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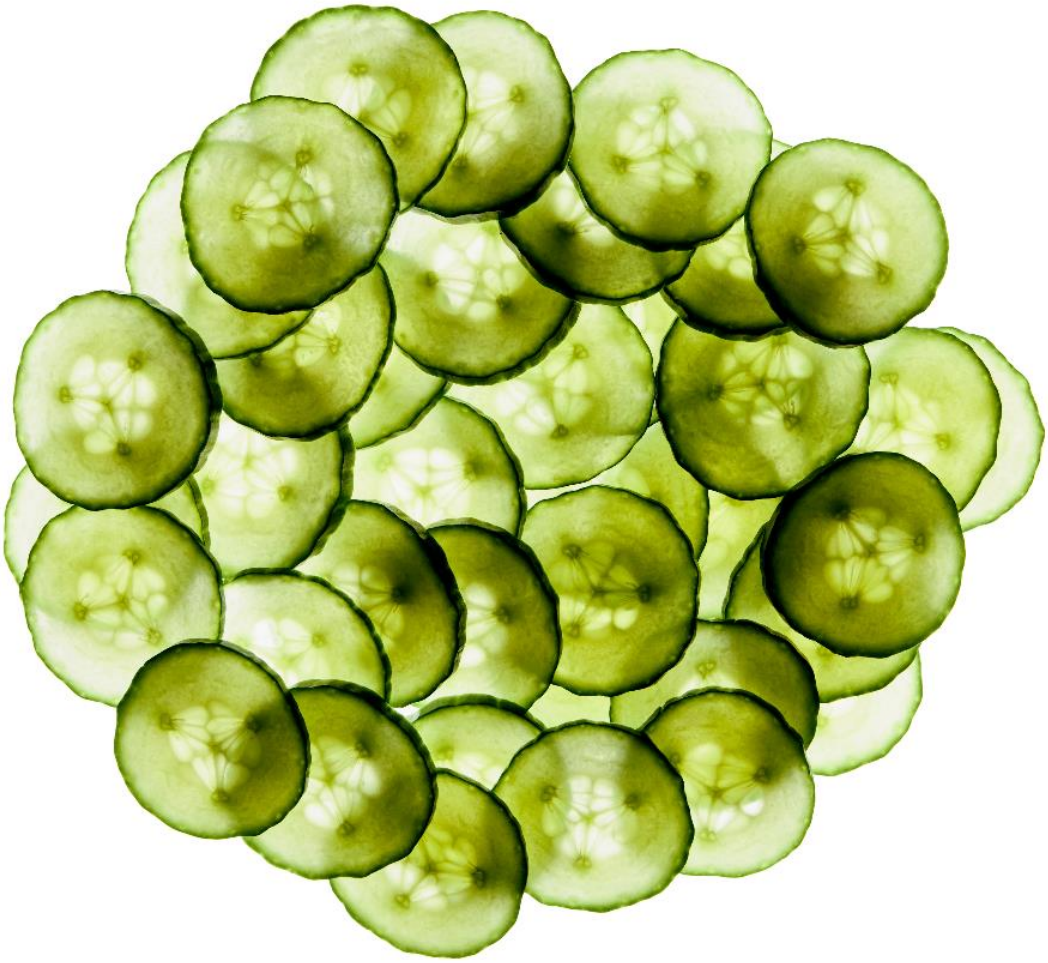

Cost benefit analysis for the implementation of a mandatory domestic organic standard

Department of Agriculture, Water and the Environment

March 2021

Deloitte Access Economics

Contents

Glossary

Acronym	Full name
ABARES	Australian Bureau of Agricultural and Resource Economics
ACCC	Australian Competition and Consumer Commission
ACL	Australian Consumer Law
AS 6000	Australian Standard for Organic and Biodynamic Products
ATO	Australian Tax Office
BCR	Benefit cost ratio
DAWE	Department of Agriculture, Water and the Environment
FSANZ	Food Standards Australia New Zealand
NPV	Net present value
RIS	Regulatory impact statement

Executive summary

To support the work of the Organics Industry Advisory Group (the group), the Department of Agriculture, Water and the Environment (the Department) has engaged Deloitte Access Economics to undertake a desktop cost benefit analysis for the implementation of a mandatory domestic organic standard. To support the group's deliberations on how a mandatory domestic organic standard could be implemented, it was agreed at the 5 March 2021 meeting that a consultant would be engaged to assess the three key implementation mechanisms: Australian Consumer Law, Food Standards Australia New Zealand and new standalone Commonwealth legislation.

At present, organic products intended for the domestic market are not required to be certified or comply with a particular standard to be labelled as 'organic', including the voluntary Australian Standard for Organic and Biodynamic Products (AS 6000). However, organic producers which seek to export their goods overseas are required to obtain certification from an approved organisation in Australia under the National Standard for Organic and Bio-Dynamic Produce (National Standard). The current approach has resulted in a dual system, where products intended for export, and products intended for domestic consumption (including imports), are subject to different standards and regulatory regimes.

The organics industry has sought a mandatory domestic organic standard to promote consistency and assist in unifying the approach across the industry. A unified approach will increase the trust and recognition of Australian organic produce, which may lead to associated benefits to consumers, producers and government. At the same time, establishing a mandatory domestic standard will result in implementation and operational costs, and could increase the regulatory burden for some domestic producers.

In this study, the **base case** is defined as 'business as usual' with no change to the current regulatory system, meaning that the domestic organic industry will not be subject to a mandatory standard. Compliance with the National Standard or AS 6000 for producers of organic food for the domestic market will continue to be optional. Those producers that currently opt for certification for domestic purposes will be assumed to continue to do so. The base case assumes that the size value of the Australian organics market continues to grow consistent with historical conditions and future expectations.

Three key mechanisms are considered for implementation of the mandatory domestic organic standard:

Option 1: via an Information Standard incorporated in the Australian Consumer Law (ACL), enforced jointly by the Australian Competition and Consumer Commission (ACCC) and state and territory consumer affairs regulators:

- **Option 1a:** through a mandatory certification mechanism (though no compulsory logo use)
- **Option 1b:** without mandatory certification.

Option 2: via the Australia New Zealand Food Standards Code developed by Food Standards Australia New Zealand (FSANZ) and enforced by state and territory authorities. This option would not require mandatory certification of organic businesses, and would not apply to non-food operators.

Option 3: via new Commonwealth legislation, enforced through a new Commonwealth regime:

- **Option 3a:** with a mandatory certification mechanism (though no compulsory logo use)
- **Option 3b:** without mandatory certification.

The following table summarises the headline results in 2020-21 present value terms and incremental to the base case. It is noted that this cost benefit analysis is based on a desktop review of currently available information and that in some cases, assumptions have been necessary to address data gaps. Further evidence would assist in refining the estimates presented.

The results show that of the five project options considered, all but Options 1a and 2 have a BCR of less than 1. Options 3a and 3b result in negative NPVs of $24.3 million and $31.3 million respectively. Option 2 is the preferred option in terms of both the BCR (1.9) and net benefits ($6.3 million) and has both the lowest benefits and lowest costs (by far) of all the options.

The benefits of Option 2 are largely contingent on the assumption that there would be strong compliance and some increased sales due to greater consumer confidence and trust in the absence of certification, together with significantly lower government and business costs. If this option were to proceed, it is recommended that the lower cost base is thoroughly tested with government and industry. If the costs of this option were $5.5 million higher in present value terms over 10 years - for example if additional funding were to be provided for enforcement - then Option 1a would have a higher BCR.

The non-certification project options (Option 1b, Option 2 and Option 3b) have much smaller overall benefits relative to the other options. This is primarily due to the assumption that without mandatory certification, consumer confidence would take longer to build, and therefore so will any associated price premium. Given the overall significance of this benefit in all options, it is recommended that further research and testing is undertaken as to the assumptions underpinning this calculation, such as a specific consumer survey targeting willingness to pay under all specified options, and in particular those without certification.

Table i: Cost benefit analysis results, 2021-22 to 2030-31 (NPV $m)

	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Costs					
Increased regulatory burden and compliance costs for domestic producers	51.9	-	-	47.2	-
Transition costs for domestic producers	0.3	0.3	0.3	0.3	0.3
Implementing and enforcing a mandatory standard	14.3	12.9	6.3	42.3	40.9
Maintaining a mandatory standard	3.9	3.9	0.4	3.9	3.9
Benefits					
Reduction in regulatory burden for exporting organic producers	1.4	1.4	1.4	1.4	1.4
Increased sales value due to greater consumer confidence for organic producers	69.6	13.5	11.7	63.3	12.3
Lower certification costs for existing certified producers	4.5	-	-	4.5	-
Total					
Costs	70.3	17.1	6.9	93.6	45.0
Benefits	75.6	15.0	13.2	69.3	13.8
NPV	5.2	– 2.1	6.3	– 24.3	– 31.3
BCR	**1.07**	**0.88**	**1.91**	**0.74**	**0.31**

Source: Deloitte Access Economics calculations.

Some of the costs of a mandatory domestic organic standard are borne by government, whereas others are borne by industry. In contrast, the benefits of the scheme largely accrue to industry and consumers. The division between these two categories are shown in the tables below.

Table ii: Costs and benefits, 2021-22 to 2030-21, private (NPV $m)

Category	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Private (industry and consumer) costs	– 52.2	– 0.3	– 0.3	– 47.5	– 0.3
Private (industry and consumer) benefits	75.6	15.0	13.2	69.3	13.8
NPV	**23.4**	**14.7**	**12.9**	**21.8**	**13.5**

Source: Deloitte Access Economics calculations.

Table iii: Costs and benefits, 2021-22 to 2030-21, public (NPV $m)

Category	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Public (government) costs	– 18.2	– 16.8	– 6.6	– 46.2	– 44.8
Public (government) benefits	-	-	-	-	-
NPV	**– 18.2**	**– 16.8**	**– 6.6**	**– 46.2**	**– 44.8**

Source: Deloitte Access Economics calculations.

Deloitte Access Economics consulted with the Organics Industry Advisory Group in this project, and considered the Group's views when preparing this final report. Deloitte Access Economics agreed with some of the points made by the Group, and a number of assumptions and inputs to the cost benefit analysis were amended as a result of the Group's input.

However, following presentation of the report, the Organics Industry Advisory Group has written expressing what in its view are unresolved concerns in relation to certain data, methodology and assumptions adopted in this report. These concerns are summarised in Appendix A.

Deloitte Access Economics

1 Background

The Australian organic industry was estimated to produce goods worth $2.6 billion in 2018, approximately double its market value in 2012.[i] Despite its growing role in Australia's agricultural landscape, and the price premium often charged for organic goods, the use of the term 'organic' is not regulated via a standard for domestic sales. The organic industry has requested the development and implementation of a mandatory domestic standard to address this matter.

1.1 Current regulation of organic producers and processors in Australia

The regulation of organic goods in Australia is achieved via a co-regulatory approach with industry.

1.1.1 Organic goods for domestic consumption

At present, organic products intended for the domestic market are not required to be certified or comply with a particular standard to be labelled as 'organic', including the voluntary Australian Standard for Organic and Biodynamic Products (AS 6000). Nevertheless, producers and processors ('producers') which misuse the term 'organic' risk prosecution by the Australian Competition and Consumer Commission (ACCC) for misleading and deceptive conduct under the Australian Consumer Law (ACL) as set out in the *Competition and Consumer Act 2010* (Cth). In effect, producers do not necessarily need to meet the requirements of AS 6000 to label their products as 'organic' in Australia, provided those claims can be substantiated.[ii]

However, very few false organic claims have been successfully proven or addressed. The ACCC most recently issued three infringement notices to Dreamz Pty Ltd in mid-2018.[iii] As noted by ACCC Deputy Chair, Mick Keogh in 2019 at the International Farm Management Association Congress:

> *Allegations of false claims about organic status, for example, are quite difficult to take action on, as even very detailed analytical testing may not provide conclusive proof, and there are a multiplicity of different standards for organic farming. It is also the case that a farm does not need to have organic certification in order to be able to claim organic status in domestic markets.*[iv]

Despite there being no mandatory requirement for domestic producers to become certified by a recognised body, some producers choose to do so. Surveys conducted by peak body Australian Organic Limited (Australian Organic) suggest that certification marks are influential on consumer purchasing decisions, holding all else equal.[v]

1.1.2 Exported organic goods

Organic producers which seek to export their goods are required to obtain certification from an approved organisation in Australia under the National Standard for Organic and Bio-Dynamic Produce (National Standard). This requirement is enforced under the *Export Control (Organic Produce Certification) Orders* (Cth) and *Export Control Act 1982* (Cth). Certifiers are assessed and approved by the Department of Agriculture, Water and the Environment (the Department), who are then able to assess producers' compliance with the National Standard. There are six approved certifying bodies in Australia that certify to the National Standard. Some bodies have their own standard (equivalent to the National Standard) and all have their own organic certification labels, which may only be used if the certifying body has inspected and assessed the organic producer's operations. Fees and levies are charged by certifiers for this service.

Certification under the National Standard is in addition to any certification requirements for countries with which Australia does not have equivalence arrangements (i.e. where Australian standards are deemed not to meet the importing country's requirements). As a result, some organic producers may be certified to Australian standards as well as to standards in export markets, such as those in the United States, European Union, China and Japan.

1.2 The case for change

There is no nationally agreed definition of what constitutes 'organic' products. Producers claiming an organic product must be able to substantiate their organic claim under the ACL, but they do not need to adhere to any specific standard. Consumers wishing to purchase organic products cannot observe or verify whether the label is accurate when purchasing, resulting in an information failure in the market.

Many organic businesses however choose to be certified by an organic certification body to underpin truth in labelling requirements and promote consumer confidence. While organic consumers are becoming increasingly aware of certification logos – an estimated 55 per cent of organic buyers now look for a certification logo, up from 34 per cent in 2012 – many shoppers remain unaware, with only 51 per cent recognising the Australian Organic 'bud' certification mark.[vi] The wide range of certification logos which appear on products alongside other uncertified, but labelled, organic products likely limits the value and trust that consumers place in organic labelling.

The current approach has also resulted in a dual system, where products intended for export, and products intended for domestic consumption (including imports), are subject to different standards and regulatory regimes. This is potentially exacerbated by the lack of a domestic organic standard limiting the possibility of equivalence arrangements with other countries, thus resulting in increased regulatory burden for exporters.

The organics industry has requested the development of a mandatory domestic organic standard to promote consistency and assist in unifying the approach across the industry. A unified approach will increase the trust and recognition of Australian organic produce, which may lead to associated benefits to consumers, producers and government. At the same time, establishing a mandatory domestic standard will result in implementation and operational costs, and could increase the regulatory burden for some domestic producers.

1.3 Purpose and scope of report

To support the work of the Organics Industry Advisory Group (the group), the Department engaged Deloitte Access Economics to undertake a desktop cost benefit analysis for the implementation of a mandatory domestic organic standard. A mandatory domestic organic standard may have some benefits, but is also likely to impose a series of costs on producers. This cost benefit analysis considers these competing factors through three primary prisms: reputation; regulatory burden; and market access.

It is noted that this cost benefit analysis is based on a desktop review of currently available information and that in some cases, assumptions have been necessary to address data gaps. Further evidence would assist in refining the estimates presented.

The remainder of this report is structured as follows:

- Chapter 2 provides an overview of the methodological approach
- Chapter 3 details and quantifies the potential benefits of implementing a mandatory domestic organic standard
- Chapter 4 outlines and quantifies the potential costs of the scheme
- Chapter 5 summarises the overall results and provides a range of sensitivity tests.

2 Approach

2.1 Methodology

A cost benefit analysis examines all the monetary and non-monetary or intangible costs and benefits of an investment proposal to society, including economic, social, environmental and other outcomes. It is a tool for determining whether or not the societal benefits of an investment are outweighed by the societal costs, and, if so, to what extent.

This cost benefit analysis was undertaken in line with the following government requirements and guidance documents:

- Office of Best Practice Regulation: *Cost-benefit analysis guidance note*
- NSW Treasury: *TPP17-03 NSW Government Guide to Cost Benefit Analysis*.

Undertaking a cost-benefit analysis in accordance with these guidelines involves five key steps.

Step 1: Defining a base case and project case and, as relevant, project delivery options
A cost benefit analysis only considers costs and benefits that can be attributed to the reform in question. The total benefits and costs of a given proposal (the 'project case/s') are compared to those that would have otherwise occurred in the absence of the reform (the 'base case'). Only incremental costs and benefits of project cases are considered, relative to the base case.

In many cases, there are different options for delivering the project. In these circumstances, the costs and benefits of each project option are compared to the base case. The analysis can therefore be a useful tool for ranking options (including the base case) according to the extent to which benefits outweigh costs.

Step 2: Identifying the costs and benefits of the project
All reasonable costs and benefits of the project should be identified, including both tangible and intangible impacts. Common categories of stakeholders affected by a proposal, for which the relevant costs and benefits incurred or accrued should be incorporated, include households or residents, businesses, the environment, government and non-government organisations. This includes governments at the federal, state and local level.

The costs and benefits of this proposal were identified by considering the potential impact of the project on different stakeholders across the supply chain. These costs and benefits were informed by desktop research as well as discussions with the Department and the Organics Industry Advisory Group.

Step 3: Quantifying the time series path of each cost and benefit, wherever possible, or qualitatively acknowledging costs and benefits that cannot be quantified
Typically, a major challenge in cost benefit analysis is quantifying the various costs and benefits. This is largely due to two reasons:

- Firstly, unlike a narrow financial evaluation, cost benefit studies cover a much wider range of impacts, including non-market, environmental and social impacts.
- Secondly, the data required to undertake a proper quantification exercise may not exist, or may not be readily obtainable.

Where such issues arise in this report, Deloitte Access Economics has examined the desktop evidence available and, where appropriate, made reasonable assumptions on the basis of that evidence. Where such information is not available, or it has been considered inappropriate to make such assumptions, the cost or benefit is discussed qualitatively. This ensures that these benefit and cost items are still taken into account in decision-making.

The different types of costs and benefits, and their quantification approach and data sources, are detailed throughout this report. Further evidence could assist in refining the estimates presented.

Step 4: Ascertaining the net present value (NPV) of the time series path for each cost and benefit
As some impacts of a proposal are often immediate (such as the upfront establishment costs), while others tend to occur over longer periods of time (such as the ongoing market benefits), costs and benefits are compared in net present value (NPV) terms. Comparing the impacts that occur over different time periods to arrive at an overall project evaluation requires a method of comparing impacts in the present versus those in the future: a discounted cash-flow analysis. This approach provides an estimate of the net present value of all costs and benefits, and therefore, whether the benefits exceed the costs in present value terms.

The net return (discounted benefit over discounted costs) is expressed in the form of a ratio, referred to as the benefit cost ratio (BCR). A BCR greater than one indicates that net benefits related to the proposal are greater than net costs (or for every $1.00 in costs, a return greater than $1.00 is achieved). The reverse is true for a BCR of less than one.

Step 5: Interpreting and testing the results
The central BCR figure of the cost benefit analysis should be supported by further analysis by way of sensitivity and distributional analysis to guide government decision-making.

Sensitivity analysis shows the sensitivity of results to key assumptions and other factors, which can reasonably be expected to impact the level of costs and benefits. Sensitivity analysis is most useful when there is a meaningful testing of such factors, rather than arbitrary contingencies. However, this depends on the information available. The sensitivity analysis undertaken for this project is presented together with the results.

Distributional analysis is used to understand how a policy impacts different stakeholders, and considers to whom the benefits accrue and by whom the costs are incurred. It is based on the premise that not all agents within the economy will benefit equally from government decisions, and in some cases, depending on the objectives of the decision being made, the allocation of resources within the community can be more, or just as important, as the overall BCR. Where possible, the distributional impacts of this proposal have been noted.

Finally, to support the analysis, all assumptions, data or information sources, and the basis for calculations must be documented. This has been carried out throughout the report.

2.2 Options assessed

The **base case** is defined as 'business as usual' with no change to the current regulatory system, meaning that the domestic organic industry will not be subject to a mandatory standard. Compliance with the National Standard or AS 6000 will continue to be optional. Those operators opting for certification for domestic purposes will be assumed to continue to do so. The base case assumes that the value of the Australian organics market continues to grow consistent with historical conditions and future expectations.

Three key mechanisms are considered for implementation of the organic standard:

Option 1: via an Information Standard incorporated in the ACL, enforced jointly by the ACCC and state and territory consumer affairs regulators:

- **Option 1a:** through a mandatory certification mechanism
- **Option 1b:** without mandatory certification.

Option 2: via the Australia New Zealand Food Standards Code developed by Food Standards Australia New Zealand (FSANZ) and enforced by state and territory authorities. This option would not require mandatory certification of organic businesses, and would not apply to non-food operators.

Option 3: via new Commonwealth legislation, enforced through a new Commonwealth regime:

- **Option 3a:** with a mandatory certification mechanism
- **Option 3b:** without mandatory certification.

These options are detailed further below.

2.2.1 Option 1: Development of an Information Standard incorporated in the ACL and enforced by the ACCC

Under Option 1, a mandatory domestic standard would be implemented via the development of an Information Standard. The Information Standard would be incorporated in the ACL, similar to the Country of Origin Food Labelling Information Standard 2016.

The ACCC would be responsible for compliance and enforcement. This is not dissimilar to the current legal mechanism used to monitor compliance with the ACL, as operators may be in contravention of the ACL if they engage in misleading or deceptive conduct or misrepresent organic claims. However, the mandatory nature of an Information Standard is assumed to lead to greater reporting and enforcement activity.

Under this option, a requirement for certification to the mandatory domestic standard from an approved certifying organisation could aid in compliance and enforcement. This requirement is considered in **Option 1a**, while a system without mandatory certification is considered under **Option 1b.** It is assumed that the mandatory certification model would not require a logo to be placed on organic produce, although this is further explored in Chapter 5 with mandatory logo sensitivities.

2.2.2 Option 2: Amendment to the Australia New Zealand Food Standards Code developed by FSANZ and enforced by state and territory authorities

Under Option 2, a mandatory domestic standard would be incorporated in the Australia New Zealand Food Standards Code. As with the current Code, the domestic organic standard would be enforced by relevant state and territory authorities. While this function would be within current auditing mechanisms monitoring compliance with the Code, the requirement for additional resources will be considered.

Since compliance with the Code is mandatory, no requirement for certification is considered under Option 2, nor is there a certification mechanism.

Clearly, the FSANZ option is limited in its application to food. This option would need to be supplemented with additional regulation to expand its reach to non-food products, such as textiles. In this analysis, it has been assumed that Option 2 would not apply to non-food operators, meaning that different costs and benefits are adjusted accordingly. The proportion of non-food operators has been estimated by considering the number of non-food operators certified by ACO Certification Ltd, at 13.5 per cent of all operators.

2.2.3 Option 3: Development of new Commonwealth legislation enforced via a new Commonwealth regime

Under Option 3, the Commonwealth would enact new legislation requiring organic operators to comply with a defined standard. This would also require a new compliance and enforcement regime, with associated costs.

Given the limitations in Commonwealth legislative powers, there may be gaps in the coverage of this standard. Based on advice from the Department, it is Deloitte Access Economics' understanding that sales within a state (intrastate) between two unincorporated bodies would not be covered under the Commonwealth legislation option. This could reduce the scale of benefits enjoyed under Option 3a and 3b. The scale of this reduction depends on the proportion of organic operators who are unincorporated, and their usual mode of sale.

The other gap, as advised by the Department, is that the legislation would not apply to New Zealand imports. The Department has advised that under the *Agreement between the Government of Australia and the Government of New Zealand concerning a Joint Food Standards System* (the Treaty) and the *Trans-Tasman Mutual Recognition Act 1997* (the Act) it is assumed that the *Food Standards Australia New Zealand Act 1991* will be the sole piece of Commonwealth legislation providing standards governing the labelling of food, its production and its packaging. The objective of the Act is to harmonise food standards between Australia and New Zealand and to provide mutual recognition for each other's goods. If Australia introduces a new scheme it could be

considered inconsistent with the Treaty and the Act. Theoretically, New Zealand organic imports of questionable quality could lead to a poor consumer response to Australian organic produce. However, if New Zealand were to implement its own standard (as is currently underway), this is unlikely to lead to additional costs, thus this has not been considered in this analysis.

Under this option, a requirement for certification to the mandatory domestic standard from an approved certifying organisation could aid in compliance and enforcement. This requirement will be considered as **Option 3a**, while a system without mandatory certification is considered under **Option 3b.** It is assumed that the mandatory certification model would not require a logo to be placed on organic produce, although this is further explored in Chapter 5 with mandatory logo sensitivities.

2.3 Assumptions

It is assumed for all options that the relevant mandatory domestic standard will be identical in all material respects to the National Standard. As a result, it is assumed that exporting operators certified under the National Standard will automatically be certified under the new domestic standard, and that there are no material costs involved in developing a new domestic standard.

For each overarching option, it is assumed that there are only marginal differences in the **nature** of resulting benefits, although any differences in the **size** of benefits are considered if evidence is available. Fundamentally, it is assumed that each implementation option achieves a similar outcome – a mandatory domestic organic standard which applies across the industry. Any additional benefits which relate to the scope of the regulation are out of scope for this report.

Other key assumptions include:

- the number of certified operators (i.e. producers and processors) in the base case is assumed to increase over time in line with IBISWorld forecasts,[vii] with baseline data sourced from the Australian Organic Market Report[viii]
- all costs and benefits are considered over a ten-year timeframe, beginning 2021-22 and ending 2030-31
- all costs and benefits are expressed in real 2020-21 dollars
- a central discount rate of 7 per cent is used for the NPV calculation, as per the Office of Best Practice Regulation's *Cost-benefit analysis guidance note.*

3 Benefits of implementing a mandatory domestic organic standard

3.1 Overview and incidence of benefits

The benefits identified for the implementation of a mandatory domestic organic standard, and the incidence of those benefits, are summarised in Table 3.1. Each benefit is then separately considered in the remainder of this chapter.

It should be noted that while this table provides an overview of the types of benefits attributable to the five project options, there is expected to be some crossover in the beneficiaries throughout the supply chain. In order to account for potential double counting, where benefits have been captured elsewhere, they are quantified in the modelling of the five project options. However, the fact that a benefit may accrue to different actors in the supply chain is noted qualitatively.

Table 3.1: Benefits of implementing a mandatory domestic organic standard

Benefit	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Benefits for producers					
Reduction in regulatory burden for exporting organic operators	✓	✓	✓	✓	✓
Increased export market access for all organic operators*	✓	✓	✓	✓	✓
Increased sales value due to greater consumer confidence for organic operators	✓	✓	✓	✓	✓
Lower certification costs for existing certified operators	✓			✓	
Benefits for consumers					
Increased consumer utility from improved certainty and confidence delivered by mandatory standard*	✓	✓	✓	✓	✓
Benefits for governments					
Reduced cost of equivalence negotiations for governments*	✓	✓	✓	✓	✓

Source: Deloitte Access Economics.

Note: Starred benefits reflect those which are assessed qualitatively either due to data availability or double-counting.

3.2 Benefits for producers

3.2.1 Reduction in regulatory burden for exporting organic operators

While exporting organic operators are required to obtain certification under the National Standard, this certification is not recognised via equivalence arrangements in all countries. As a result, some organic exporters are required to obtain multiple organic certifications from different countries.

One benefit of a domestic standard highlighted by industry is the potential to negotiate equivalence arrangements with other countries, thereby reducing the regulatory burden of maintaining multiple organic certifications. This could assist organic operators to take better advantage of recent free trade agreements negotiated with Australia.

The extent of this benefit is relatively unclear, as advised by the Department based on previous experience negotiating equivalence arrangements. It is unknown whether a mandatory domestic standard would result in equivalence arrangements with key trading partners, given there are a number of other factors at play. This includes country-specific factors (not all countries may seek equivalence arrangements with Australia based on their domestic industry context), as well as potential differences in the recognition of implementation methods (which is itself uncertain, though it has been assumed in this analysis that all implementation methods would be recognised equally in the absence of other evidence). The Department has advised that a domestic standard is not the only factor precluding the negotiation of equivalence arrangements, and that any such arrangements, if they were to be negotiated, would take a number of years to come to fruition. The Department has stated it cannot predict or assign a probability of achieving equivalence with a mandatory standard in place because each export market is unique. It has also advised that there also needs to be an appetite for trading partners to come to the negotiating table; for example, Australia made a submission to China for equivalence several years ago and has not received a response.

As such, the extent to which, if any, benefit would be realised within the ten-year timeframe of this cost benefit analysis is uncertain. The estimation approach therefore acknowledges the potential that this benefit does exist, but that its realisation is dependent on factors outside of the scope of this cost benefit analysis. The potential benefit was estimated by assuming that exporting organic operators with more than one certification (i.e. are certified to an additional standard beyond the National Standard) see an overall 20 per cent reduction in the number of additional international certifications held. Additional international certifications are assumed to cost an average $679 each annually, based upon fee schedules available from four certifying bodies. An additional indirect cost of $900 per certificate is also assumed, based on the minimum reported in a survey undertaken by Australian Organic; the minimum figure was used, noting that some direct and indirect costs for domestic and export certification overlap.

It is assumed that each organic exporter with multiple certificates only holds one additional certificate, while the number of such exporters is based upon an estimate from 2018. This estimate may be further refined through the use of export data held by the Department, as well as estimates directly from certifiers as to the cost (direct and indirect) of holding multiple certificates.

Table 3.2: Reduction in regulatory burden for exporting organic operators, NPV terms

Benefit	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Reduction in regulatory burden for exporting organic operators	$1.4m	$1.4m	$1.4m	$1.4m	$1.4m

Source: Deloitte Access Economics calculations.

This reduction in regulatory burden is quantified by considering the reduction in cost for organic operators. If equivalence arrangements were negotiated, then certifying bodies would also benefit from lower costs – as they would no longer need to be accredited and audited for different countries' standards. However, as these costs are passed on in certification fees, including any reduction in certifiers' costs would double-count this benefit. In addition, there would be further costs imposed on the Department to both negotiate and maintain these arrangements, which would offset some of the overall benefit.

3.2.2 Increased export market access for all organic operators

As set out above, the organics industry has highlighted the potential for greater levels of exports arising from a mandatory domestic scheme due to more equivalence arrangements and the subsequent ability to take advantage of recent free trade agreements negotiated with Australia. The industry has also suggested that more domestic operators may export overseas, while increased access to different markets may also provide benefits.[ix]

However, it is also plausible that any domestic operator which saw export opportunities would already have taken the steps to become certified under the current system – meaning that whether equivalency in itself would lead to higher sales is unclear. In addition, the realisation and timing of this benefit is uncertain – as it requires both the negotiation of equivalence arrangements, and for Australian operators to sell goods to those markets that would not otherwise have been sold.

As such, no overall increase in the level of Australian organic exports is factored into this cost benefit analysis. However, it is recognised that if a domestic standard were to lead to equivalence arrangements, then the consequential increase in export market access could make possible greater sales and benefits for producers.

3.2.3 Increased sales value due to greater consumer confidence for organic operators

A mandatory domestic organic standard may increase consumer confidence in organic produce, thereby leading to increased sales for organic operators selling in the domestic market. Similarly, there may be lower risk of reputational damage as a result of fraudulent claims and poor quality products.

This confidence is evidenced through studies which have found that organic produce attracts different price premiums depending on the certification status. Paull (2008) identified that Australian consumers were willing to pay a 7.9 per cent premium for organic produce (not certified) and a 16.5 per cent premium for certified organic produce.[x] The 2011 OECD survey on Environmental Policy and Individual Change also found that the median Australian was willing to pay 5 per cent extra for fresh fruit and vegetables labelled as organic (16 per cent additional when considering the mean).[xi]

It is assumed that the mandatory domestic organic standard would have no impact on price premiums for organic products which are already certified. It is also assumed that uncertified organic produce is currently marketed as organic and thus already attracts a price premium. Based on the study by Paull (2008), it was assumed that converting uncertified organic produce to certified organic produce would attract an *additional* willingness to pay of 8.6 per cent. This figure therefore only applies to options with mandatory certification.

The additional willingness to pay also only applies to produce sold by *uncertified* organic operators, who can then attract higher prices. The number of uncertified organic operators is a well-known gap in Australian agricultural data.[xii] To approximate the number of uncertified organic operators, Deloitte Access Economics considered a 2014 study undertaken by Veldstra, Alexander and Marshall in a United States. This study found that, despite the mandatory requirement for certification in the United States, some fruit and vegetable producers using organic methods were opting not to certify for a range of reasons. The proportion was estimated to be 71 per cent of producers using any organic practices in the survey.[xiii] This would suggest a relatively high number of uncertified organic producers and processors, assuming the same finding extended beyond fruit and vegetable producers to all organic operators, and in an Australian context. However, as this study was undertaken in the United States where certification is compulsory (with an exemption

for very small operators), it tends to suggest that many producers would continue *not* to certify under a mandatory certification model, though still use organic practices.

Establishing the number of uncertified producers and processors which would participate in an Australian mandatory regime is therefore uncertain. Noting comments from the group that the Veldstra estimates of uncertified producers are likely to be higher than currently occurs in Australia, but in the absence of any firm data, this analysis assumes that the size of the uncertified organic market which would seek to participate in the mandatory scheme would be 50 per cent of the number of certified operators, amounting to 1,953 operators (915 producers and 1,039 processors) in 2018. Note that this figure is also inclusive of any in-conversion or conventional operators who may choose to participate in the scheme. Given its uncertainty, this figure has been sensitivity tested in Chapter 5.

In order to develop an estimate of average sales for uncertified producers, statistics from the Australian Bureau of Agricultural and Resource Economics (ABARES) were utilised,[xiv] assuming that uncertified producers represent Australia's smallest farms and that larger producers are more likely to currently be certified. Cash receipts from ABARES for different agricultural industries were weighted based on the composition of organic production as reported in the *Australian Organic Market Report*, suggesting revenues of $80,124 per producer. The additional willingness to pay was then added to this base figure. It is noted that only producers (rather than processors) were factored into this analysis, due to revenue data availability.

While studies largely focus on willingness to pay for organic produce or for certified organic produce, none consider the specific value of a domestic standard in the absence of a certification scheme. However, it is likely that there would be some additional consumer confidence as a result of the mandatory domestic standard, together with increased awareness as a result of an advertising and education campaign. It has been assumed that this benefit would amount to 25 per cent of the increased sales value seen under a certification option by the fifth year of the scheme operating, as trust builds up gradually over time. This assumption should be further refined, such as through undertaking a specific consumer survey targeting willingness to pay under all specified options, and in particular those without certification.

Overall, organic sales are expected to increase by between $11.7 million and $69.6 million in NPV terms. This benefit is expected to be lower under the Commonwealth legislation scheme than under Option 1. This is because legislation would not apply to intrastate sales between two unincorporated bodies, and so unincorporated operators who only sell locally would not mandatorily need to comply with the standard. While there are no specific estimates as to this proportion, a proxy based on direct-to-consumer sales through farmers markets and farmgate was used. The overall number of uncertified operators was therefore reduced by 9 per cent for Option 3a relative to Option 1a,[xv] leading to fewer producers attracting a price premium.

In practice, the benefit from the introduction of a mandatory national standard will manifest through a combination of higher prices (to reflect increased willingness to pay from existing organics consumers) and greater volumes of organic purchases (associated with increased awareness and confidence in organic products). Both of these contribute to higher consumer and producer surplus, which is the core benefit considered in a cost benefit analysis. At the same time, there are competing factors at play – while increased consumer confidence may encourage greater purchases of organics, any increase in price may lead to consumers purchasing lower quantities of organic goods.

Table 3.3: Increase in sales value due to greater consumer confidence, NPV terms

Benefit	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Increase in sales value due to greater consumer confidence	$69.6m	$13.5m	$11.7m	$63.3m	$12.3m

Source: Deloitte Access Economics calculations.

3.2.4 Lower certification costs for existing certified operators

There is the potential that certification costs will decrease if certification were to become mandatory, as certifiers become more efficient and spread fixed costs over a wider customer base and, potentially, additional certifiers enter the market to service increased demand. Only organic operators who are already certified (or who would become certified, as more operators enter the industry over time in the base case) are considered under this benefit, as they save from lower costs compared to the base case.

The fee schedule for certification to the National Standard is relatively complex and differs by certifier. For simplicity, it is assumed that there would be no change in the levies charged by some certifiers, and that the potential cost saving is reflected by considering the difference between the mean reported certification cost ($1,150) and the lowest reported certification cost ($1,045) based upon fee schedules available from certifying bodies. This saving was then applied to all organic certified operators, under those options with mandatory certification. Actual savings may be higher or lower, depending on the extent to which there is increased certifier efficiency, an increase in the supply of certifiers, and whether these savings are passed onto operators (though certifiers would otherwise benefit if this were not the case). It is possible, if new certifiers do not enter the market, that additional demand for certification may push prices up.

Table 3.4: Lower certification costs for existing certified operators, NPV terms

Benefit	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Lower certification costs for existing certified operators	$4.5m	-	-	$4.5m	-

Source: Deloitte Access Economics calculations.

3.3 Benefits for consumers

3.3.1 Increased consumer utility from improved certainty and confidence delivered by mandatory standard

Consumers may enjoy increased utility from organic products purchased, as they may have more certainty and confidence if a mandatory standard were to be implemented. However, this utility is typically measured through willingness to pay – either in price or quantity terms. As a result, this benefit is already captured when considering increased sales for operators, and so has not been separately quantified.

3.4 Benefits for governments

3.4.1 Reduced cost of equivalence negotiations for governments

If Australia were to introduce a mandatory domestic standard, Australia's standard may be more likely to be recognised under equivalence arrangements with other countries. This could potentially reduce the costs of negotiation for the Australian Government, if other countries recognise that Australia has a domestic organic regulatory scheme. Equally, however, there may be increased resources required in the short-term to negotiate these arrangements. Given the relative uncertainty in both the direction of this cost or benefit, and the likelihood of any such arrangements, this benefit has not been quantified for this analysis.

4 Costs of implementing a mandatory domestic organic standard

4.1 Overview and incidence of costs

The costs of a mandatory domestic organic standard, and the incidence of those costs, are summarised in Table 4.1. Each cost is then considered in the remainder of this chapter.

Table 4.1: Costs of implementing a mandatory domestic organic standard

Cost	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Costs for producers					
Increased regulatory burden and compliance costs for domestic operators	✓			✓	
Transition costs for domestic operators	✓	✓	✓	✓	✓
Costs for consumers					
Increased prices of organic goods due to new regulatory scheme*	✓	✓	✓	✓	✓
Costs for governments					
Implementing a mandatory standard	✓	✓	✓	✓	✓
Enforcing a mandatory standard	✓	✓	✓	✓	✓
Maintaining a mandatory standard	✓	✓	✓	✓	✓
Implementing an education campaign	✓	✓	✓	✓	✓

Source: Deloitte Access Economics.

Note: Starred costs reflect those which are assessed qualitatively either due to data availability or double-counting.

4.2 Costs for producers

4.2.1 Increased regulatory burden and compliance costs for domestic operators

For organic operators selling domestically who are not currently certified, a mandatory domestic standard will impose additional costs, whether in terms of fees, compliance or time.

Under options which require certification, it is assumed that the number of uncertified producers and processors identified earlier (1,953) would be required to obtain certification.

The fees to be paid for this certification are assumed to be equivalent to that paid for certification under the national standard, at the reduced cost outlined in section 3.2.4. This figure was used on the advice of Australian Organic, although it is noted that fees for currently uncertified domestic operators may be lower (or higher) than those currently paid by certified operators.

In addition to the fees paid for certifiers, there are also indirect costs associated with certification, such as the time taken to undertake administrative work or consultant fees. These indirect costs have been estimated by Australian Organic to range between $900 and $6,000 annually, with an average of $2,167, reported via a survey of all certified organic operators.[xvi] The minimum figure has been assumed to apply across the domestic uncertified industry, in the absence of other information, reflecting the assumption that currently uncertified operators are likely to have smaller or less complex operations compared to those already certified for export.

Another potential compliance cost is that incurred to change current labels to include the certification mark. Labelling costs have been sourced from PwC as $6,603 for a 'medium' label change on packaging (used for processors),[xvii] and from Deloitte Access Economics' prior analysis as $1,374 for a 'medium' label change on smaller labels used for fresh fruit and vegetables (used for producers). Options 1a and 3a do not *require* a particular logo to be displayed on newly certified organic products. However, it has been assumed that 50 per cent of producers and processors would *choose* to change their labels and display their new certified status. It is assumed that each producer and processor is required to change one label each, as it is unknown how many products are produced per operator in each category, although it is possible that the relatively high cost would account for multiple labels per business. These changes are assumed to occur over a sufficient timeframe such that no wastage of labels or goods is necessary. The costs contemplated therefore exclude the cost of printing labels, as it has been assumed that new labels would need to be printed during the designated time period.

Both the fees and indirect costs were considered to apply to all uncertified organic operators, based on the same earlier derived estimate. This only applies to options with a mandatory certification scheme. However, these costs are expected to be lower under the Commonwealth legislation scheme. This is because this legislation would not apply to intrastate sales between two unincorporated bodies, and so unincorporated operators who only sell locally would not mandatorily need to comply with the standard. While there are no specific estimates as to this proportion, a proxy based on direct-to-consumer sales through farmers markets and farmgate was used. The overall number of uncertified operators was therefore reduced by 9 per cent for Option 3a.[xviii]

Table 4.2: Increased regulatory burden and compliance costs for domestic operators, NPV terms

Cost	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Certification fees and other indirect costs	$47.0m	-	-	$42.8m	-
Labelling costs	$4.8m	-	-	$4.4m	-

Source: Deloitte Access Economics calculations.

Even without a certification system, some operators may face one-off costs to modify their practices to become compliant with the domestic standard, to the extent they are not already meeting the standard required but are using the organic label. These costs would apply across all options. However, given that there is a lack of information about the current standards of uncertified operators and how they relate to the National Standard, it is not possible to estimate the gap between their standards and those that may be required under a mandatory scheme.

4.2.2 Transition costs for domestic operators

Domestic organic operators who have previously not interacted with the National Standard or AS 6000 may face transition costs if a domestic mandatory standard were implemented. These transition costs reflect the likely time and effort required to read the standard and understand new requirements.

It has been conservatively assumed that the time taken per uncertified producer would be in the order of four hours, multiplied by a minimum wage rate of $19.84 per hour. This cost applies across all options.

Table 4.3: Transition costs for domestic operators, NPV terms

Cost	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Transition costs for uncertified domestic operators	$0.3m	$0.3m	$0.3m	$0.3m	$0.3m

Source: Deloitte Access Economics calculations.

The proposed government incentive program

The Department has advised that it is considering an incentive program to assist operators with the additional costs associated with a mandatory organic standard, with or without certification. It is proposed this incentive program would operate on a on matched funding basis – that is, the Department would effectively provide half of the total amount sought by an applicant, with the remainder to be contributed by the applicant. Funding would be available to assist with any additional compliance or transition costs associated with the mandatory organic standard, for the first four years of the scheme.

From a cost benefit analysis perspective, the effect of such a program is neutral on the final results. Unless the program incentivises new or additional activities to be undertaken, it is merely subsidising activities which would have occurred otherwise – the burden of the cost changes, but the magnitude does not.

With this in mind, costs for government will be higher under options with mandatory certification. The potential cost of the incentive program is shown in the table below.

Table 4.4: Potential cost of government incentive program, NPV terms

Transfer	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Government contribution to incentive program	$26.1m	$0.2m	$0.1m	$23.7m	$0.1m
Industry contribution to incentive program	$26.1m	$0.2m	$0.1m	$23.7m	$0.1m

Source: Deloitte Access Economics calculations.

4.3 Costs for consumers

4.3.1 Increased prices of organic goods due to new regulatory scheme

Consumers may face increased price of organic goods, as uncertified domestic operators seek to pass on the costs of the new regulatory regime. However, this cost has already been factored in as a cost borne by those operators, and as such, has not been separately quantified.

4.4 Costs for governments

4.4.1 Implementing a mandatory standard

All options will require some level of cost borne by government in order to implement the new standard and scheme. It is reasonable to assume that this cost will differ across options, depending on the resource effort involved.

The Department has provided cost estimates for Option 3 (Commonwealth legislation), which are based upon using the new Inspector General of Water Compliance as a case study. Under this option, establishing a compliance body is estimated to cost $6.6 million, assumed to be distributed over two years.

No comparable estimates were available at the time of drafting for Option 1 (ACL) or Option 2 (FSANZ). Based on the information available from the Decision Regulatory Impact Statement (RIS) regarding the Information Standard for Country of Origin Labelling,[xix] it is understood that the ACCC was not anticipated to face a specific implementation cost, but rather increased costs relating to enforcement. However, there is likely to be some small amount of additional resourcing required during the transition. It is therefore assumed for this analysis that there is once-off $500,000 implementation cost in Option 1.

Regarding Option 2, it is understood that FSANZ would develop a new domestic standard for introduction into the Food Standards Code. Normally, FSANZ would charge businesses for the resource effort required to develop a new standard on a cost-recovered basis. The development of a new standard is considered a 'major procedure' under the FSANZ Application Handbook.[xx] While no business would bear this cost in Option 2, and the Department would not be charged these fees, the cost recovery charges provide an indication of the effort required. The Handbook provides that the minimum cost would be $195,400, plus additional charges for each person-hour required to undertake the procedure exceeding 680 variable hours.

A comparable case study may therefore be used to estimate the implementation cost for Option 2. While FSANZ undertakes few major procedures each year, detail was available on a proposal to develop a primary production and processing standard for meat and meat products. This proposal was estimated to require 7,070 hours in total.[xxi] If a similar number of hours were required to implement a domestic organic standard, the total cost would be $923,860, assuming all work was undertaken by resources at the APS 6 level. This figure could be considered a minimum cost, given that an organic standard will have a broader scope of application, and therefore would likely require more extensive work.

4.4.2 Enforcing a mandatory standard

Further costs will be incurred by government to enforce the standard over the longer term. These costs have been estimated by the Department as the following, based on the aforementioned case studies:

- Option 1: $1 million per year for ACCC compliance, plus an additional $200,000 per annum to manage a private certification scheme in Option 1a only
- Option 3: $4.2 million per year for enforcement through a new Commonwealth body, plus an additional $200,000 per annum to manage a private certification scheme in Option 3a only.

Based on advice from the Department, it is assumed that there is no additional ongoing cost for enforcement in Option 2. This is because changes to the Code do not ordinarily result in an increase in resources for state and territory enforcement bodies, so the assumed cost is nil. There is also no precedent for the Australian Government to provide additional funding to states or territories for this purpose. Rather, the Implementation Subcommittee of Food Regulation (ISFR) – which is a subcommittee where Australian and New Zealand food regulators meet – determines

common approaches to implementing food standards which are then agreed and produced as guidelines. However, if there were to be new resources allocated for the purpose of a domestic standard, this would need to be factored into the calculations.

While the cost of maintaining a private certification scheme has been factored into Options 1a and 3a, it is also possible that the Department would face increased costs as a result of maintaining new equivalence arrangements, which are currently paid for by certifiers under private arrangements and passed onto operators. This cost has not been included in this cost benefit analysis due to a lack of data and certainty as to equivalence arrangements. However, it is noted that if this cost were borne by the Department, it would likely be offset by lower costs for certifiers, as these arrangements are currently maintained and paid for by multiple certifiers, meaning the overall cost is greater compared to if these payments were incurred once.

In addition, although Options 1a and 3a are essentially a co-regulatory model – whereby certifiers regulate operators within the certification system and the government regulates operators outside of the certification system – it is not anticipated by the Department that overall enforcement costs would be lower than for Options 1b and 3b respectively. There are significant costs associated with establishing and maintaining a new compliance function, even with the function sitting within an existing department. Currently, the Department does not have the expertise or resources to regulate a mandatory domestic organic standard and the costs provided by the Department reflect this.

4.4.3 Maintaining a mandatory standard

Another ongoing cost is maintenance of the standard, in order to ensure it is up to date with current expectations. This task is currently undertaken by the Department for the National Standard, however any additional requirements above and beyond this current task should be factored into this cost benefit analysis.

This cost has been provided by the Department as $550,000 annually under both Options 1 and 3. It is assumed under Option 2 that a nominal cost of $50,000 per year is incurred to update the standard. The lower cost under Option 2 is due to the fact that under Options 1 and 3, there is a dedicated set of activities which would be undertaken on an annual basis to maintain the standard, whereas under Option 2, any changes would only occur on an application basis to FSANZ.

4.4.4 Implementing an education campaign

As advised by the Department, each option is assumed to incur an education and awareness campaign at the cost of $6 million, to ensure that consumers and operators alike are aware of the new standard. It was assumed that the costs of this campaign would be distributed over a two-year period.

The following table summarises all costs borne by government under each option in NPV terms. Costs of maintaining a certification scheme are incorporated in enforcement costs.

Table 4.5: Costs for government, NPV terms

Cost	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Implementing and enforcing a mandatory standard	$14.3m	$12.9m	$6.3m	$42.3m	$40.9m
Maintaining a mandatory standard	$3.9m	$3.9m	$0.4m	$3.9m	$3.9m

Source: Deloitte Access Economics calculations, using information provided by the Department.

5 Results and sensitivity testing

5.1 Cost benefit analysis

This chapter presents the results of the evaluation of the costs and benefits of each option. This includes consideration of the quantified costs and benefits for each of the five project options defined in this analysis.

Table 5.1 below outlines the results in 2020-21 present value terms and incremental to the base case. Of the five project options considered, all but Options 1a and 2 have a BCR of less than 1. Options 3a and 3b result in negative NPVs of $24.3 million and $31.3 million respectively, largely due to the high costs of establishing the scheme.

Option 2 is the preferred option in terms of both the BCR (1.9) and net benefits ($6.3 million). However, the benefits of Option 2 are largely contingent on the assumption that there would be strong compliance and increased sales due to greater consumer confidence and trust in the absence of certification, together with significantly lower government and business costs associated with this option. If this option were to proceed, it is recommended that the lower cost base is thoroughly tested with government and industry. If the costs of this option were $5.5 million higher in present value terms over the 10 years - for example if additional funding were to be provided for enforcement - then Option 1a would have the higher BCR.

One of the core inputs used in this analysis is the assumption that without mandatory certification, consumer confidence would take longer to build, and therefore so will any associated price premium. Given the overall significance of this benefit, it is recommended that further research and testing is undertaken as to the assumptions underpinning this calculation.

Deloitte Access Economics consulted with the Organics Industry Advisory Group in this project, and considered the Group's views when preparing this final report. Deloitte Access Economics agreed with some of the points made by the Group, and a number of assumptions and inputs to the cost benefit analysis were amended as a result of the Group's input.

However, following presentation of the report, the Organics Industry Advisory Group has written expressing what are in its view unresolved concerns in relation to certain data, methodology and assumptions adopted in this report. These concerns are summarised in Appendix A.

Table 5.1: Cost benefit analysis results, 2021-22 to 2030-31 ($m 2020-21 NPV)

	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Costs					
Increased regulatory burden and compliance costs for domestic producers	51.9	-	-	47.2	-
Transition costs for domestic producers	0.3	0.3	0.3	0.3	0.3
Implementing and enforcing a mandatory standard	14.3	12.9	6.3	42.3	40.9
Maintaining a mandatory standard	3.9	3.9	0.4	3.9	3.9
Benefits					
Reduction in regulatory burden for exporting organic operators	1.4	1.4	1.4	1.4	1.4
Increased sales value due to greater consumer confidence for organic operators	69.6	13.5	11.7	63.3	12.3
Lower certification costs for existing certified operators	4.5	-	-	4.5	-
Total					
Costs	70.3	17.1	6.9	93.6	45.0
Benefits	75.6	15.0	13.2	69.3	13.8
NPV	5.2	– 2.1	6.3	– 24.3	– 31.3
BCR	**1.07**	**0.88**	**1.91**	**0.74**	**0.31**

Source: Deloitte Access Economics calculations.

Some of the costs of a mandatory domestic organic standard are borne by government, whereas others are borne by industry. In contrast, the benefits of the scheme largely accrue to industry and consumers. The division between these two categories are shown in the tables below.

Table 5.2: Costs and benefits, 2021-22 to 2030-21, private (NPV $m)

Category	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Private (industry and consumer) costs	– 52.2	– 0.3	– 0.3	– 47.5	– 0.3
Private (industry and consumer) benefits	75.6	15.0	13.2	69.3	13.8
NPV	**23.4**	**14.7**	**12.9**	**21.8**	**13.5**

Source: Deloitte Access Economics calculations.

Table 5.3: Costs and benefits, 2021-22 to 2030-21, public (NPV $m)

Category	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Public (government) costs	– 18.2	– 16.8	– 6.6	– 46.2	– 44.8
Public (government) benefits	-	-	-	-	-
NPV	**– 18.2**	**– 16.8**	**– 6.6**	**– 46.2**	**– 44.8**

Source: Deloitte Access Economics calculations.

5.2 Sensitivity analysis

It is important to recognise that this analysis relies on a number of assumptions, in addition to data on the organic industry that is of uncertain quality. For example, a number of assumptions underpin the benefit of increased sales, and in particular the quantum of any price premium (under both certification and non-certification options) as well as the number of uncertified organic producers and processors in Australia.

Due to this uncertainty, variations in certain key assumptions have been tested against the central results presented, including assumptions on the willingness to pay premium for certified produce, the proportion of this benefit that may accrue under non-certification options, and the ratio between the number of certified and uncertified operators in Australia (which also affects other costs and benefits).

Other sensitivities tested include:

- the discount rate
- the average number of labels processors would be required to change if certification was required
- the proportion of operators uncaptured by the Commonwealth scheme, proxied by the proportion of organic sales which are direct-to-consumer

- the reduction in regulatory burden (in percentage terms) for organic exporters currently holding more than one certificate (i.e. one or more in addition to the National Standard)
- the average number of additional certificates held by those organic exporters.

The results of this sensitivity analysis are presented in Table 5.4. The analysis shows that the results are particularly sensitive to any assumptions influencing an increase in consumer sales, as well as those affecting regulatory costs for uncertified operators. This is logical, as these two items are the largest overall in the cost benefit analysis. Future research on these assumptions would improve confidence in modelled outcomes.

Further to the sensitivities tested and presented in Table 5.4, there were several additional tests undertaken. These have been presented separately as they incorporate new evidence and data not presented in other sections. They are included in the following sections.

Table 5.4: Sensitivity analysis of cost benefit analysis results (BCRs)

Sensitivity	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Discount rate					
Central (7%)	1.07	0.88	1.91	0.74	0.31
High (10%)	1.03	0.78	1.61	0.71	0.27
Low (3%)	1.13	1.02	2.41	0.79	0.35
Consumer willingness to pay for certified products					
Central (8.6%)	1.07	0.88	1.91	0.74	0.31
High (15%)	1.81	1.47	3.18	1.24	0.51
Medium (7.76%)[xxii]	0.98	0.80	1.75	0.67	0.28
Low (5%)	0.66	0.55	1.20	0.46	0.19
Proportion of increased sales benefit under non-certification options					
Central (25%)	1.07	0.88	1.91	0.74	0.31
High (50%)	na	1.67	3.62	na	0.58
Low (12.5%)	na	0.48	1.06	na	0.17
Uncertified operators as a share of certified operators					
Central (50%)	1.07	0.88	1.91	0.74	0.31
High (71%)	1.14	1.20	2.59	0.84	0.42
Medium (30%)	0.96	0.56	1.25	0.59	0.20
Low (15%)	0.79	0.33	0.74	0.41	0.11
Proportion of domestic operators uncaptured by Commonwealth scheme					
Central (91%)	1.07	0.88	1.91	0.74	0.31
Medium (80%)	na	na	na	0.70	0.27
Low (70%)	na	na	na	0.66	0.24

Reduction in regulatory burden for exporting operators					
Central (20%)	1.07	0.88	1.91	0.74	0.31
High (30%)	1.10	0.99	2.20	0.76	0.35
Low (10%)	1.05	0.76	1.63	0.72	0.26
Average number of additional certificates per exporting producer					
Central (1 certificate)	1.07	0.88	1.91	0.74	0.31
Medium (2 certificates)	1.08	0.91	2.00	0.75	0.32
High (3 certificates)	1.09	0.95	2.10	0.75	0.33
Number of labels changed					
Central (1)	1.07	0.88	1.91	0.74	0.31
Low (3)	0.95	na	na	0.68	na
Medium (5)	0.84	na	na	0.62	na
High (7)	0.76	na	na	0.58	na

Source: Deloitte Access Economics calculations.

5.2.2 Sensitivity: different options for labels with mandatory certification

At present, operators who voluntarily become certified include a logo on the label of their product, signalling their certification. Different certifying bodies provide different logos for use on labels. The usage of different labels, according to Nielson Homescan data provided by Australian Organic, is provided in Table 5.5 below. It is noted, however, that this data is limited by its source, in that it may not take into account purchases from farmer's markets, roadside stalls etc. The bud logo is licensed by Australian Organic to ACO Certification Ltd and AUS-QUAL.

Table 5.5: Logo displayed on Australian-certified organic labels

Certifier and logo	Proportion of certified organic brands
ACO Certification Ltd or AUS-QUAL (bud logo)	85%
NASAA Certified Organic (spring leaf logo)	7%
Organic Food Chain (chain logo)	4%
AUS-QUAL (scales logo)	2%
Southern Cross Certified Australia Pty Ltd (kangaroo logo)	1%
Bio-Dynamic Research Institute (leaf logo)	1%

Source: Unpublished data provided by Australian Organic, from Nielson Homescan.

Under Options 1a and 3a, certification is mandatory for all operators. However, the scenarios presented in the body of the report assume that while certification is mandatory, the presence of a logo on a label is not. As a result, all existing certified operators do not face additional costs, and only 50 per cent of uncertified operators are assumed to modify their packaging.

A further two additional scenarios are included for consideration. These include where a government logo is developed and mandated, and where an existing industry logo is adopted and mandated. The impact of each scenario is considered below.

Government logo

Under this scenario, a new logo would be developed by the Department and its use would be mandatory for all organic operators. The practical effects would include:

- government would incur additional, one-off costs in designing a new logo, as well as ongoing costs to maintain the logo
- Australian Organic would likely lose its revenue associated with licensing the bud logo to ACO Certification and AUS-QUAL, unless there was continued demand for this logo alongside the mandated government logo
  - if it is assumed that this logo no longer had value (given its replacement with the government logo) there would be a capital cost associated with the loss of the asset's value; this loss of value would also apply to other logos in use by certifying bodies
  - there would also be savings for Australian Organic and other certifying bodies in no longer needing to maintain a logo
- ACO Certification and AUS-QUAL would save the ongoing expense of paying a licensing fee for the bud logo, which may be passed on to certified organic operators
- all certified operators would need to change their labels, with an assumed two-year transition period to allow products with old labels to be sold
- all uncertified operators would also need to change their labels, with an assumed two-year transition period to allow products with old labels to be sold.

Some of the effects above represent changes in the use of resources in the economy, and can therefore be included as costs or benefits in this analysis. Other effects are merely transfers from one participant to another, or otherwise net out, and are therefore not included. The overall costs associated with a mandatory government logo (net of any transfers) are detailed below.

Table 5.6: Costs associated with a mandatory government logo, NPV terms

Cost	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Government logo development cost	$1.0m	na	na	$1.0m	na
Industry labelling cost	$29.8m	na	na	$29.0m	na

Source: Deloitte Access Economics calculations, using information provided by the Department and Australian Organic.

Labelling costs

The cost associated with changing labels to include the new logo, for example, will require a new set of activities to be undertaken by *all* certified and uncertified operators. Using the same assumptions as detailed in section 4.2.1, the estimated cost to implement the government logo is $29.8 million under Option 1a or $29.0 million in Option 3a. This figure includes only the costs of designing the label and its printing plate, rather than the cost of printing new labels. This is because, within a two-year transition period, all operators would likely have had to print new labels regardless of whether a logo was mandated. The Department could consider an exemption process for operators who do not exhaust their stock within two years to minimise the costs for operators.

Licensing fees and asset value

As noted earlier, both ACO Certification and AUS-QUAL would no longer need to pay licensing fees for the bud logo, instead using the government logo to signal certification (for which a licensing fee will not be charged). This represents a saving for these certifying bodies.

On the other hand, Australian Organic would lose a source of income. Australian Organic has stated that the earnings from license fees are used to fund industry advocacy, education and research initiatives, as well as other support to its member base. It is unknown whether these activities would continue to the same degree if Australian Organic no longer received licensing fees.

This is effectively a transfer from Australian Organic (a cost) to ACO Certification and AUS-QUAL (a benefit) which nets out, and is therefore not included as a cost or benefit in the final results.

However, an associated cost is the loss in value of any existing logo. Effectively, mandating a new logo eliminates, or at the very least significantly reduces, the intangible asset value of other logos. This is most significant when considering the bud logo, which is both the most highly used logo (according to Homescan data) and is also the only one for which licensing fees are paid. While this capital cost cannot be easily quantified, the regulatory change would result in a cost ordinarily considered in a cost benefit analysis.

Government costs

Under the government logo scenario, the Department would need to incur costs to develop a new logo. These have been estimated by the Department to be $1.125 million.

The Department has advised no ongoing costs will be incurred in either maintaining the logo, nor will any license fee be charged to certifying bodies for its use. While it is likely that some effort would be required to maintain the logo, it is also probable this would be roughly equivalent to those activities required to maintain the bud logo, and thus the costs and savings net out overall.

Singular logo benefits

A potential benefit of any "single logo" model is whether there is greater willingness to pay or buy associated with one mandated logo across an industry class. Products with a certification logo may be perceived to meet stricter production standards and to be under greater regulation. Where these logos are familiar and trusted, consumers may be more likely to buy the product at a premium price.[xxiii]

However, it is noted that a premium price is already enjoyed by certified operators using a variety of logos. It is therefore questionable whether introducing a new mandatory logo – new or existing – would attract additional willingness to pay, over and above that enjoyed as a result of the certification process. Comparisons can be drawn to the introduction of the 'Euro-Leaf' logo in Europe. One study identified that the new mandatory logo had no significant impact on willingness to buy or willingness to pay for organic products when compared to previous labelling.[xxiv] Introducing a new label may create uncertainty in the short term, particularly where the new label is unfamiliar and not yet trusted. Another study in Europe found that consumer willingness to pay was higher for well-known and trusted logos.[xxv] These studies indicate the importance of a well-designed logo, as well as an associated education campaign (which would be undertaken, as detailed in section 4.4.4).

Industry logo

Under this scenario, an existing industry logo would be mandated for all organic operators. It has been assumed this would be the bud logo, on advice of the Department. The practical effects of this scenario would include:

- Australian Organic would gain additional revenue through licensing the bud logo to the remaining four certifying bodies currently using a different logo
- these four certifying bodies would then face additional operating costs, as they would be required to pay Australian Organic a licensing fee
- only certified operators using logos other than the bud would need to change their labels, though all uncertified operators would need to implement new labels, with an assumed two-year transition period.

The overall costs (net of any transfers) associated with a mandatory industry logo are detailed below.

Table 5.7: Costs associated with a mandatory industry logo, NPV terms

Cost	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Industry labelling cost	$18.0m	na	na	$17.1m	na

Source: Deloitte Access Economics calculations, using information provided by the Department and Australian Organic.

Labelling costs

As noted above, unlike the government logo scenario, only a subset of certified operators would be required to change logos if the bud was mandated. This is because many certified operators already display the bud on their products. According to Australian Organic, the bud logo is applied to more than 1,700 organic operators. Other operators apply different logos to their products.

The precise number of labels that would need to be changed is relatively uncertain. However, using the same assumptions regarding labels as previously used – that is, one label change per producer or processor – between 4,500 and 4,800 labels would need to be changed, based on the remaining number of certified operators *not* using the bud logo, plus all uncertified operators. This translates to a cost of $18.0 million for Option 1a and $17.1 million for Option 3a in NPV terms to update labels to include the new logo.

Licensing fees

Under the industry logo scenario, it is assumed that Australian Organic would charge licensing fees to certifying bodies which currently use their own logo. While this is technically a transfer between different industry participants, it is likely to have flow-through effects for certifying bodies and organic operators, representing an additional cost not currently incurred.

The quantum of additional licensing fees to be paid by certifying bodies is uncertain, as this is a commercial decision for Australian Organic. It is noted that government may choose to regulate any licensing fees to be paid to Australian Organic if its logo was mandated by regulation.

Singular logo benefits

The potential benefits of a single government logo also apply to a single industry logo. However, whether any *additional* willingness to buy or willingness to pay can be ascribed to wider use of the bud logo (relative to other logos) is unclear for the reasons stated above. As such, no additional benefits have been incorporated for this scenario over and above those already estimated.

Overall impact on results

The implication of these additional costs on the final BCR is shown below.

Table 5.8: Cost benefit analysis results, mandatory logo sensitivity (BCRs)

Sensitivity	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
No mandatory logo (central case)	1.07	0.88	1.91	0.74	0.31
Mandatory government logo	0.79	na	na	0.59	na
Mandatory industry logo	0.90	na	na	0.65	na

Source: Deloitte Access Economics calculations.

Scenario testing

Table 5.9 below tests the logo sensitivities discussed above in line with broader scenarios impacting the industry. These scenarios are as follows:

- Scenario 1:
  - mandatory logo (government or industry)
  - uncertified operators as a share of certified operators is 30 per cent
  - number of labels changed is 3
- Scenario 2:
  - mandatory logo (government or industry)
  - uncertified operators as a share of certified operators is 15 per cent
  - number of labels changed is 3.

Table 5.9: Cost benefit analysis results, label scenarios

Sensitivity	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Central	1.07	0.88	1.91	0.74	0.31
Government scenario 1	0.39	0.56	1.25	0.30	0.20
Government scenario 2	0.27	0.33	0.74	0.20	0.11
Industry scenario 1	0.54	0.56	1.25	0.39	0.20
Industry scenario 2	0.41	0.33	0.74	0.27	0.11

Source: Deloitte Access Economics calculations.

5.2.3 Sensitivity: exemption for operators with turnover under $50,000

The Department is considering an exemption from certification for operators with turnover under $50,000. This sensitivity would impact Options 1a and 3a.

In effect, a group of operators would no longer face the regulatory burden of certification – including certification fees, label changes and other administrative work. However, there would be an equivalent impact on the benefits of the scheme – with fewer operators enjoying increased sales as described in section 3.2.3. In calculating the impact of this sensitivity, it is assumed that all existing certified operators would continue to be certified – even if they fall under the turnover threshold – as they already seek certification voluntarily. However, there would be fewer currently uncertified operators seeking certification.

As noted earlier, the number of currently uncertified producers and processors is unknown, though has been estimated to be 50 per cent of the number of certified producers (only including those which would participate in the scheme). The turnover breakdown of these operators could be estimated in one of two ways:

- using Australian Tax Office (ATO) statistics as to the number of businesses in the agriculture, forestry and fishing industry with turnover between $10,000 and $50,000 as a share of all businesses in that industry (14 per cent)
- using ACO Certification Ltd data on its certified operators with turnover less than $50,000 as a share of all certified operators (44 per cent).

For this analysis, the ACO Certification Ltd data was used, as it accounts for all processors and producers (including those which fall outside the agricultural industry, such as manufactured producers). However, it is noted that this may be an underestimate, if operators with a smaller turnover are less likely to voluntarily become certified. The revised results, in which only 56 per cent of uncertified producers and processors are assumed to be required to comply with the scheme, are shown in Table 5.10. Note that this assumes that the average income earned per producer (as described in section 3.2.3) are the same, in the absence of other information.

Table 5.10: Cost benefit analysis results, small operator exemption sensitivity (BCRs)

Sensitivity	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Central	1.07	0.88	1.91	0.74	0.31
Small operator exemption	0.95	0.54	1.19	0.57	0.19

Source: Deloitte Access Economics calculations.

5.2.4 Sensitivity: exemption for non-food operators

The Department is considering a similar certification exemption for non-food operators. This sensitivity would also impact Options 1a and 3a, and like the exemption for small operators, would reduce both the costs and benefits associated with the certification scheme. Non-food in this case refers to textiles, pet food, other products, animal food products, cosmetics, allowed input products and agricultural processed products, as advised by Australian Organic.

Similar to the small operator exemption, it is assumed that non-food operators who are already certified would continue to engage in the certification process. The relevant scaling factor is therefore the number of non-food, uncertified operators. This figure has been proxied by considering the number of non-food operators certified by ACO Certification Ltd, at 13.5 per cent of all operators. It is therefore assumed that the breakdown between food and non-food operators is the same in both the certified and uncertified markets.

The revised results, in which only 86.5 per cent of uncertified producers and processors are assumed to be required to comply with the scheme, are shown in Table 5.11.

Table 5.11: Cost benefit analysis results, non-food exemption sensitivity (BCRs)

Sensitivity	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Central	1.07	0.88	1.91	0.74	0.31
Non-food exemption	1.05	0.77	na	0.70	0.27

Source: Deloitte Access Economics calculations.

5.2.5 Additional uncertified producer scenarios

Table 5.12 below tests some of the uncertified producer assumptions in line with broader scenarios impacting the industry. These scenarios are as follows:

- Scenario 1:
  - uncertified operators as a share of certified operators is 30 per cent
  - proportion of increased sales benefit under non-certification options is 12.5 per cent
- Scenario 2:
  - uncertified operators as a share of certified operators is 15 per cent
  - proportion of increased sales benefit under non-certification options is 12.5 per cent.

Table 5.12: Cost benefit analysis results, additional uncertified producer scenarios

Sensitivity	Option 1a	Option 1b	Option 2	Option 3a	Option 3b
	Via ACL and mandatory certification	Via ACL no mandatory certification	Via ANZFS Code	New regime mandatory certification	New regime no mandatory certification
Central	1.07	0.88	1.91	0.74	0.31
Scenario 1	0.96	0.32	0.73	0.59	0.11
Scenario 2	0.79	0.21	0.48	0.41	0.07

Source: Deloitte Access Economics calculations.

Appendix A Organics Industry Advisory Group submission

The Organics Industry Advisory Group provided a submission to Deloitte Access Economics expressing its concerns in relation to some of the data, methodology and assumptions used in this final report. While we have a different view to the Group on these matters, in order to provide full transparency the Group's concerns are summarised below:

- The **limitation of available data**, and the **assumptions** made to address those gaps, were noted by the Group as a factor impacting the cost benefit analysis. The particular assumption made in relation to the **number of certified and uncertified operators** was flagged as an issue, given the importance of this assumption in quantifying the costs and benefits.
- The Group considers that **compliance costs facing uncertified producers** (which are presented as a cost) should actually be considered as a benefit, due to the fact that a number of these producers contribute to issues in the domestic market for certified producers and consumers.
- It was suggested that further benefits should be attributed to existing **certified operators**, as the Group considers that the lack of a domestic standard reduces confidence and willingness to pay for certified producers by undermining existing claims (as not all uncertified operators are compliant with organic standards) and that a domestic standard would lead to increased consumer confidence (and therefore willingness to pay) in already-certified products.
- The Group considers that cost benefit analysis understates the potential benefit of **increased export market access** arising due to possible new equivalence arrangements, and particularly the opportunity cost of lost exports where the operator has an export opportunity but does not have the required international certification.
- The Group also believes that the analysis underestimates the benefit of the **reduction in exporter regulatory burden** associated with possible new equivalence arrangements. This is because the analysis does not separately consider costs associated with export regulations for existing organic operators beyond those directly connected with certification fees (such as audits). In the Group's view the report does not articulate the need and benefit of congruence between domestic and export standards and compliance. The Group considers that Australian certifiers likely have more regular and detailed audits because there is no domestic regulation in Australia to provide confidence to the auditor about domestic organic production systems.
- The cost benefit analysis assumes the **industry will continue to grow under the status quo option**, but fails to consider the costs to industry of this scenario. The Group notes the base case is not a steady state from which the other options can be adequately analysed. Certifying bodies and certified operators will continue to pay if the status quo remains – via lost export opportunities, education costs, and a reduction in consumer confidence. At a minimum, the deficiencies in the current regulatory arrangements, and the quantitative effects over time of those deficiencies, should have been recognised in the report to highlight the market failure that may result from no action.
- The Group is strongly of the view that **Option 2** would not deliver sufficient consumer protection and would not improve likelihood of trade or equivalence agreements, as it does not provide for mandatory certification and therefore confidence. The Group considers this option would not deliver the benefits sought by industry, and should be disregarded.
- The Group considers the benefits of **Options 1a and 3a** err on the conservative side and that the costs are overstated and could be lower with tweaks to the implementation timeframe and process. While assumptions were made about the cost of these options, there was a failure to identify benefits to government. The CBA assumes benefits are the same to the industry across all options. However, the Group considers mandatory certification under Options 1a and 3a will deliver additional benefits, including market access and equivalence, and a reduction in regulatory burden. The Group considers these benefits have not been properly considered which skews results towards options that will not meet industry needs.

Endnotes

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[ii] Australian Competition and Consumer Commission, *Organic claims* <https://www.accc.gov.au/consumers/groceries/organic-claims>.

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[iv] Mick Keogh, 'The future of global agriculture' (Speech, International Farm Management Association Congress, 4 March 2019) <https://www.accc.gov.au/speech/the-future-of-global-agriculture>.

[v] Australian Organic Ltd, *Australian Organic Market Report 2019* (2019) 38.

[vi] Australian Organic Ltd, *Australian Organic Market Report 2019* (2019) 28.

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[viii] Australian Organic Ltd, *Australian Organic Market Report 2019* (2019).

[ix] See, e.g., Australian Organic Ltd, *Domestic Regulation* (2020) <https://austorganic.com/about-us/domestic-regulation/>.

[x] John Paull, 'Price premiums for organic food from Australia and China' (Conference Paper, Second Scientific Conference of the International Society of Organic Agriculture Research, 20 June 2008).

[xi] OECD (Organisation for Economic Co-operation & Development), *Greening Household Behavior: Overview from the 2011 Survey* (2013).

[xii] John Paull and Benjamin Hennig, 'Maps of Organic Agriculture in Australia' (2018) 5(1) *Journal of Organics* 29, 36.

[xiii] Michael D Veldstra, Corinne E Alexander and Maria I Marshall, 'To certify or not to certify? Separating the organic production and certification decisions' (2014) 49 *Food Policy* 429, 433.

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[xv] Hui-Shung (Christie) Chang, Garry Griffith and Lydia Zepeda, *An Overview of the Organic Food Products Market in Australia* (Working Paper No. 2003-10, December 2003) <https://core.ac.uk/download/pdf/6413811.pdf>.

[xvi] Australian Organic Limited, *Organic Domestic Regulation Discussion Paper* (Confidential Brief to the Minister for Agriculture, Water and Environment, 9 June 2020).

[xvii] PwC, *Cost Schedule for Food Labelling Changes* (report commissioned by the Department of Health, April 2014).

[xviii] Hui-Shung (Christie) Chang, Garry Griffith and Lydia Zepeda, *An Overview of the Organic Food Products Market in Australia* (Working Paper No. 2003-10, December 2003) <https://core.ac.uk/download/pdf/6413811.pdf>.

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[xxi] Food Standards Australia New Zealand, *Proposal – Administrative Assessment P1005* (20 March 2009) <https://www.foodstandards.gov.au/code/proposals/documents/P1005%20PPPS%20Meat%20_%20Meat%20Products%20FINAL.pdf >.

[xxii] Informed by a study suggesting that hypothetical willingness to pay is overestimated by 10.82 per cent compared to actual willingness to pay. Jonas Schmidt and Tammo HA Bijmolt, 'Accurately measuring willingness to pay for consumer goods: a meta-analysis of the hypothetical bias' (2020) 48 *Journal of the Academy of Marketing Science* 499.

[xxiii] Meike Janssen and Ulrich Hamm, 'Consumer perception of different organic certification schemes in five European countries' (2011) 1(1) *Organic Agriculture* 31.

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Limitation of our work

General use restriction

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Deloitte Access Economics Pty Ltd
ACN 149 633 116
8 Brindabella Circuit
Brindabella Business Park
Canberra Airport
Canberra, ACT, 2609
Australia

Tel: +61 2 6263 7000
Fax: +61 2 6263 7004
www.deloitte.com.au

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