

Title: Fairer food labelling public consultation. This impact assessment relates to Part B: Method of production labelling proposals within the above consultation IA No: RPC Reference No: RPC-DEFRA-5263(1) Lead department or agency: Department for Environment, Food and Rural Affairs Other departments or agencies:	Impact Assessment (IA)
	Date: 25/01/2024
	Stage: Development/Options
	Source of intervention: Domestic
	Type of measure: Secondary legislation
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Summary: Intervention and Options	RPC Opinion: RPC Opinion Status

Cost of Preferred (or more likely) Option (in 2019 prices)

Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status
£139.9m	£259.3m	£3.7m	£18.5m

What is the problem under consideration? Why is government action or intervention necessary?

Evidence shows that UK consumers want to buy high-quality food and care about animal welfare as both citizens and consumers. However, it can be difficult to clearly identify where food comes from and how it is produced. Despite their value, existing voluntary assurance schemes have been unable to create a consistent, simple way to identify the production standards of animal products. The voluntary nature of existing assurance schemes means that information on the production standards of products is not consistently provided, and the subset of imported products produced to standards below the UK's legal baseline, are not identified as such. This means that farmers and farm businesses are competing on an uneven playing field. In this way, a lack of transparency distorts competition and sets up barriers that prevent consumers from purchasing products in line with their values, and the current market therefore does not deliver animal welfare in line with societal expectations.

Mandatory labelling aims to correct market failures related to information asymmetry due to a lack of reliable welfare information on food products, the public good nature of animal welfare, and negative externalities such as reduced consumer confidence. Government intervention is needed to standardise information to consumers on the production standards of products and ensure that this information is provided, incentivising businesses to provide products in line with consumer demand.

What are the policy objectives of the action or intervention and the intended effects?

The three objectives of labelling are to

- Make it easy for consumers to choose food products that align with their values by ensuring that UK baseline and higher welfare products are accessible, available and affordable
- Support farmers meeting or exceeding baseline UK animal welfare regulations by ensuring they are rewarded by the market
- Improve animal welfare by unlocking untapped market demand for higher welfare products

By improving transparency in the food system, this policy aims to unlock untapped market demand for higher welfare products, facilitating improved consumer choice and creating a long-term shift in the market towards increased higher welfare production.

Better transparency is a first-order impact of this policy and responds to consumer interest in clearer information around production standards of food products¹. In addition to this first-order impact, we expect second-order impacts to occur as a result of changing market demand in response to the policy. These second-order impacts include consumer and

¹ [The EIT Food Trust report](#) found consumer interest in better transparency and more standardised information. Consumer insights from AHDB (2019) identified consumer demand for greater transparency, and proposed this could be delivered through clearer labelling. Similarly, [Opinium](#) asked 1,990 UK adults whether animal products should be labelled according to the conditions they are raised in: 68% of respondents agreed; [YouGov](#) asked 1,652 UK adults if they would support labels on meat products indicating how the animal was raised and slaughtered: 55% of respondents supported; [Qa Research](#) asked 1,001 UK adults whether method of production labelling should be extended to all animal products: 83% of respondents agreed (<https://www.qaresearch.co.uk/food-labelling-report-published>).

industry behavioural changes resulting from increased transparency. Consumer research², analysis of the food system³ and case study evidence⁴ indicate that these second-order impacts will shift the market towards higher animal welfare products; however, the extent of these predicted second order-impacts is necessarily more speculative.

Decisions around policy design elements, such as around the regulatory approach and the label format, have sought to ensure effective delivery of both first and second order impacts.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

This Impact Assessment explores five policy options, building on data submitted through our recent call for evidence about costs and feasibility of reform.

- Option 0 (“do nothing”): No government intervention; continue to rely on existing industry and NGO initiatives.
- Option 1 (preferred option): The medium ambition option would introduce mandatory method of production labelling reforms for unprocessed and certain minimally processed products from pigs, meat chickens and hen eggs sold in the retail sector for domestic and imported products. The production standards underpinning the label would focus on welfare potential on farm. **This is the preferred option**, as it most effectively balances delivering on policy objectives with minimising burden on industry.
- Option 2: The high ambition option expands the scope of labelling to cover products from beef and dairy cattle, and sheep.
- Option 3: The low ambition option is voluntary rather than mandatory labelling, and would only apply to unprocessed products.
- Option 4 (non-regulatory): A government-led consumer awareness campaign to promote understanding of existing voluntary labels.

There is a strong case that mandatory labelling is necessary in order to deliver the policy objectives. Due to the number of existing voluntary labels and consumer awareness campaigns to promote these, an additional voluntary label or campaign will not add value to the market. While the high ambition option is expected to provide greater benefits, this comes with associated greater costs and complexity than the preferred option, which targets reforms towards what is simplest to deliver.

Will the policy be reviewed? It ~~will~~ will be reviewed. If applicable, set review date: TBC

Is this measure likely to impact on international trade and investment?		Yes		
Are any of these organisations in scope?	Micro Yes	Small Yes	Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)		Traded: 0		Non-traded: 0.65

² We know that UK consumers care about animal welfare. We also know that the value placed on animal welfare is not always borne out at point of purchase. This is known as the value-action gap.

Evidence submitted through the 2021 call for evidence identified three key barriers driving this value-action gap. These are accessibility, availability and affordability. Accessibility refers to the lack of consistent, clear information on products. Availability relates to the limited availability of higher welfare products – particularly for more processed products. Affordability relates to the cost of higher welfare animal products, which on average exceed the cost of production.

Further discussion of consumer research can be found in the economic rationale for intervention (1.2), benefits to consumers (7.1), and Annex 2 on the label format.

³ See section 6.1 for further discussion

⁴ Refer to Annex 2 for discussion of case studies such as the EU mandatory shell egg label.

Summary: Analysis & Evidence Policy Option 0 (do nothing)

Description: Existing NGO/industry-led labels continue unchanged. This is the baseline against which other options are assessed.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)			
			Low: 0.0	High: 0.0	Best Estimate: 0.0	
COSTS (£m)	Total Transition (Constant Price) 10 Years		Average Annual (excl. Transition) (Constant Price)		Total Cost (Present Value)	
Low	0		0		0	
High	0		0		0	
Best Estimate	0		0		0	
Description and scale of key monetised costs by 'main affected groups'						
The do-nothing option would impose no costs. Existing market failures (related to the public good nature of animal welfare, information asymmetry due to a lack of reliable method of production information on food products, and negative externalities of the current market system) would persist.						
Other key non-monetised costs by 'main affected groups'						
Not applicable.						
BENEFITS (£m)	Total Transition (Constant Price) 10 Years		Average Annual (excl. Transition) (Constant Price)		Total Benefit (Present Value)	
Low	0.0		0.0		0.0	
High	0.0		0.0		0.0	
Best Estimate	0.0		0.0		0.0	
Description and scale of key monetised benefits by 'main affected groups'						
The do-nothing option would yield no benefits.						
Other key non-monetised benefits by 'main affected groups'						
Not applicable.						
Key assumptions/sensitivities/risks (%)					Discount rate	3.5%
Not applicable.						

BUSINESS ASSESSMENT (Option 0)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 0.0	Benefits: 0.0	Net: 0.0	

Summary: Analysis & Evidence Policy Option 1 (preferred)

Description: A mandatory tiered method of production label that initially is required on unprocessed and minimally processed products containing pork, chicken, and eggs.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 103.3	High: 195.7	Best Estimate: 139.9

COSTS (£m)	Total Transition (Constant Price) (£m) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	5.5	7.3	67.9
High	11.9	25.2	228.1
Best Estimate	8.5	16.6	151.2

Description and scale of key monetised costs by 'main affected groups'

Labelling reform of this kind gives rise to three direct costs to industry: relabelling, familiarisation with regulations, and compliance. Relabelling and familiarisation are one-off costs, and compliance is an ongoing cost. We have sought to minimise costs through policy design. For example, a transition period will enable industry to make a significant proportion of labelling changes as part of routine label refreshes. We estimate this transition period will save industry approximately £8.4 million.

In addition to impacting industry, a change in farming practices in response to improved transparency may also indirectly impact the environment through changes in emissions. We have partially monetised this for chickens using BEIS' carbon valuations (low, central and high estimates). Depending on the nature and scale of changes in farming practices involved, the impact on the environment could be positive or negative. For example, better welfare can improve productivity, which can reduce the environmental impact of farming. However, slower growing breeds (by living longer) consume more feed, which could increase the environmental impact.

Other key non-monetised costs by 'main affected groups'

Indirect costs to industry could arise from changes to production systems in response to increased demand for higher tier products. As labelling does not mandate behaviour change, any changes would be voluntary and only occur if they will be profitable for farmers and farm businesses in the long term.

We have not monetised the emission changes associated with changing farming practices for other species in scope, due to uncertainties in the data.

BENEFITS (£m)	Total Transition (Constant Price) (£m) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0	42.4	338.4
High	0.0	33.4	263.5
Best Estimate	0.0	36.7	291.1

Description and scale of key monetised benefits by 'main affected groups'

Through improved consumer transparency, labelling will clearly identify goods that do not meet UK baseline welfare standards – that is, those imported products that fall below the UK baseline. Enabling consumers to make more informed purchasing decisions could lead to potential benefits for UK farmers, who would be able to capture an increased market share for their products. We have monetised this based on analysis of the supply chain and speculative changes in consumer behaviour for unprocessed and minimally processed products containing pork and chicken.

Section 8.3 outlines the benefits to UK farmers in further detail while section 8.3.1 describes the analytical approach and methodology used to monetise this benefit.

Other key non-monetised benefits by ‘main affected groups’

Method of production labelling can incentivise consumers and industry to buy and source higher welfare products. We expect this will benefit farmers with higher welfare practices, as they will be able to capture a market premium for their products.

Based on assumptions around behaviour change (which draw on case study evidence set out in annex 1), we estimate that this policy would improve the welfare of approximately 110 million meat chickens, 700,000 laying hens and 510,000 pigs per year⁵. In addition to benefitting the animals themselves, this welfare improvement will benefit farmers, who value the welfare of their stock. The animal welfare benefits will also benefit UK consumers, who agree on the principle that farm animals should be treated humanely and that cruelty towards them is unacceptable⁶. Our breakeven analysis suggests that a benefit of £0.40 per consumer would offset the costs.

In addition to the costs mentioned above, there are potential environmental benefits resulting from improved welfare that we have not quantified at this stage for any species in scope. We have not been able to fully monetise these due to the speculative behavioural changes involved (related both to changes in farming practices and to the extent of mitigation strategies used), a lack of granular data on the environmental impacts of production systems, and the complexities of monetising environmental impacts beyond greenhouse gas emissions (such as soil health, biodiversity, air pollution, water quality etc.).

Key assumptions/sensitivities/risks	Discount rate (%)	3.5%
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Where we have needed to make assumptions in the absence of data, we use conservative figures and provide low, central and high estimates. Key assumptions include:

- The number of labels that would need to be updated. We have used manual web scraping of products sold by the top ten retailers by market share to estimate the number of stock keeping units in scope
- Industry and consumer behaviour changes related to the consumption and production of higher welfare products. We assume low, central and high estimates for the shift from baseline to higher welfare of 5%, 10% and 30%, drawing on case study evidence (further details in annexes)
- Market penetration of existing assurance schemes. Using data from assurance schemes, we assume 90-95% penetration for species in scope of this option
- Profit changes for industry. We assume long-term profit changes across industry will overall be zero, as labelling is a market-driven lever and businesses will act to at least maintain if not improve their profits
- Cost increases related to improved welfare as a proportion of retail price. We have conducted economic analysis using price-scrape data⁷ to estimate these, and drawn on a number of secondary evidence sources

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 3.7	Benefits: 0.0	Net: 3.7	
			18.5

5 We assume that 10% of meat chickens and pigs slaughtered each year will benefit from behavioural changes in response to improved transparency. We assume that 2% of laying hens will benefit from behavioural changes in response to improved transparency. The figure is lower for laying hens, as we believe that mandatory shell egg labelling already facilitates consumer choice. However, we anticipate an improvement due to the increased scope of welfare requirements (including minimally processed eggs as well as just shell eggs), potential changes in the standards to improve behavioural opportunities within production systems (such as the provision of verandas), and due to the standardisation across species of labelling, which will further ease consumer decision-making. As the standards for all species are draft standards subject to consultation, they may change. For this reason, we keep our estimated figure low.

6 Toma, L., Stott, A. W., Revoredo-Giha, C., & Kupiec-Teahan, B. (2012). Consumers and animal welfare. A comparison between European Union countries. *Appetite*, 58(2), 597–607. doi:10.1016/j.appet.2011.11.015

7 Information collected by extracting pricing data from various supermarket websites available online.

Summary: Analysis & Evidence Policy Option 2

Description: A mandatory tiered method of production label that applies initially to unprocessed and minimally processed pork, chicken, eggs, beef, milk, and lamb.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 21.1	High: 172.1	Best Estimate: 79.2

COSTS (£m)	Total Transition (Constant Price) 10 Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	11.9	3	9.3	91.5
High	24.5		34.1	317.3
Best Estimate	18.0		22.6	211.9

Description and scale of key monetised costs by 'main affected groups'

Labelling reform of this kind gives rise to three direct costs to industry: relabelling, familiarisation with regulations, and compliance. Relabelling and familiarisation are one-off costs, and compliance is an ongoing cost. We have sought to minimise costs through policy design. For example, a transition period will enable industry to make a significant proportion of labelling changes as part of routine label refreshes. We estimate this transition period will save industry approximately £13.7 million.

A change in farming practices may also impact the environment. We have partially monetised this for chickens using BEIS' calculations. We have not been able to fully monetise this due to the speculative behavioural changes involved (related both to changes in farming practices and to the extent of mitigation strategies used), a lack of granular data on the environmental impacts of production systems, and the complexities of monetising environmental impacts beyond greenhouse gas emissions (such as soil health, biodiversity, water quality etc.).

Other key non-monetised costs by 'main affected groups'

We have not monetised the environmental impact of a shift towards higher welfare farming practices for other species in scope, due to uncertainties in the data. Depending on the market-driven behavioural responses to labelling, this policy option could impact the environment in terms of soil health, biodiversity, greenhouse gas emissions, and land use, for example.

There may also be additional traceability costs to industry for tracking vendors through the supply chain in producing processed products. These costs have not been monetised here.

BENEFITS (£m)	Total Transition (Constant Price) 10 Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0.0	3	42.4	338.4
High	0.0		33.4	263.5
Best Estimate	0.0		36.7	291.1

Description and scale of key monetised benefits by 'main affected groups'

Through improved transparency, labelling will clearly identify where imported goods do not meet domestic baseline standards. This will benefit UK farmers, as they will be able to capture a market premium for their products. We have monetised this based on analysis of the supply chain and speculative changes in consumer behaviour for unprocessed and minimally processed products containing pork and chicken. This policy will also benefit farms producing beef, and lamb, but we have been unable to quantify the impacts at this stage due to an absence of data. The monetised figure is therefore slightly lower than the true benefits.

Other key non-monetised benefits by 'main affected groups'

Method of production labelling can incentivise consumers and industry to buy and source higher welfare products. This could benefit farmers with higher welfare practices, as they will be able to capture a market premium for their products. We have partially monetised this based on analysis of the supply chain and speculative behaviour changes, although we assume that the net change to overall business profits is zero.

We estimate that this policy would improve the welfare of approximately 110 million meat chickens, 510,000 pigs, 250,000 beef cattle, 180,000 dairy cattle and 1m sheep per year⁸. In addition to benefitting the animals themselves, this welfare improvement will benefit farmers, who value the welfare of their stock. The animal welfare benefits will also benefit UK consumers, who agree on the principle that farmed animals should be treated humanely⁹. Our breakeven analysis suggests that a benefit of £5.57 per consumer would offset the costs.

In addition to the costs mentioned above, there are potential environmental benefits resulting from improved welfare that we have been unable to quantify.

Key assumptions/sensitivities/risks rate (%)	Discount	3.5%
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Where we have needed to make assumptions in the absence of data, we use conservative figures and provide low, central and high estimates. Key assumptions include:

- The number of labels that would need to be updated. We have used manual web scraping of products sold by the top ten retailers by market share to estimate the number of stock keeping units in scope
- Industry and consumer behaviour changes related to the consumption and production of higher welfare products. We assume low, central and high estimates for the shift from baseline to higher welfare of 5%, 10% and 30%, drawing on case study evidence (further details in annexes)
- Market penetration of existing assurance schemes. Using data from assurance schemes, we assume 65-95% penetration for species in scope of this option
- Profit changes for industry. We assume long-term profit changes across industry will overall be zero, as labelling is a market-driven lever and businesses will act to at least maintain if not improve their profits
- Cost increases related to improved welfare as a proportion of retail price. We have conducted economic analysis using price-scrape data to estimate these, and drawn on a number of secondary evidence sources

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 10.8	Benefits: 0.0	Net: 10.8	
			53.8

⁸ This estimate is based on our central substitution assumption (which draws on case study evidence discussed in Annex 1) of a 10% shift towards higher welfare production systems. For animals whose lifespans are shorter than a year, we assume 10% of the total number slaughtered annually. For animals whose lifespans are longer than a year, we assume 10% of the total number of animals in the UK kept within a production system that would speculatively be in scope of a label. We exclude animals that are not reared specifically for the consumption of their products – for example, animals used for breeding.

⁹ Toma, L., Stott, A. W., Revoredo-Giha, C., & Kupiec-Teahan, B. (2012). Consumers and animal welfare. A comparison between European Union countries. *Appetite*, 58(2), 597–607. doi:10.1016/j.appet.2011.11.015

Summary: Analysis & Evidence Policy Option 3

Description: A voluntary tiered method of production label that applies initially to unprocessed and minimally processed from pigs, meat chickens and laying hens.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -81.5	High: -12.4	Best Estimate: -41.6
COSTS (£m)		Total Transition (Constant Price) ⁽²⁰²⁰⁾ Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)	
Low		5.3	0.8	12.4	
High		10.0	8.3	81.5	
Best Estimate		7.6	4.0	41.6	
<p>Description and scale of key monetised costs by ‘main affected groups’</p> <p>Labelling reform of this kind gives rise to three direct costs to industry: relabelling, familiarisation with regulations, and compliance. Relabelling and familiarisation are one-off costs, and compliance is an ongoing cost.</p> <p>In modelling the re-labelling costs related to a voluntary government label, we assume that all higher welfare products will choose to label their products with the new label. This is likely to be an overestimate, as there are already a number of voluntary labels and assurance schemes. Due to the lower uptake of a voluntary label, relabelling costs are lower than under the mandatory options.</p> <p>We have monetised indirect costs (such as the environmental impact of a change in farming practices) using a lower estimate of behavioural change than under a mandatory labelling policy.</p>					
<p>Other key non-monetised costs by ‘main affected groups’</p> <p>We have not monetised the environmental impact of changing farming practices for other species in scope, due to uncertainties in the data. We have not been able to fully monetise this due to the speculative behavioural changes involved (related both to changes in farming practices and to the extent of mitigation strategies used), a lack of granular data on the environmental impacts of production systems, and the complexities of monetising environmental impacts beyond greenhouse gas emissions (such as soil health, biodiversity, water quality etc.).</p>					
BENEFITS (£m)		Total Transition (Constant Price) ⁽²⁰²⁰⁾ Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)	
Low		0.0	0.0	0.0	
High		0.0	0.0	0.0	
Best Estimate		0.0	0.0	0.0	
<p>Description and scale of key monetised benefits by ‘main affected groups’</p> <p>This option involves voluntary rather than mandatory labelling. Due to the number of existing voluntary labels, we assume that an additional voluntary label will not add value to the market. For this reason, we expect a lower uptake and weaker behavioural change from industry and consumers to labelling. We anticipate that the benefits will accordingly be substantially lower than the benefits achieved under the mandatory options. Due to the speculative behaviour changes and uncertainties with the data, we have been unable to monetise these benefits.</p>					
<p>Other key non-monetised benefits by ‘main affected groups’</p> <p>Under a voluntary label, we assume that a maximum of around 7% of products in scope will be labelled¹⁰, with coverage likely much lower than this. This means that a voluntary label will fail to address the consumer transparency issues, whereby the coverage of existing labels is piecemeal and underpinned by varying standards of welfare. By adding another label to an already crowded landscape, the introduction of a voluntary government label could aggravate rather than improve the market failure this policy seeks to address – contributing to the information overload and lack of comparability faced by consumers.</p>					
Key assumptions/sensitivities/risks (%)				Discount rate	3.5%

10 This is based on data on the current proportion of higher welfare products in industries within scope of the proposed label.

Where we have needed to make assumptions in the absence of data, we use conservative figures and provide low, central and high estimates. Key assumptions include:

- The number of labels that would need to be updated. We have used family expenditure as a proxy for products in scope, and secondary evidence sources to estimate the number of stock keeping units in scope
- Industry response to the introduction of a voluntary government label. We assume low uptake, due to the number of existing assurance schemes
- Market penetration of existing assurance schemes. Using data from assurance schemes, we assume 90-95% penetration for species in scope of this option

BUSINESS ASSESSMENT (Option 3)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 2.1	Benefits: 0.0	Net: 2.1	
			10.3

Summary: Analysis & Evidence Policy Option 4

Description: A consumer awareness campaign seeks to promote consumer understanding of existing voluntary assurance schemes.

FULL ECONOMIC ASSESSMENT

Price Base Year 2019	PV Base Year 2020	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 0.0	High: 0.0	Best Estimate: 0.0-
COSTS (£m)	Total Transition (Constant Price) (000) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)	
Low	0	0	0	0	
High	0		0	0	
Best Estimate	0		0	0	
Description and scale of key monetised costs by 'main affected groups'					
We have not monetised the costs associated with a consumer awareness campaign, as we expect these would be minimal.					
Other key non-monetised costs by 'main affected groups'					
There would be no direct costs to businesses associated with an awareness campaign. There would be some cost to government associated with developing and launching the campaign. This could be done in partnership with existing assurance schemes and nonprofits to reduce costs.					
BENEFITS (£m)	Total Transition (Constant Price) (000) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)	
Low	0.0		0.0	0.0	
High	0.0		0.0	0.0	
Best Estimate	0.0		0.0	0.0	
Description and scale of key monetised benefits by 'main affected groups'					
We have not monetised the benefits associated with a government-led consumer awareness campaign, but we expect these would be minimal due to the number of existing and previous campaigns ¹¹ and the complexity of the existing landscape of welfare claims.					
Other key non-monetised benefits by 'main affected groups'					
A number of initiatives already seek to improve consumer awareness of the array of existing voluntary labels. The success of these initiatives at facilitating consumer choice is limited by the variability and piecemeal nature of voluntary marketing claims on animal products. A government-led consumer awareness campaign is not able to standardise the provision of information about welfare, so we do not believe it will deliver on policy objectives.					
Key assumptions/sensitivities/risks			Discount rate (%)	3.5%	
We have assumed that a government-led consumer awareness campaign would not be significantly more effective than the existing campaigns and consumer-facing resources spearheaded by various non-governmental organisations in the decades since the introduction of farm animal welfare assurance (for example, Which?, Compassion in World Farming and Red Tractor, among others).					

BUSINESS ASSESSMENT (Option 4)

¹¹ See for instance: [Decoding food labels: sustainability, welfare and food safety - Which?](#); [Red Tractor, RSPCA Assured and organic meat: what's the difference? - Which? News](#); [The labels and lingo supermarkets use to get you to buy their chicken - Which? News](#); [Popular food assurance labels and what they mean | Compassion in World Farming \(ciwf.org.uk\)](#); [Our Logos | Red Tractor](#); [Pork Labelling Guide](#) • [Know Your Labels](#) • [Farms Not Factories](#); [How does Red Tractor rank against other food assurance schemes? | The Poultry Site](#)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 0.0	Benefits: 0.0	Net: 0.0	

Evidence base

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1 Background

1.1 Problem under consideration and rationale for intervention

1. With no simple, consistent way to identify the method of production of animal products, claims about animal welfare are piecemeal, and the standards underpinning such claims vary significantly in terms of scope and stringency. The voluntary nature of existing assurance schemes means that information on the production standards of products is not consistently provided, and imported products produced to welfare standards below the UK's legal baseline are not identified as such.
2. This means that farmers and businesses are competing on an uneven playing field. In this way, a lack of transparency distorts competition and sets up barriers that prevent consumers from purchasing products in line with their values.
3. To address the issue, this policy aims to reform and expand existing mandatory method of production labelling for animal products sold in the United Kingdom (UK), whether domestically produced or imported. Voluntary assurance schemes have laid the groundwork, but government intervention is necessary to expand, improve, and standardise the communication of information about animal welfare. Labelling reform aims to correct the information failures around production standards in the current market and deliver transparency for consumers.
4. The policy objectives of labelling reform are to:
 - make it easy for consumers to choose food products that align with their values by ensuring that UK baseline and higher welfare products are more easily accessible, widely available, and affordable

- support farmers meeting or exceeding baseline UK or equivalent welfare regulations by ensuring they are rewarded by the market
 - improve animal welfare by unlocking untapped market demand for higher welfare products
5. Evidence submitted through Defra's 2021 [call for evidence on labelling for animal welfare](#) points to the strong potential of well-designed mandatory labelling reforms to unlock systems-level change. By establishing a level playing field, mandatory method of production labelling can change the incentives to support higher welfare products¹². Harmonised labelling across products and contexts creates fair competition, ensuring that the market rewards higher welfare products more efficiently than the current array of voluntary labels and unclear branding allows.
 6. Supporting the government's ambition to improve animal welfare, labelling reform feeds into and mutually reinforces the broader Animal Health and Welfare Pathway¹³. Among other strands, the Pathway explores how we can financially reward farmers for delivering public goods like animal welfare, through capital grants and ongoing payments. Financial rewards could help farmers who wish to improve standards of animal welfare to do so, while mandatory labelling could ensure that their higher welfare products receive a fair price on the market. In addition to benefits for consumers and producers¹⁴, improved standards of animal welfare benefit the animals directly. As affirmed in the landmark Animal Welfare (Sentience) Act 2022¹⁵, animals are sentient beings, which is broadly understood to be the capacity to have feelings, such as pain.
 7. Labelling reforms also play a role in wider government objectives to boost exports and improve the resilience of domestic supply chains. In the UK Government Food Strategy¹⁶, alongside our commitment to consult on mandatory welfare labelling, we committed to introduce complementary measures in the food service sector. As part of the consultation on Fairer Food Labelling, we are seeking views on potential measures for country of origin labelling reforms in the food service sector. Work on method of production labelling will align with the wider work on sustainable and transparent food systems announced in the UK Government Food Strategy¹⁷, including ongoing work on the UK Government Buying Standards for food and catering services.
 8. As part of a package of reforms, improving and expanding mandatory current method of production labelling has the potential to deliver on governmental objectives to strengthen the food system, cement the UK's position as a global leader on animal welfare and facilitate the sale and trade of quality produce.

1.2 Economic rationale for intervention

9. Market failures relating to information asymmetry, the public good argument, and the presence of negative externalities justify government intervention in the market for animal welfare goods.
10. In many cases, these market failures prevent fair competition between higher-welfare and lower-welfare producers (including between UK producers at varying levels of higher welfare, and overseas producers selling goods in the UK that (a) meet or exceed or (b) do not meet the UK's baseline animal welfare standards). There is a strong case for the government to ensure that all goods in the UK, whether produced here or overseas, are produced to at least the acceptable minimum standards that the public expects. However, if some imported goods do not meet these standards, there is a need to make consumers aware of this.

12 In response to the mandatory labelling of shell eggs in the EU, for example, retailers used shelf space and price promotions to build a market for higher welfare eggs <https://linkinghub.elsevier.com/retrieve/pii/S0743016713000077>. Free range eggs represented just 30% of the total egg market when the regulations were introduced; today this figure sits at over 60% (data via [Egg Info](#) and [GOV.UK](#))

13 [Animal Health and Welfare Pathway - GOV.UK \(www.gov.uk\)](#)

14 Some of these benefits are outlined in the section 'Economic rationale for intervention'. As a further example, farmers can benefit from increased job satisfaction through improved standards of animal welfare. [Growing chicken, the Better Chicken Commitment way - Poultry News](#) and [Search results - Publications Office of the EU \(europa.eu\)](#)

15 [Animal Welfare \(Sentience\) Act 2022 \(legislation.gov.uk\)](#)

16 [UK Government Food Strategy - GOV.UK \(www.gov.uk\)](#)

17 [UK Government Food Strategy - GOV.UK \(www.gov.uk\)](#)

11. Increased transparency resulting from labelling reform will address the market failure of information asymmetry and ensure a level playing field across standards of animal welfare. Moreover, through industry and consumer decisions in response to increased transparency, labelling reform can contribute to addressing wider market failures related to the nature of animal welfare as a public good and the negative externalities of low welfare products.

Consumer values and barriers at point of purchase

12. UK citizens care about animal welfare as both citizens and consumers and are keen to protect the UK's high standards of animal welfare. 98% of UK citizens believe it is important to protect the welfare of farmed animals¹⁸, and 86% consider it important that animal welfare standards in trade deals should match the UK's own¹⁹. Despite competing priorities at point of purchase, such as the key drivers of price and convenience²⁰, consumers report animal welfare as a major and growing concern when making purchasing decisions²¹. Most UK consumers also state their willingness to pay more for higher welfare products, which bears out in the case of the cage-free egg market (discussed further in Annex 1)²². This demand has led to a proliferation of marketing tools and assurance schemes seeking to reassure consumers that the animals behind their purchases led a good life.
13. Although consumers place a high value on animal welfare, a gap emerges between these values and their actions at point of purchase (the 'value-action gap')²³.
14. Evidence submitted in the 2021 Call for Evidence suggests that this value-action gap is driven in part by information asymmetry in the market, which hampers consumer decision-making and creates misaligned incentives for businesses. Shoppers have limited choice given the lack of reliable welfare information to help them distinguish between higher-welfare and lower-welfare products, and due to higher-welfare products often being unavailable²⁴ and priced disproportionately relative to the additional cost of production²⁵.

Information asymmetry

15. Existing regulations related to providing information on how animals are reared are limited. Aside from some limited provisions in assimilated organics regulations (which focus on a broad set of characteristics beyond animal welfare, such as naturalness)²⁶, there are two marketing standards in place that define methods of production covering the sale of shell eggs and raw chicken, and these do not extend to the sale of cooked and processed products. Moreover, marketing standards for raw chicken are voluntary and are not commonly used.
16. While there are several well-established voluntary and industry-led labelling schemes that cover production standards, such as Red Tractor (launched in 2000) and RSPCA Assured (launched in 1994²⁷), these do not identify imported products that are produced below UK baseline welfare standards, and do not allow for easy comparison of production standards by consumers. A consumer interviewed in a 2023 study²⁸ noted of assurance schemes: "they've just gradually evolved, there's

18 [Eurobarometer 2016](#)

19 [NFU/OnePoll \(2021\)](#)

20 [Consumer Insights: The meat shopper journey | AHDB](#)

21 [Food and You 2 - Wave 4 | Food Standards Agency](#). Similarly, [AHDB \(2021\)](#) found that "retail sales of higher welfare pork have grown faster than standard product over the past year, at +12% vs +7% (Kantar, 52 w/e 16 May 21)."

22 Production of free range eggs sits at 60% of the market. (Data via [Latest UK egg statistics - GOV.UK](#))

23 [Consumer Insights: The meat shopper journey | AHDB](#)

24 Eurobarometer survey 2016: 47% do not think there is sufficient choice of animal welfare-friendly food products in shops and supermarkets - up by 9% from 2006

<https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/71348>

25 Defra web scrape analysis found low availability of higher welfare products in major retailers, and price premia beyond cost of production. The 2022 EC report on animal welfare labelling identified similar issues across European countries. [Study on animal welfare labelling - Publications Office of the EU \(europa.eu\)](#)

26 [Organic regulations \(No 834/2007\)](#)

27 Per their website, RSPCA Assured was launched in 1994 under the name Freedom Foods: [See the history of RSPCA Assured from inception to now](#)

28 Gorton et al. (2023). Consumers' willingness to pay for an animal welfare food label. *Ecological Economics*, Volume 209. <https://doi.org/10.1016/j.ecolecon.2023.107852>

too many different ones, and then people get very confused and that is particularly the case for animal welfare". The standards underpinning these labels can differ significantly. For example, RSPCA Assured permits a stocking density for meat chickens of up to 30 kg/m², compared to the 38 kg/m² under Red Tractor and 39 kg/m² under the UK legal baseline. Not only are these differences not apparent to consumers comparing product labels, but also they are not meaningful to a consumer lacking expertise in animal welfare, who cannot visualise or interpret the welfare implications of the permitted weight of chickens per square meter.

17. Consumer insights submitted via the 2021 call for evidence provided further data on the information failures. For example, 64% of consumers do not understand Red Tractor, despite it being the best-known assurance scheme in the UK²⁹, and only 27% of consumers recognise RSPCA Assured³⁰. More than three-quarters of consumers think that farming systems in the UK are often free range³¹, yet the prevalence of free-range production systems varies widely by sector³², and free range is only defined in law for meat chickens and laying hens. Informational barriers to consumer purchasing decisions are reflected in numerous surveys showing strong consumer appetite for more information about animal welfare³³. These barriers may also reduce consumer willingness to pay.
18. The complex landscape of welfare claims on food means that consumers who care about animal welfare do not have access to clear information about the production standards of the products they purchase. There is a strong case for information asymmetry in the market, which could be resolved by standardising welfare information across products through a mandatory method of production label.
19. In addition to negatively impacting consumers, information failure in the market is harmful to farmers and producers. Given the limitations of existing food information relating to animal welfare, farmers and producers employing higher-welfare practices are often not recognised or rewarded by the market, and therefore not compensated for the increased costs associated with such practices.

Public goods and negative externalities

20. As set out in the 2020 Defra future farming policy statement³⁴, high animal welfare is a public good. It is possible for someone to derive positive value from the fact that animals are being well cared for as a result of another's purchasing decision, whether or not that person participates in the market by purchasing animal products themselves. One person's holding of this value does not detract from another's. There is a clear economic rationale for the government to intervene to protect animal welfare as a public good.
21. Animal products with low welfare standards can create negative externalities. When consumers buy animal products with low standards, the price they pay does not reflect the fact that other members of society oppose their consumption, especially if the standard falls below the socially acceptable baseline levels that are set out in legislation. This imposes a cost on these other members of society, known as an externality. The welfare of animals is important to many consumers, and this preference is not reflected in the price of the product. Continued purchases of these low welfare products will therefore impact the wellbeing of these consumers. As this is not factored into the retail price, the

Describing the market failure, the study notes that "There is an incentive for sellers to pass-off less stringent animal welfare standards as more stringent ones, and as evidenced in the post-DCE interviews, there are multiple schemes with varying standards, most buyers cannot discern the relative standards underpinning specific logos, and currently there is no standardization so that sellers lack credible disclosure technology - sellers with more stringent animal welfare standards find it difficult to distinguish their offering from less stringent ones. Consequently, consumers' preferences regarding animal welfare may not translate into consistent choices."

29 AO.com survey referenced in [Food Management Today](#)

30 AHDB/YouGov Aug-20 – data submitted via the 2021 call for evidence.

31 https://docs.cdn.yougov.com/iyxfibltcj/Internal_AnimalWelfare_200901_W.pdf

32 For example, free range constitutes less than 5% of UK meat chicken production, compared to around [60% of laying hen production](#).

33 For example, [Opinium](#) asked 1,990 UK adults whether animal products should be labelled according to the conditions they are raised in: 68% of respondents agreed; [YouGov](#) asked 1,652 UK adults if they would support labels on meat products indicating how the animal was raised and slaughtered: 55% of respondents supported; [Qa Research](#) asked 1,001 UK adults whether method of production labelling should be extended to all animal products: 83% of respondents agreed (<https://www.qaresearch.co.uk/food-labelling-report-published>).

34 [The future for food, farming and the environment: policy statement \(2020\) - GOV.UK \(www.gov.uk\)](#)

social cost of the product is higher than the purchase price of the product, leading to an overconsumption of low welfare products.

22. Other negative externalities such as reduced consumer confidence in the products purchased could be addressed through a clear label that allows citizens to better align their purchases with their values. This externality can occur when lower animal welfare practices harm the reputation of the meat aisle and can lead to decreased demand for the products produced.

1.3 Proportionality approach

23. The level of detail throughout this analysis has been determined by the evidence currently available. Key evidence sources include:

- A 2022 European Commission study on animal welfare labelling³⁵
- Evidence submitted by key stakeholders via 2021 Defra call for evidence on labelling for animal welfare³⁶
- Elasticities data based on homescan data from Scotland (Akaichi & Revoredo-Giha, 2016³⁷)
- AHDB data on beef, pork and lamb markets³⁸
- Kantar data on the retail sector and welfare standards of products
- Survey data from an external research report assessing the cost-effectiveness of various welfare enhancements for farmed animals
- An Efra report on farmgate prices³⁹
- A Campden BRI report produced for Defra on costs of labelling changes⁴⁰
- Case study analysis of existing labelling schemes, including the mandatory labelling of shell eggs in the EU and international assurance schemes – these are set out in Annex 1
- Commercially sensitive data shared with Defra by stakeholders

24. Where we have made assumptions due to a lack of available data, these are detailed in the discussion. As evidence on consumer and producer behavioural responses is limited, we have focussed primarily on the costs of the proposed regulations.

25. We will use the consultation to develop the evidence base on the behavioural side further. and will feed this into any post-consultation impact assessment.

2 Description of options considered

26. In 2021, Defra ran a call for evidence⁴¹ to gather data on the potential impacts of different types of labelling reform for animal welfare. We received 1,633 responses. The summary of these responses is available on GOV.UK⁴². The key message from stakeholders is that there is real potential for well-designed mandatory labelling reform to deliver on our three policy objectives.
27. Based on the evidence gathered and as announced in the UK Government Food Strategy, we are therefore consulting on potential reforms to mandatory labelling. These consultation proposals have been co-developed with stakeholders across the whole supply chain and will form part of longer-term work to improve the resilience and diversity of domestic food systems.
28. The call for evidence on labelling for animal welfare sought evidence on over 30 policy decisions, ranging from which products could be included to how we could define welfare standards. The full scope of options considered is shown in table 1, below the options overview. Using the evidence provided about the promise of various options, including both domestic and international precedents,

35 [2022 European Commission study on animal welfare labelling](#)

36 [Defra call for evidence on labelling for animal welfare](#)

37 [Akaichi & Revoredo-Giha, 2016](#)

38 [Markets and prices | AHDB](#)

39 [Efra report on farmgate prices](#)

40 [Campden BRI report](#)

41 <https://www.gov.uk/government/consultations/labelling-for-animal-welfare-call-for-evidence>

42 Labelling for animal welfare – summary of responses available at [GOV.UK](#)

and taking into account our trade obligations, we have selected a short-list of options for consideration. We will continue to refine our proposals through consultation with the public and our core stakeholders.

Option 0: “Do nothing”

29. Under the “do nothing” option, existing NGO/industry-led labels continue unchanged. Market failures related to the public good nature of animal welfare, information asymmetry due to a lack of reliable welfare information on food products, and negative externalities of conventional animal agriculture would persist. This is the baseline against which other options are assessed.

Option 1: Medium ambition

30. This is the preferred option. We propose a mandatory tiered label⁴³, covering domestic and imported products (where the lowest tier indicates products that are not verified as meeting baseline UK welfare standards). The underpinning standards are based on inputs such as method of production, including whole of life considerations where possible.
31. We propose that the label applies to unprocessed and some minimally processed products from pigs, meat chickens, and laying hens. We believe this proposal best balances consumer interest and deliverability. These products:
- i. have the greatest difference in systems of production (intensive indoor versus extensive outdoor systems), and therefore where there is the greatest demand from consumers for information on welfare
 - ii. are consumed in the greatest volume in the UK, therefore providing welfare information on the greatest number of animals
 - iii. have the simplest supply chains meaning that traceability, monitoring, and enforcement of labelling will be simpler to implement (though recognising that there will still be significant complexities)
 - iv. have the greatest level of consensus on what constitutes good welfare, with existing definitions that can be built on
32. If monitoring and evaluation demonstrates that these initial labelling reforms are effective, we will explore expanding the scope of labelling to a greater number of species and products.
33. We propose that Food Business Operators (FBOs) would be responsible for ensuring the accuracy of the labelling applied to their products. They would need to have suitable traceability systems in place to ensure any welfare claims can be appropriately evidenced back through their supply chain. A designated enforcement authority would have powers to monitor and investigate compliance, for example by checking that labels are correctly applied. Government guidance would be published setting out how FBOs can meet their responsibility, which would include the option of sourcing from producers who are members of farm assurance schemes that meet a minimum set of criteria and whose standards meet the standards for one or more of the label tiers. This would include farm assurance schemes operating within the UK or overseas. To support this, the UK government, the Scottish Government, Welsh Government and the Northern Ireland Executive would keep a register of applicable schemes, based on documentary evidence provided by the schemes to demonstrate that they are certifying to the required standards. This would mean that a body in another country can apply for recognition that they certify animal products to a production standard equivalent to one or more of the tiers underpinning the label, and so be labelled to show this. In addition, FBOs could meet their responsibility to apply accurate labelling by demonstrating that a product originates from a country whose baseline legislation meets the standards for a certain tier.
34. To maximise the effectiveness of labelling reforms, the preferred option would be accompanied by a consumer awareness campaign.

Option 2: High ambition

35. This option is similar to the preferred option but incorporates an increased scope in terms of species covered. The label would apply to beef and dairy cattle and sheep in addition to pigs, meat chickens, and laying hens.

⁴³ Please see Annex 2 for evidence underpinning the proposed label format. We are seeking further views and evidence in our consultation, and in collaboration with social researchers.

Option 3: Low ambition

36. This option is the same as the preferred option but is voluntary rather than mandatory. Standards would be defined in law, like the existing assimilated poultry meat marketing regulations⁴⁴, but it would be for businesses to decide whether to label their products.

Option 4: Non-regulatory option and other complementary interventions

37. A range of complementary interventions (regulatory and non-regulatory) could bolster the increased transparency that labelling aims to achieve. For example, alongside any labelling reform we would seek to launch a consumer awareness campaign, to promote understanding of method of production labelling⁴⁵.

38. Although a consumer awareness campaign would be valuable, we do not believe that as a standalone intervention it would successfully deliver on our policy objectives.

39. Voluntary certification schemes for animal welfare have existed in the United Kingdom since the 20th century. In the intervening decades, a number of initiatives and awareness campaigns – funded by certification schemes themselves as well as by other organisations keen to promote consumer choice – have sought to improve consumer understanding of these voluntary schemes. For example:

- i. Consumer guides produced by consumer choice charity Which?⁴⁶
- ii. Red Tractor's televised advertisements and social media campaigns⁴⁷
- iii. British Veterinary Association's #ChooseAssured campaign⁴⁸
- iv. Comparison guides from animal welfare NGOs like Compassion in World Farming⁴⁹

40. These existing consumer awareness campaigns have been unable to address the market failures described above. The number of different labels and the range of information that underpins them makes it difficult to convey a simple, clear message for consumers. The efficacy of a campaign is limited by the complexity of the information. Adding to the challenge, the voluntary nature of labelling means that these labels may change or be removed from packages (for instance, Sainsbury's removed the Red Tractor logo from its products, but continues to use Red Tractor as a baseline⁵⁰).

41. As early as 2005, an Efra Select Committee⁵¹ report raised concerns about the confusion caused by the number of schemes, suggesting that this leads to information overload in consumers. Consumer insights submitted through the Call for Evidence⁵² demonstrated that most consumers struggle to recognise or understand existing assurance schemes, and are keen for further information when purchasing meat products.

42. We consider that there is no reason to believe a government-led consumer awareness campaign would be able to correct the information failures where these existing initiatives have struggled. In contrast to a consumer awareness campaign, standardising and universalising product information through mandatory labelling is best placed to provide clear information and deliver on our policy objectives. A label can itself contribute to raising awareness and consumer understanding – to do so, it must be consistent (i.e., mandatory) and designed to be simple and easy for consumers to understand⁵³.

44 [Poultrymeat Marketing Standards Regulation \(No 543/2008\)](#)

45 A consumer awareness campaign was initially shortlisted as a standalone option to assess within this Impact Assessment. However, given the complex landscape of existing welfare claims on products and the limited ability of an information campaign to deliver our core policy objectives, we chose not to take forward a consumer awareness campaign as a separate option.

46 For example: [Decoding food labels: sustainability, welfare and food safety - Which?](#), [11 popular food assurance labels and what they mean - Which? News](#), [The labels and lingo supermarkets use to get you to buy their chicken - Which? News](#), [Red Tractor, RSPCA Assured and organic meat: what's the difference? - Which? News](#)

47 For instance: [Watch Our Ad | Red Tractor](#), [Emma Investigates - Red Tractor Consumer](#), [Our Logos | Red Tractor](#), and [Love Chicken Love Red Tractor - Red Tractor Consumer](#)

48 [BVA - UK's farm assurance schemes](#) <https://bvajournals.onlinelibrary.wiley.com/doi/abs/10.1136/vr.k996>

49 [Know your labels | Compassion in World Farming \(ciwf.org.uk\)](#)

50 <https://help.sainsburys.co.uk/help/terms-and-conditions/red-tractor-removal>

51 [House of Commons - Environment, Food and Rural Affairs - Seventh Report \(parliament.uk\)](#)

52 <https://www.gov.uk/government/consultations/labelling-for-animal-welfare-call-for-evidence>

53 See discussion in [Temple \(2022\)](#). Further evidence and consumer insights around label design can be found in annex 2 of this document.

43. Although we do not think a consumer awareness campaign could deliver on our objectives by itself, we believe it could increase the impact of labelling reforms. For this reason, we propose launching an awareness campaign alongside any labelling reforms.

Table 1: Overview of options considered and taken forward for impact assessment

Decision point	All options	Impact assessment: possible options				
		1: Medium ambition (preferred option)	2: High ambition	3: Low ambition	4a: Do nothing	4b: Complementary interventions
Regulation	Mandatory (including imports)					
	Voluntary standards defined in law					
	No action – existing NGO/ industry-led labels					
Format	Tiered, e.g. 1-5					
	Tiered, e.g. 1-3*					
	Descriptive					
Standards: basis	Method of production & outcomes					
	Inputs only					
	Outcomes only					
Standards: assurance period	Whole life including transport, slaughter & welfare of parent animals					
	Whole life including transport & slaughter					
	Whole life including considerations around slaughter					
	Welfare on farm only					
Scope: species	Terrestrial & aquatic animals					
	Terrestrial animals					
	Specific species (pigs, meat chickens and laying hens)					
	Specific species (poultry)					
Scope: food type	All products (unprocessed, minimally processed, primary & secondary ingredients of multi-ingredient products)					
	Unprocessed & minimally processed products, plus primary ingredients					

	of multi-ingredient products					
	Unprocessed & minimally processed products					
	Unprocessed products					
Scope: food service sector	Mandatory labelling on menus					
	No labelling requirements (see section 'Complementary reforms' for potential measures in the food sector)					
Enforcement: domestic	Existing private assurance schemes					
	Increase funding to existing government enforcement bodies					
	Enforce through existing government enforcement bodies					
	Bespoke government assurance body					
Enforcement: international	Recognition of international assurance schemes and other recognised bodies					
	Country-level recognition					
Complementary reforms	Country of origin					
	Mandatory disclosure of aggregate welfare standards					
	Consumer awareness campaign					
	Voluntary marketing terms defined in law					

2.1 Summary and preferred option with description of implementation plan

44. The preferred option would be given effect through secondary legislation. An eighteen-month phase-in period would allow industry time to adapt to the reforms, with changes therefore coming into effect in 2027 at the earliest.
45. The preferred option is restricted in scope – it would apply only to unprocessed and minimally processed products from pigs, poultry and eggs sold in the retail sector. We selected this approach so we can assess the effectiveness of the labelling changes. The impact of any labelling reforms will be evaluated, with the evaluation process guided by HMT's Magenta Book⁵⁴. Labelling reforms will only be expanded if Post Implementation Review determines that the policy is demonstrably achieving its objectives.

⁵⁴ The Magenta Book - GOV.UK (www.gov.uk)

3 Monetised and non-monetised costs and benefits of each option

3.1 Option 0: Do nothing

46. Option 0 is the do-nothing baseline against which the other options are compared. As such, the costs and benefits are assumed to be zero.

3.2 Option 1: Medium ambition option (preferred option)

47. This policy option introduces mandatory method of production labelling for unprocessed and minimally processed pork, chicken meat and egg products. The label would take a tiered approach, with five tiers of underpinning production standards. The requirement for labelling would apply to imported products as well as domestically produced products, with enforcement operating through recognised bodies such as assurance schemes.

48. The table provides a summary of the key costs and benefits associated with this option and distinguishes whether the cost/ benefit is direct or indirect. RPC guidance⁵⁵ explains that a direct impact is where the effects of the measure are immediate and unavoidable, and an indirect impact involves subsequent effects that are beyond the immediate implications of the measure (indirect).

49. The figures are explained in more detail below. Labelling, familiarisation and compliance/enforcement costs are highlighted in bold, as these feed into the Equivalent Annual Net Direct Cost to Business (EANDCB).

Cost/benefit	Impact description	Direct/Indirect	Central estimates (2022 prices)
Cost	Relabelling	Direct	- £1.97m (one off cost)
Cost	Familiarisation	Direct	- £8.9m (one off cost)
Neutral	Profit changes	Indirect	We assume no overall profit change (i.e. zero benefit). As labelling is a market-driven lever and businesses are rational actors, they will respond to labelling in a way that at least maintains or otherwise improves their profits.
Cost	Compliance/enforcement	Direct	-£3.4m per year (annual cost)
Cost	Traceability	Direct	Not quantified
Cost/benefit	Environmental impact	Indirect	-£17.7m in increased GHG emissions per year for poultry, assuming a 10% shift towards higher welfare consumption; GHG emissions for pork have not been monetised due to a lack of data. Positive impacts (for example, improved biodiversity) could offset these negative impacts.
Benefit	Benefit to consumers	Direct	Not quantified
Benefit	Benefit to animals of increased welfare	Indirect	Not monetised, but an estimated 110m chickens, 0.7m laying hens and 0.51m pigs per year would benefit from better welfare. This assumes a 10% shift towards higher welfare production for meat chickens and pigs, and a 2% shift towards higher welfare production for laying hens ⁵⁶

55 [RPC case histories - direct and indirect impacts March 2019 1 .pdf \(publishing.service.gov.uk\)](#)

56 Our central assumption of a 10% shift towards higher welfare systems is an arbitrary assumption that draws on case study evidence set out in Annex 1. This assumption applies to all species except laying hens. We assume that 2% of laying hens will benefit from behavioural changes in response to improved transparency. The figure is lower for laying hens, as we believe that mandatory shell egg labelling already facilitates consumer choice – as borne out in the market, where 60% of eggs in the UK are produced in free range systems.

We anticipate a welfare improvement for laying hens due to:

1. The increased scope of welfare requirements (including minimally processed eggs as well as just shell eggs)
2. Standardisation across species of labelling, which will further ease consumer decision-making

Benefit	Benefit to farmers	Indirect	+£46.56m (annual; assuming a 10% shift towards higher welfare consumption) This figure excludes the welfare benefits to farmers from improved animal welfare
Benefit	Benefits to society	Indirect	Not quantified

50. The benefits to consumers, animals and society as a result of this policy intervention have not been quantified in the absence of an established methodology to monetise these values: there is no consensus, for instance, on how we can express in financial terms the value of a better life for farm animals. These benefits have instead been qualitatively described in section 8. We also conducted a high-level breakeven analysis to assess how the benefits to consumers compare to the likely costs of the policy, finding that a benefit of £0.40 per consumer would offset the costs.
51. Over a 10-year appraisal period, we estimate a quantified net present social value of the policy of £139.9m in the central scenario (including all quantified costs and benefits, 2019 prices). The Equivalent Annual Net Direct Cost to Businesses (EANDCB) is calculated at £3.7m (2019 prices) over the same period.

3.3 Option 2: High ambition option (not recommended)

52. This policy option would introduce mandatory method of production labelling for unprocessed and minimally processed pork, chicken, eggs, beef and lamb. The label would take a 'tiered' approach, with five tiers of underpinning production standards. The requirement for labelling would apply to imported products as well as domestically produced products, with enforcement operating through recognised bodies such as assurance schemes.
53. The table provides a summary of the key costs and benefits associated with this option. Labelling, familiarisation and compliance/enforcement costs are highlighted in bold, as these feed into the Equivalent Annual Net Direct Cost to Business (EANDCB).

Cost/ Benefit	Impact description	Direct/Indirect	Central estimates (2022 prices)
Cost	Relabelling	Direct	- £3.5m (one off cost)
Cost	Familiarisation	Direct	- £19.4m (one off cost)
Neutral	Profit changes	Indirect	We assume no overall profit change (i.e. zero benefit). As labelling is a market-driven lever and businesses are rational actors, they will respond to labelling in a way that at least maintains or otherwise improves their profits.
Cost	Compliance/enforcement	Direct	-£11.0m per year (annual cost)
Cost	Traceability	Direct	Not quantified
Cost/benefit	Environmental impact	Indirect	-£17.7m in increased GHG emissions per year for poultry (assuming a 10% shift towards higher welfare consumption); pork, lamb and beef have not been monetised Positive impacts (for example, improved biodiversity) could offset these negative impacts. Due to this uncertainty, it is not clear whether the environmental impacts would be a cost or benefit
Benefit	Benefit to consumers	Direct	Not quantified

3. Potential changes in the standards to improve behavioural opportunities within production systems (such as the provision of verandas)
As the standards for all species are draft standards subject to consultation, they may change. For this reason, we keep our estimated figure low.

Benefit	Benefit to animals of increased welfare	Indirect	Not monetised, but (assuming a 10% shift towards higher welfare consumption) an estimated 110m chickens, 0.7m laying hens, 0.51m pigs, 250,000 beef cattle, 180,000 dairy cattle and 1m sheep per year would benefit from better welfare. This assumes a 10% shift towards higher welfare production for meat chickens, pigs, beef cattle, dairy cattle and sheep, and a 2% shift towards higher welfare production for laying hens ⁵⁷
Benefit	Benefit to farmers	Indirect	+£46.56m (annual; assuming a 10% shift towards higher welfare consumption) This figure excludes the welfare benefits to farmers from improved animal welfare, and only covers pork and poultry – we were unable to calculate price and cost differentials between UK baseline welfare and higher welfare beef and lamb. We will explore this further in any post consultation impact assessment
Benefit	Benefits to society	Indirect	Not quantified

54. Over a 10-year appraisal period, we estimate a quantified net present social value of the policy of £79.2m in the central scenario (including all quantified costs and benefits, 2019 prices). The Equivalent Annual Net Direct Cost to Businesses (EANCB) is calculated at £10.8m (2019 prices) over the same period.
55. This option has no greater monetised benefit than option 1 despite covering a greater scope of species. This discrepancy is because benefits to farmers have only been monetised for poultry meat and pig meat at this stage. We were unable to estimate the additional benefits to farmers related to the expanded scope due to the lack of data currently available for the increased cost of production and retail prices for higher welfare beef and lamb. We do anticipate additional benefits to farmers through increasing the scope to also cover lamb and beef, but this benefit can only be qualitatively described at present. As with the preferred option, some benefits have not been quantified due to methodological challenges, and have instead been qualitatively described.

3.4 Option 3: Low ambition option (not recommended)

56. This policy option would introduce voluntary method of production labelling for unprocessed and minimally processed pork, chicken meat and egg products. The label would take a 'tiered' approach, with underpinning production standards. Standards would be defined in law, like the existing poultry meat regulations⁵⁸, but it would be for businesses to decide whether to label their products. These standards would apply to imported products as well as domestically produced products, with food business operators being responsible for ensuring the accuracy of the labelling applied to their products.
57. The table provides a summary of the key costs and benefits associated with this option. Labelling, familiarisation and compliance/enforcement costs are highlighted in bold, as these feed into the Equivalent Annual Net Direct Cost to Business (EANDCB).

57 Our central assumption of 10% is an arbitrary assumption that draws on case study evidence set out in Annex 1. This assumption applies to all species except laying hens. We assume that 2% of laying hens will benefit from behavioural changes in response to improved transparency. The figure is lower for laying hens, as we believe that mandatory shell egg labelling already facilitates consumer choice – as borne out in the market, where 60% of eggs in the UK are produced in free range systems. We anticipate a welfare improvement for laying hens due to:

4. The increased scope of welfare requirements (including minimally processed eggs as well as just shell eggs)
5. Standardisation across species of labelling, which will further ease consumer decision-making
6. Potential changes in the standards to improve behavioural opportunities within production systems (such as the provision of verandas)

As the standards for all species are draft standards subject to consultation, they may change. For this reason, we keep our estimated figure low.

58 Poultrymeat Marketing Standards Regulation (No 543/2008))

Cost/benefit	Impact description	Direct/Indirect	Central estimates (2022 prices)
Cost	Relabelling	Direct	- £0.8m (one off cost)
Cost	Familiarisation	Direct	- £8.9m (one off cost)
Neutral	Profit changes	Indirect	No overall change in profit
Cost	Compliance/enforcement	Direct	-£1.5m per year (annual cost)
Cost	Traceability	Direct	Not quantified
Cost/ Benefit	Environmental impact	Indirect	-£3.5m in increased GHG emissions per year for poultry, assuming a 2% shift towards higher welfare consumption; pork has not been monetised Positive impacts (for example, improved biodiversity) could offset these negative impacts
Benefit	Benefit to consumers	Direct	Not quantified
Benefit	Benefit to animals of increased welfare	Indirect	Not quantified
Benefit	Benefit to farmers	Indirect	Not quantified
Benefit	Benefits to society	Indirect	Not quantified

58. Over a 10-year appraisal period, we estimate a quantified net present social value of the policy of - £41.6m in the central scenario (including all quantified costs and benefits, 2019 prices). The benefits to consumers, animals and society as a result of this policy intervention have not been quantified in the absence of an established methodology to monetise these values: there is no consensus, for instance, on how we can express in financial terms the value of a better life for farm animals. These benefits have instead been qualitatively described in section 8. The benefits to farmers have not been quantified at this stage due to a lack of robust evidence as we do not expect this policy option would be a significant change on the status quo. The Equivalent Annual Net Direct Cost to Businesses (EANCB) is calculated at £2.1m (2019 prices) over the same period.

3.5 Option 4: Non-regulatory intervention – consumer awareness campaign (not recommended)

59. This policy option would not introduce reforms to the existing labelling framework, but would seek to improve consumer understanding of the terminology and assurance schemes used on products.

60. Under this option, voluntary assurance schemes such as Red Tractor certification and RSPCA assurance would continue to be available to businesses and there would be no requirement to use these labels. Mandatory labelling with legally defined terms would continue to be required for shell eggs, with the existing voluntary marketing standards continuing for raw poultry sales. As is currently the case, imported products that do not meet UK baseline welfare standards would not require any labelling to identify them as such, placing UK and other higher welfare producers at a disadvantage.

61. The costs and benefits of this option have not been monetised at this stage as we expect these would be minimal. There would be no direct costs to businesses associated with an awareness campaign. There would be some cost to government associated with developing and launching the awareness campaign, but this could be done in partnership with existing assurance schemes and nonprofits to reduce costs.

62. We expect the benefits from such a campaign to be minimal given the number of existing consumer awareness campaigns and the complexity of the existing landscape of welfare claims; the complexity of the information landscape limits the potential effectiveness of an awareness campaign. The existing market failures identified in the rationale for intervention section would persist.

63. Although a consumer awareness campaign alone would not be able to address the market failures, such a campaign could be useful alongside labelling. By raising awareness of the new labels, a campaign could boost the effectiveness of the label. For this reason, we will explore launching an awareness campaign if any labelling reforms were taken forward post consultation.

4 Overview of costs and benefits

Impact category	Sub-category	Explanation	Ease of monetising (RAG)	Benefit or cost	Direct or Indirect	Status of impact analysis
Economic Impact – Government	Delivery	Monitoring & evaluation, delivery, admin costs	A	Cost	Direct	Plans for monitoring and evaluation of method of production labelling are in development, and will be guided by the principles set out in HMT's Magenta Book. We have not monetised these costs; they will be a cost to government, and will be similar across all policy options. Provisional questions and Key Performance Indicators for analysis are set out in section 12 of this Impact Assessment.
Economic Impact – Farmers	Familiarisation	Farmers need to understand new regulations and how their farming practices fit into the standards	G	Cost	Direct	Monetised based on time needed to read guidance and the value of businesses' time.
	Change in profits	Increase in profits from selling higher animal welfare products at a fairer price	A/R	Benefit	Indirect	Not monetised. We anticipate that the increased transparency afforded by clearer labelling will enable higher welfare farmers to differentiate their products ⁵⁹ . This differentiation will enable them to better capture the market premium associated with higher welfare products.
	Transition costs to farmers	Some farmers may switch to higher welfare practices at a cost (for example, to build new infrastructure for better welfare)	A	Cost	Indirect	Not monetised. Farmers will only switch if they expect to maintain or increase their overall profits from investing in higher animal welfare practices and equipment. We therefore assume that short-term transition costs will be cancelled out by longer-term changes in profits. Short-term costs could be mitigated by capital grant funding available through the Animal Health and Welfare Pathway.
	Compliance	Costs of inspection to certify improved welfare tiers	A	Cost	Direct	Monetised based on data from existing enforcement mechanisms. To minimize burden, we propose that monitoring and enforcement of the labelling scheme occurs through existing regimes. Food Business Operators would have the option to meet their responsibility for accurately labelling products by sourcing from farmers and producers who are members of farm assurance schemes, such as Red Tractor, who assure most UK farms. We assume the additional costs of compliance will fall on industry.
	Trade	Substitution towards domestic produce and reputational	A	Benefit	Indirect	A partial assessment has been conducted to monetise the impact on higher welfare farmers of a speculative switch from products that do not meet UK baseline standards towards UK baseline or higher welfare products. No

⁵⁹ For example, an EU case study on the Dutch multi-tier welfare label Beter Leven found that farmers producing the highest welfare chicken in the scheme were rewarded with a higher price (30%), 42% in additional revenue and an average increase of farm income per year of 6%. [study on animal welfare labelling annexes 1- 8 to-EW0722148ENN \(2\).pdf](#)

		boost for British produce				assessment has been conducted of the potential for better international recognition of higher welfare production standards boosting our export market.
Economic Impact – Processors, Manufacturers and Retailers	Familiarisation	Businesses will have to familiarise themselves with new regulations	G	Cost	Direct	Monetised based on time needed to read guidance and the value of businesses' time.
	Label changes (for retailers and any other sectors in scope)	Cost to develop & implement new labels into production line/menus	A/G	Cost	Direct	Monetised based on current assumptions for the labelling requirement.
	Transition costs to businesses	Some producers may need to change their sourcing practices	A/R	Cost	Indirect	Not yet quantified or monetised, as difficult to anticipate exactly what changes may be required. For example, a processor who purchases meat from multiple different farms may standardise their suppliers to avoid changing the animal welfare standard on their labels. In the more integrated supply chains in the poultry and pig sectors, this standardisation may present less of a challenge.
	Change in profits	Change in profits from selling new mix of produce (higher volume of higher animal welfare produce and lower volume of lower animal welfare produce)	A/R	N/A	Indirect	We expect no overall change in profits, as labelling is a market-driven lever. Businesses will respond to labelling in such a way as to maintain or increase their profits in the long term. ⁶⁰
	Traceability costs	Businesses may have increased traceability costs to demonstrate their method of production standards along the supply chain	A/R	Cost	Direct	Not monetised. The UK already has a number of industry and government-led traceability schemes in place. For example, the Red Tractor assurance scheme provides full supply chain traceability and covers 95% of the domestic pig and poultry sectors. The Livestock Information Programme (in development) will further improve farm-to-fork traceability.
Economic Impact – Consumers	Cost of animal products	Consumers will face higher costs if they choose to purchase higher AW produce	A	Cost	Indirect	As a result of the transparency associated with labelling, we expect a proportion of consumers who value animal welfare to choose higher welfare products. Due to the increased cost of production for higher animal welfare, these consumers will pay a higher price compared to standard products (although we assume not compared to the existing range of higher welfare products, which evidence suggests are priced disproportionately). This is an indirect cost, as it is their choice whether to pay this higher price based on their values. If fewer retailers stock the lowest price, lowest welfare products, they may be less available for consumers who seek out these products. However, as labelling is a market driven lever,

60 In their discussion of the transition from conventional to improved animal welfare in the Netherlands, Saatkamp et al. (2019) note that market share and margins were unaffected by the change.

						<p>we expect that these lowest price products would remain available in supermarkets whose core brand is built on value for money – and where price-conscious consumers are likely to already shop.</p> <p>For further discussion of impacts on food prices and low-income consumers, see sections 6.1 “Changes to consumption patterns and profits” and 10.1 “Wider impacts”.</p>
	Improved information	Allows consumers to make informed purchase choices	A/R	Benefit	Direct	Not monetised – the benefits to consumers have been qualitatively described.
Environmental Impact	Greenhouse gas emissions (contribution to broader Net Zero agenda)	Change in CO ₂ from changes in animal welfare practices (e.g. changes in land use, improved animal productivity)	A	Cost	Indirect	<p>The environmental impact of this policy is complex to model and entails both benefits and costs. For example, better welfare can improve productivity, which can reduce the environmental impact of farming. However, increases in feed, energy use and manure production associated with the use of slower growing meat chicken breeds could increase the environmental impact.</p> <p>We have monetised a potential increase in greenhouse gas emissions associated with a shift towards higher welfare meat chickens using BEIS’ value of a tonne of CO₂. We have not monetised this for pigs due to a lack of data. This calculation is a partial assessment of the environmental impacts of the policy.</p> <p>The challenges associated with monetising the environmental impact relate to the speculative behavioural changes involved (related both to changes in farming practices and to the extent of mitigation strategies used), a lack of granular data on the environmental impacts of production systems, and the complexities of monetising environmental impacts beyond greenhouse gas emissions (such as soil health, biodiversity, water quality etc.).</p>
	Other environmental impacts	For instance, improving air and water quality, biodiversity	A/R	Benefit	Indirect	We have not quantified or monetised any other environmental impacts.
Welfare impact	Society	Value that consumers and non-consumers place on improved animal welfare, as a public good	R	Benefit	Indirect	Not monetised – as would rely on a detailed willingness to pay study of people’s preferences of enhanced farm animal welfare (which is not currently available).
	Consumers	Improved transparency of higher welfare products	R	Benefit	Direct	Not monetised
	Animal	Benefit to the animal itself arising from improved welfare	R	Benefit	Indirect	Not monetised – as would rely on animal sentience research that could clarify the lived experience of the animal and convert this into a financial value.
	Farmers	Benefit to farmers of	R	Benefit	Indirect	Not monetised – as would rely on a detailed willingness to pay study of people’s preferences

5 Discussion of direct costs

5.1 Labelling costs

64. We have monetised this cost as part of the Equivalent Annual Net Direct Cost to Business.

65. Mandatory labelling would require producers of products in scope to develop new packaging incorporating method of production standards. There will be an associated one-off cost to businesses.

66. The extent of these labelling costs to business is likely to depend on a number of key factors, including the number of products in scope, the proportion of changes that could be incorporated into typical business cycles for labelling refreshes, and the costs incurred by a business in producing a new label. Evidence on these factors is limited, so we will test in consultation the assumptions that underpin our estimates.

- i. The number of products in scope of the regulations will determine the magnitude of labelling changes needed. Retailers use the term 'stock keeping unit' (SKU) to refer to a distinct product sold.
- ii. To determine the number of products affected per supermarket, we used manual web scraping to extract data from both traditional and discount supermarkets' websites to determine the number of products in scope of labelling changes. Web scraping suggests that an average of 238 SKUs per supermarket would be in scope of labelling.
- iii. A proportion of labelling changes could be conducted as part of routine labelling refreshes and would therefore not impose any additional cost on business.

Based on submissions to the 2021 call for evidence, we understand that most food products have a routine labelling refresh every 1-3 years, although businesses specialising in frozen or long shelf-life products may have longer product cycles. We propose to align the implementation period of labelling reforms with routine labelling refreshes, to minimise costs and waste for industry. For our central estimate, we assume that 80% of label changes can take place as part of routine refreshes. For our upper-bound estimates this figure falls to 66%, and for our lower bound estimate we assume this will be 95%. In our central scenario, after accounting for the proportion of label changes that can take place as part of routine refreshes, we estimate approximately 492 SKUs will be affected overall. When introducing the uplift for non-supermarket products this increases to 500 SKUs affected.

- iv. The average additional costs incurred by firms to produce a new label are likely to vary significantly by company and product type. For instance, smaller businesses may have simpler labels that cost less to redevelop, and some smaller stores stock own-brand products from larger retailers. We have used previous research produced for Defra⁶¹ as the basis for the cost of redeveloping a label per SKU. From the research paper, we used the cost to a large company for a label change for meat and meat products for our central cost per SKU of £3,100, the average cost for meat and meat products across all types of packaging for our lower bound cost per SKU of £2,400 and the trimmed mean for major label changes for our upper bound cost per SKU of £3,330⁶². The costs were provided in 2010 prices and as such were adjusted for inflation to provide current year prices. We are seeking updated estimates of relabelling costs per SKU through consultation.

67. Our estimates of the labelling costs due to relabelling are obtained using the following formula:
Labelling costs = Number of SKUs affected x (1 – Proportion of labelling changes that could occur as part of routine refreshes) x Estimated cost per SKU

61 [labelling-changes.pdf \(nationalarchives.gov.uk\)](#)

62 [labelling-changes.pdf \(nationalarchives.gov.uk\)](#)

68. Applying this gives us a central estimate of **£1.97m in labelling costs**. This would be a one-off cost to business. Our lower bound labelling cost is approximately £0.30m and our upper bound labelling cost is approximately £4.44m. The significant increase from the central estimate is due to both the higher labelling cost and higher proportion of products that would need a labelling change outside of routine refreshes assumed.

69. Without an implementation period, re-labelling costs could significantly increase; we estimate that this implementation period will save industry approximately £8.4 million in our central estimate.

Estimate	Labelling Costs
Lower Bound	£0.3m
Central Estimate	£1.97m
Upper Bound	£4.44m

70. We are aware that the government is currently exploring a number of potential labelling reforms, such as eco-labelling, and waste labelling. We will ensure that timelines of reforms to labelling for animal welfare are aligned with broader reforms wherever possible, to minimise the burden on industry.

5.2 Familiarisation costs

71. We have monetised this cost as part of the Equivalent Annual Net Direct Cost to Business. It is treated as a direct cost to business.

72. Various agents involved in the manufacturing and supply of pork, chicken and eggs would likely need to familiarise themselves with the new regulations. This would likely be a one-off cost to business.

73. We have estimated the number of businesses that would likely need to familiarise using data from the Annual Business Survey (ABS)⁶³ for the following SIC codes:

- i. 10.11: Processing and preserving of meat
- ii. 10.12: Processing and preserving of poultry meat
- iii. 10.13: Production of meat and poultry meat products
- iv. 46.17: Agents involved in the sale of food, beverages, and tobacco
- v. 47.11: Retail sale in non-specialised stores with food, beverages or tobacco predominating
- vi. 47.22: Retail sale of meat and meat products in specialised stores

74. In addition, to these firms, farmers will likely need to familiarise with the new regulations. We estimate that there are 23,513 farms with poultry in the UK and 10,259 pig farms in the UK, based on the Defra farm survey data (central estimate) and the Animal and Plant Health Agency's poultry register⁶⁴. We do not use the ABS for this estimate as it has limited coverage of SIC code 01, which contains agricultural activities. An upper and lower bound for the number of enterprises has not been for the relevant enterprises with a SIC code as we have high confidence in this ONS data source.

75. We will seek to further refine our estimates on the number of businesses through the consultation process. For instance, it is possible that some of the business under SIC code 10.13 do not produce poultry or pork, and therefore would not be affected under the medium ambition policy option. Similarly, it is likely that not all enterprises in SIC code 47 will be affected. In our analysis we have included all the enterprises of this SIC code as we do not have the granular data on whether the stores do not sell products in scope of labelling. We suspect that the majority of the stores may be small convenience stores, many of whom may not stock products in scope of this policy. However, to avoid underestimating the familiarisation costs, all enterprises in this SIC code have been included.

⁶³ [Non-financial business economy, UK: Sections A to S - Office for National Statistics](#)

⁶⁴ The farm survey data covers England. Our figures have then been scaled to the UK using [Structure of the agricultural industry in England and the UK at June - GOV.UK \(www.gov.uk\)](#).

Assuming that all farms need to familiarise may also be an overestimate, as producers who sit at the legal baseline and do not wish to access a higher tier may not need to familiarise with labelling.

76. [Table 1](#) below summarises the number of firms we expect will incur some familiarisation costs.

Table 1: Number of relevant enterprises by SIC code

SIC Code	Description	Number of enterprises		
		Lower Bound	Central Estimate	Upper Bound
N/A	Farms with pigs and/or poultry	31,421	33,772	36,213
10.11	Processing and preserving of meat	375	375	375
10.12	Processing and preserving of poultry meat	95	95	95
10.13	Production of meat and poultry meat products	555	555	555
46.17	Agents involved in the sale of food, beverages and tobacco	1,320	1,320	1,320
47.11	Retail sale in non-specialised stores with food, beverages or tobacco predominating	30,962	30,962	30,962
47.12	Retail sale of meat and meat products in specialised stores	5,580	5,580	5,580
	Total	70,308	72,659	75,100

77. We assume that this would take one person at each firm approximately 7.8 hours to familiarise themselves with the new regulations (central estimate)⁶⁵.

78. We then combine this with wage data from the Annual Survey of Hours and Earnings (ASHE) by occupation type to estimate costs. For the familiarisation costs faced by farms, we use the mean wage for crop and animal production, hunting and related service activities⁶⁶. For the other firms, we use the mean wage for manufacture of food products and administrative occupations⁶⁷. The businesses were grouped into 3 broad categories (all of which had different mean: agriculture manufacturers and retail & wholesalers).

79. Our estimates of the familiarisation costs are obtained using the following formula:

Familiarisation costs = Total number of hours per business group to read the regulations x hourly wage costs per business group⁶⁸

Total number of hours per business group to read the regulations = Number of impacted businesses (broken down by business group) x Time taken to read the regulations (hours)

80. By doing so, our central estimate is a **total familiarisation cost of £8.87m**, of which £3.82m would be a cost to farmers, £133k would be a cost to manufacturers and £4.91m would be a cost to retailers/wholesalers. This would be a one-off direct cost to business. Our lower and upper bounds are provided in the table below.

81. There are likely to be some additional costs associated with familiarising and training any additional employees required for enforcement purposes. This is likely to impact larger businesses such as supermarkets who have thousands of staff members and businesses such as processors to ensure compliance with assurance schemes.

82. In addition to the costs to businesses from familiarisation with the regulations, there may be costs associated with running any consumer awareness raising campaigns associated with the policy. We

65 Based on having to read 39,000 words (estimated using current Red Tractor standards for a variety of species) and a reading speed of 100 words per minute as identified in [guidance from BEIS](#).

66 Table 5.5 [Earnings and hours worked, UK region by industry by two-digit SIC: ASHE Table 5 - Office for National Statistics \(ons.gov.uk\)](#)

67 Our assumption here is that these firms are likely to be larger, and therefore may have designated people to look at the impacts of policy changes for their firm. As such, using the hourly wage for this occupation will likely be more accurate.

68 Hourly wages where adjustment for inflation to provide 2022 prices and a non-wage scaling factor of 22% was also added as per RPC guidance: [RPC short guidance note - Implementation costs August 2019.pdf \(publishing.service.gov.uk\)](#)

have not quantified these costs at this stage, as it is not clear whether these costs would be borne by businesses or by government. In either case, these would not be mandated, and therefore would not alter the overall direct business impact.

Estimate	Familiarisation Costs
Lower Bound	£6.64m
Central Estimate	£8.87m
Upper Bound	£10.73m

5.3 Compliance and enforcement costs

83. We have monetised this cost as part of the Equivalent Annual Net Direct Cost to Business. It is an ongoing direct cost that impacts industry as well as government. The nature and magnitude of compliance and enforcement costs will depend on policy decisions that we are seeking views on at consultation.
84. Our policy proposal seeks to minimise the financial burden of compliance by allowing food business operators flexibility in how they meet their responsibility to apply accurate labelling. For producers wishing to access a higher tier, we propose that existing farm assurance schemes play a key role in compliance. Food business operators could meet their responsibility to apply accurate labelling by sourcing from producers who are members of farm assurance schemes that meet a minimum set of criteria – integrating any new audits with the systems already in place.
85. Not all products would incur additional compliance costs. For example, a product sold under the lowest tier is not certified to a particular welfare standard, and therefore would not incur compliance costs. Food business operators labelling products from animals reared in the UK as tier 4 would not require further certification beyond existing enforcement mechanisms, since the UK legal baseline aligns with tier 4. In the same way, food business operators could meet their responsibility to apply accurate labelling by demonstrating that a product originates from another country whose legal baseline meets the standards for a certain tier. At consultation, we are also seeking views on whether to include a country-level register detailing other countries whose method of production standards align with a particular tier, as part of guidance to support food business operators.
86. The UK government, the Scottish Government, Welsh Government and the Northern Ireland Executive would designate an enforcement authority with powers to monitor and investigate compliance with the claimed tiers. We have not quantified the additional costs that this would entail. These could integrate with existing checks by enforcement authorities. There may be some additional impacts on businesses due to these checks – for example, time spent preparing for an inspection. We will monetise this fully as part of any post-consultation Impact Assessment, once we have gathered views at consultation.
87. As we propose a system where food business operators can meet their responsibility to apply accurate labelling through sourcing from producers who are members of farm assurance schemes which meet a minimum set of criteria, we model compliance and enforcement costs based on data on existing assurance schemes, primarily Red Tractor (for meat chickens and pigs) and British Lion (for laying hens). The details of how inspections will be funded is still to be decided. This impact assessment takes a conservative approach and assumes that the burden will fall on businesses; however, we will seek to explore other options to minimise burden on industry.
88. The additional burden for industry would depend on which tier a producer wishes to access. UK producers at the legal baseline would not be required to undergo additional inspections beyond the existing enforcement regime in place for the legal baseline. In practice, however, retailer requirements of their UK suppliers generally exceed the legal baseline. As the scope of labelling requirements under the preferred option (i.e., unprocessed and minimally processed products) mainly falls within the retail sector, we conservatively assume that all producers would certify to an improved welfare tier and would incur costs accordingly.

89. Red Tractor is the largest assurance scheme involving animal welfare currently available in the UK. It currently assures approximately 95% of the market from meat chickens; 95% of the market for pigs; 85% of the market for beef; 65% of the market for lamb; and 98% of the market for dairy⁶⁹. With a similarly high market penetration, British Lion assures over 90% of UK eggs⁷⁰. For the analysis below, we assume that farms already covered by the Red Tractor or British Lion assurance schemes would not experience significant further compliance or enforcement costs, but that the existing inspection regime could be leveraged for our proposed policy.

90. Based on the current coverage of Red Tractor and British Lion, and given an estimated 31,428 pig, chicken and laying hen farms in the UK, we estimate approximately 2,549 additional inspections would be required per year in our central scenario for the preferred option.

91. The methodology for estimating the compliance and enforcement costs is further broken down below:

- i. We estimated the number of pig, chicken and laying hen farms that are already assured based on the market penetration of the Red Tractor and British Lion assurance schemes. This gives us a central estimate of 95% market penetration.
- ii. The number of farms with pigs in the UK⁷¹ was then multiplied by the Red Tractor assurance scheme coverage value to provide the number of farms covered by the existing scheme in our central scenarios (9,746) and the number of additional pig farm inspections required (513).
- iii. In the absence of data on the total number of meat chicken and laying hen farms in the UK, this was estimated by dividing the number of meat chicken and laying hen farms in England⁷² by the proportion of poultry birds in England from the UK total⁷³. The same calculations applied for pig farms were used to provide us with the number of farms covered by the existing scheme in our central scenarios (1,625) and the number of additional meat chicken farm inspections required (81).
- iv. Data from assurance schemes on costs paid by farmers per inspection for pig, laying hen and meat chicken farms⁷⁴ were used to quantify the cost of inspections for assured and unassured farms. We assume that inspectors need to be paid an additional cost for the inspections they are currently undertaking, to accommodate for the possibility of divergence between government labelling standards and those of existing assurance schemes.
- v. The cost will depend whether the farm is assured or unassured as this will impact upon the length of time for the inspection. The cost of an inspection for an unassured farm is higher than the cost of inspecting an assured farm.

92. Our estimates of the compliance and enforcement costs are obtained using the following formula:

Compliance and Enforcement Costs = (Number of Assured Meat Chicken Farms x Cost of an Assured Meat Chicken Farm Inspection) + (Number of Unassured Meat Chicken Farms x Cost of an Unassured Meat Chicken Farm Inspection) + (Number of Assured Pig Farms x Cost of an Assured Pig Farm Inspection) + (Number of Unassured Pig Farms x Cost of an Unassured Pig Farm Inspection) + (Number of Assured Laying Hen Farms x Cost of an Assured Laying Hen Farm Inspection) + (Number of Unassured Laying Hen Farms x Cost of an Unassured Laying Hen Farm Inspection)

93. Our central scenario assumes a moderate additional inspection cost for all assured meat chicken and pig farms, and the cost of a full inspection for unassured pig and chicken farms who will require additional farm inspections. The lower bound scenario assumes no additional costs for assured

69 Based on data submitted through the 2021 call for evidence on labelling for animal welfare ([Labelling for animal welfare: call for evidence - GOV.UK \(www.gov.uk\)](#))

70 [British Lion Eggs | What Does the Lion Stamp Mean | Egg Info](#)

71 10,259 pig farms in the UK (2021) Taken from: [Structure of the agricultural industry in England and the UK at June - GOV.UK \(www.gov.uk\)](#)

72 1,199 chicken farms in England (2021) Taken from: [Structure of the agricultural industry in England and the UK at June - GOV.UK \(www.gov.uk\)](#): results by type of farm (ODS, 409 KB)

73 This was a proportion of 74% found by dividing the [number of poultry birds in England \(138.8m\) by the number of poultry birds in the UK \(188.2m\)](#)

74 Commercially sensitive data on inspection costs obtained from internal Defra communications

farms and the full cost of inspection for unassured pig and chicken farms. Finally, the upper bound scenario assumes an increased additional inspection cost for unassured and assured farmers.

Estimate	Enforcement Costs
Lower Bound	£0.4m
Central Estimate	£3.44m
Upper Bound	£5.49m

94. Enforcement costs are relatively low because our proposals align with existing accreditation and assurance schemes. We are seeking further information on any additional compliance and enforcement costs through consultation and aim to streamline the auditing burden where possible.

Monitoring & enforcement for imported products

95. We have not quantified the additional costs associated with monitoring and enforcement for imported products. There is no obligation under the labelling proposal for imported products to provide certification. Where FBOs are not able to demonstrate that a product has been produced to a particular production standard, they would need to apply the lowest-tier label to the product, indicating it has not been produced to any particular production standards.

96. As for domestic products, for imported products labelled with a higher tier, FBOs would need to be able to provide documentary evidence demonstrating that the product has been produced in a manner consistent with the standards associated with that tier. Documentation could include membership of a farm assurance scheme that meets a minimum set of criteria (such as independent ISO 17065 accreditation and a minimum of one farm inspection annually). This proposal aligns with existing industry practice. For example, many UK retailers already import products that are assured by schemes overseas. Farm assurance schemes in countries that export to the UK offer add-on modules for producers, so they can assure their products to the standards required both by their domestic consumers and by the UK export market. The introduction of mandatory labelling would integrate with these existing mechanisms. As with domestic compliance, the costs incurred would relate to divergence between the existing standards to which products are assured, and the draft standards included in the consultation which could underpin the label tiers.

97. The UK is known globally for its high standards of animal welfare as set out in our legal baseline. Our high standards mean that producers operating at UK legal baseline standards are automatically labelled as tier 4. We know that we are not the only country with a stringent legal baseline. Food business operators could meet their responsibility to apply accurate labelling by demonstrating that a product originates from another country whose legal baseline meets the standards for a certain tier. We are considering publishing a country-level register detailing those countries whose legal baseline meets the standards associated with a particular label tier as part of guidance to support food business operators, and are seeking views on this through consultation. To be added to the register, countries would need to submit evidence to the UK government, the Scottish Government, Welsh Government and the Northern Ireland Executive. For products imported from a country on the list, proof of origin would suffice as proof of meeting that tier.

5.4 Traceability costs

98. We have not monetised this cost, as we believe traceability costs arising from this policy will be minimal given existing requirements. Traceability is an ongoing direct cost to business.

99. There may be some additional traceability costs to businesses, if they are required to maintain additional evidence on the method of production standards of products used along their supply chains. The exact nature of these costs would likely depend on (a) the nature of the regulations, which will determine what evidence they are required to keep; and (b) the extent to which there is overlap with existing traceability requirements. We do not have sufficient evidence to quantify this at this stage. However, we believe additional traceability costs arising from this policy will be minimal:

- vii. The vast majority of impacted businesses (90-95% of producers in scope of preferred option) are already part of assurance schemes such as Red Tractor that require full supply chain traceability. They will therefore not incur additional traceability costs.
 - viii. Animal products are already segregated and tracked by their provenance. For example, many pork processors already segregate their products by indoor, outdoor bred, outdoor reared, and according to retailer requirements. Before going for slaughter, all pigs are marked with slapmarks to identify which farm they originated from.
 - i. Value added is an important dimension of business strategy. Industry already looks to leverage the benefits of value added (such as better animal welfare) wherever possible.
 - ix. Due to food safety considerations, products of animal origin sold in the UK must be labelled with a health mark that identifies the establishment where it was produced⁷⁵.
100. For imported products, the traceability burden will likely fall on foreign producers, putting it out of scope of this Impact Assessment. There is also the possibility that the costs will be passed down the supply chain, increasing the price of imported goods. This would likely contribute to a small shift away from imported products to domestic goods, which has been estimated under the "Benefits to farmers" section.
101. We recognise that there are limitations to current traceability mechanisms, ranging from poor legibility of slapmarks to issues with food fraud. We are also conscious that segregation and traceability practices may vary across processors, and that small enterprises in particular, might face further challenges. We are seeking further information on traceability in the consultation.
102. Ongoing developments in this space from both industry and government will build on existing traceability mechanisms that can feed into labelling. For instance, as cited by a number of respondents to the call for evidence, the digital traceability system Livestock Information Programme⁷⁶ is currently in development for a number of species in England, including pigs, sheep and cattle, with similar systems being introduced in Scotland, Wales and Northern Ireland. Innovations around blockchain technology being explored by industry may similarly contribute to improving systems for farm to fork traceability.
103. Due to the existing and forthcoming initiatives relating to full supply chain traceability, we do not expect significant additional traceability costs for domestic producers related to labelling requirements. We will seek to quantify this further if necessary following the consultation.

6 Discussion of indirect costs

6.1 Changes to consumption patterns and profits

104. Mandatory labelling based on production standards aims to improve market competitiveness by correcting market failures related to public goods, market concentration, information failure, and negative externalities (more details in section 1 on "Rationale for intervention"). By creating a level playing field, labelling can reorient the food system and shift behavioural incentives for consumers and industry.
105. Because labelling unlocks market-driven change, businesses will respond in a way that either maintains or increases their total profits – adapting their offer based on their brand and customer base. Since behavioural changes will be determined by the market, we do not monetise the impact on profits. We assume that in the long run, overall profit changes will either net out or be positive.
106. In a competitive market, direct costs such as the increase in production standards will be passed through to consumers who choose those products. We expect that the prices of higher animal

⁷⁵ Guidance on health and identification marks that apply from 1 January 2021 | Food Standards Agency. See also [Assimilated Regulation 178/2002 on the definition of 'food'](#)

⁷⁶ [Livestock Information Programme | AHDB](#)

welfare products will reduce relative to their current price point due to changes in retailer pricing strategies (further discussion in 7.1.1), unlocking untapped market demand. Nonetheless, higher welfare products generally have higher prices than their baseline welfare alternatives. Additional funding available to producers through the broader Animal Health and Welfare Pathway could mitigate pass-through costs, and in the longer term, economies of scale and the standard pressures of market competition may further reduce the gap between higher welfare and baseline welfare production costs.

107. The subsections below provide qualitative background on the food system (7.1.1) and discuss some potential changes to various agents in the supply chain (7.1.2).

6.1.1 Context

The food environment

108. The majority of UK shoppers cite animal welfare as a key consideration in their purchases. However, evidence suggests that value is among the most important drivers of purchasing decisions at fixture, along with taste and ease of cooking⁷⁷. For this reason, 47% of switches in consumer purchasing decisions are due to price or promotions⁷⁸ (although some evidence suggests that these ‘traditional’ drivers are being gradually displaced by ‘ethical’ drivers⁷⁹). Consumers expect retailers to ensure an acceptable minimum standard of animal welfare and so it becomes a less important consideration at fixture.
109. These factors suggest that to effectively impact consumer behaviour, labelling must shape the food environment – i.e., it must impact how supermarkets present products to consumers, through their pricing strategies and availability of products on shelf. A mandatory labelling scheme will help shape the purchasing environment that consumers experience, by providing a more transparent link between price and animal welfare.
110. In a context of choice-editing in the food environment and price-driven consumer purchases, case studies suggest labelling plays a role in unleashing a “virtuous circle” of behaviour change across the food system. The mandatory labelling of shell eggs in the European Union led retailers to source and promote free range eggs⁸⁰, and consumers to exercise their choice and purchase more free range eggs. Greater investment in free range decreased the retail price of these higher welfare products, which in turn led consumers to purchase more. Bolstered by support available via the Animal Health and Welfare Pathway, mandatory labelling aims to replicate this success.

Retailer pricing strategies

111. Retail profit margins are narrow, with supermarkets achieving profit through volume of sales⁸¹. Supermarket pricing strategies are complex, and the relationship between animal welfare and price of products is thus not linear. Retailers look to balance the books, assessing profit at a category or business level, rather than prices of individual items. A lack of transparency combined with intense competition and consumer willingness-to-pay for higher welfare products can incentivise supermarkets to charge premia on such products beyond the cost of production. This limits the market share of higher welfare products and prices them more highly than is affordable to many consumers⁸².
112. A 2022 European Commission study found that price premia on products with animal welfare-based labelling claims ranged widely, and in some cases, there was no price difference compared to conventional products⁸³. The study suggests that increased production costs for higher welfare products “play a minor role” in the higher price compared to demand, level of processing, and retailer pricing strategies. This would make it more difficult for consumers to express their preferences

77 [AHDB \(2018\)](#). Price is often cited as a key driver, but the driver is relative rather than absolute cost. Consumers generally compare the price of one product to a product of comparable quality on shelves, rather than purchasing the cheapest product available in the supermarket.

78 [AHDB \(2018\)](#)

79 [Food and You 2 - Wave 4 | Food Standards Agency](#) and <https://www.mintel.com/press-centre/food-and-drink/eating-with-a-conscience-ethical-food-and-drink-sales-hit-8-2-billion-in-2018>, which showed that animal welfare was the top priority in ethical food shopping.

80 See for example [Buller and Roe \(2014\)](#)

81 [The secrets of supermarketing: A model balanced on a knife edge - Food Research Collaboration](#)

82 Analysis of prices based on web scrape data assessing availability, accessibility and affordability of higher welfare products. The influence of pricing strategies on ethical markets is also discussed in industry reports such as [Kantar \(2023\)](#), which suggests that brands are constricting market demand for sustainable products, by pursuing a “premium” pricing strategy (i.e. charging the highest prices for the most sustainable products, to target consumers who are highly motivated to pay).

Transparency can help encourage companies to change their pricing strategies, as the Kantar report calls for, by allowing easier identification of welfare standards. Without comparability, businesses struggle to differentiate their products so they are under pressure to pursue this premium pricing strategy – signalling sustainability through the price tag rather than through standardised information.

83 European Commission, Directorate-General for Health and Food Safety, Maestre, M., Campbell, L., Etienne, J., et al., *Study on animal welfare labelling: final report*, Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2875/676603>

through their purchases, given the lack of a clear link between price and production standards. Mandatory labelling would provide a clearer link between prices and standards, allowing consumers to express their preferences more efficiently. This could also benefit producers⁸⁴. Analysis of the price differentials on animal products in eight EU countries found that retailers receive the greatest margins, followed by processors, with farmers receiving the lowest margins, and suggests that better transparency could go some way to redressing this imbalance⁸⁵.

113. Similar to the findings of the EC study, our initial analysis of retail price and production cost differentials suggests that the increase in profits on higher welfare products is typically greater than the additional costs of production associated with these higher welfare standards.
- i. We used a web scraping programme run across a range of dates in 2020 and 2021 to estimate the price differential (holding product size constant) between own-brand supermarket pork and poultry products, of baseline and higher welfare standards. We have used Red Tractor assured products to proxy baseline welfare standards. This is by no means a perfect proxy, as Red Tractor standards are slightly above UK baseline welfare standards. However, as all major retailers require products to be at least Red Tractor assured or equivalent, it is the closest proxy of a baseline welfare product given the data we have available. For pork products, we have used RSPCA Assured products as our proxy for higher welfare. Unfortunately, for meat chicken products the price data available for standard RSPCA Assured products was limited, therefore we combined these data with spot price data gathered in 2022 from three different supermarkets.
 - ii. The results of these price comparisons are shown in the table below. For chicken in particular, there are significant differences at the individual product level, as well as across supermarkets. The significant range between the upper and lower bounds reflects these discrepancies. The lower bound represents the average difference for chicken thighs, which had the lowest mark-up, whereas the upper bound is based on chicken breasts. The central estimate for the markup is based on the whole chicken, as this sits roughly in between the lower and upper bounds.

Table 2: Increased cost of higher welfare products compared to baseline welfare products

Product	Additional cost of higher welfare products (as % of baseline prices)	Additional cost of higher welfare products (as % of baseline prices)	Additional cost of higher welfare products (as % of baseline prices)
	Lower Bound	Central Estimate	Upper Bound
Pork	27.7%	34.9%	41.2%
Chicken	6.7%	43.4%	77.7%

- iii. We then estimated the cost increases (as a percentage of retail prices) associated with producing pork and poultry products to higher welfare standards. This was done by compiling a list of standards differences between the Red Tractor and RSPCA assurance schemes and using secondary evidence sources to estimate the costs of each. These are presented in the table below.

Table 3: Production cost increases, baseline welfare to higher welfare

Product	Additional production cost of higher welfare products (as % of baseline prices)	Additional production cost of higher welfare products (as % of baseline prices)	Additional production cost of higher welfare products (as % of baseline prices)
	Lower Bound	Central Estimate	Upper Bound
Pork	2.1%	3.1%	3.2%
Chicken	22.7%	31.4%	35.8%

84 Further discussion in “Unpicking food prices” – report for Sustain by Professor Lisa Jack and Harriet Hammans.

85 European Commission, Directorate-General for Health and Food Safety, Maestre, M., Campbell, L., Etienne, J., et al., *Study on animal welfare labelling: final report*, Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2875/676603>

- iv. By comparing the price differences and the cost differences, we see that in general, the retail price mark-up on higher welfare products is higher than would be expected based on the estimated production costs.
114. A recent Sustain report⁸⁶ notes that the small proportion of the cost of food that relates to farming means that even if farmgate prices doubled, there would not be a significant impact on shelf price – although it would bring significant benefits to farmers. While no firm evidence is available on what drives these profits there are a few possibilities. For instance, if manufacturers can extract a premium based on a higher welfare image due to a lack of transparency, a universal label may go some way to reducing this market advantage.
115. We assume that shifting the incentives through method of production labelling would not impact the overall profits that retailers capture, as they would seek to balance their books through supply chain savings and different pricing across the total range of animal products (or in fact all products).
116. Case study evidence suggests that retailers will balance their books in response to changing welfare standards. For example, in their study of the transition in the Netherlands from conventional to higher welfare chicken meat, Saatkamp et al. (2019)⁸⁷ suggest that retailers did not lose market share or margins. Evidence submitted via the 2022 call for evidence on labelling for animal welfare noted that, when Dutch retailer Albert Heijn shifted their standards to 1-star Beter Leven for pork, they did not raise prices.
117. We will further test our analysis of food system dynamics in consultation, and welcome further evidence.

6.1.2 Impacts of mandatory labelling across the supply chain

118. Behaviour changes resulting from mandatory transparency could impact affected groups in a number of ways. At a high level, we assume that:
- i. Farmers producing to higher welfare standards receive a market premium due to their products being clearly marked as such
 - ii. Farmers producing to UK baseline welfare standards may see an increase in sales, as products below these standards will be marked as such. (These indirect benefits are discussed further in the 'Benefits to farmers' section)
 - iii. Processors and retailers will experience no long-term change in profits, as they will balance their books and make supply chain savings or change pricing as necessary
 - iv. Consumers will find it easier to purchase products in line with their values. A proportion of consumers will trade up, choosing to buy higher welfare products in response to their increased availability, accessibility and affordability, increasing total sales of these. (In some instances, consumers will choose to pay more to purchase in line with their values; in others, existing higher welfare products will become more affordable)
119. In a situation where labelling is introduced:
- I. Supermarkets whose brand capitalises on consumer interest in animal welfare will increase the availability, accessibility and affordability of higher welfare products, to protect their customer base in the highly competitive sector. This will involve altering pricing strategies – reducing the disproportionate premia, and instead profiting on these products by selling more, rather than by selling a smaller quantity at a higher price.
 - II. This would, in the longer term, increase the supply of higher welfare goods on the market, driving down their price and further improving their affordability.

⁸⁶ [Unpicking food prices: Where does your food pound go, and why do farmers get so little? | Sustain \(sustainweb.org\)](https://www.sustainweb.org/food-prices/)

⁸⁷ [Saatkamp et al. \(2019\)](#)

- III. Case study evidence shows that higher-welfare pork products are price elastic⁸⁸, therefore, as their price falls, demand will increase. Assuming this is also the case for higher welfare poultry products⁸⁹, we would also expect a fall in demand for lower welfare products in scope of this policy, counterbalancing the increased sales of higher welfare goods, as consumers would substitute rather than buy additional food items.
- IV. In response to this increase in supply and demand, the competition may increase their own offer of higher welfare goods, identifying that they would make a profit from doing so.
- V. Changes in the retail sector would have a knock-on impact on other agents in the supply chain. As rational actors, they would only invest if a financial incentive existed – that is, if they believe that the net impact in terms of profit is at least zero or preferably positive. Any investments, which in themselves would be an indirect impact, would thus likely have a net positive impact on the sector.
 - Farmers would be incentivised by the increased demand and support from retailers for higher-welfare products to invest in welfare enhancements. Capital grants and other government funding schemes would provide short-term support to enable this shift as the market adjusts to a new equilibrium.
 - Processors or manufacturers would likely also shift toward using higher welfare products. We assume that higher welfare and baseline welfare products can be directly substituted in products, and therefore it is unlikely that there would be any product reformulation costs. However, in some cases, processors may change their sourcing practices. For example, in cases where a processor purchases their meat for a product from multiple different farms with differing production standards, they may choose to standardise their suppliers. The presence of highly integrated supply chains may lessen the challenges associated with sourcing, as businesses already request producers to supply to a particular standard.
- VI. The early movers would likely gain in the short term, before in the longer-term, the competition would catch up, reducing prices and any supernormal profits.
- VII. Overall, this would lead to an increase in demand for higher welfare products, unlocking benefits for consumers, farmers and animals.
- VIII. Although production of higher welfare products would increase, overall profits would likely be unchanged due to the highly competitive nature of the market adjusting to a new equilibrium.

120. We believe that consumers would still be subject to the same budget constraint for expenditure of food and drink. We do not have sufficient evidence to assess whether, in the long-term, this means that consumers would spend more on animal products overall, or simply substitute some baseline products for higher welfare products as meets their budgeting preferences at a given time.

6.2 Environmental impact

121. We have not fully monetised the environmental impact. As discussed above, this policy will lead to a substitution towards higher welfare food products. This will likely have a corresponding environmental impact.
122. We know that the health and welfare of animals, humans, and the environment are interlinked (“One Health”). For instance, healthier animals are more productive, which can reduce the environmental impact of farming.

88 Faical Akaichi Cesar Revoredo-Giha , (2016)," Consumers demand for products with animal welfare attributes Evidence from homescan data for Scotland ", British Food Journal, Vol. 118 Iss 7 pp. 1682 –1711 :<http://dx.doi.org/10.1108/BFJ-09-2015-0321>

89 Although we do not have a quantified sense of the changes in demand, we believe it is reasonable to assume based on economic principles that if the price of a product goes down, the quantity purchased will increase.

123. Depending on the specific welfare enhancements employed, higher welfare standards on farms may increase emissions of greenhouse gasses (for example, if the policy incentivises the use of slower-growing breeds for meat chickens). Given that many key welfare enhancements are related to ensuring animals have more space, there will also almost certainly be an increase in land use for livestock, which could have further negative environmental impacts. However, there may also be broader sustainability and biodiversity benefits associated with higher welfare standards for animals³². Similarly, there may be improvements in soil health and air and water quality, again depending on the specific nature of the welfare enhancements.
124. Our analysis suggests increases in CO₂ emissions per kilogramme of the order of 20% for meat chickens whose welfare is enhanced from Red Tractor standards to the Better Chicken Commitment (BCC)⁹⁰. These increases in emissions are due to increases in feed, energy use and manure production associated with slower growing breeds. This increase equates to an annual average cost of £17.7m in the central scenario, but does not account for any potential positive environmental impacts mentioned above. In addition, calculated impacts could also be mitigated through the use of renewable energy, energy reduction measures, use of alternative feeds such as low-soy or soy from “non-land use change” practices, and manure emissions reduction measures such as the use of anaerobic digesters for energy recovery. These potential mitigation measures have not been considered as part of the calculated impacts.
125. Should consumers switch their purchasing behaviour as a result of this policy, there may be an impact on trade flows. However, these impacts could work in both directions from an environmental perspective. On one hand, consumers could potentially buy more British products due to the higher average standards of animal welfare, which could reduce imports and therefore transport-related emissions. On the other hand, there could also be a shift in imports towards sourcing from businesses certifying to higher standards of animal welfare and operating in countries with lower production costs, due to consumer demand for higher welfare products. This could lead to increased emissions compared to domestic production. To a large extent, however, the origin of imports will depend on a broader range of factors (for example, future trade agreements, cost and relative competitiveness, consumer preferences and perceived quality) rather than the labelling policy itself.
126. Such costs and benefits are difficult to monetise, and we do not currently have sufficient evidence to do so. We will seek to further explore these issues (and any potential quantification that may be possible) as part of the consultation process³³.

7 Discussion of benefits

7.1 Benefits to consumers

127. A key benefit of this proposed policy option is the increased utility consumers will experience. This could occur through a number of mechanisms:
- x. For those who wish to consume higher welfare products, the labelling may help to increase availability, accessibility and affordability (caveated by the above mechanisms on prices) and therefore allow for a better “match” between preferences and purchases, increasing utility.
 - xi. Some consumers may also experience increased utility from the transparency provided by a standardised label (i.e., they may value knowing the production standards of the food they are consuming, even if they don’t change their purchasing decisions as a result). This increased transparency could improve consumer trust in the meat aisle at a time of negative media pressure⁹¹.
 - xii. For consumers who value animal welfare but do not purchase animal products, there may be a utility gain from the overall reduction in the consumption of baseline welfare food products.
128. Unfortunately, these benefits are difficult, if not impossible, to quantify. However, we produce a breakeven analysis below to explore the scale of benefits that would be required to offset the costs of the policy, as described in the sections above.

⁹⁰ [The Better Chicken Commitment - BCC \[US\]](#)

⁹¹ [Consumer Insights: Improving shopper engagement with the meat aisle | AHDB](#)

129. Evidence suggests that a large proportion of the UK population support greater animal welfare labelling on food products:
- xiii. Opinium asked 1,990 UK adults whether animal products should be labelled according to the conditions they are raised in: 68% of respondents agreed⁹².
 - xiv. YouGov asked 1,652 UK adults if they would support labels on meat products indicating how the animal was raised and slaughtered: 55% of respondents supported⁹³.
 - xv. Qa Research asked 1,001 UK adults whether method of production labelling should be extended to all animal products: 83% of respondents agreed.⁹⁴ Taking a simple average of these studies, we assume around 69% of the public would experience a utility gain from the introduction of this policy. Combining this with an adult population size of 55m⁹⁵, we estimate around 38m people would benefit.
130. In the first year (i.e., including one-off costs), we estimate this policy option would incur a transition cost of £8.5m, as well as the recurring annual cost of £16.6m per year, across all of the quantified costs discussed in the sections above (central scenario). Therefore, across the estimated 38m who would benefit, this equates to a cost of approximately £0.66 per person. As such, it seems highly probable that the unquantified benefits to consumers will outweigh the associated costs, given the low cost per individual.
131. In subsequent years, there is a net cost from the quantifiable impacts of £16.6m per year (central estimate). This implies a benefit per consumer of £0.44 per year would be required to offset these costs.

Consumer insights

132. Studies of consumer knowledge and understanding of animal welfare labels suggests that labels are confusing to consumers, who may have little to no knowledge of animal production methods. Most consumers recognise the Red Tractor label, but around a third of consumers are unsure what it means⁹⁶. Survey data submitted through the Defra 2021 call for evidence suggested that 92% of shoppers want consistency in the way their meat is labelled.
133. Many consumers are time poor. When selecting meat, shoppers spend on average between 41-84 seconds considering a product⁹⁷. Constraints such as these can lead to some consumers using ineffective proxies such as country of origin labelling⁹⁸ and pictures of green spaces⁹⁹. This suggests that some of the current labelling is too complex for the fast-paced buying decisions. Introducing a clear tiered labelling scheme could combat this barrier to purchasing animal friendly food products – one of the main barriers faced by consumers¹⁰⁰.
134. A large-scale survey across Europe¹⁰¹ found that 55% of UK citizens look for such labels when purchasing animal products, indicating interest in this information. However, 38% never or rarely look, and 6% were not even aware such labels existed. 64% of respondents would like more information about animal welfare and 47% do not think there is enough choice currently marketed.

92 [Overwhelming majority of British people want clear labelling showing how their meat and dairy was produced, new poll finds | Compassion in World Farming \(ciwf.org.uk\)](#)

93 https://d25d2506sfb94s.cloudfront.net/cumulus_uploads/document/jnclqzkqk6/WCL_190205_AnimalWelfare_w.pdf

94 <https://www.qaresearch.co.uk/food-labelling-report-published>

95 Total UK population over the age of 15 of 55,106,377 in 2020 as obtained by the [ONS](#). We have used the age of 15 as our lower bound here due to the data categories available.

96 [Many UK consumers not sure what Red Tractor assurance scheme is | Food Management Today](#)

97 [ShopperDecisionTree-Meat_1762_181107_WEB.pdf \(windows.net\)](#)

98 [Science Search \(defra.gov.uk\) - Follow Up Study of EU Food Information to Consumers - FA0169](#)

99 [Consumer perceptions of beef healthiness: results from a qualitative study in four European countries | SpringerLink](#)

100 Other barriers include low trust in certification schemes, lack of belief in their ability to improve animal welfare through their purchases, and poor availability and affordability of animal friendly products. European Commission (2007), "Attitudes of EU citizens towards animal welfare", available at: www.vuzv.sk/DB-Welfare/vseob/sp_barometer_aw_en.pdf

101 [Attitudes of Europeans towards Animal Welfare - March 2016 - Eurobarometer survey \(europa.eu\)](#)

135. Knowledge on animal welfare and production standards is weak among consumers. A 2014 survey found that only 53.5% of respondents could correctly identify the definition of animal welfare from a list¹⁰². Marketing terms such as “farm assured” are neither understood nor trusted¹⁰³.
136. Consumers prefer simple cues that require minimal time investment and engagement, and that provide an instantly recognisable beacon for decision making.

7.2 Benefits to society

137. In addition to the benefits to consumers, labelling can benefit society more broadly, due to the public good nature of animal welfare. UK citizens value the welfare of farm animals, as reflected in the UK’s high standards of animal welfare; and the value that one citizen places on animal welfare does not detract from the value that another citizen places on it.
138. As animal welfare is a public good, there may be a utility gain from the overall reduction in the consumption of lower welfare food products. This utility gain will benefit all individuals who value welfare (98% of the UK population¹⁰⁴), whether they choose to purchase or to avoid purchasing animal products.
139. The connection between human, animal and environmental health (“One Health”¹⁰⁵) means that improvements to animal welfare can benefit wider society. For instance, healthier animals mean less antibiotic usage, lessening the risks of antimicrobial resistance. A 2019 study of the switch in the Netherlands from conventional to higher welfare meat chicken production identified a reduction in antimicrobial use, which it tentatively attributes to the increased robustness of slower-growing breeds³¹.

7.3 Benefits to farmers

140. We have attempted to partially monetise the benefits to UK farmers that would arise from a change in their profits due to labelling. This is an ongoing indirect benefit to farmers. It is difficult to produce precise estimates on profit changes to farmers given this will depend on a number of speculative behaviour and profit changes. As a result, there is significant uncertainty in our modelling of the benefits to farmers. Our assumptions are laid out below and we will seek further evidence through consultation.
141. Broadly, we expect this policy to benefit farmers producing to UK baseline standards by increasing sales at this level. We assume that some retailers will shift away from sourcing products whose welfare standards fall below those acceptable to UK consumers. Farmers producing to UK baseline standards may also capture a price premium through being able to differentiate their products from those that fall below the level acceptable to UK consumers.
142. We also expect labelling to benefit farmers producing above UK baseline standards, as clearer labelling will support them to receive a farmgate price that better reflects the market value of their higher welfare farming practices.
143. We anticipate that farmers will benefit as a result of this policy. For instance, an EU case study on the Dutch multi-tier Beter Leven meat chicken welfare label found that farmers producing the highest welfare chicken in the scheme were rewarded with a higher price (30%), 42% in additional revenue and an average increase of farm income per year of 6%¹⁰⁶.
144. We have sought to monetise the impacts on farmers as a result of a speculative shift away from products that fall below the standards acceptable to UK consumers (detailed in 8.3.1). We have

102 Sustainability labels on food products: Consumer motivation, understanding and use - ScienceDirect

103 [ARCHIVED CONTENT] ([nationalarchives.gov.uk](https://www.nationalarchives.gov.uk))

104 https://www.adiveter.com/ftp_public/20160324012835_4944-eurobarometer-2016-animal-welfare.pdf

105 <https://www.woah.org/en/what-we-do/global-initiatives/one-health/>

106 [Study on animal welfare labelling annexes 1- 8 to-EW0722148ENN \(2\).pdf](#)

monetised this separately from the wider domestic profit changes discussed in 7.1 due to the international component.

145. As a lever that can improve animal welfare, labelling also brings broader benefits to farmers (discussed in 8.3.2). These include economic benefits, such as improved productivity; and well-being benefits, such as increased recognition and job satisfaction.

7.3.1 Monetisation of shift away from products below UK baseline

Assumptions

146. In response to mandatory labelling that would mark out products that fall below the standards acceptable to UK consumers, we expect that retailers will shift away from sourcing such products. We anticipate a diversion away from products that fall below UK baseline standards, and a corresponding diversion towards higher welfare products that meet or exceed UK baseline standards.
147. Imported animal products in scope of labelling will be assigned the lowest tier, unless they are able to certify their products as meeting a higher welfare tier. The majority of British consumers perceive higher-welfare meat as healthier, safer, better for the environment, more nutritious and tastier¹⁰⁷. Accordingly, we expect they will prefer domestic products meeting the four higher tiers, which correspond to UK baseline standards or above. Importers who do choose to certify their animal welfare standards as above the lowest tier will do so at their own cost which may reduce their profitability. In the absence of full operability details at this stage¹⁰⁸ we were not able to calculate the additional cost to importers for the label and certification of their products' production standards. We will seek to minimise the costs for importers through careful policy design, to ensure a level playing field for products.
148. Under the preferred option, a label would initially apply to unprocessed and some minimally processed products in the retail sector, with the option of expanding in scope should the label prove effective.
149. At present, most major retailers source unprocessed pork, chicken and eggs mostly from the UK¹⁰⁹. The changing trade landscape as the UK secures new trade deals could cause retailers to change these commitments; labelling may be an additional factor in sourcing decisions.
150. The inclusion within scope of more processed products would increase the benefits to UK farmers. For example, currently around 46% of pork is imported¹¹⁰. A proportion of this imported pork currently comes from countries that permit practices illegal in the UK due to welfare concerns, such as the use of sow stalls. Labelling such products would encourage supermarkets to source from higher welfare producers and consumers to purchase higher welfare products, benefitting UK farmers and higher welfare international producers.

Analytical approach and methodology

151. This section discusses our attempt to partially monetise the change in profits to UK farmers in respect to trade and domestic production. However, our analysis is highly assumption driven in the absence of clear supply chain data and speculative regarding the change in consumer behaviour.
- xvi. We first identified the proportion of domestic consumption of meat products in scope of potential labelling requirements that consist of imported products. This was calculated using a

107 Kehlbacher, A., Bennett, R. and Balcombe, K. (2012). Measuring the consumer benefits of improving farm animal welfare to inform welfare labelling. *Food Policy*, Vol. 37 No. 6, pp. 627-633.

108 To monitor and enforce international products, we are exploring a compliance mechanism similar to that in place for organic products. Further details can be found in the consultation document.

109 Based on retailer animal welfare policies from Tesco, Sainsbury's, Asda, Morrisons, Aldi, and Lidl, available on their websites. Together, these six supermarkets comprise over 80% of the grocery market.

110 Calculated as a proportion of imports of pork to the UK (taken from [UK trade in goods statistics - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/agriculture-in-the-united-kingdom-2021/chapter-8-livestock)) over UK consumption of pork (taken from <https://www.gov.uk/government/statistics/agriculture-in-the-united-kingdom-2021/chapter-8-livestock>)

3-year average¹¹¹ of HMRC overseas trade statistics¹¹² for animal products in scope and calculating the proportion of UK consumption for these animal products over the same time period¹¹³.

- xvii. As only unprocessed and some minimally processed products are in scope of labelling requirements, we then estimated the likely proportion of imported products which will be in scope of labelling requirements. We are aware many of these imported animal products are used in the production of more processed animal products (for example, pizzas and ready meals) rather than sold as unprocessed or minimally processed products in supermarkets.
- xviii. In the absence of data on the destination of these imported animal products, we assumed that 70% of the volume of imported meat products were sold and used in processed products in our central scenario, and therefore out of scope for this option¹¹⁴. Animal welfare commitments from the major UK retailers were used to inform these assumptions around where imports go. For example, the major UK retailers source most of their unprocessed pork, chicken and eggs from the UK.
- xix. We estimated the proportion of imported pork and poultry that falls below UK baseline standards. As a proxy, we assumed that imports from outside the EU, and from EU countries that permit welfare practices banned in the UK (such as sow stalls), are below UK baseline standards. This gives us an estimate of 46% of pork (with a total value of £761m) and 21% of poultry that is imported (with a total value of £386m)¹¹⁵.
- xx. We used retail market data (for the same 2019-2021 time period) to determine the annual revenue of the unprocessed animal products sold in the UK. We then used some high-level assumptions to estimate the annual total profit for UK businesses selling imported animal products:
- the estimated import price (per kg)¹¹⁶ as the purchase price paid by retailers
 - wages as a share of output for the costs to retailers for this part of the supply chain process
 - the average retail price (per kg) as the sale price for imported animal products for retailers
- xxi. In the absence of clear data, we assumed that revenue and profits for imported products would only be distributed to retailers and have no benefit to either UK farmers or processors as they would not have been involved in the production process for the imported animal products.
- xxii. Finally, we arbitrarily assumed a 10% annual switch in consumption from imported products in scope that fall below UK baseline requirements (the lowest tier) toward UK baseline requirements (tier 4) as a result of this policy. This aligns with our central assumption of behaviour changes in response to labelling, based on the case study evidence set out at annex 1. We modelled this shift as an annual 10% substitution over a 10-year period.
- xxiii. Based on this figure, we calculate the annual profit changes on imported products.
152. As estimated using the methodology outlined and assumptions based on case study evidence in section 7, we derived an estimated annual profit change of **£46.56m** in our central scenario for farmers¹¹⁷ when modelling this partial shift towards higher animal welfare.
153. We have not identified the benefits to international producers with higher welfare standards, as this question falls outside the scope of this impact assessment. However, international producers

111 We used the years 2019 to 2021, as the last three fully available calendar years of data and due to the impact of COVID-19 on trade in both 2020 and 2021.

112 <https://www.gov.uk/government/collections/uk-overseas-trade-statistics-and-regional-trade-statistics>

113 <https://www.gov.uk/government/statistics/agriculture-in-the-united-kingdom-2021/chapter-8-livestock>

114 A +/- 10% range was used for our low and high scenarios to account for the high uncertainty in our assumption.

115 Calculated by multiplying the average annual value of pork and poultry imports (2019-2021) by the estimated percentage of imports which may fall under below UK baseline standards in our assumption [Using [UK trade in goods statistics - GOV.UK](#)]

116 Calculated by dividing the sum of Value (£) of the imported animal product by the Sum of volume (tonnes) and then converting this into Kg [Using [UK trade in goods statistics - GOV.UK](#)]

117 Average annual farmer profit change in pork = £32.79m, Average annual farmer profit change in poultry = £13.77m.

with higher welfare standards will also benefit from increased sales resulting from this policy, provided that their standards are certified by a recognised body as equivalent to a tier in a label.

7.3.2 Other non-monetised benefits

154. In addition to the shift away from products that fall below UK baseline welfare standards, improved transparency around animal welfare may also bring benefits to farmers through changing retailer sourcing practices. The Efra farmgate prices report¹¹⁸ notes that pressures on the highly competitive retail sector ultimately mean that producers may not receive a fair price, as retailers sell products below cost to protect and expand their market share. The introduction of a mandatory welfare label could shift the incentives in the retail sector, encouraging competition along the lines of animal welfare and leading to a better deal for farmers. A recent Sustain report¹¹⁹ notes that the small proportion of the cost of food that relates to farming means that even if farmgate prices doubled, there would not be a significant impact on shelf price – although it would bring significant benefits to farmers. The report accordingly cites better transparency and food labelling as measures to support farmers.
155. Beyond the potential economic benefits of labelling, improved animal welfare may bring wider benefits for farmers. Better welfare is associated with enhanced job satisfaction and improved working conditions¹²⁰. Anecdotally, for example, producers prefer to farm slower growing breeds¹²¹.

7.4 Impact on animal welfare

156. Over a billion animals are farmed in the UK each year. The landmark Sentience Act¹²² enshrines in law that these animals are capable of feeling and imposes on policymakers a responsibility to pay all due regard to their welfare.
157. As sentient beings, farmed animals have an interest in avoiding pain and attaining a good life. In addition to the benefits of animal welfare through consumer utility, the sentience of animals means that animal welfare should be intrinsically valued for its own sake. The impact on animal welfare thus constitutes a direct benefit of this policy.
158. Monetising the animal welfare benefits is not possible at this stage. However, based on the farm data available¹²³ and our central substitution assumptions (which draw on case study evidence discussed in Annex 1), we estimate that approximately 110m meat chickens, 0.7m laying hens, 0.5m pigs, 0.25m beef cattle, 0.2m dairy cattle and 1m sheep per year will have their welfare standards improved. For meat chickens, pigs, beef cattle, dairy cattle and sheep, these figures are estimated based on the assumption that 10% of the total herd/flock would benefit at a given time as a result of this policy. For animals whose lifespans are shorter than a year, we assume 10% of the total number slaughtered annually. For animals whose lifespans are longer than a year, we assume 10% of the total number of animals in the UK kept within a production system that would speculatively be in scope of a label. We exclude animals that are not reared specifically for the consumption of their products – for example, animals used for breeding¹²⁴.
159. For laying hens, we assume that 2% of the flock at any time will benefit from behavioural changes in response to improved transparency. The figure is lower for laying hens, as we believe that mandatory shell egg labelling already facilitates consumer choice – as borne out in the market¹²⁵. We expect that the increased scope of proposed welfare labelling (including minimally

118 [House of Commons - Farmgate prices - Environment, Food and Rural Affairs Committee \(parliament.uk\)](#)

119 <https://www.sustainweb.org/publications/dec22-unpicking-food-prices/>

120 [Animal welfare – revision of EU legislation \(europa.eu\)](#)

121 See discussion in [Growing chicken, the Better Chicken Commitment way - Poultry News](#) and [Everyone's a winner \(rspca.org.uk\)](#)

122 [Animal Welfare \(Sentience\) Act 2022 \(legislation.gov.uk\)](#)

123 See [Chapter 8: Livestock - GOV.UK \(www.gov.uk\)](#) and [Farm animals: slaughter sector survey 2022 - GOV.UK \(www.gov.uk\)](#)

124 For example, we assume 10% of cattle finished for beef would benefit, and 10% of the milking herd.

Figures based on Chapter 8: Livestock - GOV.UK (www.gov.uk); June agriculture survey

<https://www.gov.uk/government/statistics/livestock-populations-in-the-united-kingdom/livestock-populations-in-the-united-kingdom> and [Latest cattle, sheep and pig slaughter statistics - GOV.UK \(www.gov.uk\)](#)

125 <https://www.egginfo.co.uk/egg-facts-and-figures/industry-information/data>

processed eggs in addition to shell eggs, to which existing mandatory requirements apply) and the standardisation of labelling across species (further enabling consumer understanding) will lead to a small impact on consumer decisions, and could encourage consumers to purchase more higher welfare barn eggs. Our estimated percentage of the laying hen flock that would see a welfare improvement is low, as this depends to the greatest extent on the draft standards published as part of the consultation, and which may be subject to change depending on the evidence received.

160. The nature of welfare improvements experienced by each species will depend on the details of the standards (draft production standards are published in Annex B of the consultation), and on which tiers a producer shifts their practices toward.

Expected welfare improvements (preferred option)

161. Meat chickens are the most intensively-reared livestock species. There is growing scientific evidence that faster-growing breeds of meat chickens are more likely to be affected by a range of often severe welfare problems compared to slower-growing breeds reared in similar conditions¹²⁶. Although the multifactorial nature of these welfare problems makes it difficult to link them to a single cause, we believe it is reasonable to expect this labelling policy to lead to a range of health and welfare benefits for meat chickens. This could include reduced mortality, reduced lesions on footpads/hocks, reduced lameness and mobility issues, reduced metabolic disorders and the increased ability to express normal behaviours such as perching and foraging.

162. Around 60% of laying hens in the UK are farmed to free range standards¹²⁷, in response to consumer demand facilitated through the mandatory labelling of shell eggs. We expect laying hens to benefit from this policy, less through changing consumer demand for higher welfare products (as good transparency means this is already expressed in the market), and more through updating the underlying standards in response to the increasing prevalence of avian influenza to ensure that higher welfare is attained. For instance, the draft standards recognise the value of indoor systems that can provide improved behavioural opportunities for laying hens, especially during housing orders due to avian influenza. At the highest production tiers, we propose the inclusion of verandas – an enclosed or semi-enclosed outdoor space with solid roofing overhead. Verandas provide shelter during bad weather and are often better used year-round than the range itself¹²⁸; importantly, if appropriately secured, these semi-outdoor spaces can also be accessed during avian influenza housing orders¹²⁹. By reducing stocking density and encouraging hens out of the barn, verandas can promote positive behaviour and reduce stress and frustration for hens, which can help combat feather pecking¹³⁰. Lower stocking density can have wider benefits for laying hen welfare, such as reducing competition for resources (food, nest boxes, enrichment, high level roosting perches)¹³¹, reducing falls and collisions associated with keel fractures¹³², and enabling greater movement throughout the barn¹³³.

163. The increase in higher welfare production practices such as reduced sow confinement during farrowing¹³⁴, lower stocking densities¹³⁵ and increased provision of environmental enrichment¹³⁶ are expected to provide a range of welfare benefits for pigs. These are expected to include increased ability to express normal behaviours such as nest building behaviour, sow-piglet interaction, and

126 See for example [Rayner et al. \(2020\)](#)

127 [UK Egg Industry Data | Official Egg Info](#)

128 See for instance Steinfeldt & Nielsen, 2015: <https://doi.org/10.1017/S1751731115000713> and Larsen et al, 2017: <https://doi.org/10.3390/ani7030021>

129 Bestman et al., 2017. <https://doi.org/10.7120/09627286.26.3.355>

130 Bestman et al., 2017. <https://doi.org/10.7120/09627286.26.3.355> and EFSA (2023) <https://efsa.onlinelibrary.wiley.com/doi/10.2903/j.efsa.2023.7789>

131 Steinfeldt and Nielsen, 2015. <https://doi.org/10.1017/S1751731115000725>

132 Sandilands et al., 2009. <https://doi.org/10.1080/00071660903110844>

133 Pettersson et al., 2016. <https://doi.org/10.1017/S0043933915002664> and Estévez & Newberry, 2017. <https://doi.org/10.4324/9781351114325>

134 Baxter, Lawrence, and Edwards (2012):

<https://www.sciencedirect.com/science/article/pii/S1751731111001224?via%3Dihub>

135 Fu et al. (2016):

<https://www.sciencedirect.com/science/article/pii/S0168159115002683>

136 Godyn, Nowicki, Herbut (2019):

<https://www.mdpi.com/484206>

freedom of movement during farrowing¹³⁷; as well as the ability to express rooting and chewing behaviours for finishing pigs¹³⁸. A reduction in mutilations such as tail docking is also expected, as are improvements in tail and body lesions, and lameness prevalence¹³⁹.

8 Assumptions, risks and sensitivity analysis

8.1 Assumptions

164. A number of assumptions underpin this impact assessment.
165. Where we have needed to make assumptions in the absence of data, our model uses conservative figures and provides low, central and high estimates. Key assumptions include:
- That the long-term overall profit changes for industry as a result of this policy intervention will be neutral, in our central scenario. As labelling is a market-driven lever, businesses will respond in such a way as to maintain or increase their profits.
 - That there is a value-action gap amongst UK consumers and information asymmetry in the market. This is supported by strong evidence discussed throughout the impact assessment.
 - The number of labels that would need to be updated. This assumption will be tested at consultation.
 - The number of businesses who will have to familiarise with the regulations. It is currently assumed all businesses, regardless of size, that have been identified as being impacted will need to familiarise; this is likely an overestimate.
 - That the Red Tractor assurance scheme currently covers approximately 95% of the market from meat chickens; 95% of the market for pigs; 85% of the market for beef; 98% of the market for dairy; and 65% of the market for lamb. We will seek further evidence on this assumption to inform any post-consultation impact assessment.
 - The proportion of farmers who will switch to higher welfare production practices. Drawing on case study data we have assumed this to be 10% for our central scenario and 5% and 30% for our low and high scenarios respectively. This assumption will be tested at consultation.
 - Retailer pricing strategies. We assume that retailers balance their books by setting prices at a product category or business level. This assumption will be tested at consultation.
 - Cost increases related to improved welfare as a proportion of retail price. Given the black box nature of the supply chain, we have struggled to find accurate data on the breakdown of costs and profits on animal products. We have drawn on a number of secondary sources and produced our own analysis based on retail and farmgate data (please see tables 2 and 3 in section 7 for further detail). This looks solely at the tier 4 to tier 3 shift and as such we have looked at individual products in isolation.
 - Production standards of imported products. We assume that the production standards of a proportion of imported animal products from (a) non-EU countries and (b) EU countries that permit practices banned in the UK, fall below the UK baseline standards. This was estimated to be approximately half of the pork that is imported and approximately a fifth of the poultry meat that is imported.
 - What kind of products imports end up in. In the absence of data on the destination of these imported animal products, we assumed that 70% of the volume of imported meat products were sold and used in processed products (retail and out of home sector) in our central scenario. We base this assumption on analysis of retailer commitments around animal welfare, which suggest that most unprocessed products are British. This assumption will be tested at consultation.
 - That revenue and profits for imported animal products would only be distributed to retailers and have no benefit to either UK farmers or processors as they would not have been involved in the production process for the imported animal products. We will seek further evidence on this assumption to inform any post-consultation impact assessment.

137 Baxter, Anderson & Edwards (2018): <https://www.sciencedirect.com/science/article/pii/B9780081010129000022>

138 Bracke (2023):

<https://www.cambridge.org/core/journals/animal-welfare/article/abs/expert-opinion-regarding-environmental-enrichment-materials-for-pigs/C69EDEA0C470745B99CDB8DD6118C8FD>

139 EFSA Scientific Opinion: Welfare of pigs on farm (2022)

<https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2022.7421>

8.2 Risks

Trade implications

166. The modelling at present does not account for the potential impact on imports or the overall balance of trade. There may be opportunities for international producers to increase their exports of higher welfare products to the UK, in response to market demand. There is therefore a risk that profit changes modelled for UK farmers may be an under- or overestimate. This would also be the case if there were a significant shift in the welfare standards of countries exporting pork, poultry and eggs to the UK (either through changing trade relationships or changing standards in existing trade partners).
167. Future free trade agreements may impact the cost of imports for products in scope of this policy. Individual impact assessments are produced for each free trade agreement; detailed discussion does not belong in the present impact assessment on labelling for animal welfare. However, free trade agreements will have implications for consumption of animal products, and may alter the anticipated behavioural changes discussed in this impact assessment.

Cost of living

168. The current inflationary pressure on food prices may continue or worsen, which will constrain consumer budgets even further¹⁴⁰. In this case, while the policy will meet its objective of providing better information to consumers, it may not deliver on its third objective of improving the welfare of farmed animals by unlocking untapped market demand. However, if the government chooses to proceed with labelling based on the outcome of this consultation, the policy timeline means that labelling requirements would not come into effect until 2027 at the earliest – by which time the current inflationary pressures are expected to have likely largely abated. In addition, recent evidence from Europe found that despite inflationary pressures on food prices, 60% of respondents indicated that they would be willing to pay more for higher-welfare food¹⁴¹. A 2022 survey by FSS also found that animal welfare was the second biggest area of concern, reported by 77% of consumers, despite increased concerns around food prices¹⁴².

Risk of underestimating traceability costs

169. Traceability costs have not been monetised due to the existing and forthcoming initiatives relating to full supply chain traceability, which will minimise additional traceability costs. If the Red Tractor assurance scheme does not currently assure 95% of the market for meat chickens and 95% of the market for pigs (a key assumption in this Impact Assessment), these costs will have been underestimated. This assumption is based on the industry assertion that Red Tractor assurance covers 95% of the pig and meat chicken sectors. We will look to confirm this assumption to inform any post-consultation impact assessment.

9.3 Sensitivities

Labelling costs

170. A proportion of labelling changes could be conducted as part of routine labelling refreshes and would therefore not impose any additional cost on business. Most food products have a routine labelling refresh every 1-2 years¹⁴³. A proposed eighteen-month phase-in period will allow industry time to adapt to the reforms.
171. Depending on the proportion of labelling changes that take place during routine refreshes, this phase-in period will save industry the amounts shown in the table below in a low, central and high scenario.

140 Find further discussion below, in the "Wider impacts" section.

141 European Commission, [Eurobarometer shows how important Animal Welfare is for Europeans](#), (viewed on 26/01/2024)

142 Food Standards Scotland, [Food in Scotland Consumer Tracker Survey Wave 14](#), 2022, page 13.

143 Based on evidence submitted to our call for evidence.

Scenario	Low	Central	High
Proportion of changes that can take place as part of routine refreshes	95%	80%	66%
Estimated number of products that will be relabelled during routine refreshes	2,045	2,657	3,204
Estimated cost per SKU (2022 prices)	£3,054	£3,945	£4,237
Savings to industry	£6.26m	£8.39m	£8.96m

172. Additionally, when monetising both direct and indirect costs and benefits throughout this impact assessment, we have provided costs and benefits in our low, central and high scenarios to showcase how the impacts on costs and benefits would differ with the variable inputs. (See for instance the tables included in sections 6.1, 6.2 and 6.3.)

9 Impact on small and micro businesses

173. Without exemptions, small and micro businesses would face a disproportionate share of the costs, and gain a less than proportionate share of the benefits. For example, familiarisation costs will likely be similar for all firms, but will be more burdensome for businesses with fewer employees.

174. The burden for small and medium businesses and exemptions possible will vary depending on the stage of the supply chain. For example, labelling costs will be borne by packagers and retailers rather than by producers, as they will need to print the label on products. In the retail sector, the top 10 retailers hold just under 97% of the grocery market share¹⁴⁴; in this context, exemptions for small and micro retailers would not undermine policy goals. We expect that many small retailers will not stock products in scope of the preferred option (that is, unprocessed and minimally processed animal products). Moreover, some small retailers stock own-brand products from larger businesses rather than having their own distinct supply chains and labels. We are exploring the possibility of exemptions for small and micro enterprises (such as farm shops and farmers' markets) sourcing from small farmers. We are seeking further evidence on the impacts on small businesses and how these can be mitigated in our consultation.

175. UK processors face familiarisation costs, and may face additional traceability impacts. Small businesses predominate in this sector: 84% of businesses have fewer than 50 employees. We would not be able to exempt small processors without undermining the policy goals.

176. UK producers will not face labelling costs but may face familiarisation and compliance costs. The proposed labelling approach means that UK producers would be automatically assigned to tier 4 in the absence of evidence that they meet the standards for a higher welfare tier. This means that producers not wishing to access a higher welfare tier can choose to avoid additional familiarisation or compliance costs (although our modelling of the impact on businesses assumes that all producers will incur these costs). Producers will only incur a burden if they choose to access a higher tier, and they will only choose to do so if it makes financial sense.

Background on farm sizes

¹⁴⁴ Grocery Market Share - Kantar (kantarworldpanel.com)

177. In 2021, the top 20% of pig farms by size – those with over 1,000 pigs – held almost 90% of the national herd¹⁴⁵. However, classifications of farm size do not map onto classifications of business size by number of employees. For example, the 2014 Farm Business Survey classifies a large farm as having between 3 and 4 full time equivalent employees¹⁴⁶. In contrast, the Office for National Statistics (ONS) defines a large business as having over 250 employees¹⁴⁷, and the Better Regulation Framework¹⁴⁸ as one with over 500 employees.

Business classification	Number of full-time equivalent employees		
	2014 Farm Business Survey	Office for National Statistics	Better Regulation Framework
Very small / micro	< 0.5 0.5-1	0-9	0-9
Small	1 < 2	10-49	10-49
Medium	2 < 3	50-249	50-499
Large	3 < 4	250-499	500+
Very large	>= 5	500+	

178. The relatively small number of employees per business in the farming sector means that impacts such as familiarisation with the regulations will take a greater proportion of their total resource than for other sectors. However, one of the core policy objectives is to benefit the UK farming sector, as better transparency will ensure higher welfare farmers are rewarded by the market. We will work closely with the industry to develop guidance for farmers on the regulatory changes. As well as training and tools, wider financial support available through the Animal Health and Welfare Pathway will ensure farmers are supported in any transition they choose to make.

179. The following table shows the employment size bands for businesses in scope of labelling proposals.

Impact on Medium-sized businesses

180. Table 1 below also includes statistics for medium sized businesses (businesses with between 50-499 FTE employees, per the updated RPC guidance on medium-sized business assessment guidance). Using this definition of medium-sized businesses, the proportion of medium-sized businesses in the relevant industry are provided in the column labelled '50+'.

181. The ONS source for the data does not provide a further breakdown of categories for businesses with over 250 employees. It is therefore not possible to distinguish between medium-sized and large businesses using the 50-499 FTE employees categorisation of medium-sized businesses.

Table 1: Employee sizebands in relevant industries¹⁴⁹

Category (per [source])	Employment Size Band								Total	<50	<250	50+
	0-4	5-9	10-19	20-49	50-99	100-249	250+					
1011 : Processing and preserving of meat	190	55	30	40	30	15	15	375	84.0 %	96.0%	16.0%	

145 Structure of the agricultural industry in England and the UK at June - GOV.UK (www.gov.uk)

146 2014 Farm Business Survey

147 Office for National Statistics (ONS)

148 Medium sized business regulatory exemption assessment: supplementary guidance - GOV.UK (www.gov.uk)

149

<https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/ukbusinessactivitysizeandlocation>

1012 : Processing and preserving of poultry meat	35	10	5	15	10	10	10	95	68.4 %	89.5%	31.6%
1013 : Production of meat and poultry meat products	230	95	80	80	30	20	20	555	87.4 %	96.4%	12.6%
4617 : Agents involved in the sale of food; beverages and tobacco	1,075	140	65	30	10	0	0	1,320	99.2 %	100.0%	0.8%
4711 : Retail sale in non-specialised stores with food; beverages or tobacco predominating	23,080	6,560	2,140	715	125	45	50	32,715	99.3 %	99.8%	0.7%
4722 : Retail sale of meat and meat products in specialised stores	3,280	1,605	490	175	25	5	0	5,580	99.5 %	100.0%	0.5%
Sum	27,890	8,465	2,810	1,055	230	95	95	40,640	99.0 %	99.8%	1.0%

10 Wider impacts

10.1 Equalities assessment

182. The public sector equality duty set out in the Equality Act (2010)¹⁵⁰ and equivalent legislation in Northern Ireland require that the UK government, the Scottish Government, Welsh Government and the Northern Ireland Executive have due regard to the need to:

- a. eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act;
- b. advance equality of opportunity between people who share a protected characteristic and those who do not;
- c. foster good relations between people who share a protected characteristic and those who do not.

183. In developing these policy options, we have taken into account this equality duty¹⁵¹^[OBJ]. We are seeking further information through consultation on the potential impacts of this policy in order to inform this equalities assessment.

10.1.1 Low-income consumers

184. In a context of debate around food security, cost of living, and changing trade relations, reform of the food system is necessary to deliver value to UK citizens as consumers, aligned with the values of UK citizens.

¹⁵⁰ [Equality Act 2010 \(legislation.gov.uk\)](http://legislation.gov.uk)

¹⁵¹ More detail on the equality duty in: [Public sector: quick start guide to the public sector Equality Duty - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

185. Although socioeconomic status is not a protected characteristic, the current inflationary pressures highlight the need for policymakers to consider the impacts of reform on low-income consumers. Over the past two years, high inflation connected to supply chain issues and other economic stresses has put pressure on UK households. Inflation topped 11% in 2022¹⁵², and in May 2022, over 90% of food banks reported an increase in the need for their services¹⁵³. Against this backdrop, we wanted to explore the potential impact of labelling on low-income consumers.

186. We have identified two possible impacts on low-income consumers, concerning the availability of the lowest welfare products and the impact of labelling reform on food prices. We do not believe that these impacts will be significant but, as detailed below, we will continue to test our assumptions in partnership with stakeholders. To note, if the UK government, the Scottish Government, Welsh Government and the Northern Ireland Executive choose to proceed with labelling based on the outcome of this consultation, the policy timeline means that labelling requirements would not come into effect until 2027 at the earliest – by which time the current inflationary pressures are expected to have likely largely abated.

187. Labelling provides information for consumers; it does not restrict choice. The proposed tiered label allows flexibility for consumers to make decisions that align with their values and financial position at the time of purchase. We assume that retailers for whom animal welfare is a core part of their brand strategy will respond to labelling by shifting their product ranges towards the higher label tiers. In this sense, lower welfare products may be less available to consumers. However, we expect that retailers whose target market is lower-income consumers will continue to stock lower tier products, optimising for lowest prices and therefore lowest production costs. Consumers who purchase animal products based purely on price will still be able to find and purchase these products, since labelling responds to market demand.

188. As discussed throughout this impact assessment, the costs associated with labelling are mostly one-off and do not impose significant cost burden on businesses. Through policy design decisions, such as aligning the phase-in of a label with business cycles, we have sought to minimise costs to businesses of labelling. We will continue to work with industry to further reduce the burden of any labelling reforms and minimise any pass-through costs for consumers.

10.2 Impact on competition

189. A key aim of welfare labelling to ensure a fairer distribution of costs across the supply chain. Currently, farmers receive less than 10% of the value of their produce¹⁵⁴. In contrast, retailers posted significant profits in 2022¹⁵⁵. Mandatory transparency can stimulate market competition, and has the potential to drive economic growth and benefit society.

190. The Competition and Markets Authority’s guidance for policymakers¹⁵⁶ sets out four key questions on assessing a policy’s impacts on competition. The table below discusses these questions.

Question	Assessment
Does the proposal directly or indirectly increase the number or range of suppliers?	Labelling does not explicitly impact the number of businesses that can operate in the market. By introducing tiers, labelling allows a greater range of suppliers to capture the market premium associated with animal welfare. This may indirectly increase the number and range of suppliers.
Does the proposal remove restrictions on the ability of suppliers to compete?	Currently, the piecemeal and poorly understood landscape of welfare claims on food products restricts the ability of suppliers to compete. By simplifying and standardising information on packs,

152 [Consumer price inflation, UK - Office for National Statistics](#)

153 [Food Banks in the UK - House of Commons Library \(parliament.uk\)](#)

154 [Unpicking food prices: Where does your food pound go, and why do farmers get so little? | Sustain \(sustainweb.org\)](#)

155 <https://www.sustainweb.org/news/may22-millions-facing-food-poverty-as-supermarkets-announce-record-profits/>

156 [Competition impact assessment: guidelines for policymakers - GOV.UK \(www.gov.uk\)](#)

	<p>mandatory labelling makes it easier for suppliers to compete based on their production standards.</p> <p>To support innovation in the farming sector, the draft production standards (see Annex B of the consultation) have focused on a smaller suite of metrics than an average assurance scheme. The shortlist of metrics aims to ensure good welfare while allowing producers the flexibility to innovate as the evidence on farm animal welfare develops.</p>
Does the proposal increase suppliers' incentives to compete?	Mandatory transparency will incentivise businesses to compete.
Does the proposal allow consumers to make more informed choices?	A core objective of labelling is to make it easier for consumers to choose products that align with their values.

11 Summary of potential trade implications

191. Since labelling would be mandatory for imported as well as domestic products, there will be implications for international producers exporting to the UK. In developing these proposals, we have considered World Trade Organization (WTO) principles on non-tariff barriers. To meet our international obligations, we will ensure that our proposed mandatory animal welfare labelling reforms avoid discrimination against non-domestic products. Decisions around final policy design will also seek to minimise unnecessary burdens on trade flow, for example by establishing mechanisms for higher welfare imported products to be labelled as such, and a labelling option for products that have not had their welfare level certified.
192. Method of production labelling is a soft lever, in that it does not prevent any product from around the world being sold in the UK. Labelling is instead used to provide reassurance to consumers about the welfare provenance of both domestic and imported products they purchase and allows them to choose products that align with their values.
193. Other international parties are exploring similar proposals. For example, the European Union committed as part of its Farm to Fork Strategy to consider options for animal welfare labelling to better transmit value through the food chain^[OBJ].
194. In this impact assessment, we have assumed that mandatory labelling would lead to a decrease in the import of products which do not meet UK baseline welfare standards. At the other end of the spectrum, there may be opportunities for international producers to increase their exports of higher welfare products to the UK, in response to market demand.

Label design

195. International producers will be able to access all tiers in the method of production label.
196. We have explored a number of possible approaches to ensure that international producers with higher production standards can be recognised as such. We have reviewed existing precedents including the mandatory labelling of shell eggs, the Swiss model of labelling eggs and egg-based products, and organics labelling.
197. We propose that food business operators (FBOs) would be responsible for ensuring the accuracy of the labelling applied to their products, and they would need to be able to provide documentary evidence demonstrating that the product has been produced in a manner consistent with the standards associated with that tier. FBOs could meet this responsibility by sourcing from international producers who are members of farm assurance schemes operating overseas which meet a minimum set of criteria including: independent ISO 17065 accreditation, a minimum of one farm inspection annually, and requirements for assessor competence. FBOs could also meet their responsibility by

demonstrating that a product originates from a country whose baseline legislation meets the standards for a certain tier.

198. If a food business operator cannot demonstrate that a product has been produced to one of the top four tiers, they would need to apply the lowest-tier label to the product, indicating it has not been produced to any particular production standards– similar to current labelling of uncertified shell eggs as “non-UK standard”.
199. To streamline the process for international producers, we propose that the label can be affixed as a sticker after importation.
200. The draft production standards (see Annex B of the accompanying consultation) are underpinned by evidence and insights from animal welfare science. We will periodically review the standards for the label so these can be revised as the field develops.

Northern Ireland

201. We intend to introduce method of production labelling reforms, if taken forwards, across the UK.
202. As such, any labelling reforms will be designed to ensure that they work alongside relevant food labelling requirements that apply in Northern Ireland.

World Trade Organisation compatibility

203. The mandatory method of production labelling scheme will be designed and implemented in a manner that complies with relevant World Trade Organization (WTO) rules. It will be designed to avoid discriminating against non-domestic products and will not be more trade-restrictive than necessary¹⁵⁷. The label requirements would be mandatory and so would apply to all products in scope, both domestic and imported, that are sold to UK consumers. We are proposing to include a process so that production standards overseas, corresponding to the five proposed tiers, would be equally recognised in the label where evidence is provided that the requirements of one of the top four tiers have been met.
204. The EU’s 2004 regulations introducing mandatory method of production labelling for shell eggs, as well as the similar 2013 regulations for fish products, were introduced without WTO challenge. The same is true of Switzerland’s mandatory labelling based on method of production of imported rabbit meat and eggs in Switzerland. More recently, Germany notified the WTO of their proposed animal husbandry label¹⁵⁸ and did not receive any comments or challenge.

12 Monitoring and evaluation

205. As set out in the summary of responses to the call for evidence¹⁵⁹, a core guiding principle for our policy proposal is that initial labelling reforms will prioritise sectors with existing measures and relatively broad agreement on welfare standards and build on those where possible. Labelling reforms would only be considered for other products and species if initial reforms were deemed successful at stimulating market demand for higher welfare products. For this reason, strong monitoring and evaluation are crucial.
206. Plans for monitoring and evaluation of welfare labelling are in development. The detailed methodology for this evaluation will be determined through an initial scoping phase, and will draw on relevant guidance such as the Magenta Book¹⁶⁰. It is likely that the monitoring and evaluation programme will incorporate process, impact, and value for money evaluations.

157 See further discussion in [Ghislain \(2021\)](#)

158 [G/TBT/N/DEU/18 \(wto.org\)](#)

159 [Summary of responses to the call for evidence on labelling for animal welfare \(publishing.service.gov.uk\)](#)

160 [The Magenta Book - GOV.UK \(www.gov.uk\)](#)

207. As part of policy evaluation, we will engage with key stakeholders to assess the policy and identify any disbenefits or unintended consequences. Key questions for analysis may include:
- impacts on industry sourcing practices (for example, through assessing retail animal welfare policies)
 - profits along the supply chain (for example, based on changes in farmgate/processor/retailer prices)
 - the availability, accessibility and affordability of higher welfare products (for example, through retail store checks)
 - consumer understanding and purchasing practices around animal welfare (for example, through focus groups, surveys, and purchasing panels)
208. The effectiveness of the policy will be assessed using a range of data, including the market share of higher welfare products in scope of the policy.

13 Annex 1: Case studies

209. Anticipating likely behavioural changes in response to this policy is necessarily speculative, and further complicated by commercial sensitivities that discourage information sharing.
210. Evidence from a number of case studies underpins our assessment of likely behaviour changes in response to the potential introduction of mandatory labelling. A key case study is the mandatory labelling of shell eggs in the European Union, which oversaw a sharp increase in production and demand for higher welfare shell eggs. (further details in 14.1) Alongside this case study, we draw on evidence from international assurance schemes linked to animal welfare, and controlled experiments on other food information such as nutrition labels. Several of these case studies are discussed below.
211. Although the examples in this section provide an indication of the potential magnitude of change, the overall substitution in response to the labelling reforms proposed in this policy is likely to be highly context specific. Therefore, it remains difficult to put firm estimates on the substitution proportion. Accordingly, we assume an illustrative central estimate of 10% for the substitution proportion – that is, 10% of retail baseline welfare pork and poultry sales would be substituted towards higher welfare alternatives. We have selected a conservative central estimate due to the high level of uncertainty. Our lower and upper bounds are 5% and 30% respectively. These will be tested further during the consultation process.
212. The extent to which labelling leads to behavioural change is a risk for two of our three policy objectives – to support producers and improve animal welfare. However, whether or not consumers and industry change their behaviour in response to labelling, better availability of information will deliver on our core policy objective of empowering consumers to make choices in line with their values.

13.1 Mandatory shell egg labelling

213. Legislation surrounding transparency on shell egg labelling was incrementally introduced in the European Union during the 1990s and 2000s. The most significant piece of legislation came into force in 2004, which required all shell eggs to be marked with the method of production. In the UK, the market share of free range shell eggs has risen sharply, from 32% in 2004 to over 60% in

2023¹⁶¹. This shift towards higher welfare systems was replicated across the EU, although the magnitude of the shift varies by country¹⁶².

214. Clear labelling is a necessary precondition for consumer choice, but a number of additional factors likely contributed to the magnitude of the shift towards higher welfare systems. For example, celebrity chefs in the UK championed free range through televised campaigns in the 2000s. Increasing awareness of the welfare of chickens likely shaped consumer decisions to opt for higher welfare eggs. Retailers also played a role in driving consumer demand for free range eggs, through on-shelf placement and price promotions¹⁶³. The position of retailers as bridge between producers and consumers means that their decisions affect both supply and demand, amplifying their impact¹⁶⁴.
215. Comparing the market share of higher welfare shell eggs to other products indicates that mandatory labelling may be uniquely able to unlock market demand. Similar method of production definitions were introduced for unprocessed poultry meat¹⁶⁵, but uptake of the defined terms has been relatively low and the market share of higher welfare meat chicken has remained at around 5% – despite consumer interest in their welfare¹⁶⁶ and celebrity campaigns¹⁶⁷. Similarly, the free range market for food service and egg products (not subject to mandatory labelling requirements) has remained largely flat - at 22.4% in 2004, and 24% in 2021¹⁶⁸. The difference in market share for these sectors may be linked to decreased consumer willingness to pay compared to shell eggs; however, the magnitude of the difference suggests this is not the only factor at play.
216. The effectiveness of mandatory labelling in particular was asserted in EU legislation, stating that “unambiguous compulsory labelling is the only way of ensuring that the consumer is able to make an informed choice between the various classes of egg.”¹⁶⁹

13.2 Other case studies

217. International labelling schemes such as Beter Leven and Etiquette Bien-Etre Animal suggest the potential magnitude of change, although it is difficult to disaggregate the changes directly caused by labelling from broader shifts in consumer and industry choices.
218. The year after the Dutch label Beter Leven was introduced, Albert Heijn (the largest retailer in the Netherlands, with a market share of over 35%^[169]) pushed its producers for more animal-friendly pork. Today the Beter Leven assurance scheme covers 100% of pigs and meat chickens, and 87% of laying hens produced for the domestic market in the Netherlands^[170].
219. In France, Casino Groupe has committed to only sourcing fresh chicken products that achieve at least a C in the Etiquette Bien-Etre Animal by 2026^{170, 171, 172}. These examples illustrate how an incremental approach in partnership with industry can unlock change at scale.
220. Some limited secondary evidence from controlled experiments, particularly from the case of nutritional labelling, can also provide some useful evidence. For instance, a meta-analysis assessing the impact of food labelling on choices and behaviours found that traffic light labelling “increases the

161 Data via [UK Egg Industry Data | Official Egg Info](#)

162 For example, the market share of higher welfare eggs rose in Germany from 26% in 2003 to 89% in 2013, but 5% to 32% in Italy in the same timespan.

163 Buller & Roe (2014). Available at <https://doi.org/10.1016/j.jrurstud.2013.01.005>

164 [Archive – NFUonline](#)

165 [Poultrymeat Marketing Standards Regulation \(No 543/2008\)](#)

166 Consumer insights received in the call for evidence showed that the welfare of meat chickens is of greatest concern to consumers, with laying hens and pigs coming in second and third.

167 For example, Jamie Oliver’s *Fowl Dinners*, released in 2008.

168 Data via [UK Egg Industry Data | Official Egg Info](#)

169 LexUriServ.do (europa.eu)

170 [Carrefour affiche le niveau de bien-être animal | Groupe Carrefour](#)

171 [Retailers - Red Tractor Consumer](#)

172 [25% of UK poultry supply chain signed up to Better Chicken Commitment: Poultry Network](#)

[SOTCI 22 FINAL.pdf](#) (ctfassets.net)

number of people selecting a healthier option by 29.36%¹⁷³. These studies have the advantage of controlling for external factors, but their context (e.g., in terms of label scope and geography) is less relevant to the policy proposals being considered in this impact assessment.

13.3 European animal welfare labels

<u>Case Study</u>	<u>Name</u>	<u>Country</u>	<u>Species covered by the Welfare label</u>
Case Study 1	Beter Leven: the case of broilers	The Netherlands	Pigs, meat chickens, laying hens, cattle (meat and dairy), calves (meat only), rabbits, turkeys
Case Study 2	Label Rouge: the case of broilers	France	Meat chickens (for this specific case study) Other poultry also.
Case Study 3	Svensk Fågel: the case of broilers	Sweden	Meat chickens and turkeys
Case Study 4	Bedre Dyrevelfærd: the case of pig products	Denmark	Pig, meat chickens and cattle
Case Study 5	Friland: the case of pig products	Denmark	Pigs and Cattle
Case Study 6	ITW: the case of pig products	Denmark	Pigs
Case Study 7	Pro Weideland: the case of dairy milk	Germany	Dairy
Case Study 8	Welfair®: the case of dairy milk	Spain	Beef and dairy cattle, sheep and goats, pigs, laying hens and meat chickens, turkeys, quails and rabbits

14 Annex 2: Evidence and label format

221. As set out above, we propose a five-tiered label, and are seeking views on any accompanying terminology. Evidence and consumer insights received through the call for evidence suggest that this label format is best able to deliver on the three policy objectives of empowering consumers, supporting farmers, and improving animal welfare. This label format was also selected as the preferred option by the majority of respondents (65%) to the call for evidence.

222. Consumer insights received through the call for evidence pointed to the benefits of a simple modular option with additionality. This allows shoppers to select the option that best suits their values and their wallets. 68% of consumers surveyed felt that levels of standards would allow them to make an easier choice when shopping¹⁷⁴. These consumer insights are supported by other evidence

173 [Cecchini & Warin \(2015\)](#)

174 From a sample of 1,504 shoppers.

received, which suggested that, by eclipsing the intermediate stages, binary labels can lead to market failures¹⁷⁵. Multi-level labels can more effectively support consumers to purchase products in line with their values, as more differentiation allows consumers a greater range of choices that align with the specific trade-offs they wish to make (for example, around price versus welfare standard)¹⁷⁶. One study suggests that a multi-level label is twice as effective at improving animal welfare than a binary label¹⁷⁷.

223. The consumer insights suggested that the clearest message for a label combines words with symbols that provide a clear ranking. Consumers felt that a broader welfare message was preferable to reference to a specific welfare metric; terms like “organic” and “free range” were easily understood. Other evidence submitted corroborated these insights: 77% of consumers indicated that method of production labels specifically would increase trust in a product, and a petition signed by 84,000 UK consumers called specifically for method of production labelling. We also received evidence pointing to the importance of incorporating an image as well as text and symbols¹⁷⁸, and of using universally understood protocols (for example, colour schemes or alphabetisation)¹⁷⁹.
224. In addition to these consumer benefits, the proposed label format aims to benefit producers. A greater number of tiers makes it easier for producers to be recognised for incremental improvements. Along these lines, the conclusions of the 2021 EU subgroup on animal welfare labelling¹⁸⁰ suggest that a tiered label is preferable as it can better accommodate existing standards. Given the number of existing assurance schemes and wide range of production systems operating in the UK, a tiered approach is more appropriate than a binary.
225. We are planning further work with social researchers to assess in more detail consumer responses to the proposed label. Additionally, we are seeking views and evidence in the consultation on the proposed label format, and on the terminology that could accompany the standards.

175 Weinrich & Spiller (2016). Available at [Developing food labelling strategies: Multi-level labelling - ScienceDirect](#)

176 Ibid., and Maestre et al. (2022), available at [Study on animal welfare labelling - Publications Office of the EU \(europa.eu\)](#); and de Jonge & van Trijp (2013), available at <https://link.springer.com/article/10.1007/s10806-012-9426-7>

177 Weinrich & Spiller (2016)

178 See for example:

Ares, G., Giménez, A.N.A., Bruzzone, F., Vidal, L., Antúnez, L. and Maiche, A., 2013. [Consumer visual processing of food labels: results from an eye-tracking study](#). *Journal of Sensory Studies*, 28(2), pp.138-153.

Ares, G., Mawad, F., Giménez, A. and Maiche, A., 2014. [Influence of rational and intuitive thinking styles on food choice: Preliminary evidence from an eye-tracking study with yogurt labels](#). *Food Quality and Preference*, 31, pp.28-37.

Underwood, R.L. and Klein, N.M., 2002. [Packaging as brand communication: effects of product pictures on consumer responses to the package and brand](#). *Journal of Marketing Theory and Practice*, 10(4), pp.58-68.

179 See for example Hawley et al (2012): [The science on front-of-package food labels | Public Health Nutrition | Cambridge Core](#); Brazil & Caulfield (2017), available at <https://www.sciencedirect.com/science/article/abs/pii/S2214629617301226>;

Rondoni & Grasso (2021), available at <https://www.sciencedirect.com/science/article/abs/pii/S0959652621012506>; and Heinzle & Wustenhagen (2010), available at https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Heinzle%2C+S.%2C+W%C3%BCstehagen%2C+R.%2C+2010.+Disimproving+the+European+Energy+Label%27s+Value+for+Consumers%3F&btnG=

180 Available at https://food.ec.europa.eu/system/files/2021-06/aw_platform_plat-conc_awl-subgroup-conclusion.pdf