

National Adaptation Plan - Issues Paper

Department of Climate Change, Energy, the Environment and Water



INTRODUCTION

CropLife Australia (CropLife) is the national peak industry organisation representing the plant science (registered agricultural chemicals and plant biotechnology innovations) sector in Australia. CropLife represents the innovators, developers, manufacturers, formulators and suppliers of crop protection products (organic, synthetic and biological based pesticides) and crop biotechnology seed innovations. CropLife's membership is made up of both large and small, patent holding and generic, Australian and International companies and accordingly, CropLife advocates for policy positions that deliver whole of industry and national benefit. Our focus is, however, specifically on sustainable environmental land management and an Australian farming sector that is internationally competitive through globally leading productivity and sustainability. Both of which are achieved through access to world-class technological innovation and products of the plant science sector.

The plant science industry contributes to the nation's agricultural productivity, environmental sustainability and food security through innovation in plant breeding and pesticides that protect crops against pests, weeds and disease. More than \$31 billion of the value of Australia's agricultural production is directly attributable to the responsible use of crop protection products (CPPs), while the plant science industry itself directly employs thousands of people across country.¹ CropLife Australia is a member of CropLife Asia and part of the CropLife International Federation of 91 CropLife national associations globally.

CropLife welcomes the opportunity to comment on the *Climate Adaptation in Australia – National Adaptation Plan Issues Paper*, managed by the Federal Government's Department of Climate Change, Energy, the Environment and Water (DCCEEW). This document is a welcomed step toward an effective Climate Adaptation and Risk Program for Australia. Of note is the Government's commitment to ensure that science and evidence-based information is used to inform adaptation planning. Furthermore, the acknowledgement of agriculture and food production (page 15) as a cross-cutting theme has been duly recognised.

We take this moment to also highlight an often overlooked or misinterpretation of Australia's commitment to the Paris Agreement. While it is important that Australia increases its ability to adapt to the adverse impacts of climate change and foster climate resilience, we must do so in a manner that does not threaten food production (Article 2b).²

¹ Deloitte Access Economics, 'Economic Contribution of Crop Protection Products in Australia', August 2023, <https://www.croplife.org.au/resources/reports/economic-contribution-of-crop-protection-products-in-australia/>.

² UNFCCC, 'The Paris Agreement', 2015, <https://unfccc.int/documents/184656>.

COMMENTS

Roles and responsibilities

We suggest that the Government also needs to acknowledge its role and responsibility in managing the risks associated with climate change adaptation. Comments on page 3 of the Issues Paper suggest that it is solely businesses and individuals who must understand and manage their own risks. However, there exist risks for businesses and individuals where government is not only best placed to manage them but is likely the sole influencers of them.

As an example, the products and innovations of the plant science industry are rigorously regulated, assessed and approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA) to ensure they present no unacceptable risk to users, consumers, the environment and the trade of agricultural produce. However, despite the demonstrable and substantial benefit to the environment, agroecosystem health, agricultural productivity and the broader economy, Australia routinely suffers considerable major losses as opportunity costs from the delayed introduction of new, novel crop protection products and technologies. These losses are compounded when viewed in comparison to the availability of these products to farmers' overseas competitors. An analysis by Grain Producers Australia (GPA) revealed not only are fewer active ingredients made available to the Australian domestic market, fewer use patterns, crop and pests are enabled.³

Variability and predictability of the APVMA's performance exacerbates these losses. In 2017, regulator performance declined to the point that fewer than 25% of applications for product registrations were completed within timeframe. Consequently, several products were delayed to subsequent planting seasons. GPA has estimated that delays to farmer access of three new CP products over 2017 alone conservatively cost the Australian grains industry \$200 million, with potential knock-on effects approaching \$500 million.⁴

Despite improvements performance for the years 2020, 2021, and 2022, the current performance of the APVMA from September 2022 through September 2023 has declined to the point that more than one in nine assessments are not being completed within timeframe.⁵ Many of these products are currently registered in Europe and the Americas, and include chemicals urgently needed to prevent the spread of novel invasive species and biosecurity threats.

³ Grain Producers Australia, 'Submission to the Independent Review of the AgVet Chemicals Regulatory Framework', February 2020, <https://haveyoursay.agriculture.gov.au/53499/widgets/312307/documents/183643>.

⁴ Grain Producers Australia.

⁵ Applications in Detail | Australian Pesticides and Veterinary Medicines Authority', 20 December 2023, <https://www.apvma.gov.au/about/accountability-and-reporting/performance-statistics/performance-report-september-2023/applications-detail>.

In these examples, the risk of delays in product registration or review directly impacts product users whose access to these products remain critical tools in their defence against climate change mitigation and adaptation and are worryingly set to increase once again. Whilst businesses and individuals remain aware of these risks, managing or addressing these specific risks lay with government.

Measuring success

In assessing the success of climate adaptation measures, it is imperative to prioritise outcome-focused metrics over ideological agendas. By anchoring measurements in tangible results, rather than subjective beliefs or predetermined narratives, we can ensure that the measuring success of the National Adaptation Plan will remain grounded in empirical evidence and real-world impact.

Outcomes-focused metrics will allow for a genuine and comprehensive understanding of the effectiveness of the proposed adaptation strategies. Consequently, this objective analysis will enable policymakers to identify successful interventions, scale-up effective practices and allocate resources efficiently.

Moreover, outcomes-focused metrics will foster transparency and accountability, which are essential elements in fostering community trust and buy-in.

For the plant science industry, metrics could include:

- Use access to and the adoption of climate-smart technologies (including chemistry and crop biotechnology innovations).
- Crop productivity over time, particularly in the face of changing and challenging environmental conditions.
- Economic resilience of agricultural enterprises.
- Conservation of biodiversity and protection and management of natural environments.

Identified risks:

4.6 – Natural environment system

4.7 – Primary industries and food system

For the plant science industry, two of the 11 identified risks are most applicable – 4.6 – Natural environment system and 4.7 – Primary industries and food system.

CropLife appreciates the considered discussion provided in the Issues Paper and supports the overarching ideas and proposals, such as the acknowledgement that risks to sector profitability must be addressed as pressures from climate change challenge productivity (page 40). Importantly, sustainable practices within the primary industries and sector profitability go hand in hand.

Actions underway

The Issue Paper highlights the National Adaptation Plan's overlap with the Agriculture and Land Sectoral Plan. We draw your attention to CropLife's submission detailing the extensive work and contribution of the plant science industry toward Australia's goal of net zero by 2050.⁶

While we appreciate the extensive list of Australian Government initiatives and partnerships detailed in the Issue Paper, the inaccessible nature of many of the available grants should be addressed.

Australia's transition toward becoming a circular economy is an integral component of adapting to climate change. Complementing this is CropLife and its members stewardship initiatives, which are world-leading in genuine whole-of-lifecycle product stewardship. One example is CropLife's flagship product stewardship program, **drumMUSTER**[®] - a collection and recycling program for eligible agricultural and veterinary chemical drums, which established in 1999 well before the introduction of regulatory requirements and stands as an example for the effectiveness of industry-led stewardship initiatives in Australia and internationally.

With a strong pedigree in product stewardship and in demonstrating the plant science industry's ongoing commitment, CropLife and its members have been developing bagMUSTER[®], Australia's first not-for-profit and industry-led program for the responsible management of industry's light plastic bags. Despite proof-of-concept and successful pilot trials, it has been challenging for bagMUSTER[®] to receive government funding to support its national roll-out as all grants support ideation or infrastructure projects only. Ultimately, both climate change adaptation and a circular economy are about achieving long-term sustainability. As Government works to build climate resilience and increase the uptake of climate-smart and sustainable practices to support genuine climate adaptation in Australia, the remit of government funding schemes, both state and federal, should be broadened to support programs.

Finally, in supporting climate-smart agriculture and climate adaptation frameworks, the National Adaptation Plan must remain cognizant of Australia's existing efforts and success in environmental sustainability and ensure that any plans do not undermine Australia's world-leading position. As an example, a hypothetical plan that stipulates a reduction in GHG emissions for primary producers would inadvertently cause an increase in global GHG emissions. In a report led by the CSIRO, the Australian grains sector is already a low emitter of GHG compared to other global

⁶ CropLife Australia, 'Submission | The Agriculture and Land Sector Plan Contributing towards Australia's Goal of Net Zero by 2050', 31 January 2024, <https://www.croplife.org.au/resources/submissions/the-agriculture-and-land-sector-plan/>.

producers.⁷ Australia's agricultural sustainability credentials are reiterated in a more recent analysis by ABARES.⁸ An absolute reduction in GHG in the Australian grains sector would therefore be a trade-off between total emissions and productivity. Given Australia's position as a net exporter, a loss in cropping productivity may see another nation with less sustainable practices fill the gap. As such, with a global lens on, it is more sustainable for Australia to enhance yield per cultivated area through sustainable intensification as this would eliminate the need to convert more land (and the resultant emissions created by this deforestation) to meet increasing global food demands. Eluded to in the overarching principles of the Issues Paper (page 4), a one-size-fits-all approach is not appropriate and resource management processes must be developed and suited for the local environment.

Future directions

When envisioning what mainstreaming adaptation would look like, it is not enough to simply "*recognise the role of biodiversity and nature...*" (page 37) or suggest that farmers and environmental land managers can just "change" their choice of technology (page 40). Critical to a future where natural environments can be adequately protected and farmers and environmental land managers can access the full suite of innovative technologies and choose which products are best suited to their local environments to sustainably manage their land, is the ability to access these technologies when required, which includes chemistry and crop biotechnology innovations. An excellent case study demonstrating where access to chemistry has been critical to Australia adapting to its specific climate change risks is noted on page 42, where conservation tillage has been adopted by the agricultural sector. No-till farming practices are enabled using herbicide weed control over summer fallow periods. As highlighted on page 39, such a future requires robust regulatory frameworks that are efficient, fit-for-purpose and underpinned by scientific data. In a separate example to the APVMA, delays in gene technology regulatory reforms have also inhibited sector-wide innovation. The Third review of the National Gene Technology Scheme will soon enter its seventh year and the Food Standards Australia and New Zealand review of new breeding technique definitions has seemingly ground to a halt. This uncertainty has inhibited investment and left Australian agricultural innovations stalled without a pathway to market. Moreover, our farmers have been unable to access a wealth of innovative technologies that provide sustainable value-added crops.

⁷ Maartje Sevenster et al., 'Australian Grains Baseline and Mitigation Assessment' (CSIRO, January 2022), <https://publications.csiro.au/publications/publication/Plcsiro:EP2022-0163>.

⁸ Department of Agriculture, Fisheries and Forestry and ABARES, 'Environmental Sustainability and Agri-Environmental Indicators – International Comparisons', July 2023, <https://www.agriculture.gov.au/abares/products/insights/environmental-sustainability-and-agri-environmental-indicators>.

In line with the need for a fit-for-purpose regulatory framework, it is worth noting that despite Australia's primary producers growing similar crops to other countries, the Australian crop protection market is less than five per cent of the Global Market when compared to other OECD markets such as the US and EU, which are around seven times larger.⁹ As a relatively small market, Australia has minimal pull when it comes to the registration of, and ultimately access to, new products and innovations. As the negative impacts of climate change descend on Australia, it is likely that Australian-specific challenges will arise and require Australian-specific solutions.

⁹ Deloitte Access Economics, 'Agvet Chemicals – Market Drivers and Barriers (Department of Agriculture)', July 2019.