THE LAW SOCIETY OF NEW SOUTH WALES
young LAWYERS

Inquiry into the Use of Battery Cages for Hens in the Egg Production Industry

25 July 2019

The Director,

Select Committee on the use of battery cages for hens in the egg production industry

Parliament House, Macquarie Street, Sydney NSW 2000

egg.industry@parliament.nsw.gov.au

Contact: **Jennifer Windsor**
President, NSW Young Lawyers

Daniel Cung
Chair, NSW Young Lawyers Animal Law Committee

Contributors: Timothy Allen, Alex Culas, Alana Davison, Shar Doudman, Emily Hancock, Tracey Kumar, Cynthia Lam, Reem Lascelles, Lauren Musgrave, Rishika Pai, Gillian Shaw and Joanna Smith-Lawson

The NSW Young Lawyers Animal Law Committee (**Committee**) makes the following submission in response to the Terms of Reference on the inquiry into the use of battery cages for hens in the egg production industry (**Terms of Reference**).

NSW Young Lawyers

NSW Young Lawyers is a division of the Law Society of New South Wales. NSW Young Lawyers supports practitioners in their professional and career development in numerous ways, including by encouraging active participation in its 15 separate committees, each dedicated to particular areas of practice. Membership is automatic for all NSW lawyers (solicitors and barristers) under 36 years and/or in their first five years of practice, as well as law students. NSW Young Lawyers currently has over 15,000 members.

The Committee comprises a group of over 400 members interested in animal welfare and laws regulating the treatment of animals. The Committee aims to raise awareness and provide education to the legal profession and wider community, while increasing understanding about the importance of protecting animals from abuse and neglect. A common theme amongst Committee members is a passion and desire to use their legal skills and the law to improve the welfare of animals.

Summary of Recommendations

1. With respect to the Terms of Reference, in summary the Committee submits that:

   a)

   (i) Layer hens in battery cages are deprived of the Five Freedoms that measure adequate animal welfare. Several jurisdictions have banned and/or are phasing out battery cages due to the physical and physiological welfare issues inflicted upon layer hens. New South Wales (**NSW**) should follow suit by banning the use of battery cages for layer hens.

   (ii) Other considerations raised by opponents to a ban of battery cages, such as cost, mortality and productivity, when holistically analysed in order to make an evidence-based determination on whether the use of battery cages is justified, do not outweigh the significant welfare considerations and other adverse impacts outlined in this submission.

   (iii) The use of battery cages is inconsistent with community standards and is largely opposed by the general public.

   b)

(i) Substantial measures are required to prevent poor animal welfare outcomes to layer hens in the egg production industry of NSW, including the banning of battery cages (or in the alternative, phasing out) and debeaking practices, and penalising egg producers' non-compliance with such restrictions.

(ii) The minimum standards of accommodation for hens in the commercial egg production industry in NSW should be mandated in line with the standards legislated in the Australian Capital Territory (**ACT**). Floor area and stock density provisions in NSW should be increased to enable hens to exhibit their natural instincts and behaviours.

c)

(i) Commercial egg production operations generate negative environmental impacts.

(ii) Commercial egg workers are frequently subjected to a number of unsafe working conditions that can lead to serious health issues.

d) Commercial egg workers often have unsafe working conditions that may lead to health issues. Australian consumers are becoming increasingly concerned with animal welfare and ethical food production leading to a relative increase in the sale of free range eggs in Australia.

e) It is vital that egg packaging and labelling is more transparent about the conditions of the commercial egg production operations and practices to ensure consumers can make informed decisions.

f)

(i) While a ban of battery cage farming may increase the production cost of eggs, this is unlikely to adversely affect the egg market or impact the livelihood of egg farmers.

(ii) The potential economic impacts associated with the improved treatment of hens is offset by public dissatisfaction with the animal welfare outcomes associated with battery caged eggs.

g) The advantages of battery caged systems are outweighed by its disadvantages and the benefits of its alternatives methods, such as free range systems.

h) Government support of free range eggs may assist businesses in the transition to free range eggs.

i) Scientific research strongly supports a conclusion that battery cages have detrimental impacts on the welfare of hens, including preventing natural behaviours, invoking anxiety and inducing physical injury.

j) Urgent reform, such as mandating determination of the sex of the chick while in the incubation phase, is required to prevent the mass slaughter of male chicks, an inherent and largely unknown element of the egg production industry.

Discussion

The Committee submits that inhumane practices in the use of battery cages for hens in the egg production industry, detailed in responding to the Terms of Reference, fail to consider the sentient status of hens. Research indicates that hens exhibit preferences as to their environments, experience physical sensations and emotional responses[1] and possess complex cognitive abilities;[2] all of which indicate a level of sentience in hens.

The Committee comments on each of the Terms of Reference as follows:

(1) (a) (i) Whether or not the use of battery cages to contain or accommodate hens in the egg production industry is associated with poor animal welfare outcomes or is accompanied by poor animal welfare practices.

The evidence is clear that the use of battery cages is associated with poor animal welfare outcomes and poor animal welfare practices.

The United Kingdom Farm Animal Welfare Committee developed the Five Freedoms[3] as a basic standard of animal welfare assessment.[4] There is an extensive body of scientific evidence confirming that birds confined in battery cages experience pain and suffering, depriving battery cage hens of these basic Five Freedoms. By way of example:

- Free roaming hens display natural instincts and behaviours such as wandering, playing, dust bathing, perching,[5] stretching, nesting, foraging and wing flapping,[6] with the inability to do so resulting in both physical and psychological stress for hens.[7] Layer hens confined to a battery cage, sometimes with up to 20 other hens and allocated a space less than an A4 size of paper[8] are deprived of their natural behaviours.

- Layer hens in battery cages suffer from low bone strength,[9] with the cages preventing hens from adopting their natural standing, high-head posture and body posture for their species.[10] The lack of

[1] Michael C Appelby, *Poultry Behaviour And Welfare* (CABI Publishing, Cambridge, 2004).
[2] Lesley Joy Rogers, *The Development Of Brain And Behaviour In The Chicken* (CAB International, 2007).
[3] The Five Freedoms include freedom from hunger or thirst, freedom from discomfort, freedom from pain, injury or disease, freedom from fear and distress, and freedom to express normal behaviour.
[4] Farm Animal Welfare Council, Farm Animal Welfare in Great Britain: Past, Present and Future, (October 2009) <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/319292/Farm_Animal_Welfare_in_Great_Britain_-_Past__Present_and_Future.pdf>, 2.
[5] RSPCA Australia, *Five Ways To Keep Hens Happy* (13 Sept 2017) <https://www.rspca.org.au/blog/2017/five-ways-keep-hens-happy >.
[6] Voiceless: The Animal Protection Institute, *Battery Hens*, Voiceless Limited <https://www.voiceless.org.au/hot-topics/battery-hens>.
[7] Voiceless: The Animal Protection Institute, *Animal Law in the Spotlight: NSW Battery Hen Bill* <https://www.voiceless.org.au/content/animal-law-spotlight-nsw-battery-hen-bill>.
[8] David Witcombe, 'Layer hen welfare: a challenging and complex issue' (Speech, Animal Welfare Science Centre, Department of Primary Industries, 8 June 2007) <http://www.animalwelfare.net.au/article/scientific-seminars>.
[9] European Food and Safety Authority, 'Opinion on the Scientific Panel of Animal Health and Welfare on a request from the Commission related to the welfare aspects of various systems of keeping laying hens' (2005).

exercise and deformed posture often results in the hen developing fatty liver disease and osteoporosis, leading to acute chronic pain from ruptured livers or bone fractures.[11] The wire floors of the cages cause the hen to develop chronic pain from lesions and foot problems as the wires slope to maximise the ease of egg collection.[12] Psychological stress levels have been noted to be higher in birds, such as battery caged hens, subject to spatial restriction.[13]

- Battery cages are likely to cause the hen extreme frustration and severe behavioural problems, causing the hen to present signs and symptoms of fear and aggression.[14] The close confinement of hens can cause bullying, pecking and cannibalism, with some battery layer hens showing higher signs of stress than hens with adequate roaming space.[15] This is also evident in the deprivation of their natural nesting behaviours[16] as broody hens naturally require separation from other birds before nesting.[17] Broody hens confined to battery cages have been observed to display agitated pacing/movements and other stressed-like behaviours up to four hours before laying an egg.[18]
- To counter and mitigate the damage that hens may cause each other, egg producers regularly engage in debeaking practices. This practice consists of the (often permanent) partial removal of the hen's beak with a heated blade without the application of an anaesthetic agent. Debeaking practices are a poor animal welfare practice causing hens to experience tissue damage, nerve injury, and pain and suffering during and in the aftermath of the procedure.[19] The partial removal of the hen's beak may also cause long-term and painful neuromas or tumours, deterring hens from using their beaks to forage or act on other natural instincts and behaviours.[20]
- Hens kept in close confinement in battery cages have a higher likelihood of transmitting diseases and infections.[21] For example, red mites have been noted to be more likely to reproduce in areas of poor hygiene and in areas where there are lots of hens in close proximity.[22] Moreover, endoparasites are more likely to increase in areas where hens are in contact with their faeces, which is common in battery cages.[23]

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[10] The Human Society of the United States, *Scientists and Experts on Battery Cages and Laying Hen Welfare*, (Dr Ian Duncan), 1.
[11] Voiceless: The Animal Protection Institute, *Battery Hens*, Voiceless Limited <https://www.voiceless.org.au/hot-topics/battery-hens>.
[12] Ibid.
[13] Konrad Lorenz, 'Animals are sentient beings: Konrad Lorenz on instinct and modern factory farming' (17 November 1980) *Der Spiegel* 264.
[14] Ibid.
[15] Ibid.
[16] The Human Society of the United States, *Scientists and Experts on Battery Cages and Laying Hen Welfare*, (Dr Ian Duncan), 1.
[17] Joy Mench, 'The welfare of poultry in modern production systems' (1992) 4 *Poultry Science Review* 112
[18] Ibid.
[19] Farm Animal Welfare Council, *Opinion on Beak Trimming of Layer Hens* (Web Page, November 2007) <https://webarchive.nationalarchives.gov.uk/20110909181555/http://www.fawc.org.uk/pdf/beak-trimming.pdf>.
[20] Ibid.
[21] European Food and Safety Authority, 'Opinion on the Scientific Panel of Animal Health and Welfare on a request from the Commission related to the welfare aspects of various systems of keeping laying hens' (2005).
[22] Ibid.
[23] Ibid.

Bans and/or phasing out of battery cage eggs is a testament to increasing concerns about factory farming and animal welfare. Accordingly, the Committee submits that battery cages should be banned in NSW due to the severe physical and physiological harm caused to layer hens. Several jurisdictions have banned the use of battery cage eggs due to poor animal welfare practices. Furthermore, battery cages are either banned or being phased out across Europe by Switzerland, New Zealand, Canada and some states in the Unites States (California, Michigan and Oregon).[24]

Significantly, the European Union banned battery cages for all member States on 1 January 2012.[25] The Commission of the European Communities determined in 1998 that freedom from injury and disease was one of the most important factors when determining the quality of life of layer hens.[26] It previously found that hens subjected to battery cages had a poor quality of life, with the European Commission's Scientific Veterinary Committee report condemning conventional cages because of their 'inherent severe disadvantages for the welfare of hens.'[27] The Scientific Panel on Animal Health and Welfare of the European Food and Safety Agency (**EFSA**) was invited by the EU Commission to provide an opinion on the welfare aspects of the various systems of keeping laying hens that are described in Council Directive 1999/74/EC,[28] and enriched cages in particular. EFSA's recommendations and conclusions on welfare are summarised in their report.[29] EFSA found that some of the most severe threats to bird welfare in battery cages are low bone strength and fractures sustained during depopulation, and the inability to perform some high priority behaviours including nesting, perching, foraging and dust bathing.[30]

In Australia, the state and territory governments are responsible for the regulation of animal welfare. In 2014, the *Animal Welfare (Factory Farming) Amendment Bill 2013* was passed by the ACT Legislative Assembly, becoming the first Australian state or territory to outlaw specific types of factory farming practices. This included the ban of battery cages for layer hens. The ACT noted that intensive farming was cruel and did not meet community expectations for humanely produced eggs.[31] Similarly, in 2013, Tasmania banned new operators from opening battery cage operations,[32] and labelled the use of battery cages for layer eggs as inhumane.[33]

The Committee notes that the use of battery cages in NSW has been a recurring topic of discussion within the Legislative Council, highlighting the welfare of layer hens is an important and recurring issue in NSW. In

[24] Agriculture Victoria, Farmed Bird Welfare Science Review (October 2017).
[25] European Union Council Directive 1999/74/EC.
[26] Commission of the European Communities, 'Communication from the Commission on the protection of laying hens kept in various systems of rearing', 1998. 9/0092(COM), 3.
[27] European Commission: Scientific Veterinary Committee, 'Animal Welfare Section. Report on the welfare of laying hens' (1996) 109.
[28] Council Directive 1999/74/EC lays out minimum standards for the protection of laying hens.
[29] Scientific Panel on Animal Health and Welfare, 'The welfare aspects of various systems of keeping laying hens' (2005) 197 *The EFSA Journal* 1,
[30] Ibid.
[31] ACT, *Parliamentary Debates*, Legislative Assembly, 19 Sept 2013, 3437 (Shane Rattenbury).
[32] *Animal Welfare (Domestic Poultry) Regulations 2013* (TAS), r 5.
[33] Tasmania, *Parliamentary Debates*, Legislative Council, 8 June 1999, 54-116, (David Llewellyn).

2009, NSW amended the *Prevention of Cruelty to Animals Act 1979 (NSW)* (**POCTA**) to increase the penalty rates for non-compliance with poultry standards. Several members of Parliament noted that battery cage hens were subject to lives of 'extreme misery' as hens were 'crammed into tiny spaces where they cannot act out their natural instincts'.[34] It was also noted that Australia should be following Europe's lead to phase out battery cages[35] with free range the only viable long-term solution to NSW's poultry businesses.[36] This was shortly followed by the introduction of the *Animal Welfare (Factory Farming) Amendment Bill* into the NSW Legislative Council in 2014, calling for the ban of battery cages.

The objects of POCTA, set out in s 3, is to prevent cruelty to animals and to promote their welfare.[37] Significantly, the definition of an "animal" under the Act includes the general all-inclusive term, '…any…bird'.[38] While POCTA provides that animals kept in confinement must be given adequate exercise,[39] POCTA also provides an exception to stock animals[40] which includes poultry.[41] The Committee submits that the exception of animals confined to cages under s 9, to POCTA's prohibition of confinement in the absence of exercise, is inconsistent with the Object of POCTA under s 3. Confinement caused by battery cages prevents natural hen behaviour, including basic instincts such as wing-spreading. Restriction of this kind fails to "promote the welfare of animals" or "ensure the welfare of the animal", in contravention of s 3(b) of POCTA.

Hens display similar cognitive abilities and level of sentience as many mammals and primates, including cats and dogs, and have been observed to perform better than human toddlers in certain tests.[42] Similar to dogs, hens are social creatures,[43] with the ability to remember individuals and personal experiences.[44] Hens, like dogs, require physical exercise and the ability to exhibit their natural behaviours as outlined previously in this submission. In that regard, the Committee notes that keeping canines permanently confined to small cages is a breach of s 9 of POCTA. The Code of Practice for Breeding Dogs and Cats[45] outlines that all animals under the breeder's care must receive daily exercise. However, despite the abovementioned comparisons between hens and dogs, a contradictory standard appears to be present in POCTA whereby a layer hen confined permanently to a battery cage is not in breach of POCTA due to the exception it falls under in s 9 of the Act.

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[34] New South Wales, *Parliamentary Debates*, Legislative Assembly, 21 October 2009, 18470 (Clover Moore).
[35] Ibid.
[36] Ibid, (Paul Pearce).
[37] *Prevention of Cruelty to Animals Act 1979* (NSW), s 3(a)-(b) ('POCTA').
[38] Ibid, s 4.
[39] Ibid, s 9.
[40] Ibid, s 9(1A).
[41] Ibid, s 4.
[42] Lori Marino, 'Thinking chickens: a review of cognition, emotion, and behaviour in the domestic chicken', (March 2017) vol 20, 2, 127-147.
[43] Ibid.
[44] Ibid.
[45] Department of Primary Industries (Industry and Investment), 'Animal Welfare Code of Practice Breeding Dogs and Cats', (Code of Practice August 2009)14, < https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0004/299803/Breeding-dogs-and-cats-code-of-practice.pdf>.

The Committee submits that layer hens should be afforded the same legal protections that a dog, and other animals, are provided under s 9 of POCTA, in order to prevent cruelty to hens and promote their welfare, in accordance with the objectives of POCTA under s 3.

(1) (a) (ii) Whether or not the use of battery cages to contain or accommodate hens in the egg production industry is justified by any other consideration.

Cost and mortality considerations

While welfare can be a contributing factor to productivity, higher hen welfare does not inherently result in greater egg production or a minimisation of the costs associated with that production.[46] A move away from battery cages has the potential to lead to:

- increased labour costs, as more employees are usually required to manage egg production enterprises that do not incorporate battery cages;[47]
- increased feed costs, as more active hens consume more feed, and cage-free hens typically have less efficient feed conversion ratios;[48]
- a higher requisite level of husbandry skill and training, giving the increased complexity of cage-free systems;[49]
- transition costs in adapting battery cage infrastructure to alternative methods;[50] and
- higher mortality rates amongst hens.[51]

These considerations are likely to cause the egg farmers using battery cages to consider a ban or phasing out of battery cages to be cost-prohibitive. This may equally prompt consumer concern that any costs associated with the transition, if it were adopted, would be transferred to consumers.

Responses to non-welfare considerations – productivity

The Committee submits that the abovementioned concerns do not acknowledge all related factors and potential consequences. While transition costs are likely to arise from the banning (or phasing out) of battery cages, some forecasts indicate that the shift to cage-free methods is likely to produce a net benefit as a

[46] LayWel 'Welfare implications of changes in production systems for laying hens' (Research Report SSPE-CT-2004-502315, University of Bristol, 2006) <www.laywel.eu/web/pdf/deliverable%2071%20welfare%20assessment.pdf>
[47] Productivity Commission, 'Battery Eggs Sale and Production in the ACT' (Research Report, AusInfo, Canberra 1998).
[48] Ibid; Sara Shields and Ian JH Duncan, *A Comparison Of The Welfare Of Hens In Battery Cages And Alternative Systems* (2009).
[49] Sara Shields and Ian JH Duncan, *A Comparison Of The Welfare Of Hens In Battery Cages And Alternative Systems* (2009).
[50] Jonathan Ward, 'From Battery Cages to Barns: A Cost-Benefit Analysis of a National Standard for Cage-Free Egg Production (2014) *School of Public Policy Capstones* 34.
[51] Productivity Commission, 'Battery Eggs Sale and Production in the ACT' (Research Report, AusInfo, Canberra 1998).

result of increased sale prices and improved appeal to conscientious consumers.[52] Cage-free options present greater prospects for improved innovation in the future, which can improve both productivity and welfare, while battery cages do not.[53] Increased automation is also more likely to aid cage-free methods. These factors are likely to improve future prospects and address concerns regarding long-term employment. The risks of either increased redundancy or unmanageable labour requirements are reduced as employees may be retained to operate increasingly automated systems without employee numbers growing substantially and unsustainably.

Survey data monitoring industry output following battery cage bans elsewhere in the world also suggests that banning (or phasing out) battery production may improve consumption of domestic eggs as more consumers favour ethical eating habits. In Switzerland, in the year battery cages were abolished, 630 million eggs were produced. Four years later it had risen by 33 million. During this time, the percentage of Swiss-produced shelled eggs increased from 62% to 73% of total shelled eggs consumed.[54]

Responses to non-welfare considerations – hen experiences

While overall hen mortality and productivity rates may be improved in battery cage environments, the Committee submits that this is a narrow analysis of the issue as it fails to take into consideration the substantially poor animal welfare practices and outcomes that occur in and as a result of battery cage environments,[55] as outlined in section (1) (a) (i) of this Submission. In particular, the Committee submits that a lower mortality rate at the expense of the welfare and the quality of life of each individual hen cannot be justified.

More clinically, the lower mortality rates amongst battery cage hens ought to also be considered against matters such as those hens':

1. lower bone strength and higher rates of osteoporosis and fractures;[56] and
2. higher risks of salmonella when compared to those of cage-free hens,[57]

both of which speak to the vitality of the hens.

The Committee submits that a more holistic analysis of other considerations ought to be incorporated into any assessment of the extent to which the continued use of battery cages can be justified in light of the poor

[52] Jonathan Ward, 'From Battery Cages to Barns: A Cost-Benefit Analysis of a National Standard for Cage-Free Egg Production (2014) *School of Public Policy Capstones* 34.
[53] Productivity Commission, 'Battery Eggs Sale and Production in the ACT' (Research Report, AusInfo, Canberra 1998).
[54] M. HÄne, B. Huber-Eicher and E. FrÖhlich, 'Survey Of Laying Hen Husbandry In Switzerland' (2000) 56(1) *World's Poultry Science Journal*.
[55] LayWel 'Welfare implications of changes in production systems for laying hens' (Research Report SSPE-CT-2004-502315, University of Bristol, 2006) <www.laywel.eu/web/pdf/deliverable%2071%20welfare%20assessment.pdf>.
[56] Scientific Panel on Animal Health and Welfare, 'The welfare aspects of various systems of keeping laying hens' (2005) 197 *The EFSA Journal* 1-23.
[57] The Humane Society of the United States, 'Food Safety and Cage Egg Production' (2011) *HSUS REPORTS* 5.

animal welfare practices and outcomes. The Committee submits that greater consideration ought to be afforded to the welfare of hens against other considerations.

(1) (a) (iii) Whether or not the use of battery cages to contain or accommodate hens in the egg production industry is consistent with community standards and supported by the public.

The Committee submits that the use of battery cages in the egg production industry is inconsistent with community standards and opposed by the public.

Public opinion

Australian perspectives on animal welfare broadly indicate that battery cage use is considered far from acceptable; 91% of Australians consider that animals deserve at least some protection from harm and exploitation, with 30% considering protection ought to be on par with that of humans.[58] These concerns have manifested in increased responses by the public and the legislature of (particularly) Western societies to farming practices involving hens and other animals such as calves and pigs. This shows a recognition of the need to legislate ethical farming practices, the absence of which fosters a lack of animal welfare considerations.[59]

A survey has indicated three in four Australians are concerned about the welfare of battery hens, with four in five wanting it phased out.[60] Another survey[61] indicated more than half of survey respondents said that they were willing to pay $3 to $5 more per dozen for free range eggs, than cage eggs. This highlights the inconsistency between continued battery cage use and Australian community standards.

Public opinion and market behaviour

A question is raised as to why, despite disapproval rates, battery eggs continue to sell. There is a lack of correlation between some 86% of survey respondents[62] who consider it unacceptable to confine a layer hen to a cage for its entire life and consumer behaviour. As with the conduct of caged eggs producers, economics often fuels the persistence of less welfare-oriented practices, and this can have a bearing on the extent to which either may be held accountable for trends in market behaviour.[63]

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[58] Peter John Chen, *Animal Welfare In Australia* (Sydney University Press, 2016).
[59] LayWel 'Welfare implications of changes in production systems for laying hens' (Research Report SSPE-CT-2004-502315, University of Bristol, 2006) <www.laywel.eu/web/pdf/deliverable%2071%20welfare%20assessment.pdf>.
[60] RSPCA, 'Breakthrough research finds 84% of Australians want to end the battery cage' (Media Release and Statement, 26 November 2017) < https://www.rspca.org.au/media-centre/news/2017/breakthrough-research-finds-84-australians-want-end-battery cage>.
[61] Melissa Davey, 'Inside the battery hen shed: the farmer who wants to prove cages aren't always cruel', *The Guardian* (online), 19 September 2014 <https://www.theguardian.com/world/2014/sep/19/-sp-inside-the-battery-hen-shed>.
[62] Peter John Chen, *Animal Welfare In Australia* (Sydney University Press, 2016).
[63] Sara Shields and Ian JH Duncan, *A Comparison Of The Welfare Of Hens In Battery Cages And Alternative Systems* (2009).

The Committee considers an equal cause is a lack of clear information. First, survey respondents have indicated a lack of understanding of egg production practices.[64] Further, other surveys have indicated that it is a commonly held perception that battery eggs only occupy around one third of the actual market share in the total egg market.[65] This indicates public misconception regarding the dominance of the practice.

Research also indicates that when consumers are fully informed of the poor welfare outcomes of egg production practices behind different classes of egg, including battery eggs, consumers are willing to pay more for eggs produced by hens that have more space, scratching room, nesting site/material and outdoor access.[66] This underpins the importance of clear and readily available information in egg promotion, education and packaging to allow consumer behaviour to more accurately reflect public sentiment.

Accordingly, elements of market research into the popularity of battery cage eggs reflected in market behaviour is likely to be misleading in its reflection of public opinion. This concession, coupled with the abovementioned research on Australian views with respect to battery cage use, suggests abandoning poor animal welfare practices would gain public support and be aligned with community standards. The Committee holds that in light of community standards of animal welfare considerations being at the forefront of egg production, continuing the use of battery cages cannot be justified on the basis of non-welfare grounds.

(1) (b) (i) What legislative measures should be taken to prevent poor animal welfare outcomes to hens in the egg production industry of NSW?

The Committee submits that the banning of battery cages should be urgently implemented to prevent poor animal welfare practices and outcomes for hens in the egg production industry, detailed in section 1 (a) (i) of this submission. In the alternative, the Committee submits that the use of battery cages be phased out, with producers given an appropriate amount of time to transition to alternative systems such that, in the interim, the welfare of hens is minimised insofar as possible.

Additionally, the Committee recommends that egg producers' non-compliance with the proposed restrictions stemming from the ban (or phasing out) of battery cages ought to be appropriately penalised. The ACT and Tasmania are leading Australia in improving animal welfare outcomes, having banned and commenced phasing out the use of battery cages, respectively. The European Union and several states of the USA have also phased out and banned the use of battery cages,[67] as detailed in section 1 (a) (i) of this submission.

[64] Peter John Chen, *Animal Welfare In Australia* (Sydney University Press, 2016).
[65] D. A. Sumner et al, 'Economic And Market Issues On The Sustainability Of Egg Production In The United States: Analysis Of Alternative Production Systems' (2010) 90(1) *Poultry Science*.
[66] Ibid.
[67] Voiceless: The Animal Protection Institute, *Animal Law in the Spotlight: NSW Battery Hen Bill*, (Web Page) <https://www.voiceless.org.au/content/animal-law-spotlight-nsw-battery-hen-bill>.

For reasons set out in the Committee's discussion on the practice of debeaking in section 1 (a) (i) of this submission, the Committee proposes amendments to s 12 of POCTA to include the removal or trimming of the hen's beak on the list of "certain procedures not to be performed on animals" on an animal welfare basis. An exception may be included if there are extenuating circumstances, that is genuine therapeutic purposes requiring debeaking to be performed under anaesthetic by a veterinary practitioner, such as if the hen's beak is infected and debeaking is required as a last resort.

(1) (b) (ii) What legislative measures should be taken to set appropriate minimum standards of accommodation for the accommodation and treatment of hens in the egg production industry?

Accommodation standards

The Committee proposes the NSW Government bans the use of battery cages in the egg production industry on an urgent animal welfare basis, outlined in section 1 (a) and 1 (b) (i) of this submission.

In the event the NSW Government phases out, rather than bans, the use of battery cages in the egg production industry, the Committee submits that the NSW Government should set minimum standards of accommodation for hens in the commercial egg production industry to provide substantial legal protections for laying hens and increase the minimum floor capacity requirements from those currently set out in the *Prevention of Cruelty to Animals Regulation 2012* (NSW). These measures should be adopted by the NSW Government for a transitional period, after which the use of battery cages ought to be phased out (or preferably banned).

There is international precedent for this position. As detailed in section 1 (a) (i) of this submission, the European Union successfully phased out the use of battery cages.[68] New Zealand will also phase out battery cages by 2022.[69] However, the Committee submits that the phase out period should be as brief as possible. By way of example, the European Union's decision to ban battery cages was made in 1999, with producers given 12 years to transition to alternative systems. Despite this lengthy phase out period, some battery hen farmers kept their hens in cages, hoping the egg industry lobby would successfully argue for the ban to be delayed.[70] Accordingly, although the European Union ultimately reached the desired animal welfare outcome in 2012, animal welfare for hens was still compromised for a lengthy period of 12 years.

While NSW should follow in the footsteps of jurisdictions who have enforced a ban, or in the alternative, phasing out of battery cages, the Committee submits that the NSW Government should introduce transitional

[68] 'The End Of Battery Farms In Britain – But Not Europe', *The Independent* (Web Page, 2019) <https://www.independent.co.uk/news/uk/home-news/the-end-of-battery-farms-in-britain-but-not-europe-6281802.html>.
[69] 'Commercial Egg Production Systems', *Australian Veterinary Association*(Web Page, 2013) <https://www.ava.com.au/policy-advocacy/policies/poultry-health-and-welfare/commercial-egg-production-systems/>.
[70] 'Battery Cages Banned In Europe', *Animals Australia* (Web Page, 2012) <https://www.animalsaustralia.org/features/eu-bans-battery-hen-cages.php>.

accommodation requirements which aim to address each of the issues that animal welfare scientists have identified as arising from multilayer and battery cages, as described in section 1 (a) (i) of this submission.

The ACT's legislative regime provides a useful guide on how NSW may mandate certain accommodation standards and address a hens' need to perform natural functions. A person commits an offence under the ACT's regime if the person does not keep their laying hens in appropriate accommodation.[71] This is a strict liability offence[72] carrying a maximum penalty of 50 penalty units, equating to a maximum fine of $8,000 for an individual and $40,500 for a corporation.[73] These standards require hens in a single level or additional level barn be kept:

a) with the freedom and capacity to socialise, to move freely within the shed, to stretch, perch, nest, dust bathe, flap wings and fly;
b) with adequate perching facilities and nests available to birds within the shed to accommodate the needs of all hens; and
c) with half the housing kept under litter.[74]

The Committee submits that the adoption of a legislative regime in NSW in line with the ACT approach would have the effect of remedying the poor animal welfare practices and outcomes of using battery cages in the egg production industry.

Moreover, New Zealand has recently introduced a new Code of Welfare for Layer Hens[75] (**Code**) with an aim of phasing out all layer accommodation by 2022.[76] In line with the Code, proposed legislative measures in NSW should include a requirement for egg producers to meet accommodation standards related to air quality and management, litter, lighting and temperature in barns.

Minimum floor area requirements

The minimum floor area requirements in NSW are grossly inadequate. The average weight of hens in the cage is less than 2.4 kg; therefore, hens are permitted a space of around 550 cm^2 if the hen is in a cage with three or more hens.[77] Where the hen is in a cage alone or in a cage with less than three hens, the space required is marginally increased.

[71] *Animal Welfare Act 1992* (ACT) s 9A(1).
[72] *Animal Welfare Act 1992* (ACT) s 9A(2).
[73] *Animal Welfare Act 1992* (ACT) s 9A(1); *Animal Welfare Act 1992* (ACT) holds that "the value of a penalty unit for an offence against this law is $160 for an individual and $810 for a corporation" (also see *Legislation Act 2001* (ACT), s 133)."
[74] *Eggs (Labelling and Sale) Act 2001* (ACT) schedule 1.
[75] *Code of Welfare: Layer Hens 2018* (NZ).
[76] 'Conventional Cages', *Egg Producers Federation of New Zealand* (Web Page) <https://www.eggfarmers.org.nz/egg-farming-in-nz/farming-types/conventional-cages>.
[77] *Prevention of Cruelty to Animals Regulation 2012* (NSW) r 10(5)(a).

The floor area and stock density provisions in NSW should be increased. The Committee submits that laying hens ought to be housed in conditions enabling natural instincts and behaviours, as set out in section (1) (a) (i) of this submission. The Committee submits that the hens should be provided with a minimum 750cm^2 of floor space (of which 600cm^2 is 45cm high), a nest, a littered area for scratching and pecking, 15cm of perch, 12cm of food trough space, and a claw-shortening device, as has been legally required by the European Union since 2012.[78]

(1) (c) (i) The impact of egg producing commercial operations that use battery cages, on the environment.

A significant challenge facing the commercial egg producing industry (including operations using battery cages) is environmental based concerns[79] whereby research has indicated poultry production is not environmentally friendly.[80]

Egg producing commercial operations using battery cages have adverse environmental impacts. The impacts largely relate to poor management of manure and litter, waste streams from processing plants (including blood, bones and feathers), bird carcasses, dust, insects and odour. Additionally, egg producing commercial operations result in the exposure of harmful elements into the environment, including but not limited to, heavy metals, pesticide residues, pathogens, and pharmaceuticals.[81]

As egg producing commercial operations increases, so does the production of the industry's major waste product: chicken manure. Broiler litter — the mix of manure and bedding taken out of broiler houses — must be disposed of. High in nutrients needed by crops, particularly nitrogen and phosphorus, broiler litter can be an effective fertilizer. But when overused, poorly managed or inappropriately timed, the nutrients in poultry manure can cause significant environmental and water quality problems.[82]

Considering action on adverse environmental impacts is topical, the Committee submits consideration ought to be afforded to the abovementioned environmental impacts that are present in the use of battery cages in commercial egg production operations.

[78] RSPCA, *The Welfare Of Layer Hens In Cage And Cage-Free Housing Systems* (RSPCA Australia, 2016).
[79] 'Poultry producers at environmental crossroads', *The Poultry Site* 12 February 2007, The Poultry Site (Web Page, 2007) <https://thepoultrysite.com/articles/poultry-producers-at-environmental-crossroads>.
[80] Vesna Rodic, Lidija Peric, Stojcic Dukic and Natasa Vukelić 'The environmental impact of poultry production' (2011) 27 *Biotechnology in Animal Husbandry*, 1673-1679.
[81] Ibid.
[82] 'Big Chicken: Pollution and Industrial Poultry Production in America', *The Pew Environment Group* (27 July 2011 <https://www.pewtrusts.org/~/media/legacy/uploadedfiles/peg/publications/report/pegbigchickenjuly2011pdf.pdf>.

(1) (c) (ii) The impact of egg producing commercial operations that use battery cages, on health of workers.

Commercial egg workers are frequently subjected to unsafe working conditions that can lead to serious health issues ranging from physical injuries (including chemical burns) to respiratory issues.[83] A leading cause of illness in commercial egg workers is exposure to dust and ammonia.[84] Often, inside battery cages, manure builds up and causes large amounts of dust particles containing pathogens and toxins which are inhaled by both the animals and workers.[85] Moreover, battery cages and units are cleaned infrequently whereby several weeks after the floor of the cages and sheds are covered with faeces and the air is acrid with ammonia.[86]

(1) (d) Trends in relative consumer demand for egg and egg-containing products derived from commercial operations that use battery cages and commercial operations that do not.

Australian consumers are increasingly concerned with animal welfare and ethical food production.[87] This is reflected in consumers making different purchasing decisions as a result of greater awareness on animal welfare issues. While animal welfare reasons are the strong motivating factor for movement away from caged eggs, there is also the concept of natural whole foods and the appeal of affordable proteins in light of increased costs of living pressures[88] which have led to a relative increase in the sale of free range eggs in Australia.[89]

Consumer demand for free range and ethically produced food is reflected in the pledges of major grocery retailers, Coles and Woolworths, moving away from caged egg production.[90] Retailer commitments combined with the free range standards for 2016/2017 have led to significant investment in free range and

[83] Michelle Chen, 'How The Poultry Industry Is Grinding Up Workers' Health And Rights' *Huffpost* (2013).
[84] Kelley Donham, Debra Cumro, Stephen Reynolds and James Merchant, 'Dose-Response Relationships Between Occupational Aerosol Exposures and Cross-Shift Declines of Lung Function in Poultry Workers: Recommendations for Exposure Limits' (2000) 42 *Journal of Occupational and Environmental Medicine*.
[85] Amy Westervelt, 'Ethical farming dilemma: should we be helping the chicken or fixing the egg?' *The Guardian* (2014).
[86] Felicity Lawrence, 'If consumers knew how farmed chickens were raised, they might never eat their meat again', *The Guardian* (24 April 2016).
[87] 'Happy Chickens Lay Tastier Eggs: Motivations For Buying Free-Range Eggs In Australia', *Taylor & Francis* (Web Page, 2019) <https://www.tandfonline.com/doi/abs/10.1080/08927936.2017.1310986>.
[88] Annual Report 2017/2018 (2018) Australian Egg Corporation Limited, p.10.
[89] 'Happy Chickens Lay Tastier Eggs: Motivations For Buying Free-Range Eggs In Australia', *Taylor & Francis* (Web Page, 2019) <https://www.tandfonline.com/doi/abs/10.1080/08927936.2017.1310986>.
[90] 'Animal Welfare, RSPCA Approved Poultry Traceability', *Coles* (Web Page, 2013) <https://www.supplierportal.coles.com.au/csp/wps/wcm/connect/395c8400428d9b788e4bfe8af79a8633/Coles+Supplier+Requirements+Addendum+2+-+Animal+Welfare+RSPCA+Approved+Poultry+Traceability.pdf?MOD=AJPERES&CACHEID=395c8400428d9b788e4bfe8af79a8633>; 'Animal Welfare', *Woolworths Group* (Web Page, 2012) <https://www.woolworthsgroup.com.au/page/community-and-responsibility/group-responsibility/responsible-sourcing/Animal_Welfare/>.

barn egg production.[91] Moreover, the proportion of free range eggs in supermarkets has increased to 45% of the category, exceeding the volume of caged eggs, at 44%.[92]

(1) (e) The protection of consumer interests, including the rights of consumers to be fully informed of the sources of eggs in egg-containing products.

Consumers are often unaware that eggs for sale in Australia are sourced from factory farms which includes battery cages.[93] In the egg producing commercial operations, animals are frequently subjected to conditions that are largely void of animal welfare considerations.[94] However, this treatment is largely hidden from the public. Accordingly, most consumers are misinformed and/or unaware as to how their eggs are produced.[95]

Australian consumers may be misled by labelling laws which do not require producers to disclose certain information about commercial production methods including battery cages.[96] The wide range of terms currently used to differentiate the source of eggs may also mislead consumers. Words commonly used include "barn-laid", "free range", "open-range", "organic" or "biodynamic". Most of these words are not defined in legislation, resulting in a broad scope of interpretation by consumers as to the meaning of these words.[97] There is also a risk of consumers being misled by marketing imagery and labels that depict positive animal welfare conditions that largely do not reflect the reality of those conditions,[98] as outlined in section 1 (c) (i) of this submission.

The Committee submits that greater transparency is required in egg packaging and labelling about the conditions of egg producing commercial operations and the practices associated with egg production methods, in particular the poor animal welfare practices and outcomes. A nationally consistent and honest approach to egg labelling laws is the best approach for ensuring consumers are fully informed of the sources and production methods of eggs.[99]

The Commonwealth Government has introduced an Information Standard under the Australian Consumer Law for Australian egg producers.[100] It prescribes the obligations of egg producers when promoting or selling free range eggs whereby the egg production method must be clearly distinguished and labelled appropriately.

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[91] *Annual Report 2017/2018* (Australian Egg Corporation Limited, 2018).
[92] 'Egg Consumption Booming', *Australian Eggs Corporation Limited* (Web Page, 2018) <https://www.australianeggs.org.au/news/egg-consumption-booming/ >.
[93] 'Attitudes Toward Animal Welfare', *TNS Social Research Consultants* (Web Page, 2006) <http://www.daff.gov.au/__data/assets/pdf_file/0003/146748/tns_aw_research.pdf>.
[94] Nik Taylor and Tania D. Signal, 'Willingness To Pay: Australian Consumers And 'On The Farm' Welfare' (2009) 12(4) *Journal of Applied Animal Welfare Science*.
[95] 'Truth in labelling', *Voiceless, the animal protection institute* (Web Page,2018) < https://www.voiceless.org.au/content/truth-labelling-0>.
[96] Ibid.
[97] Ibid.
[98] Ibid.
[99] Ibid.
[100] Australian Consumer Law (Free Range Egg Labelling) Information Standard 2017.

(1) (f) The economic and social effects on NSW of:

(i) banning, or not banning, the use of battery cages to contain or accommodate hens in the egg production industry; and

(ii) legislating, or not legislating, to prevent poor animal welfare outcomes to hens in the egg production industry of NSW and/or to set appropriate minimum standards of accommodation for the accommodation and treatment of hens in the egg production industry.

In recent times, there has been a significant increase in consumer support for free range eggs in Australia and public opposition to battery cages.[101] The increased consumption of free range eggs from 14.5% in 2005[102] of the retail market to 45.38% in the 2018 financial year[103] indicates the public's growing preference for free range eggs. In response, Coles ceased using battery caged eggs for its Coles-branded eggs[104] and Woolworths has pledged to phase out all caged eggs by 2025.[105] With major supermarkets responding to consumer concerns and demands for animal welfare, Australian markets are better prepared for transitioning away from caged eggs.

While banning battery cages may result in significant production and adjustment costs on the industry, government support and higher consumer prices are likely to be sufficient means in offsetting these costs and mitigating any significant impact on egg farmers.[106] Although the egg production industry highlights the increasing production costs that bans may cause, the increased production costs are compensated by the higher prices that producers obtain for barn and free range eggs.

Research in the United States supports this notion, showing that whilst alternate methods to battery cage farming may significantly increase the cost of eggs, it does not reduce the consumption of eggs overall as eggs are only a small percentage of consumers' budget.[107] Accordingly, the position that implementing alternate egg farming methods would adversely affect the market for eggs is untenable as it is the need to compete with conventional methods that makes the alternate methods comparatively costly. If suppliers adopt alternate methods, it is likely that costs will be reduced to acclimatise to market competition.

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[101] 'A Pound of Flesh: A survey of 1202 Australians about whether they're vegetarian or vegan and what their attitudes to animals are', *Vegetarian/Vegan Society of Queensland* (February 2010).
[102] *Annual Report 2005* (Australian Egg Corporation Limited, 2005).
[103] *Annual Report 2018* (Australian Egg Corporation Limited, 2018).
[104] 'Battery Hens', *Voiceless* (Web Page, 2018) <https://www.voiceless.org.au/hot-topics/battery-hens>.
[105] Ibid.
[106] Michael C Appleby, 'The EU ban on battery cages: History and prospects' (2003) Humane Society of the United States < https://animalstudiesrepository.org/cgi/viewcontent.cgi?article=1008&context=sota_2003>.
[107] Daniel Alan Sumner, et al, 'Economic And Market Issues On The Sustainability Of Egg Production In The United States: Analysis Of Alternative Production Systems' (2011) 90(1) *Poultry Science* 241, 247.

In considering the market impact of a ban, eggs have historically had low demand elasticities, and therefore, have been relatively unresponsive to changes in price. This is likely to be, in part, due to the lack of direct substitutes as an ingredient in cooking or egg-containing products.[108]

In jurisdictions such as Switzerland, where standards of accommodation are better for commercial hens and where debeaking is not practised, the changes have not adversely impacted the economics of the egg industry.[109] Economic risks can also be offset by consumer preferences, and where awareness raising campaigns are implemented, consumers are often willing to pay more for an ethical product.[110] This is evident in the increasing awareness in Australia of animal suffering in intensive farms and the success of the free range industry.[111]

The Committee submits that a transition away from battery cages will aid: hens from an animal welfare point; consumers trust in the market reflecting community standards of ethical practices in the egg production industry; and egg producers adopting systems that consider the welfare of hens, are more economically viable and resilient towards future trends.[112]

(1) (g) The advantages, disadvantages and issues of different egg farming production methods.

In Australia, three main methods are used in commercial egg farming production, as follows:

1. Battery caged system;
2. Barn-laid; and
3. Free range.[113]

Although the methods are differentiated by the housing method, within each category there may be divergence depending on the climate, and care and skill of farmers.[114]

[108] Jonathan Ward, 'From Battery Cages to Barns: A Cost-Benefit Analysis of a National Standard for Cage-Free Egg Production' (2014) 34(1) *School of Public Policy Capstones* 14.
[109] M. HÄne, B. Huber-Eicher and E. FrÖhlich, 'Survey Of Laying Hen Husbandry In Switzerland' (2000) 56(1) World's Poultry Science Journal, 21, 28-29.
[110] Rachel Braun, 'Consumers' Willingness to Pay for Specialty Table Eggs' (2018) 9(1) *Supply Chain Management Undergraduate Honors Theses* 1.
[111] RSPCA, 'End the Battery Cage: Public Consultation', *RSPA* (Web Page) <https://www.rspca.org.au/campaigns/end-the-battery-cage-public-consultation>.
[112] AgraCEAS Consulting, 'Optimising Laying Hen Welfare In Cage-Free Systems: Working Towards a Smooth Transition In European Egg Productions', *Euro-Group for Animals* (Web Page, 2018) 9 < https://www.eurogroupforanimals.org/wp-content/uploads/Optimising-laying-hen-welfare-in-cage-free-systems.pdf>.
[113] Productivity Commission – Commonwealth of Australia, *Battery Eggs Sale and Production in the ACT* (Report, October 1998).
[114] New South Wales Government, 'Egg Production Systems in Australia', *Department of Primary Industries* (Web Page, 2018) <https://www.dpi.nsw.gov.au/animals-and-livestock/poultry-and-birds/poultry-planning-and-keeping/poultry-keeping-environment/egg-production-systems>.

Further to the discussion in sections (1) (a) of this submission, the following table summarises the advantages and disadvantages of battery cages and alternative egg farming production methods:[115]

Method	Advantages	Disadvantages
Battery cages	• Low cost • Relatively low mortality compared with uncaged hens • Temperature and climate control • Less biosecurity and predator threats	• Minimal access to natural light • Limited space for movement and natural behaviour, such as foraging, pecking, flapping or running • No nesting area • Minimal engagement in natural behaviours • Bone and muscle weakness caused by wired floor and lack of movement • Injuries from no scratch pads or claw shortening devices • Overcrowding • Distress caused by environment • Debeaking practice to stop distressed hens pecking each other
Barn-laid	• Litter on the floor to reduce strain on bones and muscles • Less predator threats compared with free range • More space to allow natural behaviour such as foraging, pecking, flapping, running and dust bathing	• Higher rates of cannibalism and parasitic and bacterial infections than caged hens[116] • Higher skill needed for husbandry • Minimal access to natural light and environment
Free range	• Outdoor range area permits access to natural light and environment • Large space for hens to exhibit natural behaviours • There are existing regulations for free range labelling and stock standards to assist consumers under the Australian Consumer Law[117]	• Higher rates of cannibalism and parasitic and bacterial infections due to access to wild birds and their own faeces • High levels of dust and ammonia • Higher skill needed for husbandry • Predator threats • Need larger space, more workers and feed

(1) (h) What measures should be taken to assist businesses that may be adversely affected by any proposed changes to the law?

It would be appropriate for all eggs used in government institutions (such as schools, prisons and hospitals) to no longer be sourced from caged production. Additionally, a partnership agreement between government

[115] American Veterinary Medical Association, 'Welfare Implications of Laying Hen Housing', *American Veterinary Medical Association* (Web Page, 2012) <https://www.avma.org/KB/Resources/LiteratureReviews/Pages/Welfare-Implications-of-Laying-Hen-Housing.aspx>.; DC Lay et al, 'Hen Welfare in Different Housing Systems' (2011) 90(1) *Poultry Science* 278.
[116] O Fossum et al, 'Causes of Mortality in Laying Hens in Different Housing Systems in 2001 to 2004' (2009) 51(1) *Acta Vet Scand*, 3.
[117] *Australian Consumer Law (Free Range Egg Labelling) Information Standard 2017* (Cth) pt 2, s 7.

institutions and transitioning egg producers ought to be established to meet a minimum order of free range eggs. This would assist affected businesses in the transition towards free range eggs.

(1) (i) What scientific literature says about the above matters.

The scientific literature on the abovementioned matters is discussed throughout this submission, and in particular section 1 (a) (i) of this submission.

The Humane Society of the United States' summary of findings from leading animal welfare scientists[118] reveals that the battery cage offers insufficient nesting opportunities[119] and prevents hens from foraging for food, dust bathing, wing flapping, preening and natural mobility.[120] This restricted movement and confinement in the battery cage environment can lead to a 'chronic state of social stress,'[121] and anxiety.[122]

Dr Lesley Rogers, Australian Professor of Zoology at the University of New England, found that unable to perform these natural behaviours, hens express their anxiety through 'abnormal' behaviours such as feather pecking,[123] and bullying.[124] To reduce these behaviours, a method of trimming and removing the beaks of chicks has been adopted.[125] A report by the UK Farm Animal Welfare Council revealed that this can result in 'chronic, often irreversible, injury'.[126]

The scientific literature says that severe damage to the foot[127] and bone fractures are common occurrences,[128] the latter often a direct outcome from osteoporosis.[129] Moreover, a scientific study found that in the battery cage, fractures in hens were highest, and muscle and bone strength were at its lowest, compared to other egg production housing systems.[130]

(1) (j) Any other related matter.

While poor animal welfare outcomes and practices in the egg production industry as a result of the use of battery cages impacts hens, the welfare of male chicks is also compromised. Male chicks, unable to produce

[118] The Humane Society of the United States, *Food Safety and Cage Egg Production* (Report, May 2011) 5.
[119] Ian Duncan, 'The pros and cons of cages' (2001) World's Poultry Science Journal 57, 385, as cited in *HSUS Report.*
[120] The Humane Society of the United States, *Food Safety and Cage Egg Production* (Report, May 2011).
[121] Ibid.
[122] Voiceless the Animal Protection Institute, 'Battery Hens', *Voiceless* (October 2018) <https://www.voiceless.org.au/hot-topics/battery-hens>.
[123] The Humane Society of the United States, *Food Safety and Cage Egg Production* (Report, May 2011).
[124] Voiceless the Animal Protection Institute, 'Battery Hens', *Voiceless* (October 2018) <https://www.voiceless.org.au/hot-topics/battery-hens>.
[125] Ibid.
[126] Farm Animal Welfare Council, 'Opinion on Beak Trimming of Laying Hens', *United Kingdom Government* (Web Page, November 2007) <https://www.gov.uk/government/publications/fawc-opinion-on-beak-trimming-of-laying-hens>.
[127] R Tauson, 'Health and production in improved cage designs', (1998) British Poultry Science 77, 1820–1827, at 1821.
[128] 'Do Layer Hens Suffer from Bone Problems?' *RSPCA Knowledge Base (*Web Page May 2019) <https://kb.rspca.org.au/knowledge-base/do-layer-hens-suffer-from-bone-problems/>.
[129] Ibid.
[130] Ibid.

eggs and considered inadequate as a source of meat, are routinely slaughtered.[131] Approximately 12 million male chicks are mass slaughtered each year in Australia.[132] Male chicks are subject to carbon dioxide gassing, which studies have shown is both a stressful and painful way of euthanising animals.[133] It may take up to two minutes of gasping and shaking for the chick to die.[134] Accordingly, high concentrations of carbon dioxide are required as day-old chicks are resistant to the gas.[135] The other method of slaughter is maceration, which involves grinding chicks still alive, resulting in further poor animal welfare outcomes and practices.[136]

An alternative solution has been forged in Germany, coined "Seleggt" eggs. German technology has been developed to determine the sex of the chick while in the incubation phase.[137] The male eggs are discarded before hatching, preventing poor animal welfare outcomes at the outset. "Seleggt" eggs are the first no-kill eggs sold in Germany and there are designs to expand across Europe.[138]

The Committee recommends urgent reform by the NSW government implementing a similar solution to that pioneered in Germany to prevent the poor animal welfare practice of mass slaughter of male chicks in NSW.

Concluding Comments

NSW Young Lawyers and the Committee thank you for the opportunity to make this submission.

If you have any queries or require further submissions, please contact the undersigned at your convenience.

Contact:

Jennifer Windsor
President
NSW Young Lawyers
Email: president@younglawyers.com.au

Alternate Contact:

Daniel Cung
Chair
NSW Young Lawyers Animal Law Committee
Email: alc.chair@younglawyers.com.au

[131] Voiceless the Animal Protection Institute, 'Battery Hens', *Voiceless* (Web Page October 2018) <https://www.voiceless.org.au/hot-topics/battery-hens>.
[132] 'Germany says no more chick shredding!', *Animals Australia* (Web Page 2018) <https://www.animalsaustralia.org/features/germany-stops-shredding-chicks.php>
[133] K M Conlee et al, 'Carbon Dioxide For Euthanasia: Concerns Regarding Pain And Distress, With Special Reference To Mice And Rats' (2005) 39(2) *Laboratory Animals*.
[134] 'What Happens with Male Chicks in the Egg Industry?' *RSPCA Knowledge Base* (Web Page 2019) <https://kb.rspca.org.au/knowledge-base/what-happens-with-male-chicks-in-the-egg-industry/>
[135] *Recommended Code Of Practice For The Care And Handling Of Poultry From Hatchery To Processing Plant* (Agriculture Canada, 1989).
[136] Voiceless the Animal Protection Institute, 'Battery Hens', *Voiceless* (Web Page October 2018) <https://www.voiceless.org.au/hot-topics/battery-hens>.
[137] 'World's first no-kill eggs go on sale in Berlin', *The Guardian Online* (Web Page 2018) <https://www.theguardian.com/environment/2018/dec/22/worlds-first-no-kill-eggs-go-on-sale-in-berlin>.
[138] Ibid.