growth rate per annum, to extrapolate the Victorian chicken meat production in 2025 estimated to be 335.25 Kilo tonnes*.

At an industry average of 1.9 kg average dressed weight per chicken (ADW), this would translate into demand for around 176.5 million birds grown per annum in 2025 in Victoria.

This represents a 33% increase in production over 10 years 2016-25 (an additional 45 million chickens).

This would require an additional 180 broiler sheds (averaging 45,000 chickens per shed producing 5.5 batches per annum).

Based upon 2014 production, the increased feed requirement would be approximately 203,000 tonnes of grain (at 4.5 kgs per chicken grow-out), supported by 600 mega litres (14 litres per chicken) of secure water supplies. This includes water supplies used for wash-down and cleaning.

Waste recycling & disposal (116,460 tonnes of manure & litter per annum), and rendering processes (approximately 10,000 tonnes or 4 million mortality chickens per annum) would need to be planned for.

* Note: The assumed growth from 2014 to 2016 (when this Plan might begin to be implemented) is 3% pa, however if Victoria continues to lose national share of production the 2016 production figure could be lower.
In summary, targets based upon conservative 3% pa growth over 10 years (2015/16 to 2025):

<table>
<thead>
<tr>
<th>Unit / year</th>
<th>2016</th>
<th>2020</th>
<th>2025</th>
<th>10 year Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production  Ktonnes</td>
<td>256</td>
<td>289</td>
<td>335</td>
<td>85.8</td>
</tr>
<tr>
<td>+ change pa</td>
<td>7.48</td>
<td>8.42</td>
<td>9.76</td>
<td></td>
</tr>
<tr>
<td>Chickens    million</td>
<td>135</td>
<td>152</td>
<td>176</td>
<td></td>
</tr>
<tr>
<td>+ change pa</td>
<td>2.5 kg ADW</td>
<td>3.94</td>
<td>4.43</td>
<td>5.14</td>
</tr>
<tr>
<td>Feed grain  Ktonnes</td>
<td>609</td>
<td>685</td>
<td>794</td>
<td></td>
</tr>
<tr>
<td>+ change pa</td>
<td>4.5 kg/bird</td>
<td>17.72</td>
<td>19.95</td>
<td>23.13</td>
</tr>
<tr>
<td>Water       ML</td>
<td>1,799</td>
<td>2,024</td>
<td>2,347</td>
<td></td>
</tr>
<tr>
<td>+ change pa</td>
<td>13.3 l/bird</td>
<td>52.39</td>
<td>58.96</td>
<td>68.35</td>
</tr>
<tr>
<td>Waste       Ktonnes</td>
<td>89</td>
<td>100</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>+ change pa</td>
<td>0.66 kg/bird</td>
<td>2.06</td>
<td>2.93</td>
<td>3.39</td>
</tr>
</tbody>
</table>

Table 2: Summary of 2025 targeted growth based upon 3% pa growth over current production

These targets would translate into growth ramifications:

- New breeder farms and hatcheries
- New investment in grow-out farms, processing, and value-adding processing
- Job creation
- Feed grain volume increases, and expanded feed-mills
- Increased water usage and recycling
- Increased energy usage
- Increased waste recycling and disposal
- Road sea, air, and rail freight transport
- Export potential, particularly to China

The primary production of an additional 45.15 million chickens will require more hatcheries, and new and expanded grow-out farms. There are currently 6 hatcheries producing over 128 million chicks (2014), so one additional hatchery could be needed by 2025.

An average commercial cost efficient farm can be regarded as an 8 shed operation, with 45,000 chickens per shed. Modern shed buildings and associated facilities can cost around $12 to 13 million per farm (in 2014 dollars), so the future investment in 22 chicken meat farms could be $284m (in 2014 dollars) - not including the current cost imposts from Planning Permit applications and Development Approvals.

There is some excess processing capacity within the four Integrators currently, but this could change, dependant upon how much production is lost to other States. It is estimated by the VCMC that an additional $210m investment would be required by the industry to expand current capacity: primary processing ($150m), and further value-adding ($60m), to meet these growth targets (in 2014 dollars).
Inghams’ Clyde feed mill currently has approximately 155,000 tonnes pa excess capacity. This could be utilised in the short to medium term to supply the targeted increased volumes, but private sector (eg: Ridley Agriproducts) would need to increase capacity in the central west of Victoria. Ridley’s is currently building new capacity at Geelong, so new feed mills may be required, but a small increase in employment of 20 is projected.

Employment creation is mainly in primary and further processing, farming, and distribution, but there would be additional jobs directly in feed-mills, hatcheries, technical services, sales, OH&S/QA, and administration roles. The industry notes that there is particular growth currently in value added processing, and products for the convenience food markets.

Distribution employment increases would include placing chicks and transporting fully grown chickens to slaughter, feed mill deliveries to farms, delivery of process meat products, and interstate & international exports.

Based upon 2014 employment numbers, the VCMC estimates that the additional employment creation as a consequence of the 2025 conservative 3% pa growth targets could be:

- Primary processing: 400 (taking into consideration excess capacity in 2014\(^{25}\))
- Further value added processing: 200
- Breeder farms (10): 60
- Hatcheries (1): 20
- Broiler farms (22): 110
- Distribution: 80
- Feed-mills: 20
- Technical services + Sales + OH&S/QA + Administration: 50
- Bi products recycling and processing: 50

Total employment creation could be in the order of 950 jobs. Considering salaried fulltime positions, contractor positions, and weekly shift work, at an average EFT wage of $65,000, an annual $60m in additional salaries could be created.

Feed-mills are currently either owned or operated by the Integrator companies, or by third parties (such as Ridley Agriproducts). Using the Inghams Clyde feed-mill for guidance, the plant has capacity to produce 6,000 tonnes per week, but in 2014 only delivered half that volume to company breeder farms, contract broiler farms, and external customers. Approximately 20% of that feed was a specific formula for FR chickens. The Clyde plant employed around 14 people in 2014 to produce 3,400 tonnes per week, with excess capacity of around 135,000 tonnes per annum. The additional demand for 154,000 tonnes could create 20 new jobs within the feed-mills across the State.

It is noteworthy that the Clyde mill is currently being encroached upon by urban development planning by the Metropolitan Planning Authority. The future operations of this plant within the 10 year timeframe are consequently uncertain. Relocation of this plant could cost $50m (2014).

Ridley Agriproducts is currently developing a new monogastric feed mill at Lara (near Geelong). The company currently supplies Hazelden, Baiada, and Turi farms.

Secured quality water supplies would be crucial, in terms of expanding operations with a biosecurity regime. Mains water, bore groundwater, and captured rain water will need to supported by treated recycled water. The estimated 600 mega litres will require government and private sector investment to farms and processing plants in particular. Some processing currently treats and recycles all water supplies.

Electricity supplies will need to be cost competitive to all the farms, processing plants, hatcheries, feed-mills, and transport distribution centres, in order for Victoria’s production

\(^{25}\) VCMC estimates that approximately 90 to 100 EFT jobs will be created for every additional 100,000 chickens produced per week
costs to be competitive. Supply security, particularly in rural and regional centres, will be critical in order to maintain the quality of fresh delivery.

Opportunity will exist for renewable electricity supply and bio generation plants (utilising processing waste) to augment grid power. Solar electricity generation at chicken farm sheds could also be economically advantageous, and benefit the environment.

Mains pressure gas is not considered to be a key component for growth, but LPG gas is widely used for heating of broiler sheds.

Waste disposal is a crucial consideration, particularly as the EPA is moving further toward off-farm disposal of shed litter and manure. The decrease in waste-to-landfill targeted by the Victorian government, and increased landfill levies, create a direct challenge for the chicken meat industry.

Sustainability Victoria and the Waste Resource Recovery Groups could target projects to assist in the processing and reuse of these organic waste streams, and assist with the joint funding of bio generation plants.

The State’s transport planning is detailed in the “Plan Melbourne” strategy. Directions 3.5 & 3.6 of the strategy articulates the “Victoria – The Freight State” 40 year freight and logistics plan. Three priority initiative areas underpin what is regarded by the VCMC as a crucial approach to linking industry production precincts with good freight transport routes. VicRoads and Local Councils should accommodate chicken feed and delivery/pick-up B Double transports, in the same manner as dairy, hay carting, and other agriculture service vehicles. Clustering of new farm developments would assist government in providing an integrated transport system, from hatcheries, to farm gate, to processing plants, to retail distribution, and export ports.

Demand for meat products internationally has been partly driven by an increasingly affluent middle class in developing Asian countries. Australia’s reputation for disease free produce rightly places it in a commanding position to supply countries such as China (that has been affected by avian influenza). Our relatively high cost-of-production and freight costs have historically made Victoria uncompetitive for chicken product export, but some increased demand of low and high value product is occurring.

The ABARES forecast of 2.25% pa growth for total national export of chicken meat products (45,000 tonnes or A$59m in 2019) might be changed as a consequence of the Free Trade Agreements with Japan, Korea, and China. Whilst a conservative 2025 target of 15,000 tonnes and A$20m (2014) per annum might be achievable, the VCMC regards ensuring that Victoria moves from being a net importer of chicken meat by 2020 to be the primary objective.

In summary, under this conservative scenario, by 2025 Victoria could invest $284m in new broiler farms, $60m in breeder farms, $25m in a new hatchery, $25m in feed mill capacity, $210m in additional processing, and $50m in transport & distribution. More than 950 EFT additional jobs could be created, injecting $62m per annum (in 2014 dollars) directly into the Victorian economy. A capital investment of $654m to support sectoral growth within 10 years could be required.

A “Reality check”: The South Australia experience

By way of comparison, the 10 year Strategic Directions compiled by the South Australia Chicken Meat Council in 2005, targeted 50% of Australia’s domestic consumption growth. This would represent 20% of the national production (which was 9% in 2005). This VCMC Plan seeks to only regain its 28% share of the national

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26 Refer: Figure 5
27 Poultry Meat in South Australia – Strategic Directions 2005 to 2015 (and 2012 Update), SA CMC
consumption market, and become a net exporter of product (rather than continuing as a net importer).

SA sought to increase exports from $40 million to $500 million by 2015, and create an additional 1,200 jobs. Victoria seeks to respond to current market demand (based upon 3% pa projections) and predicted population growth, and create 950 new jobs over the decade.

SA target of increased production by 50 million chickens over 10 years to create 1,200 EFT jobs. Research by Econsearch in the SA CMC 2012 Update document estimates 56 new EFT jobs (direct + flow-on) from every 1 million additional chickens produced.

Victorian currently employs in excess of 10,000 people to produce and process 128 million bird per annum. Victoria’s target of 45 million additional chickens over 10 years could create 950 jobs (a 33% increase at 23 EFT jobs per million birds), with the expected growth to come from value added processing.

The chicken meat industry in SA targeted $300 million in capital over the decade, but invested $575 million in capital in the 5 years to 2012. SA doubled its processing output to 77 million chickens, and the 2012 Update Plan predicted that a further $80 million investment could achieve an additional 33 million chickens (to 110 million annual production). Victoria is targeting $654 million to increase production by 45 million chickens over 10 years.

The VCMC notes that the SA CMC 2012 Update warned that South Australia’s targets “might not be reached due to problems with inadequate rural infrastructure, processing staff shortages, difficulty complying with development regulations in some councils, and rapidly increasing costs of utilities and waste management”. The SA CMC listed 5 challenges ahead:

1. Lack of infrastructure for new farms
2. The increased cost of utilities and trade waste management
3. Finding and keeping processing staff
4. Inconsistency of local government planning policy
5. Dealing with government and infrastructure authority procedures

The VCMC is cognisant of and notes the experience in South Australia, in compiling this Strategic Plan.

Many factors that are external to the chicken meat industry may affect and alter the conservative scenario principally applied for this Strategic Plan. Unlike South Australia’s ambitious targets to achieve 20% of national production (from 9%) and 1,200 additional jobs, the VCMC is of the view that a realistic approach is perhaps warranted in Victoria. Whilst SA did achieve strategic outcomes, and grew to 15% of national production in 8 years (2005-13), it has encountered rising utility charges, inadequate rural infrastructure, skills shortages, and difficulties complying with Local Government development regulations.

In examining potential external factors, this Strategic Plan cannot assume that processors will not close down in other States, thus creating the potential for live chickens to be imported into Victoria. Coles is currently value adding fresh whole chickens by boning and portioning in Sydney. There is potential for Coles and Woolworths to do the same in Victoria, thus diminishing the processing demand in this State. The four Integrators see significant growth potential in further value added processing, if the major retailers and convenience food outlets remain committed to realistic price margins and consistent order volumes.

The VCMC considers it prudent to also examine a 4% pa growth scenario that might lead towards Victoria a net exporter of chicken meat.

In summary, targets based upon a 4% pa growth over 10 years (2016 to 2025):

<table>
<thead>
<tr>
<th>Unit / year</th>
<th>2016</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>Ktonnes</td>
<td>262</td>
<td>306</td>
</tr>
<tr>
<td>Chickens</td>
<td>million</td>
<td>138</td>
<td>161</td>
</tr>
<tr>
<td>Feed grain</td>
<td>Ktonnes</td>
<td>620</td>
<td>726</td>
</tr>
<tr>
<td>Water</td>
<td>ML</td>
<td>1,834</td>
<td>2,145</td>
</tr>
<tr>
<td>Waste</td>
<td>Ktonnes</td>
<td>91</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 3: Summary of 2025 targeted growth based upon 4% pa growth over current production

These 3% and 4% pa growth rate scenarios do NOT consider the potential for the ABARES forecast 2.25% pa increased international product exports (and flowing from the recent Federal Free Trade Agreements).

The Department of Primary Industries in Victoria has posed the question whether 30% of national production can be achieved by 2020. For Victoria to regain a 30% share of national production it would need to grow an estimated additional 138 million chickens by 2025. This would represent a 108% increase over 2014 production. This would represent an approximate 9% pa growth scenario, to have Victoria producing over 214 million pa by 2020.

<table>
<thead>
<tr>
<th>Growth pa</th>
<th>Chicken 2025 millions</th>
<th>Increase over 2014</th>
<th>Additional farms</th>
<th>Additional zoned land</th>
<th>Land $m’s (2014 $’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3%</td>
<td>176</td>
<td>45.15</td>
<td>22</td>
<td>4,400</td>
<td>284</td>
</tr>
<tr>
<td>4%</td>
<td>196</td>
<td>63.67</td>
<td>31</td>
<td>6,200</td>
<td>400</td>
</tr>
<tr>
<td>9%*</td>
<td>329</td>
<td>94</td>
<td>94</td>
<td>18,800</td>
<td>1,207</td>
</tr>
</tbody>
</table>

* For Victorian to regain 30% of national production by 2020

Table 4: Comparison of growth scenario requirements for Victoria in 2025

The VCMC considers that the 9% pa growth scenario (ie: establishing an 5.5 additional farms per year over the 10 year timeframe) could only achievable when:

- the EPA Odour emissions regulations relating to IAH farm buffer distances were similar to other States,
- a radical overhaul of the Planning Approvals processes was undertaken to bring more surety to investment decisions in Victoria, and
- appropriate land was identified and designated by Intensive Animal Husbandry farm development overlays.
Such a scenario would require large scale investment, and joint venture partnerships, eg: from Asian export markets. The VCMC submits that this is unlikely to occur under the current regulatory regime, and government approach to chicken meat farming. The assessment of Planning Permit applications is inconsistent, and the development process lacks sufficient surety for long-term investment decisions. There is little support within peri metro Local Councils for existing farms to upgrade technology and expand their operations. Urban encroachment and allowing sensitive uses into buffer areas now restricts existing use rights.
## 6.4 A draft Plan for 10 years (2016–25) in summary:

<table>
<thead>
<tr>
<th>Objective Targets:</th>
<th>New developments:</th>
<th>Strategies:</th>
<th>Notes:</th>
</tr>
</thead>
</table>
| **1. Increase live chicken production from 135 m to 176 m pa** | • 22 broiler farms of 360,000 bird capacity  
• 1 new hatchery  
• 10 new breeder farms (1,500 sqm for 8,000 hens)  
• additional slaughtering capacity for 45 m birds | • Identify new greenfield development zones  
• Establish Special Use development zones  
• Plan and fund services infrastructure  
• Incentives for existing farms to relocate eg: land stamp duty reductions | Joint venture opportunities with SE Asian partners should be investigated. Breeder farms and Hatcheries must isolated from broiler farm zones. Some existing farms need to relocate. |
| **2. Increase value added processing capacity from 48 to 67 Ktonnes pa** | • Expand capacity at existing processing plants by 93 Ktonnes  
• Additional value adding plants 20 Ktonnes | • Utilise excess capacity within the 4 current Integrators.  
• Regional Infrastructure Development Fund support. | The 4 main Integrators to commit to capacity increase in Victoria, above approximately 650,000 chickens per week spare capacity. |
| **3. Create 950 new jobs** | • Primary processing: 400  
• Further value added processing: 200  
• Breeder farms (10): 10  
• Hatcheries (1): 20  
• Broiler farms (22): 110  
• Distribution: 80  
• Feed-mills: 20  
• Technical services, Sales, OH&S/QA, Administration: 50  
• Bi products: 50 | • Locating processing plants in employment precincts near urban growth areas and regional cities  
• Locating new farms in greenfield development areas within 1.5 hours of slaughter | Skills training required: New TAFE Certificate courses |
| **4. Increase feed supply capacity by 154 Kt** | • Establish additional supply | • Inghams Clyde feed mill has 135 Ktonnes pa excess capacity. Ridley’s expanding at Lara | |
| **5. Land and utilities** | • Identify 4,400 ha of greenfield sites  
• Water (600 ML), Electricity, and Roads | • Local Councils to hold freehold Title  
• Water Authorities and Power companies partnering | |
| **6. Waste generated per annum of 116 Kt** | • Recycling of 30% of the total weight of live chickens  
• Bio mass power generation plants  
• New markets for processed manure and litter | • Meat and bone meal for use as a valuable source of protein in stock feed  
• Manure and litter as a fertiliser  
• Pet food flavourings  
• Pharmaceuticals and other chemicals | A recycling render plant at each slaughtering plant. Sustainability Victoria funding support for organic recycling. |
7. HOW TO GET THERE (AND PLAN)

7.1 Facilities

The VCMC and Victorian Government, with the support of local Councils and utilities providers, can only achieve the targets for 33% production growth over 10 years (and supporting infrastructure) by proactive and cooperative intervention. The investment required must come from the private sector and government.

The additional greenfield land required to be zoned for clustered chicken meat farming needs to be identified and secured. Local Council Planning Schemes need to recognise these areas, and be zones amended accordingly, to provide approvals, as security for investors.

Under the current Planning Permit regime for conventional broiler farms and FR farms, an average 200 ha site would be required for each Class A farm. A total area of land required for 22 new farms might be around 4,400 ha. The cost of this farming land in appropriate locations in regional Victoria could be $22 million (at $5,000 per ha).

It must be stressed that the EPA’s current proposal for odour emissions guidelines could require up to 8 times this area of land, due to increased buffer distances, increasing the cost of land estimate to $176 million.

The new breeder farms (10) and an additional hatchery need to be separated geographically from the broiler cluster farming districts.

Waste disposal (mortality birds, manure, & litter), and recycling of protein (based upon 30% of the live weight) must be established in conjunction with the State Authorities, Local Councils, and the Integrators. The increase in production of 45 million chickens will produce in excess of 30,000 tonnes pa of additional manure & litter to be recycled or disposed to landfill. Regional processing facilities should be established to recycling this into a fertilizer resource.

7.2 Infrastructure overview

**Land:** Low cost and suitable Rural Activity zoned farm must be identified in local government areas where Councils seek to support and commit to chicken meat farming. Sufficient and practical buffer separation areas should be created. The proposed 4,400 ha should then be included in Council Planning Schemes and covered by appropriate Development Overlays, to provide surety to future approvals. The matter will be the focus of further consultation during the next phase of adopting the Strategic Plan.

**Water:** Secure water supplies need to be established for existing and future chicken broiler farms, and processing plants. Ground water, mains water, recycle water, and rain water harvesting all have a role in the future of intensive farming and value added processing.

**Roads:** Road transport is a crucial component of the integrated production and processing of chicken meat. Operational restrictions and curfews are currently impeding the sector. Freight routes for B Double transports for feed grain and chicken movements need to be identified and codified, in order to bring greater surety and environmental protection to the sector.

**Electricity and Gas:** The cost of energy and its continuity of supply are critical to the viability and efficient operations of the sector. Three phase power supplies and mains or LPG gas supplies should be planned for growth areas.

**Waste disposal:** Landfill is increasingly an inappropriate and costly method of waste disposal, and the State’s policy is to reduce inputs significantly.
Organic recycling: Much of the bi products from chicken production can be recycled and or used as biomass. Further research and funding support from government is required in partnership with the private sector to cope with and add value to the increase in waste materials.

7.3 Regulatory regime

It is noteworthy that the South Australian experience since 2005 has identified building a working relationship with the EPA as “High Priority”. The VCMC regards this as the number one priority for the implementation of this Strategic Plan. Without a practical and pragmatic response by the EPA to farm odour emissions and waste disposal / recycling, the financial viability of this Strategic Plan will not be achievable.

The Victorian EPA should further reconsider Intensive Animal Husbandry within the context of its Industrial Air Emissions Guidelines. A separate guidance is suggested for IAH farming assessments.

A nexus must be established between the desire for growth and development in the chicken meat sector, and sensible regulatory environmental protection within a rural farming environment. The operational differences between large cluster farms and single broiler farm developments must be recognised, and dealt with proportionately. The buffer areas required should be generally in-line with the other State jurisdictions. If not, Victoria will continue to have higher development and production costs.

Planning approvals for Intensive Animal Husbandry developments should be devolved by local government, but supported by appropriate references within Municipal Strategic Statements and Planning Schemes. VCAT should not be a routine mechanism for the assessment of IAH Planning Permit applications, where the SEPP’s (AQM) have become the default grounds for decisions and permit conditions.

It is clear to the VCMC that VCAT has a legal jurisdiction to decide upon Development Approvals and determine appeals, and is bound by the SEPP’s (AQM) and municipal Planning Scheme ordinances. Many Local Councils routinely allow a process via VCAT for decision, rather than act upon the recommendations of their Planning officers. This creates significant delays and adds considerable costs to Development Approval process, and constitutes a costly burden upon the Department of Justice system. VCAT and Local Government would be better served by better strategic planning for IAH developments, and a new regulatory regime.

The Victorian Government should replicate an amalgam of regime structures from the other mainland States:

- Establish a “Development Assessment Panel” comprising relevant professional Statutory Planners, Engineers, Environmental and Agricultural Scientists, under the Planning Act, that would compile and administer an ‘Integrated Development Assessment System’ (IDAS).
- The “Development Assessment Panel” could be annexed to the Victorian Building Authority, Melbourne Planning Authority, or Planning Panels Victoria (Priority Development Assessment Panel)
- An IDAS would provide a single legal administrative framework for the assessment and approval of all development in Victoria.
- IDAS should refer only to the Broiler Code 2009 (including Free Range applications), and decide upon Planning Permits and Development Approvals.
- The “Development Assessment Panel” should be directed by policy provisions that broadly cover:
  - All new Intensive Animal Husbandry farms (ie: feedlots, piggeries, Free Range broiler and layer farms, dairy farms, & co)
  - Expansion of existing all IAH farms
The information required for Planning Permit applications and Development Approvals for new IAH farms and expansion of existing farms

- Proposals for Residential and Rural-Residential Development in the vicinity of farms
- Local Planning and Development controls / conditions for Intensive Animal Husbandry farms

- Farms less than 400,000 chickens should generally be pre-approved on appropriately zoned site, with buffer distances:

  | Sensitive use: | Non-rural zone | 300 m |
  | Rural zone    | 100 m |

  | Public roads | > 50 vehicles/day | 200 m |
  | < 50 vehicles/day | 100 m |

These farms should submit and execute an approved Environmental Management Plan (EMP), and be audited regularly by the VFF’s Chicken Care Program.

The EMP should be a formal commitment that all reasonable and practical efforts have been made to operate the chicken meat farm in an environmentally sustainable manner. The Chicken Care Program should provide training and knowledge transfer to framers in support of the on-going implementation of each EMP.

The EMP should provide a system for documenting:

- environmental hazards and risks of the meat chicken farm,
- how these risks will be minimised by design and management strategies,
- the process for monitoring the effectiveness of the design and management strategies, and
- how the results of the monitoring will be reported.

- Cluster farms with greater than 400,000 chickens should also be only assessed against the Broiler Code, and require an Environmental Management System (EMS) be implemented similar to that drafted by RIRDC.

  The EMS should articulate site-specific considerations, include supporting air quality and/or acoustic modelling assessment, and recommend appropriate buffer separation distances:
  - 500 m from any existing or future residential zone;
  - 300 m from any existing or future rural-residential zone;
  - 100 m from the boundary of an abutting chicken farm.

- The IDAS could further clarify the definition of a “sensitive use” within a rural farming air emissions context. The SEPP’s (Air Quality Management) establishes the framework for managing emissions into the air environment in Victoria from all sources of air pollutants, so that the air quality objectives outlined in SEPP (Ambient Air Quality) are met, having regard to the economic and social development of Victoria. The management framework and attainment program for protection of the air environment contained in SEPP (AQM) address not only ambient (or regional) air quality, but also the management of particular sources (for example, industry, motor vehicles and open burning) and local air quality impacts, including air toxics, odorous pollutants, greenhouse gases and ozone depleting substances. Air emissions from Intensive Animal Husbandry should be assessed under different criteria from those examples listed above.
• Review and update of the Broiler Code to include aspects of Free Range chicken meat farming and a practical approach to air emissions management.

7.3 Geography

Given the current location of slaughtering plants at Mornington, Bendigo, Thomastown, and Geelong, and transport radius equivalent to 1.5 hours should be considered for broiler farm clustering. Local Government Areas around Bendigo, Geelong, and Latrobe Cities should be further investigated. Assistance plans such as that initiated for the Ford Motor Company closure, and the Latrobe Valley Taskforce, should be focussed upon supporting the implementation of this Strategic Plan.

Some existing Farmers may be encouraged to relocate elsewhere in order to be able to expand their farms without further urban encroachment upon their existing buffer areas. Victoria might replicate the experience in other States, where funded infrastructure provision have acted as sufficient inducement for chicken meat farms to cluster in geographical locations (eg: South Australia). The increasing value of peri urban land should act as a reasonable incentive for existing chicken Farmers to increase the scale of their operations via relocation.

Land identified for further chicken meat farm development could be designated as “Special Use IAH zones” within the Planning Schemes of proactive Councils. The Golden Plains Shire Council, by way of example, has successfully established a “Food Production Precinct” of around 2,800 ha on rural zoned land, and plans appropriate and compatible in-fill developments within the buffer areas for future clustered chicken meat farms.

Such an approach has many previous precedents in Victoria, dating back to the Victorian Economic Development Corporation approach in the 1980’s (eg: Albury & Wodonga development precincts). Government generally procures the land before designating specific development zones or precincts, so that any consequent appreciation in site land values is passed onto the stakeholders. Further investment into utilities infrastructure provision is made similarly, in partnership with government and the private sector, to assist in development taking place.

Furthermore, the Golden Plains Shire “Food Production Precinct” example, a Chinese agricultural enterprise group (Jungray Pty Ltd) has partnered in the land development, and $12m in 8 km of water supply infrastructure has been provided by Barwon Water and the three tiers of government.

Bio security will be a crucial consideration in the future implementation of this Strategic Plan, and location and abutting uses of chicken meat farms requires careful consideration by government and the industry. Clustering of new farms may create added risk of cross contamination and spread of diseases.
### 7.4 Implementation

It is accepted that this Strategic Plan is proposed to be discussed, endorsed, and adopted during first half of the 2015 calendar year, and the 10 year timeframe for implementation is planned from 2016. This will allow for planning, investment and funding to be discussed, and actions initiated.

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8. Stakeholder Engagement (Stage 2 of the Project)

The intension of the VCMC is to engage with government and stakeholders in further consultation regarding this interim Strategic Plan document. Stage 2 of the project intends to identify and further detail the infrastructure commitments, and other requirements needed for the implementation of this Strategic Plan from 2016 to 2025.

The Draft Plan will be further detailed thereafter, with focus upon specific locations in the regions mentioned in this document. Estimates will be compiled for infrastructure provision, skills training, and other future implementation requirements. The finalised Plan is anticipated by March 2015.

Comments and feedback can be submitted before Friday 13th February 2015 to:

Mrs Chris Ward, VCMC Secretary, C/o: Inghams Enterprises Pty Ltd, PO Box 37, Somerville, 3912. (cward@inghams.com.au) Telephone Business hours: 03 5971 6210

OR

Mr Geoffrey Carruthers, Gap Dev Corp Pty Ltd, 76 Wimborne Avenue, Mount Eliza, 3930. (gcarruthers@gapdevcorp.com) Telephone Business hours: 0419 382 856
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http://www.chicken.org.au/

Victorian Farmers Federation: © Victorian Farmers Federation, Chicken Meat Group


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