



**AUSTRALIAN ACADEMY OF TECHNOLOGY AND ENGINEERING  
AUSTRALIAN ACADEMY OF SCIENCE  
JOINT SUBMISSION TO THE REVIEW OF THE NATIONAL GENE TECHNOLOGY  
SCHEME 2017 (SECOND PHASE CONSULTATION)**

The Australian Academy of Technology and Engineering and the Australian Academy of Science (collectively, the Academies) welcome the opportunity to further participate in the Review of the National Gene Technology Scheme (the Review) in the second phase of consultation.

As stated in our joint submission to the first phase of consultation, accrued experience with gene technology and with a diverse range of genetically modified organisms, together with increasing sophistication of the technology, may in some cases justify moving to legislation that provides regulation based on the products and outcomes of technology applications rather than on the technical processes used to achieve them. In all cases, the emphasis of regulation should be placed on the potential of modified organisms to harm human health or the Australian environment.

Accordingly, the Academies maintain the position from their submission to the first phase of consultation, that the current review process should focus on improving the existing process-based legislative framework by reducing the level of regulatory oversight of proven modifications with a history of safe use, supported by an approach that enables the Scheme to continuously respond to emerging technical developments.

#### Summary of key points

- **The Gene Technology Scheme should retain its legislated purpose, its regulatory powers and its basis in scientifically informed risk assessment.**
- **There is a long history of safe use of genetic modification of plants in the agricultural sector.** The regulatory scheme should recognise this safe use, in order to simplify regulation of well-studied traits and well-characterised crops. Genetically modified crops, particularly cotton and canola, are now a staple of the Australian agricultural industry and are continuing to expand.
- **The present regulatory scheme is sufficient for laboratory level research.** The existing Scheme involving exempt, notifiable low-risk and licenced dealings has proven adequate for the regulation of laboratory level research.
- **The Gene Technology Regulator should have the capacity to respond to technological developments.** This should include a horizon-scanning capacity and the capacity to amend definitions and processes (under advice) to streamline the regulatory scheme. A continuous assessment approach to the evolution of gene technologies would enable the legislative framework to adapt appropriately to new types of genetic modification without requiring continuous legislative amendments.
- **The Academies support a risk-tiering approach to facilitate movement of safe technologies to market.** A notification system for low risk releases overseen by accredited Institutional Biosafety Committees would provide efficiencies for the Regulator and for practitioners. Such a system should still be subject to regular audits.