

REVIEW OF

Tasmania's genetically modified organisms (GMO) Moratorium

ISSUES PAPER

MARCH 2019

The Tasmanian Government has released this issues paper to frame the Review of Tasmania's GMO Moratorium.

FOREWORD

The Hodgman Liberal Government has a strong vision to grow the Tasmanian agriculture sector to \$10 billion per year by 2050. We've committed significant funding through successive budgets to partner with the private sector on a range of strategic initiatives to support Tasmanian primary producers and agribusinesses to grow and prosper. The Tasmanian Government is committed to positioning our local industries to be globally competitive, helping our businesses expand their presence in markets around the world, and attract more investment to create more local jobs. International and national markets value Tasmania's premium food products because of the provenance underpinning the Tasmanian brand. Our GMO Moratorium has been a key component of Brand Tasmania in relation to food since 2001. It has served us very well, enabling market access and advantages that are the envy of other jurisdictions. As a smaller scale and often premium producer, positioning in key markets is particularly important for the Tasmanian agri-food sector. This review is being undertaken so that a decision can be made regarding the future of Tasmania's GMO Moratorium before the expiry date of the current term in November 2019. I encourage you to have your say on this important issue for our State. Please make your submission by the closing date of 26 April 2019.



Guy Barnett MP
Minister for Primary Industries and Water

INTRODUCTION

Tasmania has since 2001 maintained a moratorium on the commercial release of genetically modified organisms (GMOs) into the Tasmanian environment. The moratorium exists to distinguish Tasmanian products in the market place and deliver an economic premium to the State's agricultural and food production industries.

The *Genetically Modified Organisms Control Act 2004*, which provides for Tasmania's moratorium, expires on 16 November 2019.

The Minister for Primary Industries and Water has directed the Department of Primary Industries, Parks, Water and Environment to undertake a review of the moratorium, in consultation with the Tasmanian community, before it expires. The Tasmanian Government will determine whether to extend or amend the moratorium, or allow it to expire, taking into account the findings of the Review.

This paper outlines the scope of the review and the issues on which the Department is seeking comment and information.

CONTEXT

A GMO is an organism that has been modified by gene technology, which includes any technique for the modification of genes or other genetic material. Gene technology is used in a number of fields, including scientific research, medicine, therapeutic goods, veterinary medicine, agriculture and other industries.

The use of GMOs in Australia is regulated through a national Gene Technology Scheme administered by an independent Gene Technology Regulator.

Box 1: Overview of GMO regulation

National Gene Technology Scheme

The Gene Technology Scheme was established in 2000 and is founded on a Gene Technology Agreement signed by all Australian governments. The Scheme consists of the *Commonwealth Gene Technology Act 2000* and *Gene Technology Regulations 2001*, and corresponding state and territory laws. Together the legislation provides a nationally consistent system to regulate the development and use of gene technology in Australia.

The objective of the *Gene Technology Act 2000* is to protect the health and safety of people, and to protect the environment, by identifying risks posed by, or as a result of gene technology, and by managing those risks through regulating certain dealings with GMOs. This is achieved through a licensing and prohibition scheme administered through the Office of the Gene Technology Regulator.

The Gene Technology Scheme was designed to fill the gaps between existing product-based regulatory schemes for human food, human therapeutics, agricultural and veterinary chemicals, and industrial chemicals. It focuses on live and viable GMOs and manages any risks they pose as a result of gene technology.

There is no provision for a state or territory to opt out of the Scheme on environmental or human health and safety grounds. However, each state or territory has the power under its own laws, known as 'moratoria legislation', to designate areas as 'GM crop areas' or 'non-GM crop areas' for marketing purposes.

Tasmania's GMO moratorium

The *Genetically Modified Organisms Control Act 2004* provides the current basis for Tasmania's GMO moratorium. The objective of the Act is to allow the State Government to designate areas of the State, or the whole of the State, as a GMO-free area for the purpose of preserving the identity of non-genetically modified crops and animals for marketing purposes. Through an order made under the Act, the whole of Tasmania was declared a GMO-free area, effective from 15 November 2005.

Tasmanian Gene Technology Policy

Following a review in 2013, the Government published the *Tasmanian Gene Technology Policy (2014-19)* and *Tasmanian Gene Technology Guidelines*. The Policy supported extending the moratorium until 16 November 2019, which Parliament legislated through an amendment to the GMO Control Act.

It also requires the Department to undertake Annual Environmental Scans of the gene technology environment to see if there have been any developments that may warrant an early review of the moratorium.

Copies of the Tasmanian Gene Technology Policy and Guidelines, and the GMO Annual Environmental Scans are contained in Attachments 2 and 3 and/or available on the Department's website at <https://dpiwwe.tas.gov.au/agriculture/tasmanian-gene-technology-policy-2014-2019#environmentalscans>

Other jurisdictions

All states and territories except for Queensland and the Northern Territory have passed moratoria legislation. However, some states have repealed their legislation or no longer have moratoria. Only Tasmania, South Australia and the Australian Capital Territory have active moratoria legislation. South Australia's moratorium is currently subject to a separate review and parliamentary inquiry.

GMO MORATORIUM REVIEW

Purpose of the Review

The Review of Tasmania's GMO moratorium will inform the Government's decision on the future of the moratorium by assessing market advantages or disadvantages for the State's agricultural and food industries.

The consultation being undertaken as part of the Review provides an opportunity for stakeholders to have their say regarding the benefits and costs of the moratorium on market access and trade.

Scope of the Review

The Review will examine the impacts on production, marketing, trade and investment of extending or amending the moratorium, or allowing it to expire.

The Review will consider information from Tasmanian businesses and industry, market and trade data, the experience in other jurisdictions, and other relevant evidence to inform the analysis. It will also examine whether there have been gene technology developments that may warrant a reconsideration of the moratorium now or in the future.

The Review will draw on public submissions, consultation with key stakeholders, and a market analysis of Tasmania's key domestic and international trading partners commissioned by the Department of State Growth.

The implications of GMOs for human health and safety or the environment are out of scope and regulated nationally through the Gene Technology Scheme. Similarly, food produced using gene technology and the labelling of genetically modified foods are regulated nationally through the Australia New Zealand Food Standards Code and are outside the scope of this review.

Terms of Reference

The Minister for Primary Industries and Water announced the Terms of Reference for the Review on 13 December 2018. The Review will consider:

- a. The potential market advantages and disadvantages of allowing or not allowing the use of gene technology in Tasmanian primary industries, including food and non-food sectors;
- b. Domestic and international gene technology policy relevant to primary industries;
- c. Research and development relevant to the use of gene technology in primary industries;
- d. Any other relevant matters raised during the review.

Issues

The Terms of Reference are discussed in order below to inform consultation on the GMO Moratorium Review.

a. The potential market advantages and disadvantages of allowing or not allowing the use of gene technology in Tasmanian primary industries, including food and non-food sectors

Tasmania's GMO moratorium has been maintained on the basis that it differentiates Tasmanian agricultural and food products in the marketplace.

Three previous reviews of the moratorium conducted in 2003, 2007 and 2013, and three consecutive GMO Annual Environmental Scans conducted in 2015, 2016 and 2017 in compliance with the Tasmanian Gene Technology Policy found no compelling reason to lift the moratorium. However, gene technology is advancing rapidly. A new generation of techniques, including gene editing, is enabling more precise and efficient genetic modification of plants, animals and microorganisms. Furthermore, field trials of several new GM crop and pasture varieties with relevance to Tasmanian agriculture, including GM perennial ryegrass, wheat, barley and canola, are in progress interstate.

Since the last review of Tasmania's moratorium in 2013¹, several reviews have observed difficulties with quantifying the marketing advantages of state and territory moratoria. Most recently, the Third Review of the National Gene Technology Scheme, which concluded in 2018 (See Box 3), noted contrasting views regarding GMO moratoria. It recommended that states and territories give ongoing consideration to the economic effects, value and scope of moratoria, highlighting that moratoria legislation is the responsibility of the individual jurisdictions not the national scheme. This followed the Productivity Commission's Inquiry Report: *Regulation of Australian Agriculture (2017)*² and the House of Representatives Standing Committee on Agriculture and Industry's *Smart Farming – Inquiry into Agricultural Innovation Report (2016)*³, both of which identified the removal of state and territory moratoria on genetically modified crops as an issue to be given Government consideration.

¹ The Final Report of the 2013 Review of the moratorium on genetically modified organisms (GMOs) in Tasmania is contained in Attachment 4 or available on the Department's website at <https://dpiwwe.tas.gov.au/agriculture/2018-review-of-tasmanias-gmo-moratorium>

² Productivity Commission. (2016). *Regulation of Agriculture*. Retrieved 29 January, 2018.

³ House of Representatives Standing Committee on Agriculture and Industry, (2016). *Smart farming – inquiry into agricultural innovation*. Retrieved 29 January, 2019.

Acknowledging these issues, the Government is undertaking research and consultation to understand the economic costs and benefits of maintaining, modifying or ending the moratorium. This will include consideration of on-farm impacts, manufacturing and supply chain costs. The Government particularly wants to hear from producers, retailers, wholesalers and exporters on matters, including:

Questions:

1. What products do you sell in domestic or international markets as 'Tasmanian' and/or 'GMO-free'?
2. What market opportunities have you gained or lost as a result of Tasmania's GMO moratorium?
3. If Tasmania's GMO moratorium was to expire what would be the impact on your business?
4. If genetically modified crops were grown commercially in Tasmania would this impact on your business and markets? If so, in what way?
5. Can you provide evidence of the financial benefits or costs to your business as a result of the current moratorium? For example: effects on yield, price premiums or input costs.

b. Domestic and international gene technology policy relevant to primary industries

A variety of policy and regulatory approaches are adopted by our key trading partners to manage gene technology and GMOs. This is important for Tasmania as around three quarters of the State's food and beverage production by value is sold interstate or overseas.

In 2016-17, Tasmania's net interstate food sales were worth \$2.44 billion and international food exports were worth \$0.60 billion. Japan, China and the USA continue to be Tasmania's largest food export markets.⁴

South-East Asia also presents opportunities for Tasmanian producers and processors to expand markets due to rising income and demographic changes.

As part of this Review the Department of State Growth has commissioned an analysis of key interstate and overseas markets for Tasmanian agricultural and food products to inform the review. The analysis will assess the level of awareness in these markets of Tasmania's moratorium, the importance placed on Tasmania's GMO-free brand attribute relative to other attributes, and any impact of amending the moratorium on the purchasing behaviour of customers and consumers in these markets.

The Review will also consider the experience in other Australian and international jurisdictions to see what Tasmania could adopt or learn from, including systems for genetically modified and conventional crops to co-exist, supply chain management and liability from cross-contamination.

Question:

1. Are there any examples of innovative GMO policy and regulation from other jurisdictions that Tasmania could adopt or learn from?

⁴ Tasmanian Agri-Food ScoreCard 2016-17,
<https://dpiwwe.tas.gov.au/agriculture/facts-figures/industry-scorecards>

c. Research and development relevant to the use of gene technology in primary industries

Gene technology is quickly evolving and the Government is interested in understanding the potential of new GMOs for commercial adoption by the Tasmanian primary industries sector. The Government is also keen to look at what research and development opportunities have been lost or gained as a result of the GMO moratorium.

Box 2: Commercial release of GMOs

The only genetically modified (GM) field crops grown in Australia are canola, cotton and safflower, of which only canola is suitable for commercial cultivation in Tasmania. In addition to field crops, GM carnations have also been approved for growing or importing into Australia.

In mainland Australia a number of experimental field trials are underway or subject to post harvest monitoring involving GM banana, barley, canola, cotton, Indian mustard, perennial ryegrass, sorghum, sugarcane and wheat. Past trials have involved GM rice, clover, maize, poppy, papaya, pineapple and grapevines.⁵

In the late 1990s and early 2000, GM canola was grown on 57 field trial sites around Tasmania. Since the commencement of the State's GMO moratorium, these sites have been managed under permit to eliminate any GM canola seedlings that germinate on the trial sites.

No genetically modified animals have been approved for commercial release in Australia.

Questions:

1. Are there new GMOs that would provide positive benefits to your business or the State as whole? What are they and what would the benefits be?
2. What impact has the moratorium had on the research and development in Tasmania? If possible please provide examples.

d. Any other relevant matters raised during the review

The Government acknowledges the broad and complex nature of gene technology regulation and is keen to consider any other information relevant to Tasmania's GMO moratorium, noting that the Review will not consider issues relevant to human, health and safety, the environment or the regulation of GM food, including labelling.

A summary of the questions posed in this paper is contained in Attachment I.

Box 3: Other recent national and state gene technology reviews

Scheme Review

- The Third Review of the National Gene Technology Scheme (Scheme Review) was initiated by the Legislative and Governance Forum on Gene Technology (the Forum), which comprises of one Commonwealth, state and territory Minister with responsibility for gene technology from each jurisdiction.

⁵ A map of GM crop field trial sites is available at <http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/Content/map>

- The Review examined the Scheme in depth to ensure that it continues to deliver on the objective of the Commonwealth *Gene Technology Act 2000* in an environment of rapid technological change.
- On 11 October 2018, Forum Ministers endorsed the 27 recommendations of the Review and a five-year Action Plan to implement the recommendations.
- The Review found that the Scheme is generally working well. Most recommendations are aimed at fine-tuning and “future-proofing” the Scheme with respect to rapidly advancing gene technologies.
- Further Information can be found at www.health.gov.au (Home > For Health Professionals > Gene Technology).

Technical Review

- In 2016 the independent Gene Technology Regulator initiated the Technical Review of the *Gene Technology Regulations 2001* to provide clarity about whether organisms developed using a range of new technologies are subject to regulation as GMOs, and ensure that new technologies are regulated in a manner commensurate with the risks they pose.
- The Regulator’s recommendations include a proposal not to regulate a gene-editing technique known as SDN-1.
- The proposal has significant implications for Tasmania because the State’s moratorium would not apply to plants, animals or microorganism developed using the technique. They could be grown or produced anywhere in Australia and are likely to be untraceable, potentially creating a risk to markets that depend on Tasmania’s GMO-free brand attribute.
- The implications of the proposal for markets for Tasmanian food products are of particular concern because the agriculture, forestry and fisheries sector is proportionately very important to the Tasmanian economy. In 2017-18 the sector contributed 9.0% of Gross State Product (GSP), compared to 2.8% of Australia’s Gross Domestic Product.
- Forum Ministers are yet to make a decision on the Regulator’s recommended amendments. Through this process the Tasmanian Government has continued to advocate on behalf of Tasmanian industry, reinforcing the importance of our moratorium to the Tasmanian Brand.
- Further information can be found at www.ogtr.gov.au (Home > About the OGTR > Regulations Review).

Food Standard

- Food Standards Australia New Zealand (FSANZ) is reviewing Food Standard 1.5.2 of the Australia New Zealand Food Standard Code, *Food produced using gene technology*.
- The Review is considering the definitions of ‘gene technology’ and ‘food produced using gene technology’ in the Code, and whether the food products of certain new gene technologies require pre-assessment for safety before they can be sold as food or used as ingredients in food.
- The FSANZ Review is independent of the Scheme Review and Technical Review but is considering the alignment between the Code and the Gene Technology Scheme.
- The final report on the FSANZ Review is due to be released in 2019.

- The outcomes of the Technical Review could have implications for the FSANZ Review.
- Further information can be found at www.foodstandards.gov.au (Home > Consumer > Genetically modified foods).

South Australia's moratorium

- The South Australian Government appointed Emeritus Professor Kym Anderson AC to conduct an independent review of South Australia's moratorium on the cultivation of GM food crops.
- On 1 August 2018 the State's Legislative Council appointed a Select Committee to conduct its own inquiry into the moratorium.
- Further information on the independent review can be found at www.pirsa.gov.au (Home > Primary Industries > Genetically Modified (GM) Crops > GM Review).
- Further information on the Select Committee inquiry can be found at www.parliament.sa.gov.au (Home > Committees > Committees).

HOW TO MAKE A SUBMISSION

All submissions must be in writing and received by 5pm on Friday 26 April 2019.

Submissions can be forwarded to:

Email: GMOMoratoriumReview@dpiwwe.tas.gov.au

Mail: GMO Moratorium Review, GPO Box 44, Hobart Tasmania 7001

Other than indicated below, submissions will be treated as public information and will be published on our website at <https://dpiwwe.tas.gov.au/gmoreview>

No personal information other than an individual's name or the organisation making a submission will be published.

For further information, please contact: GMOMoratoriumReview@dpiwwe.tas.gov.au

ACCESSIBILITY OF SUBMISSIONS

The Government recognises that not all individuals or groups are equally placed to access and understand information. We are committed to ensuring Government information is accessible and easily understood by people with diverse communication needs.

Where possible, please consider typing your submission in plain English and providing it in a Microsoft Word or equivalent format.

The Government cannot, however, take responsibility for the accessibility of documents provided by third parties.

IMPORTANT INFORMATION TO NOTE

Your name or the name of the organisation making the submission will be published unless you request otherwise.

If you would like your submission treated as confidential, whether in whole or in part, please indicate this in writing at the time of making your submission clearly identifying the parts of your submission you want to remain confidential and the reasons why. In this case, your submission will not be published to the extent of that request but will remain subject to the *Right to Information Act 2009*.

Copyright in submissions remains with the author(s), not with the Tasmanian Government.

The Department will not publish, in whole or in part, submissions containing defamatory or offensive material, or information that could enable the identification of other individuals.

Multiple identical submissions will not carry more weight than the merits of an argument in a single submission. As such, joint applications are supported.

The Right to Information Act 2009 and confidentiality

Information provided to the Department of Primary Industries, Parks, Water and Environment and Water is subject to the *Right to Information Act 2009*. If you have indicated that you wish for all or part of your submission to be treated as confidential, this will be taken into account by the Department in determining whether or not the information is exempt from disclosure in the event that it is subject to an application for assessed disclosure under the Right to Information Act. The Department may contact you during this process.