CropLife Australia

November 2022

Climate Change Policy and Action Plan 2022-2025

NSW Environment Protection Authority

1 INTRODUCTION

CropLife Australia is the national peak industry organisation representing the agricultural chemical and plant biotechnology (plant science) sector in Australia. CropLife represents the innovators, developers, manufacturers and formulators of crop protection (organic, synthetic and biologically based) and agricultural biotechnology products. CropLife's membership is made up of both large and small, patent holding and generic, and Australian and international companies and accordingly, CropLife advocates for policy positions that deliver whole of industry benefit.

The plant science industry provides products to protect both agricultural crops and Australia's vast, biodiverse natural spaces, such as national and state parks, against invasive and damaging weeds, insects and diseases that that pose a serious threat to the nation's agricultural productivity, sustainability, food security and our beautiful natural environment and delicate biodiversity.

CropLife welcomes the opportunity to provide comments to the New South Wales Environment Protection Authority's (NSW EPA) consultation on its draft Climate Change Policy and Action Plan.

Climate change: agriculture and the plant science industry are part of the solution

Agriculture, which includes the plant science industry, is a key player in supporting Australia's efforts to adapt to and mitigate the consequences of climate change. Meeting the challenges of sustainably increasing food production to meet growing global demand, particularly in the face of climate change, will require science-based policies that support all farming production systems and the research, development, manufacture and application of the products and technologies of the plant science industry. This includes chemistry and biotechnology, the opportunities of which extend far beyond the agricultural sector, with applications in medicine, environmental management and industrial processing.

As a global community, we have the moral obligation to produce food – the right to food is recognised in the 1948 Universal Declaration of Human Rights – and we can do so, in a sustainable manner and in the face of the challenges of climate change, with the tools and innovations made possible by the plant science industry.

Action plan pillar 1: Inform and plan

"*Reliable, high-quality information and planning are critical for establishing and maintaining an effective climate change response and improving over time. Actions in this area include determining baselines, assessing risks, promoting good practices, measuring success, reporting in a transparent way, providing advice, and improving in response to new evidence and stakeholder feedback.*"

CropLife commends the NSW EPA's recognition that policy development and implementation must take an evidence-based approach. In addition to engaging with climate change experts across government, experts residing outside of the government structure, which may include those within industry organisations, universities or independent research institutes, must also be involved.

CropLife is also pleased to see the acknowledgement that the NSW EPA will co-design licensee reporting requirements with relevant agencies to avoid duplication and burdensome reporting arrangements.

Action plan pillar 2: Mitigate

"*Climate change mitigation is about taking action to reduce the rate of climate change. This includes actions that limit or prevent greenhouse gas emissions and activities that remove these gases from the atmosphere.*"

Modern agricultural practices that enable sufficient food production whilst also being environmentally conscious are only possible with the implementation of the products, innovations and solutions of the plant science industry. One example is no-till farming, where soil disturbance is reduced or eliminated when compared with traditional ploughing methods. No-till agricultural practices have numerous environmental benefits, including greater water-use efficiency, reduced soil erosion, enhanced nutrient retention and availability and, directly related to the reduction of greenhouse gas emissions, has the potential to develop agricultural soil as a carbon sink.[1,2]

1 Stephen M. Ogle et al., 'Climate and Soil Characteristics Determine Where No-Till Management Can Store Carbon in Soils and Mitigate Greenhouse Gas Emissions', *Scientific Reports* 9, no. 1 (12 August 2019): 11665, https://doi.org/10.1038/s41598-019-47861-7.

2 Hannah Victoria Cooper, Sacha Mooney, and Sofie Sjogersten, 'Farming without Disturbing Soil Could Cut Agriculture's Climate Impact by 30% – New Research', The Conversation, accessed 21 October 2022, http://theconversation.com/farming-without-disturbing-soil-could-cut-agricultures-climate-impact-by-30-new-research-157153.

Supporting no-till agricultural practices is the need for innovation in the discovery and delivery of pesticides. CropLife member companies invest billions each year into the development of new tools with greater specificity for target species and new modes of action. This investment has resulted in targeted products with enhanced safety and efficacy resulting in substantially improved outcomes. Australian farmers and environmental land managers must have access to these new tools in their climate change mitigation tool kit.

In enabling new action 10 – "*Encourage and support [the] community to innovate*", the NSW EPA must acknowledge that such capacity should not be stymied by exorbitant regulatory application costs, or ideological opposition to technology-based solutions. CropLife maintains that the regulation of the use of pesticides must be efficient and effective so that stakeholders have access to the innovative tools the plant science industry provides to mitigate invasive alien species – be they plant, insect or pathogen. Above all, this requires an efficient, adaptive and science based regulatory environment to encourage both continued innovation in next-generation tools, but also support for existing, proven, effective and safe solutions to be integrated with novel technologies which is then economical for Australian taxpayers, developing an increasingly efficacious and sustainable system.

The current regulatory system for agricultural chemicals in Australia is scientifically competent, technically proficient, independent and globally recognised. All pesticides are rigorously assessed by the Australian Pesticides and Veterinary Medicines Authority (APVMA) to ensure they are safe to use and present no unacceptable risk to users or the environment.

There is opportunity for the NSW EPA to ensure that pesticides continue to be used in a safe and effective manner. Specifically, there is need to improve levels of compliance with record-keeping requirements among pesticide users. In identifying this gap, CropLife was working with the NSW EPA to develop SprayRIGHT, a smart phone app that integrates the advances and uptake of digital technology to support farmers in meeting their statutory obligations and following best practice methods. SprayRIGHT will also ensure confidence in Australian farming and food production is maintained and help mitigate the effects of spray drift on sensitive crops, farmland and environmental areas. The development and implementation of SprayRIGHT has strong support from CropLife but is dependent on financial support from NSW EPA.

Action plan pillar 3: Adapt

"*Climate change adaptation is about adjusting to the actual or expected effects of climate change. Adaptation enables communities, business and the economy to plan for, and recover more quickly and easily from, the acute and chronic impacts of climate change.*"

With the consequences of climate change continuing to challenge agricultural productivity and land management practices, farmers and land managers must adapt their methods. The tools and innovations of the plant science industry enable farmers and environmental land managers to do so in a sustainable manner.

An excellent example of plant science innovation supporting climate change adaption is in the application of biotechnology to produce crops that are resilient to biotic and abiotic stresses, particularly those that become more severe due to climate change. The expiration of the NSW moratorium on genetically modified crops in July 2021 allows for an increase in agricultural competitiveness and productivity, enabling farmers to grow the food, feed and fibre we need in an ever-challenging environment.

Access to pesticides will become more and more critical as climate change increases the risk of pests, weeds and diseases spreading in agriculture and native ecosystems, thus, threatening our agricultural productivity and unique biodiversity.[3]

In addition to the innovative tools developed by CropLife member companies, CropLife and its members also recognise that they have an ongoing responsibility to ensure the safe and sustainable use of their products. ***drum****MUSTER* and ChemClear® are CropLife's flagship product stewardship initiatives. These stewardship programs are fully funded by industry. Since ***drum****MUSTER* started operations in 1999, more than 58,000 tonnes (over 40 million containers) of plant science industry product container plastics have been diverted from landfill sites into recycling programs. There are over 800 collection sites throughout Australia for farmers, environmental land managers and other pesticide users to return their drums.

The ChemClear® initiative further demonstrates the plant science industry's rigorous commitment to product stewardship. ChemClear® supports the removal of obsolete chemicals off farms and out of regional Australia, allowing farmers to safely dispose of these unwanted products. These stewardship initiatives support the NSW EPA's Climate Change Action Plan.

3 'FAO - News Article: Climate Change Fans Spread of Pests and Threatens Plants and Crops, New FAO Study', accessed 23 October 2022, https://www.fao.org/news/story/en/item/1402920/icode/.

Crucial to the NSW EPA's 2022 emergency and disaster flood response was CropLife's ChemClear® program. We note that ChemClear® is not explicitly noted in the Action Plan and is instead only referred to as one of the EPA's "*Flood Recovery Programs – Agricultural Chemical Clean Up Program*" (Page 42), this is incorrect. ChemClear® is an industry-led stewardship initiative. It is irresponsible of the NSW EPA to expect its "*licensees to contribute in a fair and reasonable way to achieving the State's goal[s]*" and yet not acknowledge the licensees' existing efforts.

ChemClear® has a successful history in partnering with state governments to conduct collections to safely capture, remove and dispose of unwanted or unknown pesticides from properties or surrounding public lands following natural disasters. These partnerships have diverted thousands of litres of pesticides from landfill, waterways and inadequate storage, which has minimised the risk of pollution events. To ensure that this invaluable partnership continues, the NSW EPA should permanently embed ChemClear® funding into its emergency response and recovery program.

The NSW EPA notes that part of its Climate Change Action Plan is to commission research into the impacts of climate change on waste transportation, storage, processing, disposal and legacy sites. CropLife has previously engaged with the NSW EPA regarding support for conducting a pilot run of its bagMUSTER® program – an Australian first industry-led, not-for-profit genuine collection and recycling initiative for agriculture's plastic bags. When fully operational, bagMUSTER® will provide the NSW agricultural community with a genuine pathway for the responsible collection and recycling of its agricultural plastic bags, which are currently being buried on farm, disposed of in an environmentally unfriendly manner or end up as landfill. Through the delivery of bagMUSTER®, there is opportunity for the NSW EPA to demonstrate its commitment to its Climate Change Action Plan.

2 CONCLUSION

The plant science industry's tools and solutions, including pesticides and biotechnology innovations, whether they be organic, synthetic or biologically based, play a crucial role in Australia's mitigation and adaptation to the consequences of climate change. CropLife and its members are committed to enabling Australian farmers' continued access to the tools they need to sustainable farm, and also support the health and safety of end-users and the natural environment.

All relevant government agencies, industries and stakeholders will need to work collaboratively and efficiently driven by scientifically based policy and initiatives supported by efficient regulatory systems to ensure Australian agriculture, its national parks and broader community are safeguarded from the negative impacts of climate change.