

March 6, 2019

SA Agriculture Minister Tim Whetstone
Minister.Whetstone@sa.gov.au

Re: comments on the Anderson Review of the SA GM Food Crop Moratorium

Dear Minister:

Thank you for the opportunity to comment on the Kym Anderson report. We recommend that the South Australian government:

- maintain its GM-free policies and moratorium on the growing of commercial GM canola until at least 2025, as parliament decided;
- keep and strictly enforce the state ban on the transit of any GM seed through the state;
- advocate the OGTR and FSANZ continue to assess, regulate and license all new and emerging GM techniques and their products, under the national Gene Technology Scheme.

Our submission to Anderson is attached FYI as it is apparent that our extensive evidence on the benefits of the SA GM-free moratorium was not fairly or fully considered. The report's estimated benefits and costs are artificially skewed to removing the GM moratorium.

Our submission on ending the moratorium provided ample data that showed:

- loss of marketing opportunities for all SA primary products in overseas markets (esp Japan, Europe and USA);
- loss of clean, green image and shopper confidence
- demand for non-GM foods in overseas Wellness markets growing rapidly;
- threats of contamination and costs to taxpayers and other industries;
- farmers' so-called choice to grow GM crops hampers the opportunities of others to remain non-GM or organic and to benefit from GM-free market opportunities.

Anderson's incomplete and inconclusive cost/benefit analysis relies on many unrealistic assumptions and guesses, especially where data is scant or absent. The report should be peer reviewed by other suitably qualified and non-partisan experts before it could be used as the basis for any proposed policy changes.

The report backs GM canola by unfairly:

- assigning most costs to NOT lifting the GM canola moratorium;
- crediting most assumed benefits to lifting the moratorium;
- failing to acknowledge or include the real costs of GM canola that would fall on most GM-free primary industries, communities and environments - the vast majority.

Support for lifting the GM moratorium is small and sectional. As former Agriculture Minister Leon Bignell noted just 221 of the state's 5,300 grain growers signed a petition to him, asking for the state ban on GM canola to be lifted.¹ Please check out the real support and membership of groups like GPSA that claim to represent the views and interests of most farmers.

The Mecardo report for GPSA found just 2% of the gross value of broadacre farm commodities in SA is derived from canola. SA's canola crop is the smallest of any Australian canola-growing state² and last year's crop was the smallest since 2009.³ SA's whole canola industry could achieve the same premiums as KI Pure Grain if there were the industry and political will to achieve their premium products and prices. This is the kind of benefit that the whole of SA could enjoy if a concerted government and food industry program positively promoted the state's GM-free status.

Though Glencore say it could segregate and market, it makes no firm commitment and does not specify added costs. GM crops entail more segregation and coexistence time, expense and infrastructure, extra transport to fewer and more remote silos, Quality Assurance systems, and compliance costs, the risk of lost markets, price discounts, and higher liability and contamination costs.

The Mecardo report that Grain Producer's SA (GPSA) and others commissioned found the whole SA canola crop is now worth only 2% of the value of all broadacre crops grown in the state. Anderson guesses, on the basis of the small GM canola uptake in other states, that GM canola would be just 10% of SA's canola crop were the moratorium lifted. It is probably a good estimate.

As a result, any conceivable benefit to GM growers would be a vanishingly small part of all grain and oilseed production. But despite its miniscule size, GM canola would impose large risks, hazards, extra costs and lost market opportunities on everyone else in the state. That is an irrational choice which government should not make.

Any conceivable benefit of allowing GM canola would be vanishingly small. Yet everyone else – seed producers, dairy, winemakers, food processors etc. would stand to lose a lot.

Commercial GM canola was banned in all Australian canola-producing states from 2003 to 2008 with good reason, though Monsanto and Bayer had been issued unrestricted and unlimited commercial licenses in 2003. Staying GM-free in canola production was a bonanza for Australia, after we won the huge and lucrative EU canola market from Canada that had embraced Roundup tolerant (RR) GM canola.

Despite this competitive advantage, in 2007 Dynamics Pty Ltd and ACIL Tasman did a cost/benefit analysis for the Australian Government suggesting very large potential gains from ending the national GM canola moratorium.⁴ It influenced NSW and Victoria to adopt GM canola in 2008 and WA in 2010.

Anderson warns us that ACIL Tasman's, "key assumptions turned out to be rather optimistic." That is an understatement. In Anderson's estimation, ACIL Tasman's most erroneous projections were:

- **yield/ha increases of 20%** - but GM varieties have never yielded more than the best conventional varieties and at first they yielded much less.

Inexplicably, Anderson falls into the same trap, projecting 10-20% yield increases by

¹ Pers. Comm. 2018.

² Kingwell, R. How does low emission canola benefit Australian farmers? Australian Export Grains Innovation Centre, December 19, 2017. <https://www.grainsinnovation.org/blog/2017/12/19/canolatoeu>

³ SA's canola tonnage set to drop sharply, Stock Journal, October 25, 2018, p20.

⁴ DAFF, A review of non - GM biotechnology—its ability and potential to improve Australian agricultural productivity, by Dynamics Pty Ltd and ACIL Tasman, 2007. <http://www.agriculture.gov.au/SiteCollectionDocuments/ag-food/biotech/non-gm-report.pdf>

comparing only the low yielding Triazine Tolerant varieties with Roundup Tolerant GM canola.

- **identical prices for GM and non-GM canola** – but Australia has continuously earned premiums of up to \$70/tonne – an average of ~\$40 for its GM-free canola since 2006, in the EU, Japanese, US and other select non-GM markets.

Again Anderson seeks to deny that, like the other states, SA has received premiums for its GM-free crop.

- **no difference in the cost of getting the crop to a delivery point** – but segregation, identity preservation, separate transport, and fewer receival depots for GM canola have always incurred extra costs, reflected in the consistent discounts for GM.
- **the most important false assumption, Anderson says, was that there would be 80% adoption of GM varieties within eight years** says – he confirms that the “adoption of GM canola has been much lower, averaging no more than 20% in aggregate for the three states currently growing it (NSW, Victoria and WA).“

Yet his report nonetheless contends that his own projected adoption rate of 10% for GM canola in SA would be viable and would justify the extra risks, costs and losses to others.

Anderson makes many similarly shaky assumptions to those that led ACIL Tasman into their false projections and resulted in the moratoria in three other states being unilaterally lifted. His claim of yield increases of 10-20% for GM is only able to compute if based on a comparison of GM RR canola with the lowest yielding Triazine Tolerant varieties.

Had he compared RR canola with the best varieties there would be no yield advantage and no case for GM. He also compares non-GM canola yields in SA with those in West Wimmera where yields are consistently higher due to assorted environmental and agronomic factors.

The longer transport routes from SA to export hubs does impose extra costs that eat into the GM-free canola premiums which the state now earns but without the premiums SA growers would be far worse off.

Australian non-GM canola has earned premiums in Europe since 2006 and the GM canola discounts continue to be significant. CSIRO team leader Dr Sandra Eady and Australian Export Grains Innovation Centre chief economist Ross Kingwell confirmed that "We've achieved a \$100 million per year premium for our farmers, given the extra \$20-\$40/tonne paid for Australian non-GM Australian canola."⁵

CSIRO, the Australian Oilseeds Federation and the Australian Export Grains Innovation Centre agreed that, "The vast majority of Australian canola is non-GM, ... Australia's non-GM canola offers more options for the European supply chain, as residues can be used for animal feed and surplus for human consumption."⁶

Another aspect of South Australia's particular GM-free canola edge is meeting Europe's Renewable Energy Greenhouse Gas Savings Target. Dr Eady noted that SA was the best performing state, generating just 439kg of Green House Gases per tonne of canola seed harvested. "That's important because South Australia is one of the biggest (grain) exporting states to the EU," she said. However, SA's canola may not comply if the oilseed were GM.

⁵ Locke S. Australian canola for European biodiesel emits half the greenhouse gas of fossil fuels, ABC Rural, 19 December 2017. <https://www.abc.net.au/news/rural/2017-12-18/australian-canola-approved-as-low-emission-fuel-for-europe/9269232>

⁶ CSIRO, AOF and AEGIC Joint Media Release, Announcement by the EU regarding Sustainable Canola, 18 December, 2017. <https://www.aegic.org.au/australia-secures-1b-eu-canola-export-market/>

Reinforcing the point, Ross Kingwell said, "... the non-GM status of Australian canola means it can seamlessly flow into the food or biofuel sector within the EU. Hence Australian non-GM canola does not need to be subject to the additional expense of identity preservation within the EU, and so Australian exporters and farmers receive an additional premium for the non-GM status of their canola. Often this premium fluctuates from \$30 to \$70 per tonne."⁷ GM canola accounts for only 10–15% of Australian canola and most Australian producers remain GM-free.⁸

Unlike GM lobbyists, governments have a responsibility to optimise outcomes for all Primary Producers and Food Processing industries not only those who hanker after GM canola without appreciating its downsides.

SA must learn from the US experience of huge increases in the amount of glyphosate sprayed after Roundup tolerant GM crops were introduced. Glyphosate resistant weeds are already widespread in Australia Roundup tolerant canola would exacerbate this problem and farmers would fall back on toxic tank mixes.

A few mega-corporations now own and control the production and distribution of most GM crop seed and synthetic chemicals. The big four are Bayer, Corteva (Dow/Dupont), ChemChina and BASF. The US experience of fewer companies controlling crop seed (GM and non-GM) and the chemical packages designed to go with them is that, "This concentration has made a huge dent in farmers' pockets. USDA data shows that the per-acre cost of soybean and corn seed spiked dramatically between 1995 and 2014, by 351% and 321%, respectively.

Many contamination events have adversely impacted markets and trade. For instance, China rejected 545,000 tons of imported US corn found to contain an unapproved GM strain.⁹ Further GM wheat plants from Monsanto trials in 1999 were found last year on a Canadian roadside, 300 km from the trial site in Oregon.

Similar Tasmanian contamination resulted from a GM canola trial conducted in 1999, only cleaned up at state expense for over 15 years after the errant company went bankrupt.¹⁰ GM roadside contamination occurred in 2011 when, "a truck caught fire on Albany Highway near Williams, south-east of Perth, spilling 30 tonnes of GM canola.

The SA canola moratorium should continue to include regulations that prohibit transport of GM seed into and through the state. This activity is known to spread GM seed widely on roadsides, around silos and in farm paddocks.

Segregation' only functions when thresholds of allowable contamination are set. The industry's present 'adventitious presence' threshold of 0.9% was introduced after GM crop approvals, when industry promises of complete segregation and coexistence had to be abandoned.

The report also claims GM and non-GM canola can coexist and be segregated but this is only possible when a threshold of GM contamination is allowed. In Australia's case it is 0.9%. The extra management costs that all growers must bear when GM and non-GM canola are grown and handled together are ignored.

A Farmer Protection Act, previously passed into law, should be an essential precursor to any proposal to lift the SA GM moratorium. Without a no-fault compensation system and fund, based

⁷ Kingwell, R. Ibid. p1.

⁸ Australian Grain Note: Canola. Australian Export Grains Innovation Centre, p2.

https://www.aegic.org.au/wp-content/uploads/2016/04/fact_sheet_-_australian_grain_note_-_canola.pdf

⁹ BBC, China rejects US corn on fears over genetic modification, 20 December 2013.

<https://www.bbc.com/news/business-25461889>

¹⁰ Tasmanian Department of Primary Industries, Former GM Canola Trial Sites Audit Reports.

<https://dpiwwe.tas.gov.au/biosecurity-tasmania/product-integrity/gene-technology/former-gm-canola-trial-sites-audit-reports>

on levies from GM seed sales, all South Australians would be exposed to uncompensated economic loss or other harm from GM contamination.

The Anderson report also spuriously claims that benefits to farmers from GM crops would include:

(a) having more varieties to choose from to best suit specific environments and seasonal weather anomalies:

But the only crop proposed for growing in SA is RR herbicide tolerant GM canola, so that Roundup can be sprayed more often and at higher doses without harming the crop. These GM plants have no new traits for better tolerating environmental stresses.

(b) environmental and health benefits from reduced farm chemical applications;

But everywhere herbicide tolerant GM crops are grown the amount of synthetic chemicals sprayed has increased. As a result, the residue levels allowed in foods from these crops have also increased so they remain compliant.

(c) a likely boost to the value of farm land whose productivity and profitability is raised.

The reverse is true as a contract to buy and use patented GM seed allows the corporate seed owner to enter the farm anytime, without notice. When GM cropland is sold, the new owner must also agree to the contract. This may scare away buyers and depress GM farmland prices according to the Royal Institution of Chartered Surveyors.¹¹

We recommend that the South Australian government:

- maintain its GM-free policies and moratorium on the growing of commercial GM canola until at least 2025, as parliament decided;
- keep and strictly enforce the state ban on the transit of any GM seed through the state;
- advocate the OGTR and FSANZ continue to assess, regulate and license all new and emerging GM techniques and their products, under the national Gene Technology Scheme.

Yours sincerely,

A handwritten signature in black ink that reads "Bob Phelps". The signature is written in a cursive style with a long horizontal stroke extending to the right from the end of the name.

Executive Director

¹¹ Towards a strategic vision of life sciences and biotechnology, a response by the Royal of Institution Chartered Surveyors (RICS), 18 December 2001.