

# End of life vessels

Public consultation on  
Policy Options

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[transport.nsw.gov.au](https://transport.nsw.gov.au)

## Acknowledgement of Country

Transport for NSW acknowledges the traditional custodians of the land and waters on which we work and live.

We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the lands, waters and seas and their rich contribution to society.

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## Executive Summary

There is growing concern about the increasing number of vessels that are reaching, or have reached, the end of their useful life, generally referred to as end of life vessels (ELVs). Whilst the exact number of ELVs in NSW is unknown, analysis indicates that it is likely to be large, given that an estimated 75,000 fibreglass vessels reached end of life between 2000 and 2017. Additionally, it is estimated 5 to 15 per cent of moorings are occupied by ELVs across the state, depending on location.

The complexity of issues associated with ELVs are numerous and accumulate throughout a vessel's life cycle, although they currently present only as a last owner issue.

The potential scale of ELV abandonment and disposal in NSW presents a major problem for users, industry, government and the public by creating impacts in three areas:

**Economic:** there are high costs to government having to salvage and dispose of vessels and there is an opportunity cost to users who are prevented access to moorings occupied by ELVs.

**Safety:** ELVs can present a navigational hazard on the water when they detach from moorings and if unseaworthy, can present a major safety hazard to occupants when underway.

**Environmental:** when abandoned on-water they can leak harmful substances into the marine environment and off-water vessels present a major waste management problem.

Transport for NSW (Transport) has undertaken an options development process based on a comprehensive desktop review. This review focused on understanding best-practice policy approaches to dealing with ELVs in other jurisdictions, particularly the feasibility and deliverability of different policy approaches to NSW. The findings of this research are supported by targeted stakeholder consultation, conducted for the drafting of this paper.

A key finding from the research is that a comprehensive and effective solution to ELVs requires a collaborative approach, involving government and industry in NSW and support from both the Australian Government and preferably consistency with other states and territories.

Without policy intervention and without disposal options for ELVs or any means of funding it, the stock of ELVs emerging will continue to grow. This will exacerbate the existing burden of ELVs for the public, waterway users and the environment. This paper presents a range of policy options which aim to address the issue of ELVs in NSW and reduce their impacts.

The full list of proposed policy options is presented in Table 1 below.

**Table 1: Summary list of policy options proposed in this paper, by implementation timeline**

Short Term Actions (0-2 years) – led by Transport		
Number	Policy (with document link)	Description
1	<b><u>Legislation definition</u></b>	Transport will pursue a legislative amendment to the <i>Marine Safety Act 1998</i> and/or the <i>Ports and Maritime Administration Act 1995</i> to provide a clearer foundation for action against ELVs.
2	<b><u>Review of ELV management practices</u></b>	Transport will review its practices for management of ELVs in conjunction with a review of the regulation, to ensure that all processes are transparent for customers and provide clearer guidance for administration by Transport.
3	<b><u>Mooring regulations</u></b>	Transport will review the current priority mooring waiting list rules to reduce the incentive to obtain a mooring minder vessel.
4	<b><u>Data collection</u></b>	Following the introduction of a clear definition for ELVs, Transport will improve data collection and monitoring for ELVs.
5	<b><u>Responsible boat ownership</u></b>	Transport will advocate at ANZSBEG for the promotion of education campaigns to promote responsible boat ownership and other initiatives.
6	<b><u>Owner awareness at end of life</u></b>	Transport will develop a strategic ELV education campaign on the impacts and options for vessel disposal. This could be considered alongside a ‘Responsible Boat Ownership’ campaign, with scope for collaboration with industry and across jurisdictions to enable consistency of messaging.
7	<b><u>Develop and update compliance framework</u></b>	Transport to give detailed consideration of whether ELV related penalties and approaches to enforcement are appropriate.

Short Term Actions (0-2 years) – across NSW Government		
8	<u>Disposal guidelines</u>	Cross agency development of guidelines around vessel disposal, incorporating advice from existing contractors.
9	<u>Engagement with Commonwealth on Extended Producer Responsibility (EPR)</u>	NSW Government to engage the Commonwealth Government on EPR, with a view to understanding scope, feasibility and responsibility for an ELV related scheme.
Medium Term Actions (2-5 years) – NSW Government led and/or engage with other jurisdictions		
10	<u>Funding</u>	Transport to investigate options for an equitable and sustainable funding solution to fund ELV disposal. Potential options include an annual levy on vessel registrations and/or mooring licences, or a levy on vessel manufacturers.
11	<u>Vessel inspection program</u>	Transport to explore the feasibility of a targeted vessel inspection program at either registration or pre-transfer of ownership to be explored. This could be based on vessel age on a periodic basis.
12	<u>Disposal program</u>	Transport to consider a strategic approach to ELV removal, with a focus on enhanced on-water enforcement and/or a vessel turn-in option.
Medium Term Actions (2-5 years) – across NSW Government with Industry collaboration		
13	<u>Disposal network</u>	The NSW Government to consider establishing a disposal network similar to those that have been set up in France and Japan. This could be developed in collaboration with industry and Local Councils.
Longer Term Actions (5+ years) – across NSW Government, Commonwealth Government and Industry		
14	<u>Recyclability of fibreglass</u>	NSW Government to collaborate with other industry sectors to develop recycling pathways for fibreglass material.
15	<u>Development of an extended producer responsibility scheme for vessels</u>	NSW Government advocates at the respective transport and environment national committees for the development of a national regulated EPR scheme for ELVs.

## Invitation to provide feedback

The purpose of this process is to seek feedback on the short, medium and long term possible reform actions to address the complex issues related to the management of ELVs. Along with desk based research we have consulted with a range of key industry bodies and other government departments to develop this set of proposed options. We are now seeking broader stakeholder feedback. You can provide feedback by visiting the dedicated consultation page on the [Have Your Say website](#).

Here you can:

1. register for a webinar
2. complete the feedback form
3. submit a written submission

The results of this feedback will be iterative. We will review and assess the feedback and provide a summary report.

## Introduction

Transport has previously consulted on issues associated with moorings. One of the issues raised as a result of this consultation were concerns regarding the management and disposal of end of life vessels (ELVs). To address these concerns, Transport has investigated the issues associated with ELVs and subsequently developed a range of policy options for minimising their costs and impacts.

This paper seeks public feedback on proposed policy options to address ELV issues.

### Scope

This policy options paper focusses on the disposal of recreational ELVs currently occupying moorings in NSW, particularly fibreglass vessels which tend to come with the highest economic and environmental costs.

However, ELVs stored on moorings represent a small component of the wider ELV problem in NSW. ELVs are also abandoned on domestic waterfront land or are stored off-water, with issues surrounding disposal and/or abandonment occurring on land. From a whole of government perspective, there is merit in approaching the ELV problem holistically and any longer-term solutions should encompass vessels stored on and off the water.

### Approach

The policy options proposed in this paper have been developed using desktop research, including a detailed cross-jurisdictional review of domestic and international approaches to managing ELVs, supported by analysis of Transport data. Targeted consultation was also undertaken with industry, user groups and other government agencies to inform the findings.

## Key research findings

Key findings based on research are outlined in Table 2.

**Table 2: Key Research Findings**

Key Finding	Detail
<b>Scale of the problem</b>	
1	There is no clear definition in legislation or other guidance of what constitutes an ELV. This makes it difficult to diagnose the scale of the problem and manage it effectively from a regulatory perspective.
2	Anecdotal views from stakeholders are that ELVs account for up to 15 per cent of all moored vessels, but this figure varies depending on location.
3	There is limited data to ascertain the exact number, type and distribution of ELVs on moorings. Additional primary research is needed to better understand ELV numbers and distribution.
4	The scale of ELVs in NSW is considerable, with around 75,000 fibreglass vessels having reached end of life between 2000 and 2017. The problem has become worse in recent years.
5	Most vessels are less than 20 years old when they reach the end of their life, less than what might otherwise be expected.
6	ELVs will continue to emerge, but the number of vessels newly reaching end of life is likely at its peak now or in the next few years.
<b>What happens to ELVs?</b>	
7	ELVs are largely unaccounted for at end of life in NSW, so it is not possible to determine what exactly happens to them and what proportion are abandoned.
8	Transport is responsible for disposing of ELVs when they present a navigational or environmental hazard, costing in excess of \$1 million each year.



Causes of the problem	
9	The ELV problem is complex and gets progressively worse as a vessel ages.
10	Early life cycle causes focus on the role of the manufacturer, their reliance on fibreglass and the relinquishment of responsibility for disposal past the initial sale.
11	Mid-life cycle causes focus largely on the role of vessel owners; that many do not contribute to disposal and, in some case, through vessel mismanagement which shortens the useable life of a vessel.
12	Responsibility for the removal of an ELV falls entirely on the owner of the vessel at the end of its life. Depending on the vessel's location, size and condition, the process is likely to be expensive, with few, if any, disposal options available.

## Existing waste policy framework

There is no specific policy on ELVs in NSW, nor any other state or Commonwealth legislation directed at management and disposal of composite materials from vessels. However, there are several related directives that apply to waste management more generally that could be used to support future management of ELVs in NSW. There are no international directives or conventions that are applicable to recreational vessels.

### Commonwealth Government

The Commonwealth Government released their [National Waste Policy](#) in 2018, which provided a framework for national action on waste management, recycling and resource recovery up until 2030. The [National Waste Action Plan 2019](#) was subsequently published which presented targets and actions to implement the 2018 National Waste Policy.

In order to formalise the waste export ban and encourage companies to take greater responsibility for the rubbish they generate, the Commonwealth passed the [Recycling and Waste Reduction Bill 2020](#) (the RWR Bill) in August 2020. The RWR Bill establishes a legislative framework to enable Australia to more effectively manage the environment and human health and safety impacts of products and waste material.

### NSW Government

The [NSW Waste and Resource Recovery Strategy 2014-21](#) is the main policy framework for waste management in NSW. The core objectives of this strategy are; encouraging innovation, supporting investment in waste infrastructure and improving recycling behaviour.

Early in 2019, the NSW Government released its [NSW Circular Economy Policy Statement](#) to help guide the state's transition to a circular economy<sup>1</sup>. It provides a framework for implementing initiatives throughout the product life cycle, from design, manufacturing and retail to end of life disposal.

This has laid the foundation for the NSW Government's [NSW Waste and Sustainable Materials Strategy 2041](#) that is centred on waste reduction, recycling and the environmental benefits and economic opportunities related to waste management.

Transport released the [Environment and Sustainability Policy](#) in 2020 and the [Transport Sustainability Plan](#) in 2021 which commits to delivering transport that contributes to economic prosperity and social inclusion in an environmentally responsible and sustainable manner. This will be achieved by; being accountable for addressing and minimising the environmental impacts of the Department's activities, procuring and delivering sustainable, efficient and cost effective transport options, and considering whole of life benefits and impacts from activities across all life cycle stages. This is consistent with the [Future Transport Strategy](#) and actions outlined in the [Marine Estate Management Strategy 2018-2028](#) (MEMS). The MEMS provides directives that specifically target our waterways, including but not limited to, improving water quality, and reducing litter and enabling safe and sustainable boating.

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<sup>1</sup> A circular economy retains the value of materials in the economy for as long as possible, reducing the unsustainable depletion of natural resources and impacts on the environment. It is a whole-of-system approach that requires accounting of the full cost and life cycle of materials.

## Proposed policy options

The proposed list of policy options has been developed to help guide a number of regulatory reforms, management practices, vessel inspections and disposal programs. Collectively these options are designed to manage the safety, economic and environmental risks associated with ELVs.

Many of these can be led by Transport in partnership with other state and federal government agencies and alongside local councils. Some of these options will be able to be implemented quickly, others will take time to develop and implement.

The below options have been grouped according to their possible implementation time horizons. Further consultation on these options will help develop the reforms and prioritise the options.

### 1. Short term actions (0-2 years)

#### 1.1. Actions led by Transport

##### 1.1.1. Defining an ELV

**Policy Option 1: Transport will pursue a legislative amendment to the *Marine Safety Act 1998* and/or the *Ports and Maritime Administration Act 1995* to provide a definition and clearer foundation for action against ELVs.**

In general terms, an ELV is one that is no longer fit for purpose as designed and built and is typically defined as either derelict (the physical condition of the vessel) or abandoned (legal ownership status of the vessel).

Clear definitions in the legislation are considered a foundation element of an ELV policy package. The term 'ELV' is not explicitly defined in the NSW legislation.

There are two options that can be considered to provide a legislative foundation:

- 1 The provisions in sections of the *Marine Safety Act 1998* (MSA 1998) could be utilised to undertake enforcement action against some ELVs. To better manage the environmental risks presented by ELVs, the current definition of an 'unsafe vessel' could be amended to ensure that similar regulatory action can be taken in the event of a vessel presenting an environmental risk.
- 2 The Private Mooring Licence Conditions, underpinned by Part 6A of the *Ports and Maritime Administration Act 1995*, provides the basis for proactive management of ELVs. Moored vessels are required to meet certain conditions, including those related to seaworthiness and visual suitability. Another option is to establish a legislative definition of "visually suitable". This would create a more robust legislative basis for action on the

basis of vessel condition and provide an objective framework to guide action against ELVs.

### Questions for policy option 1

Q. To what extent do you agree with the following statement (1-5 scale):

- Legislative amendments to define end of life vessels (ELVs) will assist in the management of ELVs in NSW.

Q. Please provide any additional comments you have about this policy option.

### 1.1.2. ELV management practices

**Policy Option 2: Transport will review its practices for management of ELVs in conjunction with a review of the regulation, to ensure that all processes are transparent and simple for customers and provide clearer guidance for administration by Transport.**

It is important that the legislation designates authority to a public body to manage ELVs in State-managed waterways and coastal assets. ELV issues are addressed when other problems caused by ELVs are presented. These include issues under mooring licence conditions, or removal of obstructions from navigable waters. Consideration could be given to vessel owners being obligated to show proof of insurance on the vessel in order to keep it on a mooring.

The following paragraph outlines statutory provisions for management of ELVs, which forms the current foundations for Transport ELV management practices.

The *NSW Marine Safety Act 1998* governs the removal of obstructions in navigable waters. It also prescribes post-seizure and pre-disposal requirements that determine where and how long a vessel will be held in storage for under different circumstances prior to its disposal. There is scope for an owner to reclaim the vessel, provided they have paid for all costs incurred during the seizure.

Transport also has the authority to issue fines and notices to ELVs under clause 29 of the Ports and Maritime Administration Regulation 2021 when mooring licence holders fail to comply with mooring licence conditions. This authority was used widely during the recent State-wide Mooring Audit Program.

### Questions for policy option 2

Q. To what extent do you agree with the following statement (1-5 scale):

- Transport needs to review their existing practices for management of ELVs
- NSW Government regulations for management of ELVs need to be accessible, well communicated and mutually understood by customers, industry and administration.

Q. Please provide any additional comments you have about this policy option.

### 1.1.3. Mooring regulations

**Policy Option 3: Transport will review the current priority mooring waiting list rules to reduce the incentive to obtain a mooring minder vessel.**

A 'mooring minder' is the term given to an inexpensive boat purchased by a mooring licence holder specifically for the purpose of reserving the mooring space. These are readily available through online auction and trading sites with prices starting from as little as a few hundred dollars.<sup>2</sup>

The use of mooring minders stems from the requirements under mooring Priority Waiting Lists, which exist for each designated mooring area where mooring sites are not immediately available. After accepting the mooring site, a person has 45 calendar days from the date of the offer to:

- have a suitable vessel registered in their name,
- pay the appropriate mooring fees, and
- arrange for a mooring contractor to place a mooring apparatus in the position determined by the Boating Safety Officer.

Transport advises there is flexibility around this 45-day deadline provided a vessel owner is able to demonstrate an intent to have a suitable vessel moored (i.e. through a purchase order for a vessel). There is a case to have this flexibility formalised through revised deadlines to the waiting list. There are practical reasons that limit the potential length of revised deadlines.

### Questions for policy option 3

Q. To what extent do you agree with the following statement (1-5 scale):

- 'Mooring minder' vessels contribute to the issue of ELVs
- Transport needs to review their Priority Waiting List rules for mooring sites, to reduce the incentive to obtain a mooring minder vessel

Q. How can mooring waiting list rules be best modified to reduce incentives to obtain a mooring minder vessel?

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<sup>2</sup> Transport for NSW, *Moorings Review: Issues Paper*, March 2014, p 11

#### 1.1.4. Data collection

**Policy Option 4: Following the introduction of a clear definition for ELVs, Transport will improve data collection and monitoring for ELVs.**

It is important to better understand the scale of the ELV problem in order to refine and assess the effectiveness of any proposed policy options, particularly after implementation. This could be achieved through improved data collection and information on vessel age, condition and storage location.

Going forward, the mooring audit program could be modified to ensure ELV identification is a key component, underpinned by clear definitions and guidelines upon which to identify ELVs and at-risk vessels. The process could use both on-water observations and mooring licence history to provide a more holistic assessment of a vessel's ELV status.

However, the collection of private mooring data is only one part of the ELV picture. Vessels are also stored on commercial moorings, domestic waterfronts and other on-water storage locations. There is also a large number of vessels stored off-water, either in marinas, private residences or on residential streets. Having detailed information of the scale and distribution of ELVs across all these locations is important, particularly in terms of understanding the potential flow of waste materials where recycling pathways are explored.

#### Questions for policy option 4

Q. Do you think annual collection of data about ELVs, such as information on vessel age, condition and storage location would be useful for better management of ELVs? (Y/N)

Q. How could such data be best used?

#### 1.1.5. Responsible boat ownership

**Policy Option 5: Transport will advocate at Australian New Zealand Safe Boating Education Group (ANZSBEG) for the promotion of education campaigns to promote responsible boat ownership and other initiatives.**

'Responsible boat ownership' is a concept that has been proposed by several stakeholders to maximise the potential life-expectancy of a vessel. It refers to the proper care and management of a vessel throughout its life cycle.

Furthermore, responsible boat ownership would ensure that when the vessel comes to the end of its useable life, it is in a reasonable condition so it can be dismantled, with as many of the component parts able to be recycled as possible. This will help to manage the number of vessels potentially coming to end of life at any given point and maximise the reuse of the component materials, particularly for fibreglass vessels, which have limited recycling pathways.

Promotion of responsible boat ownership could be mobilised through a communications and education strategy and would highlight the benefits of proper vessel care and management. Transport proposes that advocating at ANZSBEG is an appropriate national forum to achieve this, as it includes Government and non-government representatives who could facilitate the development and far-reaching mobilisation of an education strategy to educate boat owners on proper care and management of a vessel throughout its life cycle.

A component of this strategy could be a 'user-friendly' boat maintenance guide. Noting differences in vessels and maintenance requirements, this sort of guide could outline the principles of vessel maintenance and the likely cycles of inspection and repair needed for different vessel components. This could be supplemented with YouTube 'tutorials' delivered by boating professionals that provide owners with information on boating maintenance and inspection work they can undertake themselves.

### Questions for policy option 5

Q. Do you think there is a role for Transport to advocate nationally to promote responsible boat ownership and ELV actions? (Y/N)

Q. What other national initiatives do you consider to be most important to the promotion of responsible boat ownership education?

#### 1.1.6. Owner awareness

**Policy Option 6: Transport will develop a strategic ELV education campaign on the impacts and options for vessel disposal. This could be considered alongside a 'Responsible Boat Ownership' campaign, with scope for collaboration with industry and across jurisdictions to enable consistency of messaging.**

A lack of owner awareness of disposal options may contribute to the abandonment of ELVs. Most owners will be challenged to find a starting point for their disposal journey when their vessel reaches the end of its life.

A lack of owner awareness about the environmental impacts may also contribute to the abandonment of ELVs.

Awareness and education campaigns could be provided to address existing information gaps around disposal pathways available in NSW and the environmental impacts from vessel abandonment.

Campaign efforts should be embedded as a longer term mechanism to enable a shift in boater perceptions of ELVs. Many find the concept of paying for disposal to be a foreign concept and believe their vessel has economic value, regardless of its state of repair. Shifting their mindset will encourage owners to dispose of their vessel, or even better, promote a more responsible attitude toward ownership to prevent it from falling into disrepair.

### Questions for policy option 6

Q. To what extent do you agree with the following statement (1-5 scale):

- Education about responsible boat ownership is an effective way to manage ELV issues.

Q. To what extent do you think an ELV education campaign about appropriate disposal of ELVs will be effective in ELV management?

#### 1.1.7. Develop and update compliance framework

**Policy Option 7: Transport to give detailed consideration of enhanced on-water enforcement and whether ELV related penalties and approaches to enforcement are appropriate.**

There are regulations in place to incentivise the maintenance and upkeep of a moored vessel. Failure to comply can result in a penalty notice of \$500, or a maximum penalty of up to 50 penalty units \$5,500. A mooring licence can also be suspended or cancelled if the licensee fails to comply with a condition of the licence, which includes appropriate upkeep of the mooring and moored vessel. If a licence is cancelled, the vessel must be removed from the mooring in question.

Despite the presence of such penalties, direct action is often still required from Transport to dispose of an ELV. This indicates that many ELV owners are not always motivated by the existing penalties regime.

This policy option presents an increase in existing penalties to incentivise compliance. The main risk with this approach is that increased penalties may not induce customer action. There are some customers who don't have the resources to pay for disposal, let alone cover the additional fines from enforcement action. For these customers, more stringent penalties and enforcement will likely result in the abandonment of their vessel at an earlier date. This would create higher costs for Transport in the short term, as Transport would become liable for disposal of the vessel where the customer cannot afford to do so.

### Questions for policy option 7

Q. Do you think enhanced on-water enforcement and/or related penalties would incentivise vessel owners to better maintain their vessels and/or dispose of their vessels legally? (Y/N)

Q. Why/why not?



## 1.2. Actions led across NSW Government

### 1.2.1. Disposal guidelines

**Policy Option 8: Cross agency development of guidelines around vessel disposal, incorporating advice from existing contractors.**

There are no guidelines around how ELVs should be disposed of in NSW. Landfill sites have differing requirements as to whether and how vessels need to be treated and dismantled before delivery for disposal. Similarly, contractors employ different methods when disposing of vessels on behalf of owners or Transport.

Typically, the less handling and treatment that is involved in the process, the cheaper it will be to dispose of the vessel. While this may drive cost-efficient outcomes, it is not necessarily aligned with best-practice, particularly from an environmental perspective. The percentage of recoverable products from a vessel is roughly 30 to 40 per cent of its weight.<sup>3</sup> While some contractors seek to reuse and recycle as much of the component parts of a vessel as possible, this can come at a cost. As such, reuse and recycling of vessel parts may make contractors less competitive compared to others.

Work has been done overseas to develop guidelines for the disposal process, with the best example being the *BoatCycle* guidelines, which were developed as an output from the European Commission's *BoatCycle* project.<sup>4</sup>

#### Questions for policy option 8

Q. Do you think ELV disposal guidelines would assist vessel owners and contractors to dispose of vessels appropriately? (Y/N)

Q. Who do you think should be consulted in the creation of disposal guidelines?

### 1.2.2. Engage with Commonwealth on extended producer responsibility

**Policy Option 9: NSW Government to engage with the Commonwealth Government on EPR, with a view to understanding scope, feasibility and responsibility for an ELV related scheme.**

The concept of extended producer responsibility (EPR) aims to rectify early lifecycle issues with ELVs. As defined by the Organisation for Economic Co-operation and Development (OECD), it

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<sup>3</sup> BoatCycle Project, *Guide on good scrapping and waste management practices for out-of-use boats*, 2012

<sup>4</sup> This project is within the LIFE+ component "Policy and Governance" from the European Commission LIFE+ financial instrument for the environment

does this by making producers responsible for the environmental impacts of their products throughout the product chain, from design to the post-consumer phase.<sup>5</sup>

The Department for Planning, Industry and Environment Issues Paper '*Cleaning Up Our Act: The Future for Waste and Resource Recovery in NSW*', which informed the 20-Year Waste Strategy in NSW, identified EPR as a policy option for general consideration, particularly as a means to design out waste.<sup>6</sup>

A form of EPR may be applied to vessels in Australia, with the following principle instruments for consideration:

- **Eco-design criteria in manufacturing** – the design phases of manufacturing take into account end of life considerations.
- **Industry contribution to, or coordination of, disposal at the end of life stage of a vessel** – this would constitute a mechanism to engage producers in the later stages of a product's lifecycle to cover whole or part of the net costs of waste management (i.e. costs for collection, transport and treatment of waste minus revenues from recovered materials). It could come in the form of financial or administrative obligations.<sup>7</sup>

The specific costs and benefits of EPR vary across the different schemes. Common benefits across all EPR mechanisms include driving improved product design, recycling rates, and a reduction of the burden on public authorities for waste management of ELVs. The key risk of EPR schemes is that they place an additional cost burden on business, potentially undermining their viability. The effectiveness of an EPR scheme will be a function of a range of factors, including the extent of non-participation or free riding; how important the Australian market is to producers; how orphaned and existing products are dealt with; the extent to which a scheme's administration is centralised; and the ability to target the most appropriate parties.<sup>8</sup>

### Questions for policy option 9

Q. The NSW Government is engaging with the Commonwealth Government on product stewardship and EPR, however not in relation to ELVs. Should a national Commonwealth led EPR scheme be explored for vessels in Australia? (Y/N)

Q. Why/why not?

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<sup>5</sup> OECD, *Extended Producer Responsibility – Guidance for Efficient Waste Management*, 2016

<sup>6</sup> Op cit., *Cleaning Up Our Act: The Future for Waste and Resource Recovery in NSW, Issues Paper*

<sup>7</sup> OECD, *The State of Play on Extended Producer Responsibility (EPR): Opportunities and Challenges*, 2014

<sup>8</sup> Productivity Commission, *Waste Management, Report no. 38*, 2006, p. 276

## 2. Medium term actions (2-5 years)

### 2.1. NSW Government led and/or engage with other jurisdictions

#### 2.1.1. Funding options

**Policy Option 10: Transport to investigate options for an equitable and sustainable funding solution to fund ELV disposal. Potential options include an annual levy on vessel registrations and/or mooring licences, or a levy on vessel manufacturers.**

A major problem in managing ELVs is that the financial responsibility for disposal falls solely on the final owner of the vessel. A significant proportion of these owners have no financial means to pay for disposal and are not incentivised under any regulatory circumstance to pay for appropriate disposal of their ELV.

This can incentivise them to leave their vessel on a mooring to avoid paying the disposal fee, or as a worst case scenario, illegally abandon the vessel. In either case, the ultimate cost of disposal falls on the NSW Government. This is not financially sustainable for the NSW Government, and it is not aligned with the polluter pays principle. Therefore, a more sustainable funding solution is needed, with the objective being to internalise the costs of disposal on owners across a vessel's lifecycle.<sup>9</sup>

Overseas jurisdictions have implemented a range of funding approaches, with the model chosen dependent on circumstances in each jurisdiction, particularly when it comes to the availability of government funding and buy-in from industry to contribute to and/or administer a disposal program. There is no one-size-fits-all approach.

Government funding may be considered as a 'stop-gap' measure in the short-term to facilitate the removal of historical ELVs. It is dependent on the availability of funding and other competing priorities.

Some form of industry or vessel owner contribution is appropriate to facilitate internalisation of these costs. However, the acceptability of this option for users must be considered. The concept of paying to dispose of waste is still a foreign concept to many, so to charge users on a widespread basis would likely be met with resistance. It is also important to understand the impact on users in terms of participation costs.

#### Questions for policy option 10

Q. Do you support Transport to investigate an equitable and sustainable ELV disposal scheme?  
Y/N

Q. If yes, please provide a short statement outlining how you think an ELV disposal scheme could be funded.

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<sup>9</sup> APER, *Network of dismantling recreational craft in France*, 2015

### 2.1.2. Vessel inspections

**Policy Option 11: Transport to explore the feasibility of a targeted vessel inspection program at either registration or pre-transfer of ownership to be explored. This could be based on vessel age on a periodic basis.**

Vehicle sales are regulated to ensure consumers can choose a vehicle that is safe and in a useable condition. There are no such protections available in the used boat sales market. It is not uncommon for a boat to be sold based only on a visual inspection, with no documentation around its usage, upkeep or structural condition. Nor is insurance obligatory.

There are inspections at the initial stage of registering a vessel for a mooring licence, which are limited to identifying visual defects including the general condition of the vessel, whether the vessel is capable of a voyage, and whether the vessel is taking on water.

There are no ongoing inspections of recreational vessels as part of the registration process. NSW has traditionally imposed a risk-based approach, placing the greatest regulatory effort on commercial vessels to which an inspection regime is imposed. Recreational boating requires general safety obligations of owners to maintain their vessel to a seaworthy state. While this approach is generally effective, it does not enable the proactive management of the older, poorly maintained portion of the recreational fleet.<sup>10</sup>

Intervening at an early stage in the vessel's lifecycle, before the vessel is illegally dumped or sinks, is likely to be cheaper and more effective than intervention after the vessel reaches crisis point. Early consultation with industry indicated that an inspection regime implemented on a widespread basis would be expensive, with costs and administrative burden not proportionate to the value added.

There are already ongoing mooring audits programs, which monitor the adherence of vessels to mooring licence conditions. There may also be scope for requiring a more rigorous inspection prior to a mooring licence being approved for vessels over a certain age. That would prevent 'mooring minders' and other ELVs from being stored on moorings.

For vessels stored elsewhere on land, there may be benefit in having an optional vessel inspection regime available. While this service is available at the moment, there is a possibility of providing more objective guidelines around the inspection regime through the development of specific guidelines. This would provide a benchmark to which surveyors can inspect vessels and assess the suitability of a vessel for purchase. Those vessels identified as being unsafe or unseaworthy through this process could then be notified as such through Transport. In doing so, it would prevent future registration of this vessel and provide a safeguard against future circulation of this vessel thereafter.

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<sup>10</sup> Maritime Safety Queensland, *War on Wrecks Interim Report*, March 2019, p 21.

### Questions for policy option 11

Q. Do you think a targeted vessel inspection program at either registration or pre-transfer could be useful for identifying and managing ELVs? Y/N

Q. Why/Why not?

### 2.1.3. ELV disposal program

**Policy Option 12: Transport to consider a strategic approach to ELV removal, with a focus on enhanced on-water enforcement and/or a vessel turn-in option.**

Disposal of a moored vessel typically costs between \$3,000 and \$5,000, although there is significant variation in costs based on vessel type, material, size and storage location. In most cases, the costs are significant. Some owners can afford to pay for disposal and will do so of their own accord or following other regulatory intervention, such as notice to remove orders sent by Transport. Many cannot afford the disposal costs and will leave their vessel on a mooring for the sake of avoiding them, or in a worst case, they will illegally abandon the vessel.

To address this, a more systematic approach to ELV removal – in the form of a coordinated disposal program – could be considered. The principle objective of this would be to identify on-water ELVs and ensure their appropriate dismantling and disposal at minimum cost to government. There are different permutations of exactly how a disposal program might be run, but there are two high level options:

- **Tighter mooring conditions and enhanced enforcement** – A more stringent approach to on-water enforcement could be considered as a means of expediting the removal of on-water ELVs.
- **Vessel turn-in program** – this would provide owners with a pathway to voluntarily surrender their at-risk vessels for disposal and to have the costs wholly or partly subsidised. The incentive for the owner is the avoidance of possible fines and notices, the costs of removal and future mooring licence expenses.

With a coordinated approach, per-unit disposal costs would be driven down as:

- More vessels would be removed while still floating and transportable.
- There are likely to be fewer administrative and regulatory expenses in having to issue notices and fines and recoup disposal costs from owners that have no ability to pay.
- Longer term contracts could be set up to enable disposal and reduce the procurement and administrative expenses.

Collectively, this would result in greater savings over the longer-term. There are also other benefits in the form of improved amenity on the waterway, access to high-priority moorings and reduced environmental impacts since the vessels would be removed before they sink, either polluting the waterways or becoming a hazard to navigation.

### Questions for policy option 12

Q. Please indicate to what extent you agree with the following statements (1-5 scale):

- A strategic approach to on-water enforcement targeting ELVs or vessels approaching their end of life would be effective in addressing the issue of ELVs.
- A coordinated approach to vessel removal including a 'turn in' option for ELVs would be effective in dealing with historical stock of ELVs.

Q. Would you support an ELV removal/turn in program, in principle?

Q. Why/why not?

## 2.2. Actions led across NSW Government with Industry collaboration

### 2.2.1. Creation of a disposal network

**Policy Option 13: The NSW Government to consider establishing a disposal network similar to those that have been set up in France and Japan. This could be developed in collaboration with industry and Local Councils.**

The development of a disposal system is pivotal to effectively managing ELVs and to complement other options such as a disposal program. Neither NSW, nor any other jurisdiction in Australia has a system to dispose of vessels which have reached the end of their life. Landfill is the only option for owners wanting to dispose of their vessel themselves, which is not sustainable from an environmental perspective. Landfill is considered as the least desirable option to dispose of fibre reinforced polymers (FRP).<sup>11</sup>

There are potential options to create a disposal system in NSW that is convenient, affordable and sustainable, with precedent being drawn from overseas case studies. A disposal system, at least in the short term, is unlikely to be perfectly aligned with the principles of the circular economy, as the options for recycling fibreglass at scale and in an affordable way are limited. Nevertheless, establishing a system would enable owners to facilitate their own disposal, thus minimising incentives for abandonment and releasing liability on government to dispose of the vessels.

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<sup>11</sup> European Union, *Green Paper On a European Strategy on Plastic Waste in the Environment*, 2013

One of the main obstacles faced by vessel owners is the cost of transport. For a system to be effective, it is necessary to have recycling facilities within reasonable proximity to boat owners. This makes it more convenient and less costly for the vessel owner and reduces the incentives for abandonment.

In terms of international examples, France arguably has the most advanced disposal network, with industry – through the Federation of Nautical Industries (FIN) – being the driving force behind its establishment. The boat dismantling network known as APER (translated to English as the *Association for eco-responsible pleasure boating*) was established by FIN in 2009. It has dismantled about 2,500 boats to date, and as of 2019 the organization had 18 facilities across France and was expected to increase this number to 40 by 2020.

A disposal network is also in operation in Japan. The Japanese network explored the potential for vessel recycling when it first established its network. It found that collaborating with cement plants was the best option to facilitate reuse of raw materials from fibreglass ELVs. Repurposing materials in cement is one of the few viable repurposing options at present. There may be scope for exploring such a pathway for NSW ELVs.

### **Questions for policy option 13**

Q. Would you support the establishment of a vessel disposal network similar to the networks in France and Japan, as described in the text above? (Y/N)

Q. Please provide any further comments about the potential establishment of disposal networks for ELV waste in NSW.

### 3. Long term actions (5+ years)

#### 3.1. Actions led across NSW Government, Commonwealth Government and Industry

##### 3.1.1. Recyclability of Fibre Reinforced Plastic (FRP)

**Policy Option 14: The NSW Government to collaborate with other industry sectors to develop recycling pathways for fibreglass material.**

The successful building of a recycling pathway depends on the development of innovative technology solutions, a continuous supply of ELVs, and a genuine demand for validated recycled products.<sup>12</sup>

The current supply of fibreglass vessels in NSW is unlikely to be sufficient to support a dedicated ELV recycling pathway. The boat building industry only constitutes a small proportion of the thermoset plastic composites used across the economy. Previous estimates by the International Council of Marine Industry Associations (ICOMIA) suggest that the boat building industry only uses 6% of thermoset plastic composites worldwide.<sup>13</sup> A 2016 report from Composites UK showed that the use of composite products is growing rapidly across all industrial sectors. Key sectors include transportation, construction, wind energy and aerospace.<sup>14</sup>

The viability of the industry depends on guaranteeing a steady and reliable stream of materials to recyclers. Cross-industry collaboration could be the pathway to finding a sustainable and economically viable recycling pathway.<sup>15</sup> It is already happening in Germany where, due mainly to the high number of wind turbine blades reaching their end of life, fibreglass has been banned from going to landfill. Instead, old fibreglass is ground down and mixed in a cement kiln to produce concrete.

#### Questions for policy option 14

Q. To what extent do you agree with the following statements (1-5 scale):

- The NSW Government should collaborate with other industry sectors to develop recycling pathways for fibreglass materials.
- Recycling materials is an important aspect of the disposal of ELVs.

Q. Please provide any further comment.

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<sup>12</sup> Japan Marine Industry Association, *FRP Boats Recycling – in case of Japan*, November 2015

<sup>13</sup> International Council of Marine Industry Associations (ICOMIA), *Decommissioning of End-of-Life Boats: A Status Report*, 2007

<sup>14</sup> METSTRADE, *Can plastic boats be recycled?*, 15 June 2017

<sup>15</sup> As above, 38.



### 3.1.2. Develop an extended producer responsibility scheme for vessels

**Policy Option 15: NSW Government advocates at the respective transport and environment national committees for the development of a national regulated EPR scheme for ELVs.**

While Policy Option 9 explored the short-term option to engage with the Commonwealth government on EPR to explore the feasibility and responsibility for an ELV related scheme, this long-term option presents the idea of advocating for the development of a scheme.

EPR policy was introduced in NSW in 2001 through the *Waste Avoidance and Resource Recovery Act 2001* (WARR Act). NSW was the first state or territory to establish an extended producer responsibility policy.<sup>16</sup>

NSW now supports a national approach because many products are sold in national markets and are problematic in all jurisdictions.<sup>17</sup> As this approach relies on scale and supply to ensure viability, it will only be achieved through cross-jurisdictional and industry collaboration and therefore is best led by the Commonwealth Government.

There is a framework available nationally to implement EPR through the *Product Stewardship Act 2011* (PSA).<sup>18</sup> Implementing an EPR scheme has proven problematic in practice. To date, there has been limited progress on a large scale in Australia, not even for more widespread and problematic wastes such as batteries, other electronics or photovoltaics. There have been greater successes elsewhere including in Europe. If a scheme were introduced under this framework, it would need to be led by regulation at the Commonwealth level. It is not clear whether the Commonwealth has appetite to be involved in the regulation of recreational vessels, given they are regulated for at the State level.

The alternative is for an EPR scheme to be developed on a voluntary basis by industry. The few operational boat dismantling schemes currently active internationally, namely in Japan, Finland, France and now also Sweden, were all established by or with the boating industry.

There are different permutations of voluntary schemes that could be run, but to have a tangible benefit the principles of EPR should be considered. That is, the scheme should address shortcomings across the full lifecycle of the vessel. Industry involvement may come in the form of supplementary funding to support State-led ELV removal and disposal programs. Alternatively, it could involve a commitment to targets around the eco-design characteristics of vessels, possibly to facilitate a shift away from fibreglass in the production process, or even to focus efforts on expanding recycling pathways for these materials.

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<sup>16</sup> Environment, Climate Change & Water, *NSW Extended Producer Responsibility Priority Statement 2010*, December 2010, p1

<sup>17</sup> NSW EPA, *Product stewardship schemes*

<sup>18</sup> Product stewardship is essentially the same concept as EPR in that it is about a shared responsibility to manage the impacts of different products and materials throughout their lifecycle. The main difference between EPR and product stewardship is that the latter has a wider scope and captures all product owners over a product's lifecycle – not just the producers.

### **Questions for policy option 15**

Q. Do you think that a national EPR scheme which covers an ELV framework would be effective in addressing ELV issues in NSW? (Y/N)

Q. Why/Why not?

## **Next Steps**

Feedback received will inform decisions on policy options that require further development. Your feedback will help to ensure we are focused on reforms that have the greatest prospect of success. Further consultation may occur in future stages of the policy development process.

Transport is committed to working with stakeholders, including government and industry, to lead the actions that will manage the problems around ELVs.

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