28 October 2024

Packaging Reform Taskforce
Department of Climate Change, Energy, the Environment and Water
via email: packagingreform@dcceew.gov.au

To whom it may concern

RE: Reform of packaging regulation – Consultation paper

SECOS Group commends the agreement between Australia's Environment Ministers of the need to reform packaging regulation and exploration of the best way to implement a new national packaging scheme that is fit-for-purpose, to minimise packaging waste and pollution and enable a circular economy.

We welcome the opportunity to comment on the consultation paper released in September 2024, including some limitations in its frame.

Specifically, packaging reform should, in priority order, seek to:

1. **Replace** conventional petroleum-based plastics with certified compostable bioplastic alternatives wherever possible
2. **Reuse** packaging wherever possible / composting products certified to be so
3. **Recycle** petroleum-based plastics at end-of-useful-life (noting this still results in permanent environmental pollution and public health risk, due to microplastics)

As a partner in the Australian Government funded Solving Plastic Waste CRC, we firmly believe that any approach to packaging reform should go further than the Australian Packaging Covenant which underpins a goal that all packaging is simply reusable, "recyclable", or compostable. Minimising packaging waste and pollution requires replacement of conventional plastics, not simply better end-of-useful-life treatments.

About SECOS Group

SECOS Group Limited (ASX: SES) is a leading developer and manufacturer of sustainable packaging materials. Our headquarters and Global R&D Centre are in Mount Waverley in Melbourne's south-east. We are a partner in the Commonwealth-funded Solving Plastic Waste Cooperative Research Centre.

SECOS' manufacturing is integrated from resin production to film production and can develop bespoke compostable solutions (certified to meet several Australian and international standards for home and commercial composability) for a range of applications. SECOS holds a strong patent

portfolio, with the global trend toward sustainable packaging fuelling the growth of our Australian-based business.

Our mission is to substitute much of the 1.4 million tonnes of mainly flexible conventional plastic packaging going to landfill each year with certified compostable alternatives. This would prevent around 150,000 tonnes of plastic pollution leaking into the environment annually. SECOS' focus is on primary packaging of food, cosmetics in sachets, and non-food organics, as well as associated distribution packaging.

Summary and key recommendations

While the reform of Australia's packaging regulations is a timely and welcome initiative, the focus and process through which it has been facilitated may restrict its efficacy in achieving stated aims. Our core observations are that:

- The explicit aim of packaging reform should be the removal or replacement of petroleum-based plastics. The continued reuse and recycling of such products should be viewed as a contingency and not as a primary objective due to the imminent consequence of both plastic chemicals and microplastics that will end up in the environment.
- Larger operators which jointly and severally hold a significant portion of packaging market share may, by virtue of their corporate model, be biased toward the retention of soft plastics even where viable alternatives exist.
- A distinction must be made between products advertised as compostable and products which are certified. Where a product is certified as compostable (e.g. certified to meet AS4736, AS5810, ASTM D6400, or EN13432), it is *ipso facto* devoid of many harmful contaminants found in other so-called sustainable packaging solutions (including some paper-based products).

We therefore recommend:

- Adoption of a target to replace soft plastic food packaging with certified compostable bioplastics with graduated interim targets;
- Rules for the adoption of compostable plastics; and
- Government restricts use of the terms "compostable", "biodegradable" and "oxo-degradable" on products, packaging and any associated advertising, to only those products that are certified as meeting AS 4736 and/or AS 5810.

The need to replace petroleum-based plastics

Certified compostable bioplastics completely biodegrade at end-of-life and can be re-used in other applications (e.g. in soil or mulch). In contrast, recycling other plastic types has been found to produce microplastics – these cumulatively build up in the environment and represent an increasing pollution problem and a risk to human health.

The use and application of certified compostable bioplastics in food organics and garden organics waste streams ('FOGO' or the "green bin") is well established and ubiquitous across Australia. Approximately 80% of households involved in FOGO programs across Victoria, New South

Wales, Western Australia and South Australia are utilising certified compostable caddy bin liners, which assist householders to conveniently and hygienically capture and transport their organics waste for kerbside collection.

However, the potential applications of bioplastic technology are much broader. As part of its work through the Solving Plastic Waste CRC, SECOS Group is collaborating with university-based researchers to develop a 'second generation' biopolymer. This work will produce a commercially-viable and certified compostable bioplastic that can be used to substitute both conventional plastic and treated paper products used for packaging food, potting mix, cosmetics and shampoo sachets, dog food, and more.

Replacing conventional plastic in this way would, for example, allow spoiled food within homes or unsold food or other organics in supermarkets, to be composted still wrapped in its certified compostable packaging, rather than being sent to landfill. We estimate this would avoid completely several hundred thousand tonnes of pollution (including microplastics) annually and divert significant volumes of food waste each year away from landfill, with substantial benefits for the environment and a great reduction in greenhouse gas emissions.

Limitations in scope of proposed reform

Of the options contemplated through the consultation paper, Option 1 and Option 2 will not realise the significant minimisation of packaging waste and pollution sought by governments. An extended producer responsibility scheme for packaging (Option 3) is the only option presented that could drive avoidance of waste, replace conventional petroleum-based plastics with alternatives, and result in lower environmental pollution. We note, however, there are likely other ways (without the complexity of designing and maintaining an extended producer responsibility scheme) to incentivise and/or mandate replacement of conventional plastics with alternatives.

Industry data suggests very few brands are presently using compostable plastic packaging. At the same time, progress towards recycling of soft plastics is proving glacial. The goal of government is not achieved through progress towards greater recycling and use of recycled plastic alone. While such outcomes reduce harm, petroleum-based plastic waste (e.g. microplastics) and its associated chemicals will nevertheless remain a major contaminate in our environment.

Investment in soft plastic recycling is fraught given economic limitations. Recyclers must deal with a mix of multi-layered – often contaminated – materials that are expensive to collect, clean and then recycle. End-markets for recycled soft plastics are limited. A focus on compostable substitutes will yield greater returns for the environment and likely require substantially less direct investment or subsidy by governments, one example to this point, is that significant organic processing capacity already exists in Australia.

It is worth noting also, in the context of the present industry target for "70% of plastic packaging to go on to be recycled or composted" under the National Plastics Plan, the limitations of paper-based products as compostable packaging. Paper-based packaging as a compostable substitute for

conventional plastics will not be suitable for many applications, such as food storage (especially foods with a high water content).

Additionally, paper products do not undergo any certification process – providing no assurance that they are free of harmful chemicals. This may impact on their ability to be accepted and processed by industrial composters.

Certified compostable products are free of harmful contaminants such as PFAS

The consultation paper notes that unlike compostable caddy bags, compostable packaging is not widely accepted in kerbside organics collection. The paper highlights that the removal of PFAS and other chemical additives of concern used in packaging may create opportunities for compostable packaging to play a role in aiding food recovery through kerbside organics collections while avoiding impacts to compost quality.

This highlights the importance of promoting and, where appropriate, requiring certification. Products certified to meet AS4736 and/or AS5810 are tested for the presence of hazardous substances such as heavy metals, and the resulting compost is required to have no toxic effect on plants or earthworms.

SECOS Group is available for further direct consultation

We thank you for taking the time to consider this submission. SECOS Group are available to provide further information to the department, or to answer any queries you may have. Please contact me via r.tegoni@secosgroup.com.au.

Yours sincerely

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