





# Sustainability and related certification options for wool growers

**FINAL REPORT**  
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## Main points

The main points arising from this report are:

- Regulators and markets are placing pressure on wool growers to improve the ethical aspects (e.g. traceability, sustainability, safety, animal welfare, labour conditions) of their enterprises, and this will increase with time;
- Wool growers could resist this pressure and only change their practices when this is mandatory, or, they could embrace continual improvement in ethical performance and wool quality as a means of differentiating themselves from their competitors, and improve their competitive position in higher value markets;
- Wool growers should continually improve the quality of their wool and the ethical aspects of their wool production systems, as low-cost competitors such as those in South America are slowly but surely improving their standards;
- Additionally, wool growers need to promote and sell their wool using mechanisms that maximise competition and price;
- In this context, sustainability/ethical certification options should not be viewed in isolation. They can only add value to a wool growers clip if they are part of an overall strategy for production and marketing, building on a platform of high wool quality;
- Furthermore, sustainability/ethical certification options can only add value to the wool clips of wool growers if these add value to the businesses of their customers;
- The sustainability/ethical certification option of choice in wool markets is Certified Organic. Customers have little awareness of or demand for other certifications;
- Low residue wool (known as Eco-Wool) is an emerging option. Wools with certified low levels of residues should be of interest to customers that use the EU eco-label, the Australian eco-label and Oeko-Tex 100, or those whose chemical emissions are highly regulated;
- Alternative certifications to organic and Eco-Wool exist, such as SQF 1000, Green Tick Sustainable, and ALMS, but customers will first need to be convinced of their value;
- SQF 1000 and Green Tick Sustainable are certification options that address food safety, quality assurance (QA), environmental assurance, occupational health and safety (OH&S), and animal welfare, and can encompass both meat and wool. As such, they can be used as a single, whole-of-farm, integrated certification option;
- Similarly, MLA's Livestock Production Assurance (LPA) program with its Environmental Stewardship module, when combined with wool quality certifications such as Flockcare or the Dark Fibre Risk Declaration, also provides an integrated certification option; and
- Likewise, continual improvement management systems, such as the ALMS, the ISO 14001 form of EMS and the ISO 9001 form of QA, can operate as whole-of-property or integrated management systems that are capable of addressing both internal business issues and external customer/client requirements.

It is recommended that wool growers strengthen their competitive position by continually improving:

- the quality of their wool, including a reduction in chemical residues and dark fibres,
- the ethics of their production system; and
- the way in which they promote and sell their wool.

With experience, knowledge, capacity and confidence, wool growers could then proceed to more onerous and costly quality/sustainability/ethical certifications.

In doing this, wool growers will need to consider their objectives for wanting to adopt a certification option, the resources they have to change their production and marketing practices, and their capacity to supply wool at the times and in the amounts and types required by customers.

## Summary

### Objectives of this report

The Southern Inland Group of Leading Sheep wool growers wish to consider the sustainability/ethical certification options that they could use to differentiate and add value to their wool. This has been prompted by increasing market interest in ethically produced wool, including the possibility of market access being denied on ethical production grounds.

The objectives of this report are to:

- review and evaluate current green/sustainability/ethical certification options that Queensland wool growers can use to differentiate and add value to their wool clips; and
- make recommendations as to which certification options seem the most appropriate for these wool growers and the reasons for this.

Traditional wool growers that wish to better position themselves in the market place and add value to their wool clips can pursue this through two main approaches. They can:

1. maximise the attractiveness of their wool in mainstream global markets; and
2. adopt production, marketing and sales practices that are needed to access higher value niche markets.

In both cases, a reliable supply of wool, in the volume and type required by customers, is crucial.

Importantly, wool growers will not be able to add value to their wool clips unless their wool and/or the services provided by them add value to the businesses of their customers.

### Mainstream global wool markets

If wool growers choose to remain in mainstream global markets, they should ensure that their wool complies with and preferably exceeds the minimum requirements of all potential customers. For example, their wool should not be rejected or discounted by customers in mainstream markets on the grounds that it contained high levels of chemical residues or dark fibres. By ensuring that their wool is suitable for all customers that acquire their wool through mainstream open-cry auctions, they will maximise competition for their clip.

However, wool grower compliance with the minimum requirements of all potential mainstream market customers is no guarantee that they will gain a better price for their wool. Given that wool clips sourced at auctions are often combined into large blended lots, customers may not be able to gain the value added by an individual wool grower who has a high quality clip, and therefore they will not pay a higher price for this.

### Higher value niche markets

A desire to differentiate and add value to wool at the property level using some form of certification implies that wool growers will target niche market customers that want particular or specialised types of wool, such as Certified Organic. In most cases, to gain maximum benefit from this, the wool grower may also need to change the way they market and sell this wool. It is likely that they will either need to establish or join a specialist supply chain that sells more directly to targeted niche market customers.

A number of sustainability/ethical certification options are available for use at the property level. Only one or two of these options may be suitable for individual wool growers, and hence they need to undertake their own careful analysis before deciding to adopt any one option. In doing this, wool growers will need to consider their objectives for wanting to adopt a certification or

related option, the resources they have to change their production and marketing practices, and their capacity to supply wool at the times and in the amounts and types required by customers.

### **Industry views on wool certification options**

In making decisions about certification options, wool growers should also take into account the views and advice of people actively involved in the wool industry, such as personnel from traditional brokers, companies operating specialised supply chains, wool industry organisations, and wool growers. However, this information should be treated with some caution, as their advice may be influenced by the commercial interests of the businesses in which they operate.

The traditional wool brokers believe that the only two worthwhile 'clean and green' certification options are Certified Organic wool and Eco-Wool (wool compliant with the chemical residue standard of the EU eco-label for textiles). They see organic as a niche market, and while this has potential to develop further, they think this will take some years. While the traditional brokers have seen market interest in Eco-Wool increase over the past year, overall market interest is low, and they are not aware of premiums being paid.

Similarly, the traditional brokers do not see much value in wool growers becoming certified to a quality assurance (QA) standard. Again, this is pretty much in the realm of niche markets for them, as they say that 99% of the wool market places little value on QA certifications. In comparison, wool clip QA certification is likely to be of more value to specialist wool grower groups that are targeting niche markets.

Supply chain companies, such as The Merino Company, that sell more directly to downstream customers, also believe that Certified Organic and Eco-Wool are the only two real 'clean and green' certification options. However, they appear to be more interested in trading in organic wool compared with the traditional brokers, possibly because they do not require the volumes needed by the brokers, and possibly because they see this as a niche that they can occupy. These supply chain companies believe a lack of supply is holding back the development of the organic wool market, and particularly for finer wools (18 to 20 micron). In comparison, there is less demand for and a larger supply of coarser organic wool, making it difficult if not impossible to obtain premiums for this. At this stage, the market demand for organic wools is mainly for the finer apparel wools that are worn against the skin, and it is common for premiums of around 6-10% to be paid for these.

While a number of these smaller supply chain companies expressed little interest in Eco-Wool, Roberts from Tasmania said that they were paying a premium of 3% for this. Roberts is working with the Merino Company to identify customers that want to add value to their products by making claims about ethical production, and to verify this through certifications and traceability.

Wool quality is more important for these direct selling and more specialised companies, and thus there may also be some additional value for wool growers that can make claims about dark fibres and clip preparation.

As with wool brokers and direct selling supply chain companies, wool industry organisation personnel also believe that Certified Organic and Eco-Wool are the only two practical options for wool growers, with organic being the option most likely to provide a marketing benefit. While some industry organisation personnel are upbeat about the organic wool market, others still feel that growers will find it challenging to add value to their clip by converting to organic.

Wool industry organisation personnel see potential weaknesses or threats in the Australian organic wool market. Firstly, they also believe that a limited supply of organic wool is holding



back market development. Secondly, they feel that the Australian organic standard is onerous, making it difficult for growers to maintain their organic status year after year.

Wool industry organisations are also more concerned about wool quality, possibly in response to concerns raised by China and other customers. There appears to be a growing interest in the development of national approaches to QA, animal welfare, bio-security and environmental management. In particular, there is pressure to develop a mandatory national wool QA program.

Wool industry organisations advised that wool growers who were considering converting to organic will need to have a customer in mind, and be able to consistently produce the types and quantities of wool required by them. Traditional open-cry auctions are probably not the right tool for supply chains that trade in organic wool. Customers often complain about the lack of certainty on price, quality and volume. Therefore, organic wool growers will need to consider alternative marketing approaches. If they do not have the resources to do this, then they will need to enlist the help of a company that can do this for them. However, the more businesses between the wool grower and the end-customer in the direct-marketing supply chain, the lower the value that the wool grower can expect to be added to their wool clip.

An organic wool grower with many years of experience also advised that organic wool growers should avoid open-cry auction systems. He said that they should negotiate directly with their customers, and provide them with the close connection that their consumers want with farms.

The organic wool grower also advised that wool growers should not convert to organic unless they are fully committed to the organic concepts and principles. Growing organic wool can be difficult at times, and unless you are fully committed, it will not be possible to produce organic wool year after year. In addition to this, wool growers must be prepared to make large changes to their wool production practices, to avoid the circumstances that may require large scale chemical treatments. Importantly, organic wool growers should regard their wool as a premium product, and endeavour to produce wool of the highest quality.

### **Types of certification options and market applications**

Certification options available to wool growers can be broadly grouped into three categories:

- Production protocols;
- Management systems; and
- Product labels.

Production protocols such as QA schemes and Dark-Fibre Risk Declarations prescribe a number of practices that a wool grower must implement during the course of the wool growing and harvesting cycle. Because of this, they are well suited to meeting the requirements of mainstream commodity wool markets. However, these types of certifications are not mandatory for market access at the present time, and on their own, they are unlikely to add value to a wool clip. The exception is in higher value niche markets where wool is directly marketed to customers that require specialised and high quality wools.

The early stage wool processing plants in western Europe are a subset of mainstream commodity markets. Due to the introduction of legislation that limits their emissions of waste substances into the environment, it is likely that they will place increasing value on raw wools that contain low levels of chemical residues.

While certifications for QA, dark fibres and chemical residues are not required by mainstream commodity markets at the present time, customer expectations for these quality related attributes

of raw wool are steadily growing, and it is likely that these will either eventually become mandatory, or, wool that is not certified to these criteria will be discounted.

In comparison, management systems such as ISO 14001 EMS and product labels such as Certified Organic are better suited to the marketing of wool for higher value niche markets. However, only a small number of textile industry customers are interested in management system or product label certifications. These are often small companies like Hess Natur in Germany and i-merino in Western Australia, or large companies like Marks and Spencer and Nike that have developed one or two apparel lines that are made from certified fibres.

International market research into retailer and brand company interest in ethically-produced wool commissioned by DPI&F and AWI in 2006 identified 12 companies in the US, Japan and western Europe that were interested in sourcing ethically-produced wool from Australia. These companies would be a good starting point for wool growers, wool grower groups and others who are considering producing and/or marketing certified wools. The certifications of most interest to these companies were Certified Organic, Oeko-Tex 100, Fairtrade, the Japanese Eco-Mark, and the EU eco-label.

### **Recommended certification options**

Wool growers who are not prepared to adopt sustainability/ethical certification options at this time might consider the gradual uptake of practices that will make their wool more attractive to mainstream commodity markets. These are the practices specified in QA schemes such as Clipcare, the AWEX 2007 Code of Practice for the preparation of wool clips, and the Dark Fibre Risk Declaration program.

Similarly, wool growers could also consider adopting practices that enable them to produce low residue Eco-Wool, as per the EU eco-label for textile products. By doing this, wool growers will also produce wool that is attractive to customers that use other European eco-labels, the Australian Environmental Choice eco-label, Oeko-Tex 100 and 1000, and Bluesign.

For those growers that wish to adopt a sustainability/ethical certification option, the option of choice of textile companies is Certified Organic. This is their first choice, and there does not seem to be any second or third choices. However, this is in a large part explained by a lack of familiarity with other certification options, by both wool growers and markets. Given the importance of wool volume and continuity of supply to customers, it is not surprising that they are focusing production on the single best known certification option.

Customer familiarity with and interest in organic is a significant advantage of this certification option. Due to this, Certified Organic is the 'clean and green' certification that requires least explanation and promotion. While it is not recommended, a wool grower could sell their organic clip with minimal marketing effort.

Certified Organic certainly provides niche market opportunities for wool growers, but it also involves some challenges. While market demand for organic wool is growing, wool growers interested in this certification option will need to carefully consider the changed practices, costs and benefits associated with it, and the difficulties in complying with the requirements of the Australian and international standards year-in year-out. In relation to costs, registration, certification and levies for Certified Organic are likely to be around \$2000 annually.

Given the difficulties associated with producing organic wool year-in year-out, which limits the types and amounts of wool available, it is worthwhile considering alternatives that may be acceptable to customers. However, potential customers would need to be surveyed about their

acceptance of certifications that are alternatives to Certified Organic, and they would need to be convinced that these are more viable options for them.

The certification options that have potential to be practical alternatives to Certified Organic are Eco-Wool (EU eco-label for textile products), SQF 1000, Green Tick Sustainable and the Australian Landcare Management System (ALMS).

Like organic, Eco-Wool is well known in Australia, and its certified low chemical residue status makes this wool attractive to a number of customers. Additionally, Eco-Wool is achievable for many wool growers in many years, and only requires changes in the use of lice and fly treatment chemicals applied to wool. It is also relatively cheap at \$154 per test, and as only two or three tests are required for each wool clip, total annual costs are likely to be between \$308 and \$426. However, Eco-Wool has little market impact at the current time, and is possibly more suited to commodity rather than niche market trading.

In addition to chemical residues, Livestock Production Assurance (LPA), SQF 1000, Green Tick Sustainable and ALMS all require wool growers to address other on-farm issues. For example, SQF 1000 and Green Tick have requirements for food safety, work place health and safety, and environmental management, LPA has requirements for food safety, systems management and livestock management, and ALMS is a dedicated environmental certification. All four certifications require annual registrations and audits, and Green Tick also has levies. In relation to annual costs, LPA is the least expensive at around \$800, followed by ALMS at \$1,000, SQF 1000 at \$1,200, and Green Tick Sustainable at \$2,100. Wool growers also need to consider the additional costs of implementing the practices and other requirements specified in the standards for each certification.

The Koala Friendly certification has considerable market potential, but is relatively costly. Currently, the audit and associated costs are estimated at around \$10,000 over the first two years, and then at around \$2,200 for subsequent 18-monthly audits.

Similarly, the cost of the ISO 14001 EMS is currently prohibitive. During the first year, application, audit and registration costs could be as high as \$17,000, and then close to \$10,000 in each subsequent year.

The Japanese Eco-Leaf label also had considerable market potential, given the high level of interest of many Japanese textile companies in sustainability/ethical certifications. However, the Eco-Leaf labelling program must first be developed for wool supply chains, which is likely to be a complex and costly exercise that would need to be undertaken by an industry organisation such as AWI, rather than wool growers.

Overall, each certification option has a number of known costs and potential benefits which need to be carefully worked through before a wool grower decides to adopt any one of these.

It is recommended that wool growers differentiate and add value to their wool clips by gradually adopting practices that decrease levels of chemical residues and dark fibres, result in better prepared clips, and that are more animal- and environment-friendly. With experience, knowledge, capacity and confidence, wool growers could then proceed to more onerous and costly sustainability/ethical certifications.

This will strengthen the competitive position of wool growers and enable them to capture a significant proportion of the higher-value end of the wool textiles market.

# 1. Introduction

## 1.1 Declining terms of trade

Over the last two decades, the world consumption of wool has declined markedly. This has occurred while the total consumption of apparel fibres has increased, due to growth in the use of synthetics and cotton.

As wool consumption and market share have declined, so to have the returns to wool growers. The long-term trend for wool growers has been one of declining prices relative to input costs.

A number of wool growers in Queensland are now considering the potential for ‘clean and green’ or sustainability/ethical certifications to differentiate and add value to their wool clips.

Wool growers considering this option first need to determine if and how this will add value to the business of their customers. If certifications do not add value to a customer's business, then that customer will not be inclined to purchase or pay more for certified wools.

Wool growers also need to consider how the production of wool in accordance with certification schemes affects their overall productivity and cost-efficiencies. For example, if wool is produced in accordance with an organic standard, how might this affect the costs of production, volume of production, and quality of the wool clip?

Importantly, wool growers then need to consider how the two main selling options available to them, open-cry auctions and direct marketing, influence their capacity to add value to their wool clips through the use of ‘clean and green’ and other certifications. Are both selling options equally suited, or is one more suited to this than the other?

## 1.2 Open-cry auctions

Wool growers generally operate small to medium sized businesses that trade in global mainstream commodity markets. In this respect, around 85% of the national wool clip is sold through brokering and open-cry auctioning systems. A major requirement of customers operating in these systems is the need for very large volumes of competitively priced wool that has a narrow range of characteristics. This is generally achieved by blending together wool clips from many properties, regions, and even countries. In this instance, the global market forces of supply and demand determine the prices that Australian wool growers receive for their wool.

To what extent is it possible for certifications to add value to a wool clip that is sold through the open-cry auctioning system? To answer this question, it may be better to ask, to what extent is it possible for a customer to add value to their business by purchasing certified wools through the open-cry auctioning system?

It is assumed that the majority of customers that purchase wools through open-cry auction systems are those that require very large amounts of a particular type of wool, which is usually achieved by blending together many individual wool clips. These customers can only take into account the attributes of wool that are known for and common to all wool clips, and particularly those that have a bearing on the quality and value of the final blend. In this respect, the most important customer criteria are likely to be “fitness for purpose” and value for money.

In terms of ‘fitness for purpose’, the main criteria available for all wool clips are micron, strength, length and yield, and when many wool clips are blended together, it is these factors that matter most. Other important factors, such as the amount or risk of dark fibres or chemical

residues, are only known for some clips, and therefore cannot add value to an individual wool clip (their impact on the value of the final blend is either small or unknown to customers, and therefore they cannot take these into account when pricing individual clips).

For customers that acquire large amounts of blended wools through traditional open-cry auction systems, it appears that the value of individual clips is determined by the attributes of the individual clip combined with those of the majority of other clips available at the time of the auction. Under these circumstances, small amounts of wool with little or no chemical residues or dark fibres, and even Certified Organic, are unlikely to be sold for higher prices than inferior wools available at the same time, because they do not add value to the final blend.

Wool growers who sell their wool through open-cry auction systems compete on price with other wool growers who can supply similar types of wool. Therefore, it seems that the most obvious way that wool growers can add value to their customers business is by providing 'fit for purpose' wools at the most competitive price, taking into account global supply and demand for such wools at the time of the auction.

Given that the majority of customers who use traditional open-cry auction systems are attempting to acquire large amounts of blended wools, it does not seem logical for wool growers to sell specialised wool clips, such as certified wools, through this system. Under these circumstances, there is limited capacity for certifications to add value to wool clips.

Certifications could add value to wool clips sold through traditional open-cry auction systems if:

- they are the certifications required by one or more customers;
- the wool is of the type required by these customers;
- these customers know this wool is available for sale;
- the wool can be easily identified in the sales catalogue;
- there is sufficient quantities of this wool available for sale; and
- the customer is willing to pay a premium for the wool.

As open-cry auction systems tend to involve little promotion of individual wool clips, and little or no communication and negotiation between wool growers and customers prior to the sale, the likelihood of these conditions being met is low.

For the above reasons, it seems that traditional open-cry auction systems are not a method of selling wool that enables certifications to add value to wool clips.

While it is well known that wool growers have a limited capacity to add value to their wool when selling through open-cry auction systems, are viable alternative options available?

To begin with, could wool growers and their customers add value to their businesses by using smaller scale and more specialised open-cry auction systems? While this will not suit the customers that want very large amounts of 'fit for purpose' blended wools, it may suit customers that are seeking smaller lots of more specialised wools. An example of such a system is the Elders organic and Eco-Wool auction that is held two or three times a year. Would this type of open-cry auction system better enable certifications to add value to wool clips, above that which could have been gained through the more traditional open-cry auctions? Again, the conditions needed for this to occur are the same as those needed for traditional open-cry auctions.

Certifications could add value to wool clips providing:

- they are the certifications required by one or more customers;
- the wool is of the type required by these customers;
- these customers know this wool is available for sale;

- the wool can be easily identified in the sales catalogue;
- there is sufficient quantities of this wool available for sale; and
- the customer is willing to pay a premium for the wool.

As with traditional open-cry auction systems, the lack of communication and negotiation leading up to the auction, combined with the uncertainties involving wool types, quantities and price, limits the capacity of certifications to add value to wool clips. Under these circumstances, specialised open-cry auctions have limited ability to add value to the businesses of the few customers that want certified wools, and for this reason they may not feel compelled to pay more for wools offered in this way.

### **1.3 Direct marketing**

The main alternative to auctioning systems appears to be various forms of direct marketing. In this case, individual woolgrowers or grower groups sell directly to private treaty merchants, exporters, processors, and retailers. They can do this alone, or with the assistance of companies within supply chains, such as brokers or exporters.

However, direct marketing that depends on several businesses in the early parts of wool supply chains, such as brokers and exporters, may add little or no value to wool at the farm level. In this case, there are too many businesses along the wool pipeline that all need to make a profit, and therefore a wool grower's share of this will be quite low.

For direct marketing to add significant value to a wool grower's clip, they will need to negotiate much more directly with the end user of their wool, such as a manufacturer or retailer, and they will need to take responsibility for at least some of the early parts of the wool pipeline.

An example of this is a case study described in a publication by AWI, titled 'Non-auction marketing opportunities'. The Australian Superfine Wool Growers Association (ASWGA) built successful long-term commercial relationships with the end users of their wool. This was achieved by the manufacturers and retailers visiting the wool growers, and by reciprocal visits by wool growers to these international operations. These visits enabled both parties to understand the needs of the other, and to exchange information that benefited both groups over the medium to long term. In addition to this, ASWGA provided information that the retailer used to promote the product to consumers at the point of sale.

A second example of direct marketing provided in this AWI publication is known as the Brax model, where Tasmanian Quality Wool established a close commercial relationship with the German trouser company Brax. Wool growers were able to add value to their businesses and to Brax by delivering the wool as per the specifications of Brax, by coordinating the processing of this wool, and by contributing promotional material in the form of imagery and stories about the wool growing region and the raw wool.

In relation to direct marketing, the more responsibility that wool growers take for operations within wool supply chains, thereby shortening these, the greater is the potential for adding value to their business and the business of the end customer. However, this potential value gain needs to be compared with the extra work and significant liabilities that are also associated with these increased responsibilities.

It is recommended that wool growers contemplating using direct marketing processes to sell certified wools consider the information provided in the above AWI and related publications on this method of selling.

Robert Wallace, one of the authors of the ‘non-auction marketing’ publication of AWI, made the point that wool growers should not lock themselves into a narrow path of wool promotion and sales. ‘They should not commit all of their wool to just one method of wool differentiation that is controlled by one corporation or group. Then they have the option to promote/sell/forward contract their clip, or part thereof, through the various channels.’

#### **1.4 Complying with government regulations**

Finally, there may be synergies to be gained from using market-oriented certification options for meeting government legislative and other requirements. For example, Ian Russell from CSIRO has maintained that environmental legislation in Europe will impose significant constraints on European wool processors, and because of this, they will increasingly choose to buy wool with low levels of chemical residues.

At the State level, the Queensland Government continues to impose natural resource regulations on wool growers. Increasingly, wool growers need permits and licenses to access and use natural resources such as native vegetation, water, and lease-hold land.

#### **1.5 Proactive response to market and government requirements**

One thing is certain – market requirements and government regulations will increase over time, and wool growers will not be able to avoid these. These requirements and regulations are being driven by the impact of lobby groups on retailers and government regulators, and this is slowly but surely influencing the expectations and actions of consumers.

Australian wool growers should attempt to turn increasing market and regulatory requirements from a threat into an opportunity. They have much greater capacity to comply with these requirements than their low-cost competitors from less-developed countries. They should maintain this competitive advantage by continually improving the quality of their wool clips, and produce this in accordance with the highest environmental and other ethical standards. Australian wool growers need to differentiate their wool from that of their competitors, and particularly those from countries with low living standards, cost structures, and regulatory environments. They cannot compete with these wool growers on price, and therefore must compete on quality and ethical standards.

The Australian wool industry should strive to meet the highest standards of wool production, promote this to the rest of the world, and demand that their customers, such as major retail chains, accept no less than this. Textile retailers and brand companies are very susceptible to criticisms of their ethics, and will find it increasingly difficult to source cheap wool when ethically-grown wool is available.

The Australian wool industry should position itself as the global supplier of choice for high quality and ethically produced apparel wools for the major manufacturers, brand companies and retailers. The Australian wool industry should partner with these companies, and establish supply chains that add value to all supply chain participants.

This report provides information on the certification and related options that wool growers might use to better position and add value to their businesses and their wool. Some options will suit trading within mainstream commodity markets, but most are better suited to meeting the requirements of more specialised niche markets.

## 2. Industry views on certification options for wool growers

This section of the report summarises the main points raised by a number of people who are actively involved in the wool industry. These people work for traditional wool brokering companies, more direct-selling supply chain companies, and wool industry organisations.

The people interviewed were:

- Bill Anderson Wool Technical Manager, Elders, Brisbane
- Bill Cowley Woolnetwork, Sydney
- Phil Cranney Fletchers, Dubbo
- Craig Eckert Elders, Adelaide
- Eric Hutchinson Roberts, Launceston
- Ben Lyons AWI, Sydney
- Stuart McKenzie organic wool grower
- Mark McKinnon The Merino Company
- Maurie McNeil State Manager, Elders, Brisbane
- Russell Pattinson Consultant for AWI
- Phil Speers Landmark, Brisbane
- Paul Swan Consultant to AWI
- Robert Wallace Quality Consultants P/L
- Greg Weller Woolproducers, Canberra
- Peter Vandeleur New Merino, Adelaide

The topics discussed with them and reported below are:

- Certification options available for differentiating raw wool at the farm level;
- The options that are more likely to add value to raw wool at the farm level;
- Role and value of QA programs;
- Advantages and disadvantages of individual certification options; and
- Marketing and selling options.

The responses of industry personnel have been reported under the headings of:

1. Traditional brokers;
2. Direct-selling supply chain companies;
3. Wool industry organisations; and
4. An organic wool grower.



## 2.1 Traditional brokers

### Certification options

- Eco-Wool (compliant with the chemical residue limits of EU eco-label for textiles)
- organic is the best option
- Too early to produce organic wool. Eco-Wool is the best option.
- Because certified organic is difficult to achieve and maintain, there is an opportunity for an alternative that is not as restrictive as organic, and allows some chemical use

### QA

- Clipcare still exists in principle, but probably no wool growers in Queensland registered under this scheme.
- Rewards to growers have not proven sufficient to motivate them to adopt Clipcare or keep in it.
- There have been no premiums payed for Clipcare wool clips
- Similarly, no premiums payed for Dalcare clips
- Dalcare appears to be no longer available
- The Landmark Fibre Direct program contains some elements of QA, such as practices to reduce incidence of dark fibres and stained wool, and shed checks.
- Clipcare requires additional flock and clip management practices, which cost the grower time and money
- The requirement to crutch mobs within 3 months of shearing has been a major barrier to the uptake of Clipcare
- A big limitation for QA wools is lack of volume. Lots are too small to satisfy orders
- 99% of wool market has little regard for QA. More interested in acquiring consistent supplies of large amounts of low cost blended wools, and will accept contamination
- While wool growers are not registered under Clipcare, many would use some Clipcare practices
- Believes that it would be good for Australian wool growers to set and achieve a high standard of QA, one that growers in other countries may find it difficult to meet
- Believes there is good reason to implement and be certified to QA programs, especially now that exotic meat sheep breeds are so common
- Require growers to comply with the AWEX 2007 Code of Practice: *Preparation of Australian Wool Clips*
- QA programs of most value for premium wool grower groups, such as Ausfine and Superfine
- Suggests that the property brand should be regarded as a QA brand, and build a reputation for supplying good quality wool
- Traprock Total Quality Management (TQM) and Tasmanian Quality Wool (TQW) are well known and respected QA schemes, and are probably add value to clips

### Organic

- Demand for organic wool outstripping supply
- 20-30c/kg premiums are being paid for certified organic wool
- Premiums for organic wool at the last Elders auction were mainly between 5 and 10%
- Premiums at the first organic auction were higher – 10 to 15%
- This premium is still not enough to cover costs
- Elders are holding organic and Eco-Wool (low residue) auctions around three times a year
- BWK Elders is by far the biggest buyer of wool at the Elders organic auctions

- Elders would prefer to buy organic wool directly, but this would conflict with their role as a broker, and they would be criticised for this.
- Wouldn't pursue growing organic wool at this stage. It is still very much a niche market and the costs are high. Thinks it has good future potential.
- Has some demand from EU mills for organic wool, and there is a small premium
- organic wool poses good opportunities, but only for niche markets
- Difficult to say if premiums were being paid for organic wool, and many customers not prepared to pay premiums
- Most organic wool was being sold into knitwear markets in the US

#### Low residue or Eco-Wool

- Elders have seen demand grow for Eco-Wool, but as yet no premium has been paid
- Elders believe that all wool being exported to western EU countries from January 2008 onwards will have to be compliant with the residue standard of the EU eco-label for textile products
- Western EU takes about 20% of the Australian wool clip – higher quality and value end of the clip
- Landmark has also seen demand grow for Eco-Wool, but no premiums exist. Western EU mills are asking for low residue wool, but because they are not prepared to pay a premium, this market signal has not been passed onto growers
- A brokering company tests some of their wools for residues, and if found low, will send this direct to mills
- A wool grower will need at least two lots of wool tested, especially if these are skirtings from several mobs, if they want to market their wool as compliant with the EU eco-label. May need more tests if mobs are managed differently.
- It will be important to have large volumes of low residue wool

#### Marketing options

- Elders believe growers would achieve better competition for their organic wool if they sold it through auction, rather than sell directly to one customer.
- Elders would like to run more on-line auctions, where overseas mills can bid directly for wool lots. This reduces some of the costs within wool supply chains, because there are fewer changes of ownership
- Elders Premier Wool program is not suited to selling organic wools, and matching growers with customers
- Landmark have the Fibre Direct Program. They claim that this could be used to match growers to small customers. Claim that slight premiums are achieved.

## 2. 2 Direct-selling supply chain companies

### Certification options

- Only know of two options – Eco-Wool and organic
- organic
- EU eco-label (Eco-Wool)
- Best options are organic and Eco-Wool

### QA

- Quality is still important. Because New Merino requires high quality wool and high quality preparation practices, it is effectively a quality label.

### Organic

- organic is by far the best option
- organic wool supply chains are very young and still evolving
- The limited supply of organic wool is holding back market development, particularly for fine wools
- Textile markets are familiar with the organic label because of its widespread use in the food market
- Elders organic wool auction is attracting little competition – at the last sale, all but one lot was bought by BWK
- Premium for organic mostly between 5 and 10%, and this is generally only for the finer wools (18-20 micron)
- Coarser wools, 21-23 micron, often do not attract a premium
- Thinks that the market will develop for organic coarse wools, such as for the heavier suits segment
- Mill in Australia has gained only one new customer since becoming organic
- At the same mill, many previous customers are now asking for organic wool
- Unable to meet demand for certified organic wools, but this is only for the finer wools
- Competition for organic wool runs hot and cold, and when it is hot, they have to pay a premium. Occurs when someone else in the market is chasing a particular type of wool
- The organic market is mainly for apparel wools that are worn against the skin – hence the interest in fine wools
- Expects that Argentina will be a strong competitor for Australia in the organic market
- Merino Co. buys its organic wool from auctions, but would prefer to have growers sell direct to them

### Low residue or Eco-Wool

- Eco-Wool has little significance. Wool has to be organic
- Roberts are providing a 3% premium for EU eco-label compliant wool, and are also providing a premium for wool from sheep that are not mulesed

### Marketing options

- Roberts and The Merino Company are working together to identify retail brands that are interested in the ethics of wool production, and who want to be able to trace back to the origin of this wool. They are doing this in an attempt to add value to retail brands.
- Roberts have a wool pool which operates closely with the Merino Co. Will differentiate wools in this pool if this is of interest to customers. Have a wool pool in Tasmania with 9000 bales, and other wool pools in WA, Vic, SA, and Sth Africa.
- New Merino is a direct selling method that matches wool growers with customers. Main objective is to provide large lots of high quality pure white merino wool. Claim that this is a price making rather than price taking approach. Also claim that there is a modest

premium for wools sold this way - 10c/kg. Indicate that there are also in-shed savings. New Merino provides growers with a production plan, and also creates a profile for them which is used to promote their wool

- The Merino Co. requires wool growers to commit their clip to a wool pool one year in advance of shearing. Growers receive payments based on wool pool returns. This company does market organic and Eco-Wools.
- Merino Co. has its own brand called Generation W. Want to underpin this with standards, such as EU eco-label residue standard, and some form of farm sustainability standard. This would then be 3<sup>rd</sup> party audited.

## 2. 3 Wool industry organisations

### General comments

- Lot of chatter about Eco-Wools
- First requirement in the market place is critical mass
- Still very hard to add value using organic or Eco-Wool certifications
- Would not rush into an option – first need to do a lot of research

Under the heading of general comments, Robert Wallace provided the following advice:

- “The primary aim for a wool grower is to achieve differentiation. Then they have the option to promote/sell/forward contract their clip, or part thereof, through the various channels. The majority of these are described in the AWI publication on ‘Non-auction marketing opportunities.

Growers need to be very careful not to ‘lock’ themselves into a narrow path for sales. For example, they should avoid being tied solely to one method of differentiation, controlled by a corporation/group.

- The ideal situation for the grower is described in the AWI publication ‘Non-auction marketing opportunities’, where the grower has already identified the end customer (retailer) and delivers to the specifications required (demanded) by them. This may or may not include an exporter/buyer. This could also be the least expensive method.

As we see in the western world, the trend for higher value consumer goods is moving to products that are produced under safe and sustainable production systems”.

### QA

- There is now considerable interest at a national level to develop up national approaches to QA, animal welfare, and farm biosecurity plans. This is in response to complaints from countries such as China about wool quality.
- It seems likely that mandatory national programs for QA will be eventually introduced
- At the moment, around 35% of the Australian wool clip is covered by the dark fibre risk declarations

### Certification options

- organic (not easy, but limited supply and growing consumer demand)
- Eco-Wool (more achievable but less demand)
- Wool BMP known as Landleader (not well connected with markets, but had good feedback from Marks and Spencer)
- Two main options – organic and Eco-Wool
- Other options exist, such as EMS, but no market demand for these
- organic has the most potential of a pay-off for growers. Eco-Wool is the only other option

### Organic

- Lack of volume is a problem for market development
- Australian standard is too onerous for growers, as prevention and treatment of flies often requires use of some chemicals that are not allowed by the organic standard
- AWI seeking to add some exceptional circumstance clauses to the organic standard – use chemicals when welfare of animal is at stake
- organic standards in some countries, such as Argentina, allow greater use of husbandry chemicals, and this is a threat to Australian organic wool growers

- organic is not for all growers, especially those in the higher rainfall areas where parasite loads are high.

#### Marketing options

- Growers that decide to go organic need to have a customer in mind, and have the right types and quantities of wool for them
- Growers that go organic should be thinking about investing in marketing their wools
- Auctions have their strengths, but customers often complain about the lack of certainty with price, quality and volume. Growers also complain about lack of certainty with price.
- If growers do not use auctions, then they need to find a company or group that will find a customer for them
- Forming wool grower marketing groups is very difficult and can be risky. Might be better to commit part of a grower clip to a company that will market the wool for them, and send the rest of their clip to their usual outlet.

## 2. 4 Organic wool growers

### Certification options

- organic, Eco-Wool

### QA

- Quality is vital. First and foremost, the wool must be good quality
- Need to regard your organic wool as a premium product, and not a secondary or by-product of some other enterprise

### Organic

- Wool growers should only go into organic production if they are really committed to the concept. If you just do it for the premium, which is not large, then you are unlikely to be successful. Growing organic wool can be difficult, and you need to be fully committed to making it work, year after year.
- You need to believe in the organic system, and not cut corners, otherwise things will start to go wrong
- As a wool grower, you need to be happy not to use chemicals, and work through times when there are fly waves or lice infestations
- Need to be prepared to change your management practices to help remain organic
- May need to change the time you shear, so that there is less wool on sheep during the fly season. May need to change when you lamb, so that ewes do not have wet and stained wool on them during the fly season
- Will probably need to crutch regularly, and perhaps more often. While this is a cost, it also provides some income, and may provide savings as well – don't use chemicals, no wool blindness
- Important to run sheep that have some resistance to fly strike – don't want tight-woolled sheep
- May need to use different chemicals, such as Flockmaster, and different application methods, such as plunge dipping.
- Can be more difficult to be organic in the higher rainfall areas where flies are more of a problem, and where you have close neighbours that have lice and flies.
- Sourcing organic supplements has not been a problem in the past. A commercial available dry lick is available, and it has been possible to obtain organic grain, even when traditional grain supplies were running short. Sometimes difficult to obtain organic hay, especially now.
- It's very important to have good quality wool, free of dark fibres, and market this
- The general market premium now is about 10%
- Entry into the market of Marks and Spencer has helped drive the organic market

### Marketing options

- Avoid auctions
- Negotiate directly with customers
- Customers and their consumers want to have a connection with the farm, and it is important to be able to provide this
- Have your own website so that you can communicate the story of organic wool growing on your property

### **3. Types of certification options available to wool growers**

The descriptions of the certification options available to wool growers is preceded by an explanation of certification and the different categories of standards that are used within supply chains.

Certification options for wool growers are based on formal standards, such as those used for Quality Assurance (QA), Certified Organic, and Environmental Management Systems (EMS). Certification means that an auditor has verified that the operations of a business comply with the requirements of a particular standard. The business can then make their clients aware that they have achieved certification to a particular standard.

The many standards that are available for use by businesses within food and fibre supply chains can be categorised in a number of ways. However, an easy and functional classification contains three categories. These are:

- Production protocols;
- Management systems; and
- Product labels.

#### **3. 1 Production protocols**

Production protocols are prescriptive, as they specify product features and/or how a product is to be produced or processed. In this way, they are able to include customer specifications for production practices and/or product attributes. Examples of these are industry sector QA standards such as Clipcare, Flockcare and Cattlecare. In most cases, these production protocols do not provide labels that can be placed on products.

Production protocols are generally relatively easy and less costly to implement on-farm. Because of this, they are the type of standards that mainstream commodity markets use to specify their mandatory market access requirements. For example, most food retailers will not purchase produce from suppliers unless they are certified to a food safety or QA standard.

#### **3. 2 Management systems**

Management system standards describe planning and management actions that must be implemented by a primary producer. Unlike production protocols, they do not specify specific production practices that need to be taken or outcomes that need to be achieved. Instead, the manager of a business undertakes their own analysis of risks or hazards and decides which of these they will address. Examples of these are EMS (ISO 14001), the international QA standard ISO 9001, and HACCP (Hazard Analysis at Critical Control Points). Again, management systems tend not to provide labels that can be placed on products.

Management systems tend to be more difficult and more costly to implement than production protocols, but they are also capable of providing more benefits, particularly internal business benefits. For this reason, it is usually large businesses with many staff and complex production processes, such as a livestock abattoir, that implement management systems. They have the resources to do so, and in addition to market access or preferred supplier status, management systems greatly improve their efficiencies and effectiveness.

Management systems are rarely if ever used as mandatory market access standards for producers in mainstream commodity markets. It is widely recognised that the use of management systems such as ISO 9001 for quality assurance and ISO 14001 for EMS as market access standards for low value mainstream commodity markets would be too complex and costly for producers.



### **3. 3 Product labels**

Product labelling standards, such as eco-labels, are also prescriptive. Like production protocols, they specify production practices that must be implemented on-farm, and product attributes that must be achieved. In addition to this, they may also specify environmental and social outcomes that must be achieved within supply chains. In the case of product labelling standards, only those businesses with the least environmental and social impacts will be awarded the product label. An example of these is the European eco-label for textile products.

Product standards also suit large businesses. Very large or corporate primary producers and large processors or manufacturers have the capacity to continually produce large amounts of a specific product that is targeted at a particular market segment. In these cases it may be advantageous for these large businesses to differentiate their products with a relevant product label certification.

### **3. 4 Factors influencing the choice of certification options**

Wool growers will need to identify the type of certification option that best suit their needs and circumstances. This will require an assessment of their industry at various scales, from individual grower to global mainstream markets.

It is recommended that the choice of a certification option be influenced by a number of factors, including:

- their objectives (what they expect to achieve);
- the resources (time, funds, knowledge, skills) they have available for the development and implementation of certification options, and for the marketing of certified wool;
- their target customers and the certifications required by them;
- the additional requirements of customers, particularly for wool quality, volume, timing of supply, and pricing;
- the marketing and selling methods that are appropriate for these customers; and
- the capacity of wool growers to satisfy the requirements of these customers.

Additionally, wool growers could also consider if the certification options they use for positioning themselves in a particular market can also be used to access benefits from State and Australian Governments, such as better and longer term access to the natural resource base, or better access to government funding programs.

The certification and related options described in this report have been arranged in accordance with the market categories that they best suit, either mainstream commodity or niche markets.

## 4. Mainstream commodity markets

All of the certification and relation options that suit mainstream markets are production protocols. These are quality assurance schemes, dark fibre risk declarations, the Landleader environmental stewardship program, and Meat and Livestock Australia's Livestock Production Assurance.

### 4.1 Wool clip quality assurance

#### Introduction

The two main wool QA programs promoted for use at the farm level within Australia have been DalCare (Wes Farmers Dalgety) and ClipCare (Elders). However, very few wool growers are currently registered under Clipcare, and Dalcare appears to be no longer supported since Wes Farmers Dalgety changed ownership and became known as Landmark.

The QA programs in use tend to be those associated with individual grower groups. Well known examples of these are Tasmanian Quality Wool (TQW) and the Total Quality Management (TQM) program of the Traprock Wool Association.

QA tend to focus on issues such as:

- Wool Contamination prevention in the shed and during production in the paddock and yards
- Chemical residues in wool
- Management Practices such as crutching or pizzle-rung within 3 months prior to shearing
- General shed management
- Shed Staff training
- Clip preparation
- Shearing Shed design
- Use of allowed packs for wool e.g. standard grade 5 packs or new nylon wool packs
- Bale Marking e.g. Stencilling of appropriate logos and contents on the bales
- Storage : Clean contamination free area
- Transport : To ensure the wool arrives clean and sound to sale point
- Documentation and check lists of practices and activities

#### What is required?

The requirements of QA for wool clips can be divided into five parts:

1. Practices leading up to shearing
2. Shearing practices
3. Clip preparation
4. packing and pressing
5. Bale marking, storage and transport

#### 1. Practices leading up to shearing

Sheep need to be stain free

- Sheep cannot be crutched/cleaned on the board during shearing. Crutching must be a separate operation completed prior to shearing.
- Ewes need to be crutched to remove urine stain within three months prior to shearing
- Wethers need to be rung to remove urine stain within three months prior to shearing
- Sheep need to be visually free of stain at the time of shearing

### Management of sheep

- Each mob to be run under similar conditions and in the same geographical area since last shorn
- Avoid branding sheep within six months prior to shearing
- Sheep are branded only with approved scourable preparations strictly in accordance with manufacturers specifications
- All brands present at shearing will be removed from the fleece and placed in separate line.

### Contamination from synthetic materials

- Baling twine, bale netting, polyethylene and polypropylene bags etc should be removed from paddocks, holding paddocks, yards and shearing sheds
- Sheep coats made of paper/nylon or other non-contaminating material may be used for any period of time
- Coats made of poly materials are not permitted, except for an eight week period immediately following shearing, and provided they are not frayed or damaged.

### Contamination from coloured wool and non-wool animals

- These shall not be run intentionally with sheep flocks
- Shall not be run, housed or shorn in the yards used during QA shearing
- Sheep with black or coloured points can be run with merino mobs providing they are removed at least 8 weeks prior to shearing.
- Merino ewes that have coloured or partly coloured lambs are not eligible for QA

### Preparing the wool shed

- The wool shed shall be thoroughly cleaned prior to shearing
- A separate eating area for shed staff must be designated and this must be completely clean
- A area in the shed needs to be designated for the storage of clothes
- A separate grinding area needs to be designated
- Loose objects need to be removed from wool handling areas

## **2. Practices during shearing**

- Classing is to be performed by a registered professional wool classer or a registered owner wool classer
- Shearing and wool handling to be conducted so that no more than one fleece per working shearer is on the floor at any one time
- Shearers and shed staff will not smoke while shearing is occurring
- Dogs are not allowed in the wool working area
- Children are not permitted to play in the wool working area
- The board is to be clean of wool when shearing is not in operation

## **3. Clip preparation**

The minimum standards for clip preparation are those of the Code of Practice for the Preparation of Australian Wool Clips. There are procedures for:

- Skirting
- Managing variation in length of wool
- Unscourable colour
- Dump or cast lines
- Separate lines for fly blown wool, brands and skin pieces
- Stains

- Blood stained wool
- Wool containing pigmented fibres

#### **4. Packing and pressing**

- Only nylon wool packs will be used
- All packs are to be clean and free of any contaminants prior to use
- Four fasteners to be used on both top and bottom of packs
- No wool is to protrude from packs
- Bale caps shall not be used
- Only paper dividers shall be used
- Bales should be pressed to weigh no less than 110 kg and not more than 240 kg (minimum bale weights do not apply to speciality types)
- The monkey on the press is to be lowered onto the open bale to prevent contamination that may occur after the completion of the days shearing

There are also requirements for bale marking, storage and transport which may vary depending on the type of QA standard used by a wool grower.

#### **Costs**

QA systems tend to be inexpensive with regard to registrations and audits. For example, the annual registration fee for Clipcare was only \$100. For this price, growers received a Clipcare Registration Number, and an auditor from Elders visited their shearing shed a few days prior to shearing, the day prior to shearing, and some time during shearing. Also, Clipcare prepared wools were identified in the sales catalogue.

However, there are also additional costs associated with the practices that need to be implemented by the wool grower, such as crutching prior to shearing and the in-shed requirements.

#### **Market demand**

Currently, while wool clip quality is occasionally criticised by overseas customers, there is no requirement for wools to be QA certified, and no premiums are paid for such wool.

It seems that high quality wool, particularly with regard to dark fibre contamination, is an expectation of wool customers. However, given that wool clips from all over Australia and even from other countries are combined, some of the blame for contaminated clips can be laid with the early stage supply chain customers.

There may be some market advantage in providing quality assurances for wool that is marketed directly to particular wool customers through more specialised demand chains. Again, this may be of little value unless a number of clips with similar quality assurances can be jointly marketed. This is probably why QA is largely confined to speciality wool grower marketing groups, such as Traprock Wool.

If growers choose to gain some form of ‘sustainability’ or ‘green’ certification for their wool, then there may also be some additional value in gaining a QA certification. Wool customers that value a ‘clean and green’ certification are also likely to value QA, and the relatively small volumes of wool they require is more achievable for wool growers.

## **4.2 Dark fibre risk declaration**

### **Introduction**

The International Wool Textile Organisation (IWTO), through the Federation of Australian Wool Organisations (FAWO), have initiated a program for assessing and declaring the risk of dark and/or medullated fibre contamination of white merino wool. This is a voluntary program that commenced in July 2004.

The objectives of this program are to:

- Enable growers of white merino wool to promote this to buyers; and
- Provide buyers and processors with a reliable and quantified measure of the level of dark and/or medullated fibre risk in sale lots.

The risk rating is assigned on a scale of 1 to 6, with 1 having the lowest level of risk. The Risk Ratings of 1 and 2 are commercially acceptable for sensitive end-users.

### **What is required?**

If growers decide that they want to participate in this program, then they are required to provide the following information on their wool classer's specification or associated declaration form.

- If their stock have been in contact with exotics
- If crutched
- If crutched within 3 months of shearing
- Age
- Sex
- Wool description

This information is then provided to AWTA by the grower's wool broker for calculation of the Risk Rating. This Risk Rating will appear on the AWTA Test Certificate and in the catalogue and electronic data transmissions to wool buyers.

Where no information is provided, this is identified in the catalogue as ND (not declared).

Random screening programs or audits, were planned to check compliance with the program.

### **Costs**

There do not appear to be any direct costs, such as a registration or other fees, associated with this risk declaration.

However, as with QA, there may be additional indirect costs associated with achieving a low risk rating, such as crutching prior to shearing.

### **Market demand**

As with QA, wool customers currently complain about wool contamination, but they have not signalled a requirement for some form of assurance/certification, and they have not indicated a willingness to pay more for such wool.

In the future, it is more likely that wool that does not carry certifications for quality or contamination will be discounted by customers.

Again, wool growers that are targeting high-end customers that value 'clean and green' certifications may gain additional value by providing certifications on contamination.

## **4.3 Landleader environmental stewardship program**

### **Introduction**

In conjunction with other broad-acre agricultural industries (especially red meat via MLA), the AWI Landleader program is gathering information that will enable AWI to:

- Build a profile of the livestock management practices of the Australian grazing industry and demonstrate these credentials to various stakeholders
- Provide a mechanism that individual producers can use to compare their practices with industry best practice.

In this way, Landleader will identify and promote the environmental and livestock stewardship credentials of the wool and red meat industries.

Landleader is collecting information on the following topics:

- General Farm Details and Planning;
- Cropping;
- Pasture and Grazing Management;
- Soil and Fertiliser Management;
- Native Vegetation;
- Rivers and Riparian Management;
- Other Environmental Issues;
- Livestock Management; and
- Chemical Use and Management.

The Landleader program is being developed to allow producers to self-assess on a continuum of unacceptable to above industry standards, as well as capture relevant metrics. Over time, producers will be able to track improvement via quantifiable measures.

Landleader is voluntary and is offered free of charge. Landleader does not intend to audit and/or certify wool growers. More information on Landleader can be found at [www.landleader.com.au](http://www.landleader.com.au)

### **What is required?**

Wool growers participating in the Landleader program are required to complete a survey on the Landleader website. This survey consists of a number of questions relating to each of the topics identified as dot points above.

When wool growers have submitted their farm survey, they will be able to view a report of their farm practices. This report will enable wool growers to compare their practices with industry standards. By doing this wool growers can determine their level of performance relative to other wool growers, and identify any areas they may wish to improve.

### **Cost**

At this stage there is no cost involved in participating in the Landleader program. However, wool growers that decide to change their practices in response to their self-assessments may incur additional costs.

### **Market demand**

Landleader does not audit or certify wool growers, and thus may be of limited value for marketing clips. However, Landleader is likely to add value to other certification programs, such as EMS and eco-labelling. Landleader would help inform the implementation of these programs, and the organisations responsible for them are likely to look favourably on wool growers that have undertaken and acted on these self-assessments.

## 4.4 Livestock production assurance



### Introduction

Livestock Production Assurance (LPA) is an on-farm food safety and quality assurance (QA) certification program. These standards are designed to strengthen systems currently in place for the grass-fed production sector.

The LPA program was developed in accordance with ISO 9002:1994 and HACCP principles as the production based food safety and quality assurance program for grass-fed livestock. Independent audits, both random and targeted, are conducted to ensure the program's integrity is maintained.

### What is required?

There are two levels of LPA. The first is the compulsory food safety module, and the second is voluntary quality assurance modules. These are summarised below, but for more details, visit the MLA website at:

<http://www.mla.com.au/TopicHierarchy/IndustryPrograms/LivestockQualitySystems/LivestockProductionAssurance/Default.htm>

### LPA (1) Food Safety

Level 1 LPA (food safety) is a simple on-farm food safety program that consists of one module that has five elements. These are:

1. Property risk assessment;
2. Safe and responsible animal treatments;
3. Stock foods, fodder crops, grain and pasture treatments;
4. Preparation for dispatch of livestock; and
5. Livestock transactions and movements.

For each of these elements, there is a 'food safety outcome'. The food safety outcomes are aimed at ensuring meat from your livestock is fit for human consumption. To maintain LPA accreditation, you must comply with all elements. These elements relate to what you declare and sign off on when completing the LPA NVD/Waybill Edition 1. You are also part of a random audit pool.

### LPA (2) Quality Assurance

The LPA on-farm quality assurance (QA) program, incorporating the Cattlecare and Flockcare programs, consists of three modules:

1. Food Safety Management (LPA Level 1);
2. Systems Management; and
3. Livestock Management.

Livestock producers have to be fully accredited to LPA level 1 before they can participate in LPA (2) QA. The first module of LPA QA, Food Safety Management, is in fact LPA (1). The other two modules each have five elements.

The five elements of the Systems Management module are:

1. Training
2. Internal auditing and document control
3. Quality Records
4. Document Control
5. Chemical Inventory

The five elements of the Livestock Management module are:

1. Livestock Husbandry and preparation
2. Livestock handling facilities
3. Livestock Transport
4. Animal Welfare
5. Accredited Livestock

In addition to these three compulsory modules, there is also now an optional Environmental stewardship module.

### **Environmental stewardship module**

MLA has recently introduced a draft Environmental stewardship module, being an optional module of the LPA Quality Assurance. A description of this is not available on the MLA website at this time.

This optional environmental module is only available to those livestock producers who are Certified to LPA QA, meaning that they have successfully completed the compulsory Food Safety Management, Systems Management and Livestock Management modules.

The Environmental stewardship module has four elements. These are:

1. Land management;
2. Biodiversity;
3. Water and soil; and
4. Greenhouse gas management.

Each of these elements has a single broad environmental outcome, which is represented by a number of performance indicators.

### **Cost**

The costs for LPA are relatively low. The only significant cost is for the annual audit required for LPA Level 2. This is equivalent to a Cattlecare or Flockcare audit, and is likely to cost around \$800.

### **Market demand**

LPA Level 1 is compulsory. Producers who sell livestock must be registered for LPA Level 1.

LPA Level 2 is likely to add value to other certification programs, such as EMS and eco-labelling. It would help inform the implementation of these programs, and the organisations responsible for them are likely to look favourably on wool growers who are certified to LPA (2).



## 5. Niche markets

It is doubtful that 'clean and green' certifications can add value to wool that is sold through the traditional auction systems that seek to provide wool to mainstream commodity markets, at least at the present time.

Currently, only a small number of textile industry customers are interested in wool that bears 'clean and green' certifications. These are often small companies like Hess Natur in Germany and i-merino in Western Australia, or large companies like Marks and Spencer and Nike that have one or two apparel lines that are made from 'clean and green' fibres.

International market research into retailer and brand company interest in ethically-produced wool commissioned by DPI&F and AWI in 2006 identified a number of companies that expressed a desire to source this type of wool from Australia. The following companies, from the US, Japan and western Europe, provided consent for their names to be made known to potential Australian suppliers of ethically-produced wool. These companies were:

- Aeon;
- Burberry;
- Isetan;
- Itokin;
- Konaka;
- LL Bean;
- Marks & Spencer;
- Next;
- Onward Kashiyama; and
- Pendleton; and
- Toabo.

These companies would be a good starting point for wool growers, wool grower groups and direct marketing companies that are considering producing and/or marketing certified wools. The certifications they were most familiar with were Certified Organic, Oeko-Tex, Fairtrade, the Japanese Eco-Mark, and the EU eco-label and other European eco-labels.

Wool growers that decide to certify their wool in accordance with a standard will more than likely need to change the way in which they market and sell their wool. Consequently, on-farm certification of wool needs to be approached hand-in-glove with marketing practices.

It is assumed that a desire to differentiate wool at the property level using some form of certification implies that wool growers will:

- Target particular wool customers that have an interest in particular wool certifications;
- Consistently produce wool with the qualities and in the quantities required by target customers;
- provide assurances for the attributes of wool and production practices that these customers require;
- use marketing strategies that optimise exposure of raw wool to target customers; and
- use sales strategies that optimise competition for raw wool amongst target customers.

The certification options that are best used for niche markets are either management systems or product labels.

## 5.1 Management systems

### ISO 14001

#### Introduction

ISO 14001 provides a systematic approach in the form of an environmental management system (EMS) that helps businesses to develop and implement an environmental policy, objectives and targets. This EMS is based on the continuous improvement cycle of planning actions, taking action, monitoring/measuring results, and reviewing and improving.

ISO 14001 is an international standard that specifies the requirements for an EMS that can be objectively audited for self-declaration by the owner of the sheep property, or third-party certification by a registered independent auditor.

ISO 14001 does not specify absolute requirements for environmental performance, such as setting targets for ground cover or the density of trees per hectare. Similarly, it does not specify practices that must be implemented, such as pasture monitoring sites or fencing of creek banks. However, it does require businesses to identify and comply with all relevant legislation and regulations, and to implement a process of continual improvement.

As the ISO 14001 EMS does not specify environmental or product performance criteria, it cannot be used as a product label. However, the ISO 14001 label can be displayed in buildings, on vehicles and letter-heads of an organisation.



ISO 14001 has 18 planning and management elements. The main elements are:

- Environmental policy of the business
- Identification of potential environmental impacts and their causes
- Compliance with legal and other requirements
- Formulating objectives and targets
- Documenting action plans for major activities
- Developing operational procedures for regularly repeated activities
- Identifying roles and responsibilities of people within the business
- Undertaking training of people in the business
- Developing communication plans
- Documenting all parts of the management system
- Setting up a system for managing all of the documents
- Developing emergency plans
- Monitoring and measuring results
- Evaluating compliance with legal requirements and business plans
- Taking corrective action
- Internal audit
- Reviewing performance
- Certification audit

### **What is required?**

Individuals or producer groups are required to develop their own ISO 14001 EMS. However, in most cases, individuals or groups would not be able to develop a fully compliant EMS without assistance, due to the technical and complex nature of the ISO 14001 standard. Assistance is generally provided through training workshops and/or or by professional consultants.

When the EMS is fully developed and documented, the wool grower is then in a position to commence implementation. The implementation of the EMS needs to have progressed and be tightly controlled by the wool grower before they are in a position to proceed with certification.

The certification of a wool grower to ISO 14001 must be done by a fully accredited certification body, and they often do not have auditors based in regional and remote areas. A well known example of a certification company is SAI Global. Like a number of other certification bodies, they have an office in Brisbane.

The certification body first assigns an auditor to the wool grower or wool grower group. There are some advantages in forming a grower group compared with undertaking individual property audits. The group develops and uses a common EMS which is certified, and only a few properties are inspected. This reduces the costs of auditing, but it does require additional resources and efforts to form and maintain a coherent group.

The first audit is known as a Preliminary or Desk-top Audit. This requires the auditor to visit the group office or the office of an individual wool grower. The auditor reviews the documented EMS, and provides a written report on its compliance with the requirements of the ISO 14001 standard. This is likely to take the auditor at least one day to complete, and in addition to this, there will be extra days required for travel. Any non-compliances are noted, and corrective actions must be taken before full certification can be awarded.

The next audit is known as the Certification Audit. On this occasion, the auditor will inspect the property and the documented EMS. It is anticipated that this would require two days of the auditors time, plus the usual travel time. If all goes well, then the wool growers business will be certified to ISO 14001, and a certificate will be issued. In addition to this, six-monthly or annual Surveillance Audits are required to maintain the certification. These are less intensive than the Certification Audit, but are still likely to take one day, plus travel.

The certification remains in effect for three years, and after this period of time a Re-certification Audit is required to renew the certification for another three year period.

### **Costs**

SAI Global have indicated that the daily cost for one of their environmental auditors is around \$1750 (inclusive of GST). Additionally, they charge a fee of \$0.99 per kilometre travelled. Assuming that the round trip is 1600 km, then this would cost \$1584 for each audit. On top of this, there may be other travel costs, such as accommodation and food.

Also, there is an initial application fee of \$1000, and an annual registration fee of \$1300.

The estimated costs associated with applications, registrations, audits and travelling are shown for years 1 and 2 in the table below. These are the costs for an individual property that completes the ISO 14001 certification process.

<b>Year</b>	<b>Costs</b>	
1	Application Fee	\$1000
	Preliminary audit	\$5250
	Certification audit	\$7000
	Annual Registration Fee	\$1300
	Travel	\$3168
	Total	\$17,718
2 and subsequent years	Annual Registration Fee	\$1300
	Annual audit	\$7000
	Travel	\$1584
	Total	\$9,884

These costs could be substantially reduced for individual wool growers if they operated as a group. While the costs for the group would be higher, these are then spread over the members, and thus the costs to any one member would be much lower (perhaps 40% of those shown in the table above).

#### **Market demand**

Currently, there is no market demand for any form of EMS, including a certified ISO 14001 EMS.

## **The Australian Landcare Management System (ALMS)**



### **Introduction**

ALMS is an EMS that is based on internationally recognised ISO 14001 standard. It contains the 18 elements of the ISO 14001 standard, and in addition to this requires landholders to address the priority issues of the local catchment, and has a focus on conserving biodiversity and soil health.

Accordingly, ALMS is closely aligned with the ISO 14001 standard described above. However, ALMS has two levels of recognition that precede the full ISO 14001 certification audit. This enables a wool grower to receive recognition for achieving two levels of EMS implementation at a cost much lower than that associated with full ISO 14001. More information on ALMS can be found at <http://www.alms.org.au>

### **What is required?**

ALMS offer an introductory workshop, outlining their requirements and processes. If producers decide to proceed with ALMS, then it is first necessary to become a member. The annual membership fee is \$150.

Producers develop their ALMS EMS during a 3 day clinic run by an ALMS Facilitator. Producers are expected to attend a number of half-day sessions over the three days, where it usually takes at least three sessions (1.5 days) to develop their ALMS EMS. Producers use the MyEMS computer package to develop their ALMS EMS, with the assistance of the ALMS Facilitator.

The EMS of the producer can be audited at this workshop, although in most cases this does not occur until after the workshop when the producer has had time to finalise their EMS. The Facilitator or similar ALMS representative audits the EMS to determine its compliance with the ISO 14001 standard. If judged compliant, then a certificate is awarded, indicating that the producer has achieved the first level of ALMS certification, known as Eucalypt. Producers also receive a tin sign showing that they are a Eucalypt member of ALMS, which can be hung on the entrance to their property.

In addition to the desk-top audit, the Eucalypt level of ALMS also requires a surveillance audit of the property. This is again conducted by an ALMS auditor that is familiar with the producer and their EMS. This person will visit and audit the property and the producers' EMS.

The 2<sup>nd</sup> level of ALMS is known as Banksia. This requires a desk-top audit of the EMS and a property inspection by a 3<sup>rd</sup> party, someone who was not involved in the development of the producers' EMS. This can be done by a representative of ALMS, or by an outside person with experience in auditing, such as a Cattlecare auditor.

The 3<sup>rd</sup> level of ALMS is known as Grevillea. This requires the EMS and the property to be audited in accordance with the full ISO 14001 certification requirements, which must be done by an auditor from an accredited certification body such as SAI Global. These environmental auditors cost at least \$1750 per day, plus expenses (see ISO 14001 above for more details on ISO 14001 certification costs).

ALMS also offers a range of support services, including:

- The Australian EMS manual and workbook;
- A landholder monitoring guide;
- Spatial information tools and information management protocols
- Access to MyEMS computing software;
- On-line EMS learning tools, and
- Newsletter.

### Costs

The costs of the first workshop are mainly associated with the Facilitator. Facilitators cost around \$750 per day plus travel and accommodation expenses, and this is shared by the participants, usually five.

The ‘Eucalypt’ level of ALMS also requires an audit of the property. The cost of an auditor is around \$750 per day, plus expenses.

The ‘Banksia’ level of ALMS requires an audit of the producers EMS and property, and must be done by someone who did not help the producer develop their EMS. This audit is also likely to cost is around \$750 per day plus expenses.

Year	Costs	
1	Application Fee	\$150
	Share of workshop	\$600
	“Eucalypt” property audit	\$900
	Total	\$1650
2	Application Fee	\$150
	“Banksia” property audit	\$900
	Total	\$1050

ALMS is also proposing to gain FarmBis accreditation, allowing producers to receive subsidies of around 65% for EMS training workshops.

### Market demand

As with other forms of EMS, there is no market demand for ALMS.

## SQF 1000

### Introduction

SQF means Safe Quality Food. The SQF Program is an integrated food safety and quality management protocol designed for the food sector. It is designed specifically for the food industry with application at all links in the food supply chain. Information on SQF standards can be found at <http://www.sqfi.com/>.

The SQF Program contains two standards, SQF 1000 and SQF 2000. These are based on the principles of HACCP, Codex, ISO and Quality Management Systems.



The SQF 1000 Code is designed specifically for primary producers. This standard can be used by a producer to control those aspects of their operations that are critical to maintaining food safety and quality.

The SQF 1000 standard was principally designed as a combined food safety and quality assurance standard for use on properties that produce fresh food, such as vegetables, fruit, grain, and livestock.

However, over the past 18 months, the SQF 1000 standard has been adapted to the production of wool. This has been trialled with wool growers in Western Australia who are associated with a specialised eco-wool supply chain company called Izwool (have a brand called i-merino).

A number of modules are also provided as voluntary options to suppliers whose markets require additional assurances for matters in addition to food safety and quality. They include Worker Welfare, Environment, Animal Care and Food Security. This generic standard with its various modules allows a primary producer to use just one standard to provide a range of assurances for a range of products.

The SQF program has been implemented by over 5000 companies operating in Asia-Pacific, the Middle East, United States, Europe and South America. Registered SQF Experts and SQF Auditors are implementing and auditing SQF systems around the world.

The SQF Program is rigorous, flexible and complements government programs and industry initiatives. It also avoids the duplication and confusion associated with the current array of industry sector programs. SQF certification provides benefit and value. It is:

- a tool to build confidence and trust between retailers and suppliers
- the enabling tool for producers and manufacturers to demonstrate "due diligence" and compliance with regulatory and product traceability requirements
- an internationally recognized standard, suitable for all food suppliers operating in domestic and global markets
- a means to reduce the number and frequency of inconsistent and costly audits
- a proven way for suppliers to gain an advantage over their non-certified competitors and to increase profits by aligning their products to retailer/consumer requirements
- a management system that promotes cost efficiencies through waste reduction and "one system, one audit"; and
- a structure for implementing and demonstrating sustainable production and manufacturing best practices.

## **Benefits for producers**

The SQF Program is rigorous, flexible and complements government programs and industry initiatives. Implementation of SQF helps avoid the duplication and confusion associated with the current array of industry sector programs and various audit checklists. SQF Certification provides many benefits and value to suppliers. By complying to one internationally recognized standard, SQF Reduces the need to undergo multiple audits to different standards, allowing Suppliers to shift resources from keeping up with multiple audits to concentrating on improving their product and their bottom line. Profitability is increased, processes become more efficient and streamlined, waste is reduced and the overall quality of product increases. SQF Standards enable suppliers to meet government food safety requirements and underpin "due diligence" responsibilities. Adherence to the SQF Program gives suppliers the assurance that their products consistently meet retailer specifications. Supplier image is enhanced and market access improved through strengthened supplier and retailer relationships that support buyer confidence.

## **What is required?**

SQF is divided into three levels.

- **Level 1** Food Safety Fundamentals
- **Level 2** Accredited HACCP Food Safety Plans
- **Level 3** Comprehensive Food Safety and Quality Management Systems Development

Each Level, which indicates the stage of development of a suppliers SQF system, builds on the previous steps, leading toward a comprehensive certification for food safety and quality. By dividing the implementation into more manageable and structured steps, the supplier can demonstrate continuous improvement while controlling costs and resources.

Only qualified SQF Experts can implement SQF systems. Registered SQF Auditors work with licensed and accredited certification bodies to provide SQF certification.

A supplier will be placed onto the SQF register (made available on the SQF website) after achieving Level 1, thereby immediately alerting their customers of their achievement and helping to raise customer confidence and support.

The steps involved in implementing the SQF program are as follows:

- Supplier determines the level of certification to be achieved (generally requested by the customer).
- Supplier designates and trains a staff member as its SQF Practitioner to lead development of its SQF System or hires an external SQF Consultant licensed by The SQF Institute.
- SQF Practitioner is trained at a licensed SQF Training Center.
- SQF Practitioner conducts a gap analysis of the supplier's current system.
- Supplier selects an SQF licensed Certification Body to perform a certification audit.
- Certification Audit is conducted (document review, on-site audit, audit review and exit meeting).
- Auditor recommends certification if no critical or major non-conformities are found and the audit result indicates an acceptable rating
- The Certification Body Review Council makes the final decision and the SQF Certificate and audit report are issued. The SQF Certificate is valid for 12 months.
- If critical or major non-conformities are found, supplier takes corrective action before a second certification audit takes place.
- Re-certification audits are conducted annually and within 30 days of the scheduled audit date. Audit frequency can be either annual or biannual depending on the type of certificate issued.



## Costs

The annual registration fee vary depends on the size of the farming operation, but for most wool growers this is likely to be around \$25 to \$55.

The cost and amount of time required to complete an audit depends on the complexity and size of the operation and the level of certification requested. For example a vegetable grower and packing audit requesting SQF 1000 Level 1 (Food Safety Fundamentals) may take less than one day, while a producer with several enterprises (e.g. wool, sheep meat, cattle, grain) will take a whole day or more.

Depending on the size of the operation, the costs of SQF 1000 audits vary from \$300 to \$600, and are similar to those for Cattlecare and Flockcare. Audit costs can be reduced significantly if certification is undertaken as part of a contractual group.

A primary producer can develop their own SQF 1000 system using information on the SQF website, or they can obtain assistance on a fee for service basis from an SQF Expert or similar consultant.

In Western Australia, wool growers affiliated with i-merino have been provided with SQF training. This involves a full day training workshop, and then a half-day on-farm activity where the SQF system is customised to the farm. Wool growers have paid between \$1200 and \$2000 for the 1.5 days of training and the first audit.

Estimated annual costs for SQF 1000 certification are provided in the table below.

Year	Costs	
1	Application Fee	\$ 55
	Training	\$600
	Audit	\$600
	Total	\$1255
2 and subsequent years	Application Fee	\$ 55
	Audit	\$600
	Total	\$ 655

## Market demand

The SQF standards are recognized by the Global Food Safety Initiative, an organization representing over 70% of food retail revenue worldwide. It is also recognised by Coles and Woolworths, although they would only require this for fresh vegetables and fruit. In relation to livestock and fresh meat, all that is required by retailers is Livestock Production Assurance (LPA) Level 1. SQF 1000 is regarded as LPA Level 2 (quality assurance).

The use of SQF 1000 in the wool industry is only in its infancy. This has commenced with wool growers in Western Australia who wish to sell their wool to i-merino. This company believes that the SQF 1000 certification will add value to the retail and brand companies in the US and Europe that purchase wool from i-merino, but this is yet to be confirmed.

## 5.2 Product labels

### *Certified Organic*

#### **Introduction**

Certified Organic wool must be produced on a certified organic property from certified organic sheep. Hence, all farm and all livestock production and husbandry practices, and not just those related to the animals, must comply with the organic standard.

There are at least seven organisations in Australia that certify properties with regard to an organic standard. While each certifying organisation has their own slightly different standard, all comply with the National Standard for organic and Biodynamic Produce (see <http://www.daff.gov.au/agriculture-food/food/organic-biodynamic>).

#### **What is required?**

When a producer decides to implement organic production practices, there is a period of three years when the land and land management undergoes a transition to organic production. During this time, the producer goes through three stages of certification:

1. Precertification (one year)
2. In Conversion (two years)
3. Certified Organic (end of third year)

The processes and costs associated with becoming certified organic are outlined below.

1. Submit an Application Form, Statutory Declaration to the Certification Organisation.
2. Review the organic Standard, develop and document your production system using the Livestock Management Plan from the Certification Organisation, and ensure that you practices comply with all aspects of the standard.
3. Submit your Livestock Management Plan and Application Fee of \$495 to the Certification Organisation for review and feedback.
4. Certification Organisation then arranges for the first Audit. The auditor visits and inspects the property, and discusses management practices with the producer. The Auditor also collects soil and tissue samples that are tested by the Certification Organisations. Finally, the Auditor completes a report and submits this to the Certification Review Team, and on this basis they then make a Recommendation.
5. Compliance documents are sent to the producer detailing the Certification decision and any specific actions that are required. An invoice is also sent at this time for the additional costs of Auditing. This is usually around \$500.
6. Producers will also be invoiced for the cost of soil and tissue tests. Each soil test costs \$88, and each tissue test costs (\$110). Soil tests are usually required for potential hot-spots, such as dip sites. If soil tests indicate residue problems, then tissue tests may also be required.
7. When Certification is recommended by the Certification Organisation, the producer signs the Compliance Documents, and the Certificate is then issued.

8. The producer is then officially in the first stage of conversion to organic production. This stage is known as Precertification, and lasts for one year. During this time the producer cannot use the organic logo for marketing their produce.
9. After the Precertification period of one year, the producer is Audited for a second time. Providing this audit is successful, the producer will then be issued with a Certificate that verifies they have achieved the first recognised level of organic production, known as 'In Conversion'. This second audit will cost around \$800. In addition to this, the producer must also pay an annual Certification Fee of \$231. At this stage, a producer can use the Certified Organic In Conversion logo on their produce.
10. The producer is again Audited during the third year, and when three years is up, they can trade as a fully certified organic producer. In the third year, and all subsequent years, the annual audit cost will be around \$800, and they will be required to pay the annual Certification Fee of \$231.
11. In addition to the audit costs and certification fee, producers are also required to pay a Levy, which is 1% (plus GST) of the gross sales of certified organic produce.

### Costs

A summary of the certification costs and fees are provided in the table below. The estimated levy costs are based on annual gross sales of \$100,000.

Year	Costs	
1	Application Fee	\$495
	Audit plus travel	\$500
	Soil tests (three)	\$264
	Total	\$1259
2	Certification Fee	\$231
	Audit plus travel	\$800
	Levy (1% of \$100,000)	\$1000
	Total	\$2031
3	Certification Fee	\$231
	Audit plus travel	\$800
	Levy (1% of \$100,000)	\$1000
	Total	\$2031

### Market demand

Certified Organic is the leading "clean and green" certification option for the textile industry.

It is the most well known certification option, possibly spilling over from its wide-spread use in the food sector.

Certified Organic is the on-farm option of choice for wool customers, and quite possibly, is the only 'clean and green' standard they are asking for.

Certified Organic is also probably the only on-farm standard that is capable of delivering a premium to wool growers. This premium is around 6%.

Some wool industry commentators now see organic wool as an emerging new market, where Australian wool growers will struggle to keep up with market demand.

For example, Marks and Spencer have recently decided to make all of their mens pure wool jumpers from organic wool. They produce 650,000 woollen jumpers annually, and this would require around 250 tonnes of clean organic wool, or 2200 bales. Currently, Australia produces around only 300 to 400 tonnes of clean organic wool annually.

A number of other leading apparel retailers and brand companies have also recently announced that they will make available one or more organic wool products.

At the current time, customer interest in organic wool is growing rapidly, but it remains to be seen if this is a long-term trend, or just a short-term fashion.

## Green Tick

### Introduction

Green Tick Certification Limited provides third-party sustainability certification. The main label of the Green Tick organisation is Green Tick SUSTAINABLE.



GreenTick™ SUSTAINABLE shows that a product meets the GreenTick™ Sustainability Standards. This standard has eight safety and 12 sustainability criteria.

Green Tick SUSTAINABLE places considerable emphasis on health and safety aspects of a property's operations. A formal health and safety manual, that addresses the main OH&S aspects of a property, is a requirement of this standard. Green Tick also requires that properties comply with their standards for the use and management of natural resources, chemicals, energy and wastes.

### The Green Tick labels

GreenTick™ SUSTAINABLE is the foundation standard for four other Green Tick brands or labels. Green Tick also have a fifth label, Green Tick FAIR TRADER, but this is only available to farmers in developing countries.

#### Green Tick NATURAL



In order to be certified 'Green Tick™ NATURAL' the Approved Product must:

- Meet the standards noted above for 'Green Tick™ Sustainable'; and,
- Be independently tested and confirmed as containing only natural content or substances by a Testing Authority.
- 

#### Green Tick ORGANIC



In order to be certified 'Green Tick™ ORGANIC' the Approved Product must:

- Meet the standards noted above for 'Green Tick™ Sustainable'; and,
- Hold a current organic certification from a Testing Authority approved by the International Federation of organic Agriculture Movements ([IFOAM](#))<sup>®</sup>.

#### Green Tick GE-FREE



In order to be certified 'Green Tick™ GE-FREE' the Approved Product must:

- Meet the standards noted above for 'Green Tick™ Sustainable'; and,
- Be independently tested and confirmed as containing no genetically-engineered content or substances by a Testing Authority.

## Green Tick CLIMATE-FRIENDLY



In order to be certified 'Green Tick™ CLIMATE-FRIENDLY' the Approved Product must:

- Meet the standards noted above for 'Green Tick™ Sustainable'; and,
- Be carbon neutral (zero carbon emissions) or carbon negative (consumes carbon) over its whole life cycle; or,
- The applicant holds sufficient carbon credits to achieve carbon neutral or carbon negative status for the product over its whole life cycle.

See <http://www.greentick.com> for more information on Green Tick labels.

### What is required?

Green Tick usually require producers to have 12 months of farm record before they can become certified. However, if producers have an EMS, then they would be able to be certified much more quickly.

Green Tick seem prepared to use existing Australian auditors that are located in regional Australia, such as those who audit for Cattlecare. Therefore, the auditing costs are reasonable.

### Costs

The main direct costs associated with Green Tick SUSTAINABLE certification are summarised below.

As with the other certifications, this does not include the costs of implementing the requirements of Green Tick standards, such as building a chemical shed or erecting property signage.

Year	Costs	
1	Application Fee	\$1125
	Audit plus travel	\$900
	Annual registration Fee	\$112
	Total	\$2137
2	Annual registration Fee	\$112
	Audit plus travel	\$900
	Levy (0.5% of \$100,000)	\$500
	Total	\$1512

### Market demand

The Green Tick eco-labels have also only been introduced in recent years. Additionally, the Green Tick company does not seem to have the resources needed to promote their labels in global markets, and thus awareness of this label is low. The large majority of EU, US and Japanese retailers/brand companies interviewed in 2006 were not aware of this label.

New Zealand is possibly the only country in which Green Tick labels are being used, and given that wool is one of their major exports, it is possible that the NZ wool industry will play a role in the promotion of these labels.

In June 2007, an employee of the company Plan B from NZ emailed Lester Pahl at DPI&F asking him if he was aware of any merino wool producers in Australia that were certified to Green Tick. This company said they had a high profile client in the NZ fashion industry that wanted to source organic merino or the next best thing. They wanted information on potential suppliers and wool samples.

Consumer trials conducted by DPI&F in Brisbane with Green Tick Natural labelled lamb found that consumers were attracted to the label. This indicates that the Green Tick label has good potential for conveying 'clean and green' attributes of products to consumers.

However, Green Tick is relatively unknown, and more market research would be required to determine what impact it may have in the market place.

## **Koala Friendly**



### **Introduction**

This is a recent labelling program of the Australian Koala Foundation. This label addresses a wide range of sustainability criteria, covering natural resource management, livestock husbandry and care, chemical usage and waste management. Details on this standard can be found at

<http://www.savethekoala.com/ecolabel.html>.

### **What is required?**

#### **Step 1: Self-Assessment**

The livestock producer's first step towards achieving Koala Friendly Certification is to complete a self assessment against the Koala Friendly & Sustainability Performance Criteria. To do this, the producer completes a confidential questionnaire made up of 2 levels of criteria. The first level is mandatory in the sense that all criteria must be met before a property can apply for the label. The second level is broken up into two subjects; (1) Koala Conservation and Management, and (2) Overall Sustainability. The questionnaire is to be posted back to the Australian Koala Foundation who returns a report outlining whether it is feasible for the livestock producer to continue with the program.

#### **Step 2: Verification & Discussion**

An auditor from the Australian Koala Foundation visits the farm to verify the farm's self-assessment results and discuss marketing options for Certified Koala Friendly products. To qualify for Koala Friendly Certification, AKF expects the farm to satisfy the minimum requirements - an average score of 50% for both the Koala Conservation and Management Criteria and the Overall Sustainability Criteria. It is not expected that the producer meet the minimum requirement the first time they fill out the self assessment. During this visit, the AKF auditor will work with producers to identify some actions needed to improve the properties average score.

#### **Step 3: Koala Habitat Mapping**

Mapping is an integral part of the certification process and involves AKF overlaying priority koala management areas on an aerial photograph of your property. This step can usually be conducted remotely.

#### **Step 4: Koala Management System & Audit**

The koala management system is based on the Pastoral Environmental Management System (EMS) of DPI&F Queensland, with modifications to suit the performance criteria and other requirements of the Australian Koala Foundation. Providing the livestock producer has decided to continue working towards attaining Koala Friendly certification, the next step is to work through and write his/her Koala Management System.

#### **Step 5: Certification**

Providing Step 4, produces a positive outcome, the Australian Koala Foundation will certify the producer's farm. The producer will receive two copies of a certification contract (covering rights and responsibilities of both parties) to be signed and one returned. Following this, the Australian Koala Foundation will:

- issue the farm with a certification number for the period of three years subject to successful audit every 18 months,



- supply two 'Certified Koala Friendly' farm gate signs,
- supply 'Certified Koala Friendly' product labels for placement on certified products.

### **Step 6: Review & Development**

Every 18 months, a Certified Koala Friendly auditor visits the farm to review progress made on identified Action Plans. The auditor then decides whether enough progress has been made in order to continue the Koala Friendly certification. The auditor will then help to review the producers Koala Management System to identify and prioritise objectives and targets, and develop new action plans for achieving these objectives and targets as part of the cycle of continuous improvement.

### **Cost**

The certification costs for the Koala Friendly label have not yet been finalised. Preliminary estimates of costs are as follows.

Over a period of 18 months, where the AKF provide all services associated with Steps 1 to 5 above, including the first two audits, the costs were estimated to be around \$10,000. Then, each subsequent audit, at 18 month intervals, was estimated to cost around \$2,200.

The Koala Foundation is now reviewing its certification program, including the services provided and their costs, with a view to significantly reducing the costs to producers.

### **Market demand**

The Koala Friendly label has not been tested in textile markets, and thus no information is available on market interest.

However, the Vermont organic Fibre Company from the US recently met with the Australian Koala Foundation and expressed interest in a dual certification. This company sources organic wool from wool growers in Queensland, and was interested in one or more of these growers also becoming certified to the Koala Friendly program. This company would be prepared to market this wool in the US.

## **European eco-label for textile products**

### **Introduction**

For textiles to be labelled with the European eco-label, they must comply with a number of environmental and quality criteria. Assessments are made based on a product's environmental impact over its entire lifecycle, from fibre production to product disposal. However, the environmental criteria of the European eco-label for textile products are mostly concerned with the types and quantities of chemicals used during processing and manufacturing. As such, this standard has minimal application to the wool growing or property level of supply chains. In this respect, it contains a chemical residue standard that sets upper limits for chemical residues present in raw wool. Information on this eco-label can be found at [http://ec.europa.eu/comm/environment/ecolabel/product/pg\\_clothing\\_textiles\\_en.htm#gendescrip](http://ec.europa.eu/comm/environment/ecolabel/product/pg_clothing_textiles_en.htm#gendescrip)



Raw wool that complies with the chemical residue standard of the EU eco-label for textile products is being called 'Eco-Wool' in Australia.

Eco-Wool is much easier to produce than organic, and thus much large quantities of it are available. It is estimated that 40% of the Australian wool clip would qualify for the EU eco-label.

### **What is required?**

Wool growers that wish to verify their wool as compliant with the EU eco-label need to request a chemical residue test through their broker. This residue test is performed by CSIRO Textile and Fibre Technology (Geelong) on the AWTA core samples.

In the past, growers have been able to deal directly with CSIRO, but it appears that this is about to change. AWTA, and possibly brokers, may soon administer the chemical residue testing program, and if this eventuates, growers will need to work through them. AWTA would then commission CSIRO to undertake the tests.

If the samples are found to be compliant with the chemical residue limits of the EU Eco-label for Textile Products, then a certificate is issued verifying this.

### **Cost**

This new structure for the testing residues in wool will have an influence on the costs of the test. It is likely that residue tests will cost \$154 per sample. Customers usually require tests on samples from two or three of their main wool lines.

Two tests would cost \$308, and three tests would cost \$426.

### **Market demand**

AWI is actively promoting Eco-Wool as a form of 'clean and green' wool. It is one of only two options, with the other being organic, that is considered as a practical option for wool growers.

Market interest in Eco-Wool has been a discussion point for several years, ever since the rather stringent legislation affecting wool scourers was marked for full implementation at the end of 2007.

At the end of this year, scouring plants in the EU will need to much more carefully manage the discharge of chemical residues into the environment. They will need to regulate these discharges,

and prove that they are not harming the environment. In order to manage this, they will need to know and control the chemical residue levels of raw wool entering their plants. More than likely, they will prefer to use raw wools that have certified low levels of residues.

However, wool customers in the EU have not yet signalled a need for Eco-Wool, in spite of the impending legislation. While residues may constitute a problem for scourers, the actual levels of residues that a mill will tolerate will vary because:

- They use different effluent treatment systems;
- They discharge into river systems of variable size and flow; and
- Of differences in the number of similar polluting industries in their region.

At this stage, there is little market demand for Eco-Wool, and commentators vary considerably in their views on the extent to which this may grow in the future.

Market research initiated by DPI&F in 2006 found that leading retailer and brand company awareness and use of the EU eco-label was limited, even in the EU. Of the 14 companies interviewed in western Europe, six were either not aware of it or only knew it by name, and the other eight were familiar with it. No EU companies used it. In the US, none of the nine companies interviewed were aware of this label.

## ***Australian eco-label for textile products - Environmental Choice Australia***

### **Introduction**

The Australian eco-label program is relatively new, and has only been available for a few years for a few product categories. It is based on the same international standard (ISO 14024) as the European eco-label, and is equivalent with it. Information on the eco-label can be found at:

<http://www.aela.org.au/>.



The Australian eco-label for textile products is equivalent to the EU eco-label described above. It has the same chemical residue limits for raw wool. Therefore, the chemical residue test provided by CSIRO for the EU eco-label can also be used for the Australian eco-label (see details on this above).

### **What is required?**

Same as for the EU eco-label (see above)

### **Cost**

As per the EU eco-label above

### **Market demand**

The Australian eco-label will only be of interest to companies that are selling woollen textile products in the domestic market.

The Australian eco-label has only been introduced recently, and at this early stage there are no reports of market interest.

## Oeko-Tex 100 and 1000

### Introduction

Öeko-Tex Standard 100 is the most widely used standard in the textile industry. The 45,000 certificates that have been issued to date and the 6,662 certificates issued in 2004 make it the most frequently used textile eco-label internationally, giving it world-wide recognition.



The Oeko-Tex 100 standard is referred to as a human ecology label as it screens for harmful substances present within processed textiles that come into contact with consumers. This standard only addresses the finished textile goods. Öeko-Tex 100 sets allowable pesticide residue levels that relate to the end use of a specific textile product. For example, textiles for use with babies have a total pesticide residue limit of 0.5 ppm and all other textiles have a limit of 1 ppm.

Although there is a focus on pesticide residues in the end-product, there is no limit for pesticide residues in raw wool. However, the inputs at early production stages must be considered as they have an on-going effect through the production process. They also add processing costs to downstream participants due to the cost associated with removing the residues.

A report from New Zealand found that only six pesticides on the Öeko-Tex 100 list of controlled pesticides were currently used by wool growers for protection from external parasites in that country. These chemicals were:

- Chlorfenvinphos;
- Cypermethrin;
- Coumaphos;
- Diazinon;
- Cyhalothrin; and,
- Propethamphos.

The 'Dip Residues on New Zealand Greasy Wool 2003/4' report suggests that this standard presents few problems for the New Zealand merino industry. Very few clips sampled had any traces of Coumaphos, Cyhalothrin, Cypermethrin, Diazinon and Propethamphos. The only dip active that is used and could be of concern in raw wool is the relatively high level of Chlorfenvinphos which is the active ingredient in Supreme™ and Fly Strike Dressing™.



In addition to the Oeko-Tex 100 standard, the Oeko-Tex 1000 standard encompasses the ecology of production. It does this by verifying the environmental performance of a production site, enabling products produced at that site to be audited and certified as environmentally sound. However, production sites are restricted to processing and manufacturing plants, and thus wool growing properties are traditionally not regarded as production sites.

For more information on these two standards see <http://www.okotex.com/en/main.html>.

### **What is required?**

The Oeko-Tex standards do not require anything of wool growers, as none of their criteria relate to raw wool or other raw fibres.

However, there may well be a market advantage in providing evidence of low residue levels to customers that use this label. While there is no mandatory requirement for companies that use this label to be concerned about the residue levels of raw fibres, it seems likely that they would prefer to use fibres that contain little residue, rather than wash this off and emit this into a river.

As with the EU eco-label, wool growers that wished to align themselves with the Oeko-Tex label would need to submit wool samples for testing and verification to CSIRO.

### **Cost**

As per the EU eco-label.

### **Market demand**

No wool markets have expressed an interest in purchasing wool specifically for the Oeko-Tex label. Therefore, this is only a potential market at this time.

However, the Oeko-Tex label is the most well known and widely used textile label globally. The market research commissioned by DPI&F found that of the 14 retailers/brand companies interviewed in the EU, 13 were aware of this label, and six of them used it. In Japan, seven of the 10 companies interviewed were aware of this label, and two used it. In the US, only four of the nine companies interviewed were aware of this label, and none of them used it.

Given the widespread use of this label, it would be well worth exploring market interest in low residue Eco-Wools.

## **Bluesign**

### **Introduction**

The bluesign® standard appears to be another standard that focuses on the elimination and verification of harmful chemical residues in textiles. However, unlike Oeko-Tex which is only concerned with human health impacts of the final garment, bluesign covers the complete range of environmental, health and safety issues throughout the textile production chain, i.e. air and water emissions, occupational health and resource management.

Details of this standard can be found at <http://www.bluesign-tech.com/>.



The bluesign® standard combines aspects of consumer safety, water and air emissions as well as occupational health in a single standard. The bluesign® standard seeks to create transparency along the whole textile production chain without compromising functionality, quality or design.

It is a holistic approach towards the effective management of relevant resources within each single textile process of the supply chain, from fibre production to retail, from consumer to the disposal of the garment.

The bluesign® standard also verifies that suppliers have met the chemical residue requirements of retailers and brand companies who have restricted substance lists (RSL). Examples of these are Levi's, Nike, GOTS, and Marks & Spencer.

### **What is required?**

Chemical residue testing

### **Cost**

Unknown

### **Market demand**

Bluesign also appears to be a relatively recent label, and thus little is known about its impact in textile markets. However, Patagonia, a pioneer in the development of sustainable textiles and clothing, has become the first clothing brand to join the bluesign® standard. A number of other companies have also using this standard.

## **Japanese Eco-Leaf**

### **Introduction**

This is a recent eco-label developed in Japan.



The Eco-Leaf organisation has confirmed that this standard would be available for use by wool growers in Australia. In fact, this organisation welcomes the development of an Eco-Leaf program for wool production.

However, it seems that it would be the responsibility of the Australian wool industry to develop the criteria for this label and then submit this to Eco-Leaf for approval.

Information on the Eco-Leaf program can be found at <http://www.jemai.or.jp/english/ecoleaf/outline.cfm>

### **What is required?**

The criteria for this eco-label that apply to wool production have not yet been determined.

### **Cost**

Unknown

### **Market demand**

This is a new eco-label and as yet there has not been an opportunity to determine textile market interest in this. However, given the interest of Japanese retailers and brand companies in ethically-produced wool, it is possible that this Japanese eco-label would be useful in marketing wool in that country.