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CASE
STUDY



Mandated Product Stewardship: The case of used oil

In this case study, we look at the Product Stewardship for Oil Scheme, the sole example of mandated product stewardship in Australia. In addition to providing an overview of the regulatory framework underpinning the Scheme, we also assess its benefits and effectiveness. Here, we emphasise the success of product stewardship in driving the creation of a new re-refining industry in Australia, a significant stewardship outcome.

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INTRODUCTION

Introduced by the Commonwealth Government in 2001, the Product Stewardship for Oil scheme is an early and significant example of a mandated product stewardship scheme in Australia.¹ The [Product Stewardship \(Oil\) Act 2000](#) (“The Act”) established the framework for the operations of the scheme which pays incentives to promote the environmentally sustainable management and re-refining of used and recycled oil.²

When the scheme was introduced in 2001, there was no process for the collection and recycling of used oil in Australia. However, since that time, over 320 megalitres of base lubricating oil is produced every year, equal to over half the yearly amount of oil sold in the country.³

In this case study, we provide an overview of the environmental impact of used oil, what makes a mandated product stewardship scheme unique, the mechanisms underpinning the scheme, and lessons learned from management of used oil.

We also assess the environmental, social, and economic benefits that have emerged as a result of the “the Act”. In particular, we shed light on how this mandatory scheme has supported the establishment of a new recycling industry in Australia. Finally, we consider the financial challenges the scheme has faced, particularly in light of the Covid-19 pandemic.

¹ DCCEEW (2021). [Used Oil Product Stewardship](#). Note: The various container deposit schemes in Australia could also be considered mandated. Moreover, liable parties in the National Television and Computer Recycling Scheme could also consider their contributions mandated.

² DCCEEW (2021). [Used Oil Product Stewardship](#).

³ DCCEEW (2021). [Used Oil Product Stewardship](#).

⁴ Vazquez-Duhalt, R. (1989) [Environmental impact of used motor oil](#); Gaidajis, G. et al.

THE ENVIRONMENTAL IMPACT OF USED OIL

It is well established that the inappropriate disposal of used oil causes a range of negative environmental impacts.⁴ Used oil that is not managed properly has negative impacts for land and marine environments, including damage to soil, crops, and waterways, as well as adverse health impacts for humans and animals.⁵

However, when managed properly, there are a number of environmental benefits of recycling used oil including: reduced production of new oil, reduction of total energy consumption, reduced greenhouse gas emissions, and the prevention of environmental damage caused by contamination and/or the incorrect disposal of oil.⁶

MANDATED PRODUCT STEWARDSHIP

The Used Oil PSO scheme is unique in Australia in that it is a levy-benefit system where a duty of 8.5c/l or kg is imposed on imported oil-based lubricants which funds benefits paid to used oil recyclers claimed through the Australian Taxation Office (ATO).

This is an example of mandated product stewardship where the rules (i.e., “the Act”) requires one or more specific persons to take action in relation to a specified product⁷.

Unlike co-regulatory product stewardship, there is no government approved arrangement

(2011). [Analysis of the recycling potential of used automotive oil filters using the Life Cycle Assessment approach](#).

⁵ Deloitte (2020). [Fourth Product Stewardship \(Oil\) Act 2000 review – Final Report](#).

⁶ Deloitte (2020). [Fourth Product Stewardship \(Oil\) Act 2000 review – Final Report](#).

⁷ Recycling and Waste Reduction Act Chapter 3 Product Stewardship. <https://www.legislation.gov.au/Details/C2021C00501>

to administer the scheme on behalf of the government. Rather as stipulated under “the [Act](#)”, a range of Australian Government agencies are responsible for the administration of the scheme:

1. [Department of Climate Change, Energy, the Environment and Water](#): Responsible for oversight of the Act and PSO Scheme.
2. [Australian Taxation Office](#): Responsible for benefits payments (made to recyclers of used oils) and excise duties (domestically produced oils, greases and synthetic equivalents).

The [Product Grants and Benefits Administration Act 2000](#) establishes the eligibility criteria and the administrative mechanisms used by the ATO to pay benefit to recyclers.⁸

There are also a number of related legislative documents that support the scheme. The following legislation contribute to the establishment of the Product Stewardship Levy:

- The [Excise Tariff Act 1921](#) and the [Excise Tariff Amendment \(Product Stewardship for Waste Oil\) Act 2000](#).
- The [Customs Tariff Act 1995](#) and the [Customs Tariff Amendment \(Product Stewardship for Waste Oil\) Act 2000](#).

The following legislation list exempt oils and abolish the automatic indexation on the levy:

- The [Excise Tariff Amendment Act \(No.1\) 2000](#)
- The [Customs Tariff Amendment Act \(No.2\) 2000](#).

⁸ DCCEEW (2021). [Legislation – Product Stewardship for Oil Program](#).

⁹ DCCEEW (2021). [Legislation – Product Stewardship for Oil Program](#).

¹⁰ Minister for the Environment and Water (2022). [Explanatory Statement: Product](#)

The [Product Stewardship \(Oil\) \(Consequential Amendments\) Act 2000](#) contributes to establishing the Product Stewardship Levy and general administrative arrangements while the [Appropriation \(Supplementary Measures\) Bill \(No 2\) 1999](#) funds transitional assistance expenditure, including general running costs of the Product Stewardship Arrangements and general grant funding.⁹

The [Product Stewardship \(Oil\) Regulations 2022](#) (the “Regulations”) were recently released, owing to the need to reform certain regulations underpinning the scheme. The 2022 Regulations “provide the basis of calculating the amount of benefit for a claim for the sale or consumption of recycled oil, and the consumption of gazetted oil for a gazetted use. The Regulations replace the *Product Stewardship (Oil) Regulations 2000* (the old Regulations) which sunset on 1 October 2022.”¹⁰

In addition to the Regulations, the Product Stewardship (Oil) Declaration 2022 sets out the oil types and uses to claim a benefit for oils used in industrial processes.¹¹

SCHEME STRUCTURE

The scheme is a levy-benefits system that imposes a duty on oil-based lubricants which funds benefits paid to used oil recyclers through the Australian Taxation Office (ATO). With respect to the levy, the intention is that it:

“offsets the costs of benefits paid to oil recyclers as an incentive to undertake increased recycling of used oil. This ensures that some of the costs of used oil recycling are borne by the markets that gain the benefit from the production and use of that oil, rather than from public monies

[Stewardship \(Oil\) Act 2000 and the Product Stewardship \(Oil\) Regulations 2022](#).

¹¹ Note: Information on rates is available from the Australian Tax Office [here](#) and information on claims is available [here](#).

or other markets. In economic terms, it 'internalises the externalities'.¹²

The scheme also provides benefits to incentivise and maintain a diverse range of recycling options for used oil.¹³ In order to be considered for benefits, "the recycler must undertake the final processing (recycling) stage prior to end use and the product must be used by that recycler or sold for end use (i.e., not just processed and stockpiled)."¹⁴

The benefits paid to oil recyclers vary across eight product categories which have their own criteria and corresponding benefit in cents-per-litre. This information is available [online](#) on from Department of Climate Change, Energy, the Environment and Water.

ENVIRONMENTAL, SOCIAL AND ECONOMIC BENEFITS

Building on our [Product Stewardship Benefits and Effectiveness](#) project, we have sought to assess the environmental, social, and economic benefits of "the Act".

First, with respect to the environmental benefits, the Fourth Product Stewardship (Oil) Act Review concluded that the "PSO is capturing the large majority of waste oil products and enabling its re-refining and re-use".¹⁵ Since 2013, the collection rate of waste oil products hovers between 50% and 60%, whereby 65% is the maximum feasible collection rate.¹⁶

Second, there are also demonstrated social and economic benefits associated with the scheme. For example, new businesses and job creation are noted economic benefits.

¹² DCCEE (2021). [Product Stewardship Levy \(Excise\)](#).

¹³ DCCEE (2021). [Product Stewardship Benefits](#).

¹⁴ DCCEE (2021). [Product Stewardship Benefits](#).

¹⁵ Deloitte (2020). [Fourth Product Stewardship \(Oil\) Act 2000 review – Final Report](#).

¹⁶ Deloitte (2020). [Fourth Product Stewardship \(Oil\) Act 2000 review – Final Report](#).

According to the Australian Oil Recyclers Association (AORA), over 600 jobs have been created for those working in oil collection, recycling, and re-recycling and re-refining.¹⁷ In addition, there are over 40 small enterprises employing an estimated 170 people working with the independent collection of used oil in Australia.¹⁸ Contractors are also involved in supporting AORA member operations, including in freight and logistics, chemists, mechanics, and manufactures. AORA also note that many of these are regional businesses.

According to Tim Rose, Managing Director of the Southern Oil Refining Pty Ltd, there have been four re-refineries and six partial refineries built since the introduction of the PSO Scheme. The re-refineries are in Wagga Wagga, NSW; Gladstone, QLD; Bunbury, WA; and Wetherill Park, NSW. These refineries are "lube to lube" meaning they take in waste lubricating oil and produce lubricating oil. There are also six partial refineries, involved in dewatering or defueling, located in Brisbane, Townsville, Mackay, Melbourne, Adelaide and Kalgoorlie.

CHALLENGE: FINANCIAL SUSTAINABILITY

While the PSO scheme has been largely successful in terms of increasing the collection and recycling of used oil in Australia, the scheme is not without its challenges. In particular, the financial viability of the scheme – caused by an imbalance between the collected levy and the benefits paid out – has been repeatedly identified as a key challenge.¹⁹

¹⁷ Australian Oil Recyclers Association (n.d.). Product Stewardship for Oil (PSO) Scheme.

¹⁸ Ibid.

¹⁹ For example, the PSO Scheme was in deficit by approximately \$5 million per year in the years prior to [2013 review](#). To address the scheme's deficit, recommendations for a combined approach of increasing the levy and decrease benefits paid out¹⁹. The Australian government responded by increasing the levy in

The fourth independent review of the scheme conducted by Deloitte in December 2020²⁰ made the following recommendations:

CHALLENGE	RECOMMENDATION
Reducing commodity price risk for oil recycling	Enabling the scheme benefits to change with oil prices, to insulate oil recyclers against fluctuations in crude oil prices
Addressing the increasing deficit	Increasing the levy to address the deficit
Providing more transparency and data concerning the operation of the scheme	Reinstating publication of the scheme information in Departmental Annual Reports

In response, the Commonwealth government noted each of the recommendations, reinforcing its strong commitment to the ongoing success and financial viability as well as acknowledging the importance of transparency in scheme operations and its significant beneficial public outcomes.²¹ For example, statistics about the annual benefits, levy and drawbacks and refunds paid by the Scheme for the 2017-2018 to 2021-2022 financial years are available on the DCCEEW [website](#).

THE IMPACT OF COVID-19

The Commonwealth government provided \$7.8 million in temporary funding to support oil recycling facilities that were affected by Covid-19.²² Moreover, the category 1 benefit paid to oil recyclers was also temporarily increased from 50c/L to 62c/L for the period 1 July 2020 to 31 December 2020.

2014 but decided not to decrease the benefits paid out.

²⁰ Deloitte (2020). [Fourth Product Stewardship \(Oil\) Act 2000 review – Final Report](#).

²¹ Australian Government (2021). [Australian Government response to the independent](#)

NOTE

The content of this case study is information of a general nature sourced from public sources and investigations conducted by the Product Stewardship Centre of Excellence. It does not represent advice, direction or endorsement from the Product Stewardship Centre of Excellence, nor does it represent the only method or practice to address the topics laid out in this document. Individuals or organisations are encouraged to conduct their own analysis and consideration of strategic options relevant to their situation before acting in regard to the matters covered.

Cover Photo by [Tasos Mansour](#) on [Unsplash](#).

[report: Fourth Product Stewardship \(Oil\) Act 2000 review](#).

²² DCCEEW (2021). [Product Stewardship for Oil \(PSO\) Scheme](#).

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