



Gene Technology (New South Wales) Bill, Gene

Technology (Gm Crop Moratorium) Bill.

Second Reading

Mr NEWELL (Tweed—Parliamentary Secretary), on behalf of Mr Campbell [10.06 a.m.]: I move:

That these bills be now read a second time.

Gene technology is a powerful new technology which is developing at a rapid rate. Gene Technology is now broadly acceptable as a vital scientific procedure in human medicine, providing methodologies for tackling a vast range of afflictions impacting on humans. Gene technology involves the modification of living organisms by incorporating or deleting one or more genes to introduce or modify specific characteristics of the organisms. Potential benefits from the use of the technology may include improved health, a safer and more secure food supply, new food products, and a more sustainable environment. While the development and use of some genetically modified organisms and genetically modified products have been regulated by a variety of Commonwealth, State and Territory laws and administrative bodies, there have been gaps in the regulatory scheme.

The States, Territories and the Commonwealth have been working together over a number of years to establish a co-operative and nationally consistent regulatory scheme for gene technology that is not already regulated. In this respect, we have signed an inter-governmental agreement with the Commonwealth and all other States and Territories to pass complementary legislation to the Commonwealth Gene Technology Act 2000. The new regulatory scheme is a national scheme, not a Commonwealth scheme. It involves the adoption and application of the Commonwealth gene technology laws by the States and Territories. The Commonwealth's Gene Technology Act 2000 and the Gene Technology (Licence Charges) Act 2000 commenced on 21 June 2001. The Gene Technology (New South Wales) Bill before the House provides the New South Wales component of the new nationally consistent regulatory scheme. It applies the Commonwealth gene technology laws as laws of New South Wales.

The passage of the bill will ensure that the national regulator of gene technology, established by the Commonwealth Gene Technology Act 2000, has the power to act in all circumstances in this State wherever gene technology is used. The new regulatory scheme is designed to protect public health and safety and to protect the environment. Section 56 of the Commonwealth Gene Technology Act 2001 requires that "the Regulator must not issue the licence unless the Regulator is satisfied that any risks posed by the dealings proposed to be authorised by the licence are able to be managed in such a way as to protect the health and safety of people and the environment." To reiterate, the two key elements of gene technology impacts are a Commonwealth responsibility. The scheme provides for independent, legally enforceable, auditing and monitoring of compliance. It provides for community consultation and transparency in decision making.

A Gene Technology Ministerial Council has been established. It consists of Ministers from the Commonwealth and each participating State and Territory. The council will oversee the operation of the Gene Technology Regulator and issue policy principles, policy guidelines and codes of practice. Policy principles may be issued by the Ministerial Council to deal with ethical issues, to recognise areas for genetically modified crops, or non-genetically modified crops, being areas designated under State laws for marketing purposes, such as is proposed under the Gene Technology (GM Crop Moratorium) Bill, and for other purposes that may be specified by regulation. The legislation uses a range of regulatory tools to control activities with genetically modified organisms based on the level of risk posed by the proposed activity.

All activities with genetically modified organisms are prohibited unless the activity is an exempt dealing, a notifiable low-risk dealing or licensed by the regulator. The Commonwealth gene technology laws provide for the establishment of the Office of the Gene Technology Regulator [OGTR]. This is a statutory position, the holder of which reports directly to the Commonwealth Parliament. The OGTR is an independent decision-maker on licence applications. Nevertheless, the OGTR may not issue a genetically modified organism licence where this would be inconsistent with a policy principle issued by the Ministerial Council.

In considering licence applications the OGTR will undertake scientific risk assessments on the risks that each application may pose to human health and the environment and consult with the statutory advisory committees, governments and the public. All applications for genetically modified organisms to be released into the environment and all decisions by the regulator are made available to the public. They will also be forwarded to each State and Territory Government for advice and comment. The regulator may also undertake or commission

research on risks posed by genetically modified organisms. The OGTR is also responsible for monitoring activities involving genetically modified organisms. The OGTR has a broad range of enforcement powers, including the ability to issue directions, cancel or suspend licences and seek injunctions. Stringent penalties are provided for breaches of the legislation. The OGTR maintains a GMO record for the assistance of the public. This is a centralised database recording of all licences of genetically modified organisms and genetically modified products approved in Australia. The OGTR also reports annually to the Federal Parliament, with copies of reports provided to the States and Territories for reporting to their Parliaments.

The gene technology legislation establishes three key advisory groups to assist the Ministerial Council on Gene Technology and the OGTR. The principal functions of these committees are as follows. The Gene Technology Technical Advisory Committee will provide scientific and technical advice to the OGTR on each licence application. The Gene Technology Community Consultative Committee will provide community views. The Gene Technology Ethics Committee will provide advice on the ethics of gene technology, appropriate ethics guidelines and any necessary prohibitions. Queensland, Victoria, Tasmania and South Australia have already passed legislation for their participation in the national scheme regulating gene technology. Western Australia introduced similar legislation into Parliament in 2001. It has passed through the Legislative Assembly and was introduced into the Legislative Council 26 June 2002.

This Government believes that the proposed national scheme has significant advantages over each State and Territory establishing its own regulatory system. The Gene Technology (New South Wales) Bill will ensure that New South Wales is a part of the co-operative and national regulatory scheme. It will ensure consistency of decision making across Australia resulting in increased protection of public health and safety and the environment. Other regulatory bodies also have a role in this area, including Food Standards Australia and New Zealand in the labelling of food products, the Australian Pesticides and Veterinary Medicines Authority on the registration and conditions of use of pesticides where the GM crop involves a new use pattern for a pesticide, and the Therapeutic Goods Administration where the GM involves medical use. However, it is important to appreciate that the OGTR has statutory authority over the human health and environment implications of dealings with GMOs. It cannot consider the marketing implications of the commercial release of GM food crops. This is where the second bill I have introduced comes into the picture.

The Gene Technology (GM Crop Moratorium) Bill is intended to implement the Premier's announcement on 3 March 2003 that the Government would ban the commercial production of certain genetically modified or GM crops in New South Wales for three years. This was to provide the community with time to evaluate the impacts of the introduction of GM crops on the marketing of non-GM crops. As I indicated earlier, the application of biotechnology to genetic modification of plants and other organisms has tremendous potential for the improvement of human health, the environment and commercial agriculture. Already we have the situation where all the insulin required for diabetics in Australia is produced by a GM micro organism. This has resulted in a purer, safer and a cheaper product for diabetics. In Tasmania, genetic modification is being used to improve the value and use of the opium poppy for human medication. Many medical diagnostic tests depend on a reagent produced by GM technology. In agriculture, the development of cotton, genetically modified to produce a toxin active against its main insect pest has led to a reduction of 50 per cent in the application of insecticides. This is clearly to the benefit of the environment and hence the community.

There is a great deal of research worldwide directed at the development of GM plants which produce pharmaceuticals or other products which will have considerable advantages for human health. For example, rice with higher levels of iron and vitamins for people who depend heavily on rice for their nutrition have been developed. There are also products under development which will produce new or modified products which will lead to new food products such as oilseeds with modified fatty acid composition for health, or feedstock for industrial products like biodegradable plastics. It is also realistic to hope for plants which will either cope with environmental stresses such as soil and water salinity, or even improve the environment in terms of competing better with severe environmental weeds, or the bioremediation of contaminated land. In the medical area, the potential for biotechnology and genetic modification to cure diseases or address the health problems of both affluence and poverty are enormous. So the potential for the betterment of mankind and the environment from the application of this exciting new technology is so large that we cannot afford to miss out. However, we must make every effort to ensure that this potential is achieved with an absolute minimum adverse impact.

While the potential benefit is enormous, there are risks if the technology is not contained and managed appropriately. I indicated earlier the strength and transparency of the regulatory regime implemented by the Office of the Gene Technology Regulator. However despite this, there remains public concern over the use of GM technology. Most of the concerns in the community are based on the practical use of this technology and its impact on human health, the environment and marketing of agricultural products, especially non-GM products. As indicated earlier, the potential impact of particular GM plants or animals on human health and the environment is the responsibility of the OGTR. It has the legislative power and the resources, to address those areas of concern, and the New South Wales Government has confidence in the mechanisms and processes it has developed to ensure that any research or commercial release of GMOs will not adversely impact on human health or the environment.

In terms of the impact on agriculture, there has been a great deal of effort undertaken to identify and address the impact that the introduction of GM canola would have on the farming production systems of New South Wales and Australia. This is because GM canola is the next GM crop likely to be approved by the OGTR for commercial release, and because canola is an important component of the cropping rotations of New South Wales. It needs to be recognised that GM cotton has been produced commercially in Australia for some years. A further GM plant that has also been released for commercial production is GM carnation.

Protocols have been developed to address on-farm management issues such as the development of so called "super weeds" through crossing of the GM canola with related weed species, and the potential for the development of resistance in other weed species due to excessive reliance on the one herbicide for weed control. These protocols are also intended to address the final area of concern, which is that of marketing of non-GM canola. This concern arises through the potential for crossing between GM canola and nearby non-GM crops, and hence the introduction of the GM gene into the non-GM crop, or through physical contamination during the seed production, commercial production, handling, transport, and processing chain.

However these supply chain protocols are untested, and there is some controversy over whether they can achieve the intended outcome of separate and segregated production and handling chains for GM and non-GM canola. It is these concerns that have led to uncertainty about the impact of GM canola on the marketing of the New South Wales non-GM canola crop, and hence to the need for this legislation. However there should be no doubt that such protocols can work. For example, we imported red wheat during the drought in the mid nineteen nineties, and the protocols that were developed at that time ensured that there was no contamination or introduction of disease with these importations. Further, GrainCorp currently segregates 10 to 12 different categories of wheat for marketing purposes. They manage this routinely and very well, so there is no doubt that protocols can work.

This legislation has been introduced to allow more time for the New South Wales farming and the broader community to be assured that the introduction of GM canola will not adversely impact on the marketing, both domestically, but more importantly overseas, of non-GM canola. New South Wales Agriculture will continue to participate in the development of robust protocols for identity preservation by the Gene Technology Grains Committee and its various working parties. The New South Wales Government will use the three-year moratorium to collate and analyse all available data in order to make a considered judgement on the costs and benefits associated with the adoption of GM crops. This will include looking at further information in relation to international markets for GM produce and the likely impacts of the adoption of GM crops in Australia.

The Government is proposing that under this bill the Minister for Agriculture and Fisheries will have the power to impose an order prohibiting the cultivation of certain genetically modified crops intended primarily for human consumption until 3 March 2006. The Minister for Agriculture and Fisheries gave a commitment in the other place that he would make an order creating a moratorium on GM canola as soon as practically possible after the Governor has passed this bill into law. It is the role of the Office of the Gene Technology Regulator [OGTR] to determine whether a particular crop is safe for human consumption, and I do not intend to duplicate the role of the OGTR.

The Minister will have power to grant exemptions from prohibition, such as exemptions for research trials, after seeking advice from the Agricultural Advisory Council set up under the bill. It is clearly inappropriate to attempt to incorporate into legislation complex details concerning the design of research trials. For example, trial design depends on the sort of trial and will vary with climate, soil type, varieties, and topography. This is clearly the role of experts, and the Agricultural Advisory Council is the best source of advice for the Minister on these issues. Such exemptions will be critical to enable important research into GM products to continue. This bill, as amended, establishes the New South Wales Agricultural Advisory Council on Gene Technology to provide the Minister for Agriculture and Fisheries with advice and recommendations on the important issues arising from the moratorium. These issues include the Minister seeking the advice of the Agricultural Advisory Council when making an exemption order for research trials for GM food plants.

The council will have a membership of ten including an independent chair and will comprise a person appointed on the nomination of the Director-General of the Department of Agriculture, a person appointed on the nomination of the New South Wales Farmers Association, a person appointed on the nomination of the Network of Concerned Farmers, a person appointed on the nomination of the Nature Conservation Council of New South Wales Incorporated, a person appointed on the nomination of Graincorp Ltd, a person appointed on the nomination of the Australian Wheat Board Pty Ltd, a person appointed on the nomination of the Chief Executive of the Commonwealth Scientific and Industrial Research Organisation, a person appointed on the nomination of the chair of Avcare Limited, a person appointed on the nomination of the Chair of the Grains Research and Development Corporation, and a person appointed to be the independent chairperson of the advisory council.

The functions of the Agricultural Advisory Council are to investigate any matter referred to the council by the Minister, to provide advice in relation to proposed research trials for GM food plants referred by the Minister, to provide advice on current developments and issues in relation to GM technology and its application to agriculture, and to provide policy advice in relation to licences issued under the Gene Technology Act 2000 of the

Commonwealth that relate to GM food plants.

The Premier announced a three-year moratorium. The science is moving so fast, as is the world situation in regard to the importation of GM crops and food products, and food labelling regimes, that three years is an adequate time to stop and take stock. A moratorium lasting any longer would pose a substantial risk of New South Wales farmers and consumers potentially missing out on the economic and other benefits promised by this technology. The bill also gives the Minister power to look for and investigate possible breaches of the legislation, and for courts to impose penalties where a breach has been proved.

The bill contains appropriate enforcement and penalty provisions for offences where there is a failure to comply with an order, including but not limited to powers of entry and inspection, powers of seizure and destruction, powers to order testing, and power to place a restriction or prohibit the use of land. Heavy penalties are proposed to apply for offences under the Act including fines of up to \$55,000 and/or two years imprisonment. Fines for corporations will be up to \$137,500. In addition, this bill proposes that a person convicted of an offence is to be liable to pay the costs of any cleanup necessitated by a breach of the Act. Gene technology is a contentious issue, with lots of public debate, characterised by considerable misunderstandings and suspicion. Our approach provides a very sensible way forward to allow informed public debate and discussion, while not committing the farming or the broader community to commercial production of GM food crops. I commend the bills to the House.

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