Answers to Supplementary Questions – RSPCA Australia

Question 1

Can you please clarify what you believe the cost would be of phasing out battery cages in Australia (and, more specifically, in NSW) over 10 years?

Answer

The Draft Poultry Standards Regulation Impact Statement (the RIS) estimates that the cost of requiring the provision of furnishing including perches, nest boxes, scratch pad (as required under Pathway B) will cost approximately $40.50 per hen (p.152 RIS). Nationally, the RIS estimates this would equate to $418 million over 10 years (p.152 RIS).

The RIS does not provide a state by state breakdown of costs due to 'commercial in confidence' reasons so the precise number of hens in battery cages in NSW was not disclosed but an approximate figure may be deduced from national figures. Nationally, the RIS estimated that in 2016, approximately 10,716,713 hens were housed in battery cages in Australia (p.5). According to Australian Egg Corporation, NSW (and ACT) make up 31.57% of the national flock. 31.57% of 10,716,713 equates to 3,383,266. Obviously this is not an accurate representation of the number of hens in cages in NSW as different states will have different combinations of production systems but it provides a general estimate.

According to the RIS, if 3,383,266 hens in battery cages were to be provided with furnishings at $40.50 per bird, this would cost approximately $137 million over 10 years. Of course, not all of these costs could be attributed to the proposed regulation as a significant part of the conversion of facilities is expected to occur independently of government regulation over the next 10 year period due to market forces and the need to replace aging infrastructure.

The impact of net market forces on battery cage eggs over this 10 year period was taken into account in the RIS and estimated to be -13.3%. This was described as 'extremely conservative' by economic advice from BG Economics (**attached**) in light of widespread food business and retailer commitments to go cage free by 2025.

Among these, Arnott's, McDonalds, Hungry Jacks, Subway, Nando's, Oporto, Coles, Woolworths, Aldi, Harris Farm Markets, Ikea, Kellogg's, Compass Group, Mars, Nestle, PepsiCo and Unilever have all started phasing out cage eggs from their supply chains. The breadth and scale of cage-free commitments are clearly documented at: www.welfarecommitments.com and https://www.rspca.org.au/campaigns/layer-hen-welfare/cage-free-proud

Accordingly, current cage infrastructure will increasingly become a stranded asset over the next decade. BG Economics estimates that a net market effect of -26.6% is more realistic. Coupled with an assessment of the need to replace aging cage infrastructure over the next 10 years, the proportion of the $137 million that can be attributed to the proposed regulation is likely to fall significantly below $100 million over 10 years and much of these costs may be passed on to consumers. See our response to Questions on Notice for

discussion of funding a possible adjustment package via a small retail levy per egg. Ultimately, this would require detailed economic modelling by the NSW Government.

Further consideration in assessing costs would need to be given to the extent to which costs can and will be passed down the supply chain to the consumer and the extent to which increased production costs will be offset by overall increases in industry revenue due to increased production of higher value non-cage eggs. The latest IBISWorld report shows that the industry's overall revenue has increased with the growing market share of non-cage eggs (IBISWorld 2019).

In terms of the numbers of businesses affected. The RIS states that there are approximately 88 cage egg farms in Australia (Table A1.1, RIS). As NSW accounts for 32% of egg businesses this equates to approximately 28 businesses in the state using cage production systems (again, this is not an accurate figure as the production system mix in each state is different). Many egg businesses run multiple systems (NSW DPI submission, p.3) and therefore only a portion of these businesses would be affected by the phase out of battery cages.

Finally, it is important to point out that references to the $1.5 billion figure in the RIS in the context of costs attributable to phasing out battery cages are incorrect and misleading. This figure includes the base case costs of $709 million which applies across 12 different poultry industries covered by the standards. The balance of the $1.5 billion figure includes significant costs not imposed by the proposed regulation including the costs of voluntary commercial decisions of cage egg producers to transition into free-range systems. Nothing in the proposed standards compel cage egg producers to transition to free-range. The proposed regulation is simply that furnishings are provided if cages continue to be used. A regulatory impact statement is designed to assess the cost impacts imposed by regulation. Accordingly, the proposed costs associated with voluntary commercial decisions are outside the scope of the RIS.

There are other major flaws with the draft RIS including a supposed $449 million cost for a non-contentious standard relating to beak trimming (proposed SA9.15). This estimated cost forms part of the base case and therefore runs through the estimated costs for all proposed regulatory options significantly distorting the estimated costs. These and other flaws are outlined in further detail in the RSPCA's submission to the draft Poultry Standards RIS (**attached**).

Question 2

Please outline the difference between egg production systems – caged, barn and free range?

Answer

Conventional battery cages: birds are confined continuously to barren cages with no furnishings, floor space of 550cm2 per bird, and wire floor.

Furnished cages: birds are confined continuously to cages that contain furnishing including nest boxes, perches and scratch-pads, with floor space of 750cm2 per bird.

Barns: birds are housed in large sheds where thousands of hens are kept together on litter flooring with nesting areas.

Free-range: Birds in free-range systems are often housed in sheds and have daily access to an outdoor range at varying stocking densities of up to 10,000 birds per hectare.

Question 3

Please outline the different kinds of cages, conventional, colony, pre-enriched and furnished cages?

Answer

Conventional battery cages: birds are confined continuously to barren cages with no furnishings, floor space of 550cm2 per bird, and wire floor.

Colony cages: birds are confined continuously in cages housing larger numbers of birds (40 to 100), and may include a perch.

Pre-enriched cages: barren cages that are designed to accommodate furnishings including nest boxes, perches and scratch-pads.

Furnished cages: birds are confined continuously to cages that contain furnishing including nest boxes, perches and scratch-pads, with floor space of 750cm2 per bird.

Question 4

Do you believe there is a direct relationship between the actions of activists and supermarkets impacting consumers in their choice of egg purchase?

Answer

Animal welfare organisations have undoubtedly had an impact on increasing community awareness of battery cages and their impacts on hen welfare. Much research shows that consumers do take animal welfare into account in determining what products they choose. Supermarkets are responding to consumer concerns about animal welfare by making cage free commitments.

Question 5

What are the natural behaviours that can be expressed by birds in conventional cages?

Answer

Aside from eating, drinking, laying eggs and defecating (which are more biological functions than behaviour), hens in conventional battery cages cannot express any of the natural behaviours they are highly motivated to perform, such as accessing a nest when in lay, dust bathing, wing flapping, perching, scratching, and foraging.

Question 6

Industry debt is financed over a twenty to forty year period. What does structural adjustment mean and what would this include for the egg production industry given the production system is not centred on the caged asset alone?

Answer

Ultimately this is a question for government. It is likely that structural adjustment in the context of phasing out battery cages would be focused primarily on assisting businesses with the cost of converting infrastructure.

Industry adjustment packages in agriculture are not uncommon. They can take many forms and require detailed economic modelling on a case by case basis to determine which areas it is most appropriate and effective for government to provide assistance. In the case of phasing out battery cages, the infrastructure costs associated with removing battery cages and installing furnished cages or converting cage sheds to barn or aviary systems would be the most obvious area for government assistance.

Industry assistance packages are sometimes funded by retail levies on the sale of products produced by the industry. For instance, the Diary Structural Adjustment Program Scheme (DSAP Scheme) involved an 11 cent per litre retail levy to generate revenue for the program. Similarly, the Sugar Industry Reform Package (SIRP 2004) involved a 3 cent per kilogram domestic sales levy to help fund the package. In light of the massive quantity of eggs consumed in Australia each year, a minor levy per egg unit could generate a significant source of funding to assist with infrastructure transition costs with little impact to the consumer. For instance, at 6.2 billion eggs a year, a 1 cent levy per egg could generate $62 million in funding to be dispersed among eligible egg businesses requiring adjustment assistance.

RSPCA Australia sought economic advice from BG Economics in 2018 (**attached**) following the release of the draft Poultry Standards Regulation Impact Statement. The advice considered the potential for the cost impacts of phasing out battery cages to be passed on to consumers (something the draft Regulation Impact Statement failed to do), and concluded that passing on these costs would result in a price increase of approximately 1.4 cents per egg. The advice then went on to consider the potential for Government assistance, particularly for smaller producers. See extract from pages 12-13 below:

> *Such a premium is a small additional price for consumers. However, some firms either due to their size or other factors may be unfairly burdened by trying to recover any upfront outlay required to transition away from conventional cage egg production. In such instances, this cost burden could be either fully or partially met by an industry structural adjustment program (or similar). As identified previously, most of the extra cost burden is placed on NSW, Queensland and Victoria. For South Australia, Western Australia and Tasmania the extra cost burden is far less (in absolute terms, not relative terms).*

Government funded industry packages, particularly federally funded packages, are not uncommon in the agricultural industry which compensates producers for the cost of government decisions in regard to agriculture including:

- *Dairy Structural Adjustment Program Scheme 2000 (DSAP Scheme)*
- *Supplementary Dairy Assistance Program (SDA)*
- *Sugar Industry Reform Package Sugar Industry Reform Programme (SIRP 2004)*
- *Tobacco Grower Adjustment Assistance Package (TGAAP)*
- *Premium Fresh Tasmania Regional Food Producers Innovation and Productivity Program (RFPIPP)*

The Dairy Structural Adjustment Program (May 2000 to December 2008) had a total budget of $1.63 billion.

Types of adjustment package include:

- *Industry Restructuring – To make the industry overall more sustainable, can include exit assistance (frequent in agriculture)*
- *Enterprise assistance*
- *Labour market assistance*
- *Inward investment*

Question 7

Is the egg industry able to demonstrate that social licence exists for egg production (and, in particular, caged-egg production)?

Answer

Egg production in Australia has a social licence, battery cages do not. The longer the egg industry holds on to battery cages and defends their use, the more the social licence of the broader industry will be brought into question.

There has been a steady increase in public awareness around issues of farm animal welfare in recent years, which is expected to continue in the coming years (Futureye, 2018). Australian consumers are becoming increasingly aware of farm animal welfare, and more discerning about the quality of life that the animals experienced.

Concern for the welfare of layer hens in conventional cages has probably attracted more debate than any other intensive husbandry system (Freire & Cowling 2013). A recent survey by McCrindle (2017) of 1000 Australians revealed that 84% of the Australian public are concerned about the welfare of hens in conventional cages, and that 8 in 10 want to see battery cages phased out, an increase since previous research conducted in 2015 found 2 in 3 Australians were concerned about hens in battery cages.

If animal welfare standards fail to reflect the expectations and values of the Australian public, the sustainability of the production system may be threatened in the face of increasing concern about the way farm animals are treated (Hender, 2015). This could present a significant risk to an industry's social licence.

The concept of social licence is generally thought of as the acceptance of a company or industry's practices by the general public, where a company must be seen to operate responsibly (Futureye, 2018; Hampton and Teh-White, 2019). A social licence is the implicit acceptance of a product, service, company and government. Acceptance requires ongoing alignment to society's values, paying attention to their concerns, and resolving issues (Futureye, 2018). This concept is applicable to animal industries, where animal housing and husbandry practices are increasingly subject to public scrutiny.

There is a current perceived lack of responsiveness by industry and government to the concerns of the public, who also believe that government and industry actions are insufficient to ensure good animal welfare standards (Futureye, 2018). The current regulatory environment has the potential to provoke significant public outrage if it is unable to effectively regulate farm animal welfare issues. A potential consequence of this is a loss of confidence in the government's ability to protect animal welfare, and may result in increased pressure on producers and industries. Quantitative research shows that the public has high concern for the welfare of egg-producing hens in particular (Futureye, 2018).

Since surveys have found that the vast majority of Australians are concerned about farm animal welfare, governments, industry, and food companies need to ensure that their policies encompass good animal welfare in order to maintain social licence. The use of

conventional cages to house layer hens is not a sustainable housing system and will not be accepted by the public going forward.

Question 8

Has research been undertaken to verify if the free range egg production system can perform as consistently as the caged system?

Answer

Non-cage production systems already consistently supply just under 50% of Australia's total egg demand. This is currently made up of approximately 36% free-range and 9% barn. Barn is expected to be a significant growth category in the event of a phase out of battery cages. A 10-year transition period would provide ample time for the market to adjust to ensure consistent supply.

Question 9

What information is available on the nature of demand for caged eggs?

Answer

RSPCA is not aware of any research on the nature of demand for caged eggs that extends beyond price. Demand for cage eggs has fallen steadily over the past decade.

From a retail market share of approximately 75% in 2005, it has now dropped to below 50% today (2005-2018 Australian Egg Corporation Limited Annual Reports). Conversely, the proportion of non-cage eggs, including barn-laid, has grown strongly over the past five years. Barn systems are relatively low-cost compared to free-range, but do not have the same negative connotations in relation to animal welfare as cage systems (IBISWorld, 2015).

Since 2012, non-cage eggs represent the highest value to the egg industry in Australia in terms of the grocery sales farming system market share, and have rapidly been growing since then (2011-2017 Australian Egg Corporation Limited Annual Reports). This change is reflective of Australians' concerns for animal welfare in conventional cages (IBISWorld 2015).

Should battery cages be phased out, it is likely that current purchasers of battery cage eggs will simply purchase the next cheapest option in the market. This will either be barn eggs or furnished cage eggs depending upon the level of investment by industry in furnished cages.

Question 10

What steps are being taken to address the welfare challenges of barn and free range egg production systems?

Answer

The international shift away from conventional battery cages to non-cage production systems like barn and free-range has led to an acceleration in R&D around the world to further improve the welfare outcomes of non-cage production systems. Legislative phase-out timelines have led to significant investment in research funding to address all aspects of production in non-cage systems.

Unfortunately we have not observed a similar level of commitment to addressing these issues in Australia. This is perhaps due in part to a lack of impetus. Placing an end date on the use of battery cages may lead to greater investment from the Australian industry in research designed to address the welfare challenges on non-cage production, a summary of which is provided below.

Mortality

The main welfare risks in cage-free systems are the transmission of infectious diseases and severe feather pecking, both of which can lead to mortality. Severe feather pecking is a significant welfare problem where birds vigorously peck at and pull out the feathers of other birds. These issues, and the extent to which they occur, are largely affected by the management and stockpersonship on each farm. Addressing severe feather pecking requires an integrated approach comprising genetic selection, the provision of appropriate housing conditions, and good management. The University of Bristol has developed a management guide for severe feather pecking for producers: 'FeatherWel' available here http://www.featherwel.org

Birds in non-cage systems tend to have higher mortality than those in cage systems where weekly mortality is generally less than 0.1%. However, a study [1] of the effect of cages and alternative housing systems on a number of bird production and welfare parameters found that mortality or feather pecking did not differ between systems. This means that the chance of a feather-pecking outbreak is the same regardless of housing system. Mortality can be higher in non-cage systems because a severe feather-pecking or infectious disease outbreak can have greater consequences due to transmission throughout large groups of birds. In order to reduce mortality in non-cage systems, infectious disease and the risk of feather pecking must be managed better.

Pests, parasites and disease

The transmission of infectious diseases is strongly affected by biosecurity and health management practices. Causes of mortality may also include bacterial infections (erysipelas, colibacillosis, pasteurellosis) that result from birds having contact with soil on the range or the litter in the shed, and viral diseases (lymphoid leucosis, Marek's disease, Newcastle disease). Increased incidence of internal and external parasites may also be found in non-

cage systems [2]. Emphasis on improved management of these systems is therefore important. A Swiss study [3] that monitored hens for 12 years after cages were banned in Switzerland, found that the incidence of viral disease and parasitism consistently decreased over this period due to a focus on bird management.

Intestinal worm burdens must be monitored and birds treated when high egg counts are detected. Similarly, birds must be monitored and treated promptly for mites [4]. Bacterial disease also needs to be addressed, for example, through increased emphasis on managing air quality (dust) in sheds. Managing disease in non-cage systems requires using vaccines where available, thorough disinfection of sheds and equipment, paddock rotation, and implementing appropriate biosecurity measures.

Predation

Where hens have access to the outdoors, there is a risk of birds being predated. Shed and range design should be such that predator entry is restricted. Similarly, where fencing is used, it should be constructed and maintained to prevent the entry of predators such as foxes and dogs. Guardian animals such as dogs (e.g. maremmas), alpacas or donkeys may also help deter ground predators. Providing overhead cover – either natural or artificial – will protect hens from aerial predators while still encouraging birds to access the range.

Summary

Overall, management is a very large determinant of welfare in cage-free systems. There are advantages and disadvantages to hen welfare in each type of housing system. The main risks to hen welfare in cage-free systems are, at present, highly variable. Many of the disadvantages in cage-free systems may be addressed and improved by good infrastructure design, good management practices, genetic selection, and further research. Conversely, the welfare issues in battery cages are inherent to the system, are therefore largely not affected by management and thus cannot be avoided.

[1] Freire R Cowling A (2013) The welfare of laying hens in conventional cages and alternative systems: first steps towards a quantitative comparison. Animal Welfare 22:57-65.

[2] Lay Jr DC Fulton RM Hester PY et al (2011) Hen welfare in different housing systems. Poultry Science 90:278-294.

[3] Kaufmann-Bart M Hoop RK (2013) Diseases in chicks and laying hens during the first 12 years after battery cages were banned. Veterinary Record 164:203-207.

[4] University of Bristol (2013) Improving feather cover: A guide to reducing the risk of injurious pecking occurring in non-cage laying hens Version 1.2. FeatherWel: Promoting bird welfare available at http://www.featherwel.org/injuriouspecking.

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- IBISWorld (2019) Egg farming in Australia. IBISWorld Industry Report A0172.
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