

Rice Industry Environment Policy

The Australian rice industry cares about and depends upon a healthy environment. Water, soil, air, habitat and local communities are fundamental resources for the industry and the broader community.

We are working towards a better environment for current and future generations, by continually improving the management of our natural resources. We aim to achieve this through developing an improved understanding of our environmental challenges, innovative solutions, strong partnerships and appropriate practice changes.

The rice industry recognises that efficient and productive farming businesses are a necessary pre-condition for good environmental management and outcomes.

The environmental policy is a statement of commitment agreed to by the membership of the Ricegrowers' Association of Australia (RGA) to improve environmental management and stewardship in our region. The policy is supported by a range of industry environmental programs and delivered through the Environmental Champions Program.

Policy goals

The Australian rice industry aims to implement an effective environmental policy that it will:

1. Leave a legacy of a healthy environment including productive soils, clean air and water, and diverse and robust natural habitats, rivers and watersheds.
2. Enable sustainable rice farms and regional communities.
3. Provide safe and high quality food and other products.

Policy implementation

The rice industry recognises the need to integrate environmental thinking into everyday farm management and decision-making, longer term farm strategic planning and the management of all non-farm aspects of the industry. The rice industry will continue to:

1. Increase our understanding of environmental issues and the role and responsibilities of the rice industry.
2. Promote environmental and resource stewardship with rice growers and the wider community.
3. Build our capacity and skill base to meet environmental challenges by facilitating practice change and adaptive management.
4. Form partnerships that serve common environmental understanding and outcomes.
5. Develop showcases of rice industry best practice.
6. Encourage environmental innovation.

The industry's environmental policy focuses on the five key areas of **water, air, soils, habitat** and **community**.

The delivery mechanism for implementing our environmental policy is the **Environmental Champions Program**.

Water

The industry's policy on water management covers the following three elements:

1. Regulatory compliance
2. Water use efficiency
3. Water use planning and budgeting

Regulatory compliance

Ensuring rice growers are complying with the regulatory obligations concerning on-farm water use is necessary to avoid third party effects and maintain the broader community's support of the industry.

The rice industry's policy seeks universal compliance with the following regulatory requirements:

- Whole farm water balance limits to prevent rising water tables and associated salinity issues.
- Drainage water management (chemical withholding and volume).
- Adhering to soil suitability requirements for rice growing.

Water use efficiency

Improving on-farm water use efficiency reduces the volume of water required to produce each tonne of rice, ensuring the long term sustainability of the industry and continuing community support. Efficient water use also helps reduce the effect of rising water tables.

Our policy aims to ensure growers minimise water use by adopting best practice in the following aspects of crop management:

- Planning and implementing efficient irrigation layouts.
- Crop seeding techniques and timing.
- Recycling and storage infrastructure.
- Crop agronomy and crop rotation.

Water use budgeting and planning

Effective water use budgeting and planning enables rice growers to make sustainable resource management decisions.

Our policy aims to improve irrigators' decision making about water use by improving expertise in the following areas:

- Gross margins and the opportunity cost of different water use options.
- Effective scenario planning to manage water availability risk.
- Knowledge of the water market and water trading rules.

Air

The industry's policy on air quality covers the following issues:

1. Responsible stubble burning
2. Preventing chemical spray drift damage
3. Reducing greenhouse gas emissions

Stubble burning

Ensuring growers burn stubble in a responsible way, to minimise the effect of smoke on community amenity, the health of nearby residents and on road safety, is critical to avoid third party effects and maintain local communities' support for the industry.

Our policy seeks to ensure all rice growers are aware of, and adhere to, responsible burning practices. These include:

- Using stubble management options other than burning.
- Burning during the middle of the day to avoid inversion layers.
- Achieving a hot burn with dry stubble.
- Burning with definite wind direction and velocity.
- Avoid burning when wind is likely to carry smoke over residential areas or roads.
- Recording stubble burning activity, including time of day and wind direction/speed.

Chemical handling and application

Ensuring the proper handling and application of farm chemicals is necessary to maintain safe working conditions on farm. Minimising agricultural chemical spray drift is also important to protect nearby vegetation and waterways. It is also a mandatory legal requirement where there are adjacent sensitive crops.

Our policy aims to ensure all growers and spray applicators in the industry use best practice management when handling and applying chemicals. This includes:

- Ensuring chemicals are stored, handled and transported in compliance with regulations.
- Ensuring all chemical application is carried out in accordance with product labels.
- Understanding and monitoring conditions while spraying to prevent drift damage.
- Recording all chemical applications in accordance with regulatory requirements.
- Consulting with neighbours about chemical application intentions.
- Encouraging the use of closed intake systems for chemical induction.

Greenhouse gas emissions

The rice industry understands that the agricultural sector has an important role in contributing to Australia's effort to reduce global greenhouse gas (GHG) emissions, including methane, nitrous oxide and carbon dioxide. Under schemes to credit emissions reduction activities, there may also be the potential for rice growers to earn income from emissions reducing farming practices.

Our policy aims to maximise the number of growers who, on the basis of current and future scientific research, undertake practices that reduce their on-farm emissions. These will include irrigation, stubble and fertiliser management practices that have been demonstrated to reduce GHG emissions.

This policy also aims for growers to undertake best practice energy use by carrying out energy use audits and implementing energy saving measures on farm to reduce CO2 emissions.

Soils

The industry's policy on soils aims to improve soil health by improving the structure, fertility and biota of the region's soils. Achieving this will reduce the effects of agricultural activity on our soils and improve on-farm productivity.

Our policy aims to ensure growers can improve their soil health by identifying best practice and facilitating adoption in the following areas:

- Stubble management. Maintaining stubbles in the soil to improve soil structure.
- Optimal crop rotations. Including 'green manure' crops to minimise synthetic fertiliser use.
- Tillage management. Minimising soil disturbance.
- Precision agriculture. Reducing inputs through soil testing, effective data capture, recording and review, and developing and applying prescriptions.
- Soil types matched to production systems.

Growers will be encouraged to trial innovative soil health practices and share outcomes with peers.

Habitat

There are a number of important benefits that can be achieved by the rice industry improving habitats and encouraging biodiversity in the rice growing region. These benefits are many and varied, including:

- Ensuring the industry's sustainability and leaving a legacy for future generations.
- Improving species diversity.
- Achieving better integrated pest management with the environmental benefit this brings.
- Providing important ecosystem services to the broader community.
- Improving social capital through collaborative restoration projects.
- Maintaining community support for the industry.

The industry's policy aims to engage and enlist as many growers as possible to undertake important habitat management practices. These include:

- Understanding and complying with legislative environmental offset requirements.
- Preserving areas of remnant vegetation.
- Rehabilitating and re-vegetating areas in need.
- Managing on farm wetlands and waterways.
- Participating in community corridor projects.
- Undertaking pest species control.
- Developing and implementing endangered species protection and recovery measures.

Community

The capacity of the growers and the broader community to improve skills and understanding, share knowledge and work collaboratively on environmental management is critical to achieving sustainable environmental conditions, economic stability and social amenity for the region.

The rice industry's policy is to foster capacity building by enabling growers and others to improve and share their skills and knowledge. This includes the following:

- Maximising grower participation in learning opportunities.
- Preparing growers and other key community members for leadership roles.

- Engaging in community activities.
- Building networks and partnerships.
- Maintaining industry, social and cultural history.

Environmental Champions Program

The delivery mechanism for implementing our environmental policies is the Environmental Champions Program (ECP). The ECP will be an important component of the rice industry's grower levy funded extension services.

The ECP is a farmer-driven accreditation program that provides a supportive environment for farmers to share knowledge about adaptive, best practice resource management and industry recognition for participants' achievements. ECP accreditation standards are designed to ensure that farmer achievements are not only beneficial for the environment, but also make practical business sense.

The five achievement levels cover performance across the industry's key areas of water, air, soils, habitat and community.

- Level 1:** Basic industry standards. Level 1 is the entry point for the ECP. To achieve level 1 accreditation participants need to demonstrate **regulatory compliance** in all relevant areas (water, air quality and environmental offsets).
- Level 2:** Planning beyond current on-farm practices. Accreditation at Level 2 requires demonstrated **strategic farm planning** to improve resource use management by providing a platform for adopting best management practice. This includes farm risk assessment, planning for irrigation layout and soil health improvements, energy auditing and habitat planning.
- Level 3:** Implementing best practice management on farm. Accreditation at Level 3 requires demonstrated **adoption of best practice management** within three or more of the industry's five key areas of water, soil, air, habitat and community. Guidance on best practice management is contained in the industry's environmental policy statement.
- Level 4:** Fostering innovative practices. Accreditation is gained at Level 4 by **developing and/or trialling innovative farm management practices** to improve performance in one of the industry's five key areas of water, soil, air, habitat and community. The areas of soil health and water use efficiency are particular areas where on farm trials of innovation would be beneficial.
- Level 5:** Driving industry wide environmental improvements. Accreditation at Level 5 will be granted to those who have achieved **significant industry or community benefit** by spreading the adoption of innovative practice change. This includes developing innovative practice from concept through to effective and widespread adoption, developing partnerships with a range of groups to achieve significant environmental improvements, or developing innovative systems that enable broad participation in environmental stewardship activities.