

Evaluation of the Treated Timber Initiative

# Final Report

Prepared for the NSW Environmental Trust

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#### **About Aegis Consulting Group**

Aegis is an independent advisor to government, corporate and non-government organisations on:

- Public Policy
- Economics
- Government
- Strategy

Aegis was established in 2002 and has an international team of consultants in Australia, Singapore and United Kingdom.



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## 1. EXECUTIVE SUMMARY AND RECOMMENDATIONS

## 1.1 Program history

#### **Nature of the Program**

This is a report on the evaluation of the Treated Timber Initiative (the Program) which is administered by the NSW Environmental Trust (the Trust). The Trust provided a non-contestable direct grant of \$330,000 to the NSW Environment Protection Authority (EPA) between 2014 and 2016, to fund a community awareness campaign about the risks and appropriate use, management and disposal of timber treated with Copper Chrome Arsenate (CCA).

The Program was intended to support activities (outputs) and results (outcomes) that could deliver the Program's core objective which was to meet the Trust's statutory objects in section 7 of the *Environmental Trust Act 1998* to "promote environmental education in both the public and private sectors and promote waste avoidance, resource recovery and waste management".

Under the *Pesticides Act 1999*, CCA is a restricted chemical. Timber treated with CCA is also one of the EPA's identified problem wastes. Problem wastes include those wastes without established markets for recovery and reuse. Through its Recycling Innovation Fund, the EPA has funded 3 research and development projects since 2015 seeking solutions to improve the recovery and reuse of CCA treated timber<sup>1</sup>.

#### Development, design and implementation of the Program

The Trust's Major Projects funding includes support for distinct funding streams. These include the New Government Priorities, Major Projects Strategic, Ongoing Projects and Unsolicited Projects streams. These streams subject projects to different scoping processes prior to those projects being considered and approved by the Trust. For example:

Projects in the Major Projects Strategic stream are developed via a prospectus process which includes extensive stakeholder consultation by the Trust Administration on existing and emerging environmental management priorities. This increases the opportunities that key stakeholders, such as business, local government, NSW government agencies and non-government organisations will actively participate in implementing projects funded by the Trust.

 $<sup>^{\</sup>rm 1}$  Aegis Consulting Group, Evaluation of the Recycling Innovation Fund 2018



Participation by stakeholders can increase the value for money of Trust funded projects because the Trust can leverage financial and in-kind contributions from stakeholders and expand community awareness of and responses to environmental issues using stakeholder networks.

- Projects in the New Government Priorities stream can be brought to the Trust for consideration by the Minister for the Environment (the Minister) who is also a member of the Trust. Proposals able to be brought forward can be subject to three different categories of development.
  - 1. Projects can be high level ideas which fully require further investigation and scoping by Trust Administration in consultation with stakeholders. The process for further developing these projects is similar to the approach taken for proposals in the Major Projects Strategic stream.
  - 2. Projects can be partially developed, where initial scoping has occurred, but more detailed scoping needs to be facilitated by Trust Administration in consultation with stakeholders. Again, the requirement for more comprehensive scoping is similar to the approach applied to proposals in the Major Projects Strategic stream.
  - 3. Fully developed proposals or concepts which identify the issue needing to be addressed, intervention and expected outcomes. These projects are not subject to further scoping by Trust Administration and once approved in principle by the Trust move into the business plan development stage. One clear risk with these projects is that, unlike the process for proposals considered in the Major Projects Strategic stream, Trust Administration has a limited or no role in undertaking the stakeholder consultation that should occur during project scoping. If projects are not developed with adequate stakeholder consultation prior to Trust consideration and approval there is a higher risk that funding will not support the most effective interventions and/or not achieve expected results.

The Program was proposed for Trust funding in 2013 by the Minister under the New Government Priorities stream. It was submitted as a category 3 project which are developed independently by the EPA.

Following the Trust's in principle approval of the Program, it appointed its Environmental Hazard's Subcommittee (EHS) to provide the advice on the merits of the Program. Based on the Program business plan developed by the EPA the EHS recommended that the Trust fund the Program. The EPA was obliged to report to the EHS during the term of the Program on implementation and any risks to the successful delivery of agreed Program outcomes. The EHS reported to the Trust on the ongoing performance and direction of the Program.

Delays in implementation experienced by the EPA caused the Program to be extended until 2017. Key problems included delays in the EPA's production of printed material intended to be distributed to consumers of treated timber; the time taken by external consultants to prepare an on-line training module for retail staff of hardware companies; unanticipated commercial barriers dissuading the participation of hardware companies in the Program; and shifts in the direction and resourcing of the Office of Environment and Heritage's (OEH) Smarter Choices program with which the Program had intended to integrate delivery.



#### 1.2 Evaluation methodology

The evaluation includes an examination of the appropriateness, management, effectiveness and efficiency of the Program to assess its value for money. The evaluation involved a review of relevant Program documentation and interviews with stakeholders including EPA staff managing the Program, the Trust's EHS and Administration staff, consultants involved in advising on the Program and timber retailers engaged by the Program.

Given that the Program represented a small percentage of the Trust's total annual expenditure in 2014-15 (0.004 percent), and that the activities (outputs) under the Program are relatively easy to purchase, the evaluation has based its value for money assessment on how the services help deliver government objectives and the non-cost or qualitative issues such as fitness for purpose, quality, service and support. This is consistent with best practice value for money assessments.

## 1.3 Program benefits

The Program activities (outputs) deliver a range of direct and indirect benefits. Some of these benefits are not entirely dependent on the Program because timber retailers report that they implement their own consumer awareness strategies about CCA treated timber.

#### **Environmental benefits**

One direct benefit of the Program is that it helps to support the management of restricted chemicals in the NSW Pesticides Act and the priorities for recovering and reusing problem wastes in the NSW Waste Avoidance and Resource Recovery Strategy and Waste Hierarchy. This is a direct benefit because the Program supports Parliamentary and government commitments to protect the environment from harm. It is also a benefit because protecting the environment from harm is valued by the NSW community, even where they attach only an intrinsic value to the environment but do nothing else to demonstrate that they regard it highly.

Another benefit is that the Program supports agreed international principles of environment protection and conservation practised in Australia and globally which recognise the need for communities to understand and be aware of environmental issues and practice sustainability. Using dedicated program funding to provide information to organisations, communities and individuals that can increase their knowledge and capacity to implement best practice environmental management is a way governments can respond to this.

By seeking to increase awareness of the risks and appropriate use of CCA treated timber amongst timber retailers and users, and a range of government and non-government organisations capable of educating the community, the Program creates opportunities for additional direct environmental benefits. These



benefits may occur where any of the audiences targeted by the Program change their behaviour in relation to CCA treated timber and this results in improvements to the environment. The limit on these benefits is the actual extent the Program contributed to the behaviour change of consumers.

It can be assumed that some positive impact has been made on retailer, user and consumer awareness by virtue of the Program's success in:

- Distributing a large volume of printed material directly to a wide range of timber retailers;
- Distributing printed material and communicating key messages at building industry events;
- Enabling a reported 596 retail staff in hardware stores to undertake a training module to equip them to increase consumer awareness and improve consumer action; and
- Attracting about 46,000 views of an on-line video intended to increase consumer awareness and influence action.

However the contribution these outputs made to stimulating actual consumer behaviour change and the nature of any behaviour change is unknown because the EPA did not collect any baseline or Program impact data about this, even though obtaining such data was a requirement of the business plan. Thus there is no conclusive evidence of environmental benefits.

#### Benefits for government administration

The Program provides direct benefits for collaboration and co-ordination between government agencies. This occurs because the Program was designed to be delivered via existing consumer education platforms offered by the NSW Office of Environment and Heritage (OEH) through its Smarter Choices program. It also occurs because the Program aimed to develop partnerships for community education purposes with NSW Health, WorkSafe NSW, TAFE, and the state education sector and actively reached out to these organisations to encourage these partnerships.

The Program also provides direct benefits for collaboration between the NSW Government and various non-government stakeholders including local councils and private sector companies involved in selling treated timber. The pursuit of government objectives often requires the assistance of non-government entities and the Program sought to leverage these partnerships to promote local action which would benefit the environment. This is consistent with general principles of policy administration.

For example, consistent with community knowledge and capacity building, the overall findings of the NSW Commission of Audit supported a move away from larger government and excessive spending towards smaller government that uses public funds to harness effective partnerships between government and



other sectors and encourages local participation and ownership of issues and solutions<sup>2</sup>. In this context providing information to communities to improve their knowledge and capacity has a range of benefits. For example, it can help government to:

- Build the strength of the local government, business, community and voluntary sectors and enable individuals and households to act.
- Enable government, business and community stakeholders and individuals to take ownership of lessons and learnings to the extent that motivates them to apply this knowledge and disseminate the knowledge more widely.
- Strengthen networks within and between government, business and community stakeholders to the extent that supports knowledge sharing, collaboration, and/or collective action to achieve shared goals.
- Improve the ability to act of stakeholders who have an existing deep knowledge of issues and those stakeholders who have limited existing awareness.

However, the achievement of these potential benefits was restricted by the limited participation of industry, other government agencies and local councils during the implementation Program and the absence of any meaningful ongoing collaboration with the EPA after the Program had ended.

Other important direct and indirect benefits achieved by the Program are:

- Enabling the Trust and EPA to obtain important insights about options for managing problem wastes from the report the Program commissioned into
  Extended Producer Responsibility (EPR) Schemes. The enduring benefit of these insights will depend on the extent to which the Trust and EPA apply them
  to inform other programs.
- Helping the Trust and EPA to learn a key lesson that campaigns to increase consumer awareness about environmental issues should be based on on-line digital marketing and inbound marketing methodologies which pull consumers towards messages, rather than traditional strategies to push messages via the distribution of printed material. The long-term benefit of this lesson will depend on the extent to which the Trust and EPA apply it to the design and execution of other programs.

<sup>&</sup>lt;sup>2</sup> The Commission released its Final Report on Government Expenditure in April 2012 and the NSW Government has publicly endorsed its recommendations.



## 1.4 Program risks

The Program experienced a range of risks which reduced its capacity to effectively and efficiently achieve its intended outputs and outcomes.

#### Program design

The design of the Program was the responsibility of the EPA as the proposing agency under the New Government Priorities stream. During the design phase the Trust's EHS and Administration provided guidance to the EPA to ensure the business plan satisfied the Trust's objects and requirements for funding. The Trust agreed to provide funding on the basis of the business plan. During the design phase the EPA was responsible for ensuring that it had the immediate and future capacity to implement the Program.

The Program business plan detailed an outcomes hierarchy with the ultimate outcome being a change in consumer behaviour in relation to the use and disposal of CCA treated timber. A range of intermediate outputs and outcomes were also included in the business plan and these were intended to guide activities needed to achieve the ultimate outcome. The collection of baseline and Program impact data to assess the success of the Program in achieving consumer behaviour change was a requirement in the business plan.

During the Program design phase and implementation the Trust's EHS and Administration were focussed on the need for the Program to demonstrate through effective outcome measurement that it had succeeded in achieving consumer behaviour change. For example the Trust required that the Program include the collection of:

- Baseline data about the extent to which retailers, users and consumers were aware of treated timber issues and risks prior to the Program;
- Baseline data about the nature of treated timber use and disposal consistent with waste policy principles prior to the Program; and
- Program data about the extent to which the Program has improved these baselines.

The EPA agreed and included actions in the business plan to satisfy these expectations by the Trust.

Despite these intentions the design of the Program was not able to deliver on them for the following key reasons:

■ The Program was not co-designed with proposed partners, such as hardware and timber retail companies, other NSW Government agencies and local councils. This meant that the EPA was unaware that retailers, such as Bunnings and Mitre 10, had their own consumer information strategies which reduced the demand for information amongst consumers and limited the market failure the EPA believed it was addressing through the Program. Failure to consult with these intended key program partners also meant that the EPA did not have a full early understanding of the commercial motivations and barriers



affecting the extent to which retailers would participate in the Program. For example retailers were not supportive of the EPA interviewing their staff or customers to obtain the baseline and Program impact data stipulated in the business plan. Lack of Program co-design with these partners meant that the EPA did not identify this as a risk in its risk management strategy.

- There were technological barriers to obtaining data to assess consumer behaviour change. The Trust's EHS and Administration proposed to the EPA that it could consider engaging with OEH to see if there were synergies with OEH's Smarter Choices program. That program assisted the private sector communicate sustainability issues to consumers and included a training module which was integrated with the Learning Management Systems (LMS) of businesses. The Program business plan intended to deploy a training module on CCA treated timber via the Smarter Choices platform and include a survey of retail staff who participated in the module in order to collect baseline and Program impact data. However the inclusion of this survey component did not proceed because the EPA was advised by a consultant and OEH that it would deter retail staff undertaking the training module.
- The Program was not based on an early full analysis and understanding of market dynamics. The Program business plan makes clear that the intention of the EPA was to deploy the Program as a substitute for regulation of CCA use and the foundation for potential future regulation. Thus from the outset the EPA did not appear to consider a consumer education campaign as one part of a multi-faceted and holistic approach to solving environmental and human health risks associated with CCA use. This narrow view of the purpose of the Program may have reduced the opportunity for an appropriate level of program planning.

Conceiving the Program as a stand-alone activity potentially increased risks to Program delivery because CCA treated timber is one of several problem wastes which the EPA prioritises for holistic policy responses. Failure to tackle these problem wastes can undermine the achievement of the Resource Recovery Targets 2014-21. Given this policy context, the Program would have ideally sought to maximise its impact by ensuring that the desired objectives, outcomes and outputs responded to specific market needs and that consumer education activities could genuinely shift consumer behaviour in ways that helped to satisfy these market needs. However, the Program design did not take this approach. Consequently, this increased the risk that the Program had the wrong ambition and funded activities which did not optimise outcome delivery or broader policy goals.

The Program was not subject to a Strengths Weaknesses Opportunities and Threats (SWOT) analysis to ascertain at the outset any opportunities and limitations likely to be experienced by community education campaign for a problem waste that was not subject to any holistic management. Early analysis of supply chains may have enabled Program design to reflect the fact that CCA treated timber primarily enters the waste stream via Green waste bins at household level and construction and industry waste. This kind of early knowledge may have assisted to improve the targeting of audiences for education outcomes. The Trust's EHS did request that the EPA prepare a report about options for an Extended Producer Responsibility (EPR) to provide insights on supply chain issues. However the EPA commissioned an independent consultant to prepare the report towards the end of the Program and thus this work could not assist Program design.



Further, the EPA did not undertake an audit of timber companies which was one key action in the business plan intended to assist the collection of baseline data on CCA treated timber use.

There was no early recognition of EPA capacity constraints. During the implementation of the Program it became evident that the EPA project team could not manage the Program without assistance from external expertise. The EPA then sought variations to the agreement with the Trust to engage (1) a market research firm to conduct site visits of retailers and local councils to assess the degree to which these locations had distributed Program material; (2) a digital marketing firm to prepare an on-line communications strategy; and (3) an environmental consultant to prepare the EPR report. Ideally the limitations on the EPA's capacity to undertake these activities would have been anticipated in the Program design allowing for these actions to be pursued earlier. The digital marketing strategy delivered the Program's most significant community recognition. Its impact could have been accelerated and increased if the EPA had undertaken a SWOT during Program design and identified its need to obtain communications/marketing expertise.

#### **Program implementation**

The Program delivered a public good to the extent it promoted community action to improve environmental outcomes, however it is not clear that it has been necessary to address any specific market failure. Hardware and specialist timber retailers suggest that they regularly inform consumers about the risks and use of CCA treated timber in similar ways intended by the Program. Thus, the Program appears to have duplicated existing market activity which is an inefficient allocation of Trust funds. The risk of this occurring was heightened because Program design did not include any consultation with hardware companies and timber retailers.

A contextual risk for the Program was the absence of any whole of government approach to dealing with CCA treated timbers. According to the EPA this contributed to confusion within government about which portfolio should lead a response to managing the risks of treated timber. Uncertainty about whether CCA treated timber was primarily an environment, health or workplace issue, along with pressures of other policy and program priorities, reduced opportunities for any tangible partnerships within government.

The Trust Administration expressed concern about the reporting of the EPA during the Program. This included (1) the degree of guidance and report revisions which the Trust's EHS was required to provide to the EPA's reports; (2) the slowness and number of unanticipated barriers to the EPA's implementation; and (3) the failure of the EPA to advise the Trust that it was unable to collect and report on baseline and Program impact data until its final Program report was submitted. These issues reflect major differences in program management expectations of the Trust and EPA. They confirm the need for Program design to include an assessment of the capacity of agencies to implement the proposals they make to the Trust under the New Government Priorities stream.



## 1.5 Value for money

The evaluation finds that the Program is consistent with a range of policy and legislative objectives of the NSW Government and that it delivers some direct and indirect benefits. However, the evaluation also suggests that the Program is not entirely fit for purpose because of the risks it was unable to anticipate and manage. Ultimately there is not enough evidence to conclude that the Program achieved the outcomes for which it was funded. The evaluation has made some recommendations which the Trust and EPA can apply to improve the value for money of other similar future programs they may wish to fund.

#### 1.6 Recommendations

#### Recommendation 1: Program appropriateness

- (a) The Program is consistent with the intent of national and NSW Government policy and legislative commitments to improve the management of hazardous materials and wastes and reduce their risks to the environment and human health. This includes the aims of the *Pesticides Act 1999* with respect to restricted chemicals like CCA and the objectives of the *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) regarding increasing the recovery or problem wastes such as CCA treated timber.
- (b) The Program objectives are consistent with the statutory objects of the Trust, specific goals in the NSW State Plan 2021 (current at the time the Program was commenced) and corporate objectives of the EPA.
- (c) It is appropriate that government play a role in improving consumer awareness as part of a holistic multi-faceted approach to tackle 'wicked problems' created by hazardous materials and problem wastes when doing so is a public good and/or is intended to address a market failure. However the Program was not part of a holistic approach with complementary initiatives to address the risks of CCA in treated timber. Rather it was a consumer education campaign designed by the EPA as a sole substitute for regulation and a foundation for potential future regulation.
- (d) While the Program represents a public good, it appears to have been unnecessary to address any market failure. This is because retailers of treated timber appear to have pre-existing consumer awareness strategies which the Program duplicated, and retailers were disinclined to participate in the Program because they had their own consumer information strategies. Because the Program was not co-designed by the EPA with industry, the EPA was ill-equipped to identify duplication with existing retailer consumer education strategies as a risk to Program implementation.
- (e) The Program may have been able to successfully concentrate on specific market failures that may have required solutions regardless of existing retailer led consumer information strategies if:



- Proposals such as these submitted to the Trust under the New Government Priorities funding stream were subject to the same rigorous scoping applied to Trust's Major Projects Strategic stream;
- The Program had been designed to complement a product stewardship scheme; and
- The Program had been designed to respond to resource recovery market dynamics and needs in waste streams
- (f) Consideration should be given to ensuring that government agencies developing projects for Trust funding engage with Trust Administration during the project scoping phase to gain their independent guidance and assistance with program/project design including effective stakeholder consultation and co-design principles.

#### **Recommendation 2: Program management**

The following important lessons for program management should be considered:

- (a) Prior to being considered by the Trust, all proposals under the New Government Priorities funding stream should be subject to the same process and requirements for co-design and scoping as the Trust's Major Projects Strategic funding stream. This will provide the Minister the flexibility to continue to bring forward new priorities for funding but will ensure proposals are well designed and fit for purpose by meeting Trust Objects, satisfying expectations arising from an analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT), and meeting risk management standards. This will reduce the risk of design failures which lead to projects being less effective and efficient.
- (b) Agencies who are proposed to deliver projects for funding under the New Government Priorities stream should demonstrate that there are no other more cost effective solutions to influencing consumer action, such as via regulation. Proposals should detail the costs and benefits of regulatory and other options previously considered and why they are inferior to receiving program funding from the Trust.
- (c) Proposals for Trust funding under the New Government Priorities stream which are specifically submitted as substitutes for regulation or a foundation for future regulation should include the detailed reasons why immediate regulation is an inferior solution and the timeframe for proposed future regulation. This will assist the Trust to examine the need for funding and whether project funding is sustainable until regulation is introduced.
- (d) Prior to being approved for funding by the Trust projects which propose interventions for consumer behaviour change should demonstrate the following design features:



- All projects should have examined their Strengths, Weaknesses, Opportunities and Threats (SWOT) to ensure they have properly evaluated actual market need for the intervention and are proposing solutions which can address that need effectively and efficiently. This should include:
  - Analysis to identify how the market is operating, whether there are any barriers to consumers and stakeholders participating in the Program, and the best ways to communicate with consumers based on their preferences/priorities and the outcomes being sought;
  - Analysis of preliminary baseline data about consumer behaviour and application of this data as a platform from which to detail how and why the proposed project will influence behaviour change;
  - > Demonstrated consultation with the behavioural insights teams within the NSW Government to gain data and advice to inform their design; and
  - An outcome measurement regime that is based on realistic assumptions about risks and barriers to obtaining data from consumers and includes risk mitigation strategies which can satisfy the Trust's minimum expectations about outcome delivery.
- Where required, relevant external experts should have been engaged at an early stage to advise on market and supply chain dynamics, relevant
  commercial issues affecting program implementation and preferred communication/marketing techniques to influence the audiences the Trust normally
  targets for behaviour change.
- The scope and implementation of programs requiring the participation on non-government and government stakeholders should be designed in consultation with those stakeholders. Projects which have not been co-designed with stakeholders who are being proposed as implementation partners should not be supported by the Trust.
- (e) All proposals considered by the Trust which are interventions for consumer behaviour change should be subject to the following additional assessment:
  - Agencies should demonstrate that they have the internal capacity and organisational commitment to manage this kind of program over the long term.
    This should include:
    - > A demonstrated holistic approach to tackling a problem within which a consumer education campaign is one component and supported by other policy and regulatory solutions;
    - > Demonstrated solid relationships between the agency and any industry and non-government partners who may be required to implement the program;
    - > A funding commitment from the agency to continue supporting program objectives after the Trust funding has expired; and
    - > The corporate knowledge and capacity to manage the program with and without the assistance of external expertise.



## Recommendation 3: Program effectiveness

- (a) Future program design should consider applying recommendations 1 and 2. This would reduce risks to the effectiveness of program outputs and outcomes.
- (b) The EPA should consider funding an ongoing digital marketing strategy to drive traffic to its website to increase and maintain community awareness about CCA treated timber. This is consistent with deploying a community education campaign as a substitute for regulation.

#### Recommendation 4: Program efficiency

(a) Future program design should consider applying recommendations 1, 2, and 3. This would improve potential allocative efficiency (value to consumers) and technical efficiency.

#### Recommendation 5: Value for money

(a) Recommendations 1 to 4 in this evaluation should be implemented to improve the overall value for money of future initiatives like the Program.



## 2. METHODOLOGY

## 2.1 Scope and timeframe of the evaluation

The Treated Timber Initiative (TTI) (the Program) is administered by the NSW Environmental Trust (the Trust). The Program is intended to meet the Trust's statutory objects to<sup>3</sup>:

- Promote environmental education in both the public and private sectors; and
- Promote waste avoidance, resource recovery and waste management (including funding enforcement and regulation and local government programs).

In 2014 the Trust provided the Environmental Protection Authority (EPA) with a grant of \$330,000 over 3 years (December 2014 – December 2016) to design and implement a public information campaign to increase consumer awareness about the risks and appropriate use, applications, and disposal of timber treated with copper chrome arsenate (CCA). The Program was funded under the New Government Priorities stream. The Program was developed by the EPA as part of New Chemical's Initiative in response to a request from the Minister for the Environment (the Minister) in 2013 for new initiatives. The EPA developed the business plan for the Program after gaining Ministerial and in-principle Trust support for it. Under the New Government Priorities stream the Minister (who is a member of the Trust) can bring such proposals to the Trust for funding. The Program is a non-contestable grant directly negotiated between the Trust and EPA.

The final report on the expenditure of grant funds and outcomes achieved was completed by the EPA in June 2017.

A full evaluation of the Program has not been previously conducted. The Trust has commissioned Aegis Consulting Group to undertake the evaluation of the Program. The evaluation occurred from February to March 2019.

## 2.2 Objectives of the Evaluation

The objectives of the evaluation are to examine and make findings and recommendations about:

- The appropriateness of the Program including its objectives, governance, and management.
- The effectiveness of the Program in meeting its objectives including evidence of achieved outputs, outcomes and associated benefits.
- The efficiency and overall value for money of the Program.
- The risks associated with the Program including governance, communication of information and planning.

<sup>&</sup>lt;sup>3</sup> Section 7 of the Environmental Trust Act 1998



#### 2.3 Evaluation Framework

## 2.3.1 Key issues being assessed

The assessment framework to meet the evaluation objectives has been agreed by the Trust and Aegis. The assessment framework is intended to identify the appropriateness, effectiveness, and efficiency of the use of Program funds by the Trust. These issues form the basis of examining the value for money of the use of Program funding. The assessment framework is also intended to identify any improvements that can be made to the allocation and management of the funds by the Trust. A series of key questions were developed to guide the gathering and analysis of information required to address these issues.

Table 1: Key evaluation criteria and questions<sup>4</sup>

Key evaluation criteria	Key evaluation questions
Appropriateness	<ol> <li>How appropriate was the planning process in the initial scoping phase?</li> <li>Did the project address the identified need and was it the most appropriate thing to do?</li> <li>Was the expenditure appropriate for the project?</li> </ol>
Effectiveness	<ol> <li>Was the project on time and on budget?</li> <li>Were the project's activities implemented as intended. If not, why, and what was the impact?</li> <li>Was the project appropriately planned and scoped to ensure delivery of intended outcomes and effective measurement of these outcomes?</li> <li>What outputs have been achieved to date, and do these represent value for money?</li> <li>Were the intended outputs delivered?</li> </ol>
Efficiency	<ol> <li>How efficient were the planned project activities?</li> <li>Did the project deliver value for money?</li> <li>What were the project implementation costs, and were these efficient? Could resources be allocated more efficiently?</li> </ol>
Process	<ol> <li>How well managed was the project?</li> <li>Were the methods for making decisions and managing the project appropriate and likely to ensure success?</li> </ol>
Opportunities	<ol> <li>What were the lessons learned and/or other opportunities related to the project?</li> <li>What could be done differently?</li> <li>What were the associated risks with governance, financial management and project planning?</li> </ol>

<sup>&</sup>lt;sup>4</sup> Aegis and the Trust



#### 2.3.2 Key sources of and limitations in information

Evidence and data to identify and analyse the key assessment issues and questions and develop recommendations were obtained by the following methods.

**Program document review**. An extensive range of Program documentation was reviewed. This included the:

- EPA business plan underpinning the Program;
- Funding agreement between the Trust and EPA;
- Minutes of meetings of the Trust's Environmental Hazard's Subcommittee where the Program was considered;
- Documentation supporting Program variations approved by the Trust; and
- Consultant reports commissioned by the EPA to meet Program objectives.

**Consultations with the EPA**. EPA staff who have experience managing the Program were interviewed and asked to complete a questionnaire. The EPA staff participated fully in the evaluation and provided it with valuable information including key lessons for Program design.

Consultations with consultants engaged by the EPA. In order to meet the objectives of the Program, the EPA commissioned consultants to develop training modules for timber retail staff and assess the options for an extended producer responsibility scheme for treated timber. These consultants were asked to complete a questionnaire, and some were interviewed. The evaluation received substantial responses from some of these consultants.

Consultations with the Trust. This included conducting interviews with and gathering written responses to a questionnaire from Trust Administration staff and members of the Trust's Environmental Hazards Subcommittee (EHS) overseeing the Program. These stakeholders shared important insights with the evaluation, particularly in relation to Program design and risks.

Consultations with retailers of treated timber. Under the Program the EPA engaged with hardware companies and timber retailers to disseminate EPA information about the risks, use and disposal of treated timber. The evaluation asked four of these retailers representing large, medium and small enterprises to complete the questionnaire and participate in interviews. The perspective of retailers is important because they are dealing directly with consumers. No retailers were willing to participate in the evaluation, although some provided high level responses. The absence of any detailed responses from retailers limited the ability of the evaluation to fully assess the effectiveness of the Program.



#### 2.3.3 Value for money

#### Selected method to assess value for money

The various sources of information were used to assess the costs and benefits that inform the appropriateness, effectiveness and efficiency (value for money) of the Program and options for its shape and delivery. Appropriate, effective and efficient grants administration should ideally aim to<sup>5</sup>:

- Equitably and transparently select funding recipients that represent the best value for money to deliver program objectives; and
- Efficiently and effectively deliver government funding to eligible recipients to achieve desired government policy outcomes.

Value for money is a critical outcome for the expenditure of public funds. The standard approach taken by Australian governments is that the assessment of value for money relies on<sup>6</sup>:

- The nature of the spending by a government agency to purchase or support activities or services; and
- The consideration of relevant issues upon which value for money is based.

In relation to the nature of spending, there are two primary factors to consider:

- The difficulty of securing a supply of services which means (a) the degree to which the required services present risks or are critical to the agency and (b) the extent to which a competitive market for the supply of services exists.
- The relative expenditure for the services which means their cost relative to the total purchasing expenditure of the agency.

The figure below describes how these two factors can be combined, categorised, compared and applied. Generally, spending in categories 2-4 require a detailed analysis and evaluation of the factors contributing to value for money.

<sup>&</sup>lt;sup>5</sup> Australian National Audit Office, Implementing Better Practice Grants Administration 2010, p3

<sup>&</sup>lt;sup>6</sup> Australian Government, NSW Government, Queensland Government, State Purchasing Policies



## Figure 1: A guide to the nature of purchasing (spending)

1. Easy to secure supply and low relative expenditure

These items collectively make up a relatively small proportion of the total expenditure on purchased items and are easy to purchase.

3. Difficult to secure supply and low relative expenditure

These items collectively make up a very small proportion of the total expenditure on purchased items and are hard to purchase.

2. Easy to secure supply and high relative expenditure

These items collectively make up about a quarter of the total expenditure on purchased items and are easy to purchase.

4. Difficult to secure supply and high relative expenditure

These items collectively make up over half of the expenditure on purchased items and are hard to purchase.

Based on the guide to spending the Program fits within category one because:

- The expenditure is a small proportion of the total Trust expenditure. The Program represents \$330,000 over three years from December 2014 to December 2016. By comparison in 2014-15 alone the Trust allocated \$85 million to support the delivery of its objectives. Thus, at the time of allocation the Program represented 0.004 per cent of the Trust's total spending; and
- The Program is focussed on distributing information to consumers about CCA treated timber via standard methods that are readily available and easy to purchase. These measures include an on-line training module, printed material such as brochures and posters, and digital marketing strategies.



Accordingly, the value for money of the Program only needs to be assessed against the <u>first two</u> of the following three factors that are often used to judge value which are:

- How the services help to deliver government objectives.
- The non-cost or qualitative issues such as fitness for purpose, quality, service and support.
- The whole-of-life costs of the activities funded under the program, including the internal processing costs of acquiring, using, maintaining and disposing of the service. This activity can include comparing the costs of service provision by government and the non-government sector and comparing the unit costs of funding an activity or service against the quantifiable and/or qualitative benefits the activities achieve for government and the community in general.

## Selected method in practice

In the implementation of its methodology the evaluation consistently sought to address the two selected key factors relating to value:

- How the services help to deliver government objectives.
- The non-cost or qualitative issues such as fitness for purpose, quality, service and support.

It did this by seeking information that could answer the following fundamental questions which help to address these two key factors and are aligned to the assessment framework discussed at section 2.3.1.

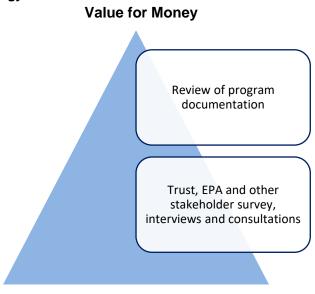
- What is the environmental problem that needs to be addressed?
- Why does government need to intervene? For example, is it because of some market failure such as necessary behaviour change that cannot occur without government intervention?
- How does this intervention align with the objects of the EPA, Trust and government more broadly?
- What are the direct and indirect costs of the chosen option?
- What are the risks of the chosen option?
- What are the benefits of the chosen option?
- What is the timeframe of the intervention and what is the exit strategy for government? For example, is it aimed at delivering a specific short- term outcome or is it seeking to achieve a longer-term change?
- What are the milestones over the timeframe that will be used to steer the intervention and respond to issues that arise so that it remains effective?
- How will the benefits be assessed so that government can judge whether to exit or continue with the intervention within the nominated timeframe or extend the timeframe?

While the methodology focussed on the delivery of government objectives and cost-issues, consideration was also given to cost issues to the extent they impacted on Program efficiency.



The figure below illustrates how the evaluation methodology sought to assess key value for money factors.

Figure 2: Value for money assessment methodology<sup>7</sup>



Costs

**Benefits** 

- Program expenditure affecting efficiency
- Non-cost or qualitative issues such as fitness for purpose, quality, service and support

- How the services help to deliver government objectives
- Additional benefits

<sup>&</sup>lt;sup>7</sup> Aegis Consulting Group 2017 based on the Australian Government, NSW Government, Queensland Government, State Purchasing Policies



## 3. PROGRAM APPROPRIATENESS

## 3.1 Program purpose and contribution to specific government aims

The Program Business Plan sets out its clear purpose including defined objectives, outputs and outcomes which are outlined in the table below.

## Table 2: Intention of the Program<sup>8</sup>

Objectives	Outputs (Astions)	Outcomes (Posulta)
Section 7 of the Environmental Trust Act 1998 specifies that the Trusts objects include:  Promote environmental education in both the public and private sectors; and  Promote waste avoidance, resource recovery and waste management (including funding enforcement and regulation and local government programs).	<ol> <li>Outputs (Actions)         <ol> <li>A training module for retailers, users and potential users of CCA treated timber, councils and associated trades and professions, covering hazards, making informed choices, safe and environmentally responsible management, and restrictions on use and waste.</li> <li>Reinforcing the message about the hazards associated with CCA treated timber and making informed choices through retailer training, public communications (including mass media, specialised media and trade and public events) and a range of educational materials (brochures/posters), tailored to general and specialised audiences.</li> </ol> </li> <li>Improving the labelling of CCA treated timber and point of sales staff advice and displays (brochures/posters) to raise consumer awareness about the hazardous chemicals used in CCA treated timber, the uses for which it is unsuitable, fire hazard and waste disposal.</li> </ol>	Ultimate outcomes Consumers are better informed so that they can choose appropriate products. CCA treated timber users have available education and training to enable better management of CCA treated timber product. Improve practice and behaviour change around management of treated timber to reduce contamination of recycling and waste streams is achieved.  Intermediate outcomes Information and training are available to CCA timber users/potential users regarding the environmental impacts and appropriate uses. Stakeholders are engaged and responding/ taking an active part. Stakeholders have been engaged by a successful campaign launch and the profile of CCA treated timber hazards and management has improved.

<sup>&</sup>lt;sup>8</sup> The outputs and outcomes are those specified in the Program Business Plan



The Program Business Plan also suggests that the Program contributes to delivering a range of NSW Government policy and EPA and Trust corporate objectives. This is an important rationale for the Program. These are outlined in the table below.

Table 3: Contribution of the Program to NSW government policy and EPA/Trust aims<sup>9</sup>

NSW 2021 State Plan Goals	EPA corporate objectives	Trust statutory objects
The Program Business Plan states that:	The Program Business Plan states that:	The Program Business Plan states that:
Informing the community and training users about the environmental hazards associated with the use of CCA treated timber will help to protect our natural environment from arsenic and/or chromium contamination. Environmental concerns include leaching, the burning of treated wood and its use as a mulch/soil amendment and contamination of recycled material.  Goal 11: Keep people healthy and out of hospital  By promoting public awareness of the hazards associated with the arsenic content of treated wood and reducing its prevalence safer use and management of the product to avoid potentially harmful health effects by contact exposure, ingestion or inhalation  Goal 6: Strengthen the NSW skill base  The development of user training supports this goal. With the online training module, we aim to promote this resource as an educational and possibly skills training requirement for industry practices such as personnel within preservative treatment plant facilities and DIY users of the CCA chemical concentrate that is currently available for over the counter sales in hardware stores, garden centres and other outlets."	<ul> <li>"The Program:</li> <li>Aligns with the EPA's Strategic Plan 2013-2016 outcome to reduce the risk of harm to human health and the environment from chemicals, including pesticides, through education and preventative programs.</li> <li>Aligns with the EPA's strategies relating to recycling and waste management and effective stakeholder engagement."</li> </ul>	"The Program contributes to the following objects of the Trust:  1. To promote environmental education that will increase public awareness of environmental issues  The Program aims to develop several training options to educate the general public in the CCA treated timber hazards, making informed choices, restrictions on use and managing waste.  2. To promote waste avoidance, resource recovery and waste management  The Program aims to reinforce educational awareness and appropriate labelling of CCA treated timber to detail the arsenic content of the wood and to state that the wood must not be burnt or recycled. This will be important in waste management practices as CCA treated wood contamination is detrimental to both the environment and human health."

<sup>&</sup>lt;sup>9</sup> The proposed alignment with government policy and corporate goals is specified in the Program Business Plan



#### 3.2 Program alignment with the general policy role of government

Beyond its suggested contribution to specific NSW Government goals and aims of the EPA and Trust, the Program also appears to be consistent with the broader role of government in relation to environmental policy and environment protection. These are discussed below.

#### National policies for protecting the environment from hazardous materials and wastes

The environment is generally viewed by responsible governments as a public good and an inter-generational legacy worth preserving. As a result, these governments embed a range of measures to promote and continuously improve the conservation and protection of the environment and biodiversity within it.

"Australian governments have a long history of collaboration on waste policy and actions. The first comprehensive domestic approach to waste was agreed under the 1992 National Strategy for Ecologically Sustainable Development (the National Strategy for ESD) by the Council of Australian Governments (COAG), which committed Australia to improving the efficiency with which resources are used; reducing the impact on the environment of waste disposal; and improving the management of hazardous wastes, avoiding their generation and addressing clean-up issues. This commitment still stands. It has underpinned the policies and programs implemented by governments to date and formed the basis for collaboration on national waste issues under the Environment Protection and Heritage Council (EPHC) since its inception in 2002"10.

Two indicators of the value that the Australian community attributes to environmental protection, waste management and resource recovery are (1) the fact that all Australian governments have agreed to the National Strategy for ESD and (2) the extent of regulation that the Commonwealth and State parliaments have and continue to enact to implement the National Strategy for ESD.

International obligations to which Australia is a signatory and which are ratified through the National Strategy for ESD and respective Commonwealth, State and Territory laws include the Basel Convention on Transboundary Movement of Hazardous Wastes and Their Disposal; the Stockholm Convention on Persistent Organic Pollutants; the Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; the Vienna Convention for the Protection of the Ozone Layer; the Montreal Protocol on Substances that Deplete the Ozone Layer; and the Kyoto Protocol to the United Nations Framework Convention on Climate Change<sup>11</sup>. The Program is consistent with the intention of these internationally and nationally agreed initiatives.

<sup>&</sup>lt;sup>10</sup> Australian Government, National Waste Policy: Less Waste More Resources 2009

<sup>&</sup>lt;sup>11</sup> Ibid



#### 3.2.2 Regulation of pesticides

Under a Council of Australian Governments (COAG) agreement, the Australian Pesticides and Veterinary Medicines Authority (APVMA) has the power to determine which pesticide chemicals are permitted to be used and how they should be used. The APVMA has declared Copper Chrome Arsenic (CCA) to be a restricted chemical and recommends that CCA treated timber not be used for garden furniture, picnic tables, exterior seating, play equipment, patio/domestic decking and handrails, because of the risks of skin contamination and possible ingestion, particularly by children.

Each jurisdiction applies legislation that is designed to implement the objectives and determinations of the APVMA. In NSW, this is the *Pesticides Act 1999*, which is administered by the EPA. The producers of CCA are required to comply with the Act and the EPA monitors and enforces compliance consistent with its roles as NSW's environment protection regulator.

However, even when CCA is produced in accordance with the Act, the presence of CCA in treated timbers can create risks to the environment and human health. This includes for example:

- The potential inhalation of arsenic via sawdust or during a fire.
- Leaching of CCA from timbers into soil.
- Recycling of sawdust or offcuts and inappropriate disposal of timber ash into waste streams.
- Disposal of timber into landfill.

This suggests that there is a need for preventative action to alert consumers and users of treated timber to its potential risks and the appropriate ways to use and dispose of it. The business plan for the Program indicates that the Program is intended to respond to this need through a dedicated consumer awareness campaign.

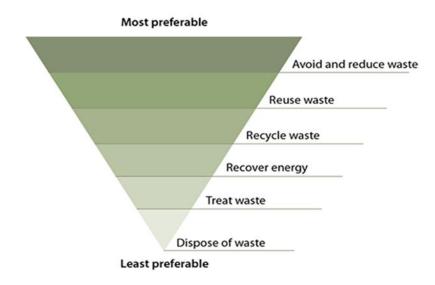
To the extent that the Program supports the EPA's role in regulating CCA, it seems appropriate for the Program to have been developed and implemented by the EPA.

## 3.2.3 Priority problem wastes

The Waste Avoidance and Resource Recovery Act 2001 (WARR Act) and the Protection of the Environment Operations Act 1997 (POEO Act) govern the regulation of waste in NSW. The WARR Act establishes the hierarchy for waste management to ensure that resource management options are considered against the clear priorities outlined in the figure below.



Figure 3: The NSW waste hierarchy<sup>12</sup>



Under this hierarchy<sup>13</sup>:

- Avoidance is intended to reduce the amount of waste generated by households, industry and governments.
- Resource recovery includes the reuse, recycling, reprocessing and energy recovery from waste, where choices are based on most efficient use.
- Disposal means management of all disposal options in the most environmentally responsible manner.

The WARR Act creates a Waste Avoidance and Resource Recovery Strategy for NSW (the WARR Strategy) with targets for waste reduction and resource recovery and reporting every two years against the targets.

The EPA supports these resource recovery targets and the preferred waste hierarchy objectives through a range of measures including protection orders and regulation, commercial incentives such as the landfill levy and grant funding for improved or new outcomes.

The Program is consistent with these waste policy objectives because it aims to increase consumer awareness about responsible use and disposal of CCA treated timber. The Program's role is particularly relevant to supporting waste management policy because CCA treated timber is designated as a problem priority waste by the EPA under the WARR Strategy. In 2014 an Independent Advisory Council advised that the problem priority wastes in the waste stream were Mattresses; Plastic film and other plastics; **Copper Chrome Arsenic (CCA) timber and treated timber**; Tyres and rubber and Nappies and incontinence pads<sup>14</sup>.

These are classified as problem priority wastes because they do <u>not</u> have established markets for recovery and reuse and cannot be dealt with via existing recycling infrastructure.

<sup>&</sup>lt;sup>12</sup> NSW Environment Protection Authority

<sup>&</sup>lt;sup>13</sup> NSW Government, Review of Waste Strategy and Policy in New South Wales, 2010

<sup>&</sup>lt;sup>14</sup> Aegis Consulting Group, Evaluation of the Recycling Innovation Fund 2018



## 3.3 Need for market intervention via the Program

Usually government programs are funded for one or more of the following reasons:

- To achieve a public good. Governments can support a public good by (a) funding services that the market would not normally fund; (b) subsidising
  market-based activities to enable an increase in the scope, scale or accelerated delivery of services; and/or (c) subsidising services to retain affordability
  for consumers.
- To address market failure. Governments can seek to address market failure by (a) providing services itself; (b) subsidising market-based services to ensure a standard or quality; and/or (c) responding with the same actions as it would to support a public good. Barriers to market entry are generally associated with market failure.

The nature of these possible responses by government indicates that there is a range of inter-relationships between supporting a public good and addressing market failure. Sometimes in choosing one option government is also pursuing another. However, not all market failure can be addressed by government regulation or spending. Some failures can more effectively be addressed by changes in business culture and operating practice in response to commercial need.

When choosing an intervention government should be clear about whether an activity is to provide a public good and/or address a market failure. Doing so will help to clarify the achievable benefits of the intervention at the outset and shape the measurement and risk management of the intervention. It will also avoid situations where government chooses interventions that it cannot deliver better than business or the market itself.

## 3.3.1 Public good

The Program clearly exists to promote a public good, namely increasing consumer awareness to prevent risks to the environment and human health from hazardous materials and wastes. This is consistent with nationally agreed chemical, pesticides and waste management legislation, and the NSW WARR Strategy and Resource Recovery Targets 2014-21.

In seeking new initiatives from the EPA to tackle risks to the environment, the Minister for the Environment recognised that it is a public good to address such risks. When developing the New Chemical's Initiative (which included the Program) in response to this Ministerial request, the EPA also sought to provide a public good consistent with its regulatory role to improve the management of risks that can harm the environment and human health.



#### 3.3.2 Market failure

Market failure in relation to managing and preventing harm from hazardous materials and problem wastes, such as CCA treated timber, could occur if:

- There is insufficient policy and regulatory support for dealing with these products;
- The performance and structure of the waste market creates barriers to the recovery, recycling and reuse of materials including barriers for investment in technology, infrastructure, market development and new entrants with innovative solutions;
- There are insufficient infrastructure or technology solutions to meet the current and future demand for recovering, recycling and reusing materials;
- Market demand for recovered problem wastes is low but can be increased by supporting the development of reuse products including through research
  and development and stimulating product awareness through education and marketing; and/or
- Market suppliers of risky products do not invest in educating consumers about the appropriate application, management and disposal of such materials.

One clear alternative response to investing in community education and awareness via the Program was to ban the use of CCA. This would have avoided any market failure. The Trust first raised this with the EPA at an early stage when it was considering whether to include the EPA's proposal for the Program as a priority for Trust funding. The Trust suggested that regulation restricting handling of CCA to licensed users only could be a more appropriate long term strategy and that the EPA should seek legal advice on any barriers to regulation. The Trust also proposed that the EPA consider as an alternative the recovery of waste management costs from manufacturers, such as via an Extended Producer Responsibility (EPR) scheme<sup>15</sup>.

In response to these suggestions the EPA indicated that these regulatory responses were not available in the short term because CCA could only be listed as a restricted pesticide, but alternative regulatory approaches may be considered in the future <sup>16</sup>.

The potential for regulation to address market failure instead of a community education campaign was also raised with the EPA by the Trust's Environmental Hazard's Subcommittee (EHS) which was tasked with advising the Trust on the Program and providing guidance to the EPA on the direction, requirements and implementation of the Program. In response the EPA advised the EHS that<sup>17</sup>:

- As CCA was a restricted pesticide it was only regulated at the point of its manufacture. This meant that retail consumers were not fully aware of the dangers of products containing CCA, such as timber treated, or suitable alternative products;
- Pursuing national regulation of CCA treated timber was a lengthy process which to date had not been successful.

<sup>&</sup>lt;sup>15</sup> Minutes of the Trust meeting on 8 April 2014

<sup>16</sup> Ibid

<sup>&</sup>lt;sup>17</sup> Minutes of the meeting of the Environmental Hazards Sub-committee on 2 September 2014



- It was hoped that raising awareness along with developing and implementing communication tools and working with other organisations, such as NSW Health, would achieve the same result as pursuing regulation. This assumed that community education would influence the consumer market to purchase safer alternative products) and that an education campaign could have a more immediate impact for less cost; and
- Mandatory training/regulation would eventually be pursued as part of an overall strategy in dealing with treated timber, however training tools/products such as those proposed in the Program, were still needed prior to this occurring.

Thus it appears from these responses that the EPA hoped that the Program would be a substitute for regulation, while also acknowledging the potential need for regulation in the future. This is also evident from the Program business plan which states that:

"The EPA's core business in regulating pesticides is to ensure that only APVMA registered pesticides are used and that they are used according to approved label directions. The EPA's regulatory relationship in this space is with the companies, chemical users and locations where the chemical is applied, not retailers who sell the treated timber or the trade/general public user of the timber.

The EPA does have an advisory role in the use of pesticides, and the Treated Timber Initiative complements the guidance, education and audits the EPA delivers to stakeholders to help improve their management of pesticides.

In the future, however, the outputs, such as user training and labelling may be incorporated in the regulatory regime, such as mandating user training and enhanced labelling, and potentially, banning the use of CCA treated timber in domestic situations. The increased awareness and knowledge of CCA hazard will also build support and capacity for future regulation and help ensure compliance in the case of a potential ban on domestic use" 18.

In this context the primary market failure the Program may have been intended or able to address appears to be the failure of market suppliers, such as timber producers and retailers to inform customers about the appropriate use and risks associated with CCA treated timbers. Whether or not that failure exists should normally be assessed via an early market analysis to inform the Program scope and purpose. This is often an important step to ensure that public expenditure is not duplicating actions already being undertaken or able to be conducted by the private sector in the normal course of commercial activities. For example, product liability regulations may require manufacturers and retailers of products containing hazardous materials to advise consumers about the appropriate use and disposal of those products.

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<sup>&</sup>lt;sup>18</sup> Program business plan, p3



Given that the Program was intended to be a substitute for immediate regulation and a platform for potential future regulation, it was particularly important to assess the gap in any market activities before commencing actions intended to change consumer behaviour. This is because behaviour change is a long-term exercise, affected by various complex factors which are hard to control, and difficult to measure.

Based on the review of literature and stakeholder consultations the evaluation observes that the Program may <u>not</u> have been required to address any market failure, and if there was a failure, the Program was <u>not</u> planned to identify and deal with it specifically. The key issues are as follows.

- Program substitutability. Limited consultations by the evaluation with some retailers indicate that large ones, such as Bunnings, have their own strategies to inform consumers about the risks and appropriate use of CCA treated timbers. While Bunnings was at first interested to participate in the Program, it was subsequently unwilling to continue to do so in any depth because of the duplication of the Program with its own consumer communication strategies. Smaller retailers suggested that they adequately inform consumers about the hazards of CCA treated timber and didn't need the support of the Program to do so. Hence such retailers did not participate in the Program. These responses suggest that the Program was reasonably substitutable with existing retailer action and therefore was not necessary to address any general failures by retailers.
- Market gaps. Problems with identifying market gaps are discussed below.
  - Failure to clearly identify market need/response. At an early stage during the Trust's consideration of the New Chemical's Initiative, the EPA indicated that there appeared to be a general acknowledgment within industry of the risks associated with CCA, but actual industry reaction to a program to educate consumers about CCA was not clear<sup>19</sup>. These assumptions should normally elicit the following responses. Firstly if it is assumed that industry is aware of the risks of CCA then this suggests that industry may have its own initiatives to warn consumers about these risks. Thus program planning should include industry consultation to avoid duplication and improve targeting. Secondly if a likely industry response is not well understood then program planning should include industry consultation to ensure appropriate market responses. However, the evaluation observes that there was no industry consultation or market analysis during the scoping and design of the Program and therefore limited opportunity to properly identify and harness market responses. This exacerbated the problems with Program substitutability discussed above.

The absence of any consultation with industry during the Program design stands in contrast to the scoping requirements for programs funded by the Trust under its Major Projects Strategic stream, which is required to examine opportunities for collaboration during their scoping. This includes ensuring that potential stakeholders and partners are consulted early and involved in identifying ways to maximise program outcomes; assessing the costs and

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 $<sup>^{19}</sup>$  Minutes of the Trust meeting on 10 December 2013



benefits of possible collaborations; and agreeing the roles and responsibilities of program partners. This approach is a robust way to ensure that programs are addressing market failure effectively and appropriately.

This risk may have been avoided if the EPA had engaged with Trust Administration during the project scoping phase to further design the project, including more detailed and effective stakeholder consultation.

Failure to assess supply chain dynamics. The inability of the EPA to deal with the risks of CCA through new regulation and an awareness within industry of the risks of CCA suggest that supply chain solutions could be one alternative to a consumer education program. Recognising this the Trust requested that the EPA include in the Program business plan an assessment of options for an Extended Producer Responsibility (EPR) scheme. A consultant's report on an EPR was commissioned by the EPA during the implementation of the Program, but only after the purpose and implementation plan has been determined. This report provided valuable insights into the dynamics and options to promote the appropriate use and disposal of CCA treated timbers throughout the supply chain and ideally should have informed the focus and ambition of the Program. These responses suggest that even if the Program was useful in addressing market failures, it is not certain that it dealt with those failures because none were specifically identified, assessed and concentrated on during Program planning.

These two key omissions are especially significant because they increased the risk that from the outset the Program would be unable to achieve the following purposes which the EPA had suggested the Program was intended for:

- > To dissuade the market from using CCA treated timber, without the immediate need for regulation; and
- > To lay the foundation for the future regulation of CCA treated timber and mandatory training of retailers about its use.



## 3.4 Lessons for future market intervention design

The success of programs seeking consumer behaviour change in relation to hazardous materials/problem wastes is likely to depend on the extent to which:

- They are integrated within a holistic product stewardship approach; and
- Their intended interventions reflect the market dynamics of waste streams.

## 3.4.1 Product stewardship

The National Waste Policy<sup>20</sup> provides the direction, principles and key actions for governments to consider when implementing the policies and programs to improve resource recovery. Four of its principles offer guidance on tacking problem wastes. These are that governments should pursue:

- Holistic approaches which address market, regulatory and governance failures, duplications and inconsistencies;
- Participants in the product supply and consumption chain, rather than the general community, bear responsibility for the costs of resource recovery and waste management;
- Evidence-based decisions informed by the waste management hierarchy of actions and the principles of ecologically sustainable development, including the precautionary approach and the principle of intergenerational equity; and
- Environmentally sound management of materials, products and services embracing whole-of-life cycle strategies and quality assurance practices.

Encouraging supply chain responsibility for resource recovery by involving all participants in end of life product management is an object of the *Product Stewardship Act 2011* or specific industry schemes. The Act indicates that such schemes can include:

- Voluntary product stewardship accrediting voluntary arrangements to further the objects of the Act and authorising the use of product stewardship logos in connection with such arrangements.
- Co-regulatory product stewardship requiring some manufacturers, importers, distributors and users of products to be members of co-regulatory arrangements designed to further the objects of the Act.
- Mandatory product stewardship enabling regulations that require some persons to take specified action in relation to products.

Ideally strategies to increase consumer awareness about the risks, use and disposal of hazardous materials which are also problem wastes should be informed by these principles as doing so increases the opportunities for encouraging successful behaviour change. The recycling industry considers that governments

<sup>&</sup>lt;sup>20</sup> Australian Government, National Waste Policy: Less Waste More Resources 2009. The Policy is currently subject to a review to update it.



should "make end-of-life producer responsibility the key way to prevent pollution and pay for recycling in a circular economy"<sup>21</sup>. It suggests that primary features of a product stewardship framework include:

- Development of a transparent and accountable method for fast-tracking product stewardship materials and products;
- Ensuring that voluntary approaches feature real trajectories against targets and real consequences for non-achievement; and
- Reestablishment of an external advisory group for product stewardship policy to determine where there is market failure and drive efforts.

One benefit of a product stewardship approach is that it enables government to steer markets and address market failure holistically. Industry groups consider that innovative collective industry to tackle market failure is a challenge without the leadership of government<sup>22</sup>.

Another benefit is that the anti-competitive effects of collaboration between competitors in a supply chain on pricing, product dealing and product management can be authorised by the Australian Competition and Consumer Commission where the collaboration has a public good. This reduces the risks and liabilities which might otherwise prevent collective action<sup>23</sup>.

A further benefit is that product stewardship schemes can help to address market failure by identifying the possible reuse of products to guide recovery and recycling options<sup>24</sup>:

These benefits are especially vital when there is limited product supply chain information about how problem wastes are being dealt with. This information asymmetry represents market failure when governments have clear objectives to reduce waste and increase recycling.

If product stewardship is an important method to encourage a collective industry approach to achieve the preferred outcomes of the waste hierarchy, then it becomes more acutely important in relation to problem wastes, such as CCA treated timber. The absence of an appropriate product stewardship framework for CCA treated timber can be a barrier to the Program purpose and effectiveness.

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<sup>&</sup>lt;sup>21</sup> Australian Council of Recycling, 10 Point Plan for Results Based Recycling, October 2018

<sup>&</sup>lt;sup>22</sup> Australian Government, Department of Environment and Energy, National Waste Report 2016, p32

<sup>&</sup>lt;sup>23</sup> Australian Government, Department of Environment and Energy

<sup>&</sup>lt;sup>24</sup> https://www.environment.gov.au/protection/waste-resource-recovery/publications/factsheet-product-stewardship-end-life-tyres



#### 3.4.2 Waste streams

The three waste streams in NSW are<sup>25</sup>:

- Municipal solid waste (MSW). Collected by councils this includes household garbage, recycling and organics and other materials collected as part of street sweeping, public place collections, clean-ups and drop-offs, and waste from council operations.
- Commercial and industrial (CI). These are waste materials generated from fixed point sources within a wide range of sectors and small to large businesses, government agencies, land managers and sites with high public visitation rates.
- Construction and development (CD). These are waste materials generated from commercial and residential property and other infrastructure construction and demolition activities in addition to materials from landscaping and other urban construction activities.

The performance of these waste streams in meeting the NSW resource recovery targets and when compared to national averages varies.

Table 4: Performance of waste streams against NSW resource recovery targets and national averages<sup>26</sup>

		, ,	<u> </u>
Waste stream	2014 resource recovery rate (%)	NSW resource recovery target by 2021-22 (%)	Performance against national averages
MSW	59	70	8% above
CI	61	70	4% above
CD	74	80	10% above

The variations in resource recovery rates between waste streams and between waste materials can occur because of, and despite, the availability of infrastructure and technology. For example<sup>27</sup>.

 NSW has significant capacity to process residual MSW through AWT facilities and a well-established organics recycling industry. Nevertheless the resource recovery of MSW and organics is well below resource recovery targets. Reasons for this include (1) 10-15 percent of MSW is not collected kerbside and is

<sup>&</sup>lt;sup>25</sup> NSW Government, Review of Waste Strategy and Policy in New South Wales, 2010, pp18

<sup>26</sup> Ibid

<sup>&</sup>lt;sup>27</sup> Australian Government, Department of Environment and Energy, National Waste Report 2016 and Blue Environment, Waste Generation and Resource Recovery in Australia 2010/11



mostly disposed of in landfill (2) food waste recovery from households and business is a major challenge and (3) away from home consumption creates issues that are difficult to manage.

- There are over 600,000 small and medium enterprises (SMEs) contributing to the CI waste stream and waste management remains a low priority for them.
- CD is the largest waste stream but recovery is high because construction and development projects are governed by planning regulations which can impose
  waste management conditions on development approval. This is particularly the case with contaminated soils which make up a significant proportion of CD
  waste.

Each waste stream can contain a mix of waste materials and have different levels of resource recovery efficiency for those materials depending on available infrastructure, technology and markets for recovered waste. This can affect market performance and create failures within and between waste streams. This means that a holistic approach with a mix of features would be normally required to address market failures in relation to problem wastes. For example in 2010 the Richmond Review proposed a sophisticated approach with a combination of elements to deal with problem wastes. It recommended that the NSW Government:<sup>28</sup>

"Implement measures to ensure appropriate management of problem wastes and hazardous wastes, including materials that contaminate landfills or alternative waste treatment products (such as composts) or cause safety problems in waste processing facilities. This could include banning some wastes from landfill, household kerbside or C&I collection. In addition to the existing materials identified as national priority wastes under the National Waste Policy (i.e. e-waste, tyres and fluorescent lamps), gas bottles, lead acid batteries and plastic bags should be considered a priority for analysis and action. This enhancement will require the establishment of viable alternatives for households and businesses, e.g. collection or drop-off infrastructure, and targeted education programs. This enhancement should also go hand-in-hand with progressing industry collection schemes via both national and state-based extended producer responsibility (EPR) schemes".

This suggests that consumer information strategies which are not based on responding to waste stream dynamics within a holistic suite of initiatives are unlikely to have a significant impact on consumer behaviour.

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 $<sup>^{\</sup>rm 28}$  NSW Government, Review of Waste Strategy and Policy in New South Wales, 2010, p5



#### Recommendation 1: Program appropriateness

- (a) The Program is consistent with the intent of national and NSW Government policy and legislative commitments to improve the management of hazardous materials and wastes and reduce their risks to the environment and human health. This includes the aims of the *Pesticides Act 1999* with respect to restricted chemicals like CCA and the objectives of the *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) regarding increasing the recovery or problem wastes such as CCA treated timber.
- (b) The Program objectives are consistent with the statutory objects of the Trust, specific goals in the NSW State Plan 2021 (current at the time the Program was commenced) and corporate objectives of the EPA.
- (c) It is appropriate that government play a role in improving consumer awareness as part of a holistic multi-faceted approach to tackle 'wicked problems' created by hazardous materials and problem wastes when doing so is a public good and/or is intended to address a market failure. However the Program was not part of a holistic approach with complementary initiatives to address the risks of CCA in treated timber. Rather it was a consumer education campaign designed by the EPA as a sole substitute for regulation and a foundation for potential future regulation.
- (d) While the Program represents a public good, it appears to have been unnecessary to address any market failure. This is because retailers of treated timber appear to have pre-existing consumer awareness strategies which the Program duplicated, and retailers were disinclined to participate in the Program because they had their own consumer information strategies. Because the Program was not co-designed by the EPA with industry, the EPA was ill-equipped to identify duplication with existing retailer consumer education strategies as a risk to Program implementation.
- (e) The Program may have been able to successfully concentrate on specific market failures that may have required solutions regardless of existing retailer led consumer information strategies if:
  - Proposals such as these submitted to the Trust under the New Government Priorities funding stream were subject to the same rigorous scoping applied to Trust's Major Projects Strategic stream;
  - The Program had been designed to complement a product stewardship scheme; and
  - The Program had been designed to respond to resource recovery market dynamics and needs in waste streams.
- (f) Consideration should be given to ensuring that government agencies developing projects for Trust funding engage with Trust Administration during the project scoping phase to gain their independent guidance and assistance with program/project design including effective stakeholder consultation and co-design principles.



# 4. PROGRAM MANAGEMENT

# 4.1 Program development

The Program was developed by the EPA as one part of the New Chemical's Initiative which was submitted to the Trust for funding in 2013. The EPA developed the New Chemical's Initiative in response to a request from the Minister for the Environment (the Minister) for new initiatives to address risks to the environment and human health. In 2013 the Trust agreed to accept a New Government Priority for the Chemical's Initiative and the Program.

The Trust's Major Projects funding includes support for New Government Priorities as well as proposals submitted under other pathways such as the Major Projects Strategic stream and Unsolicited Projects stream.

Projects in the Major Projects Strategic stream are developed via a prospectus process which includes extensive stakeholder consultation by Trust Administration on existing and emerging environmental management priorities. This increases the opportunities that key stakeholders, such as business, local government, NSW government agencies and non-government organisations will actively participate in implementing projects funded by the Trust. Participation by stakeholders can increase the value for money of Trust funded projects because the Trust can leverage financial and in-kind contributions from stakeholders and expand community awareness of and responses to environmental issues using stakeholder networks

Since May 2013 the Trust has been asked to occasionally fund projects from its statutory funding allocation to support new priorities of government. These are generally high priority issues that address point in time environmental issues or complement new policy or legislative frameworks and that fall outside of the planning approach for Strategic Major Projects due to timing constraints. In most cases however, government priorities would be addressed through the biennial consultation and planning process undertaken by the Trust.

Projects in the New Government Priorities stream can be brought to the Trust for consideration by the Minister for the Environment (the Minister) who is also a member of the Trust. Proposals able to be brought forward can be subject to <a href="https://example.com/html/trust-new-mailto:recomment-new-ma

- 1. Projects can be high level ideas which fully require further investigation and scoping by Trust Administration in consultation with stakeholders. The process for further developing these projects is similar to the approach taken for proposals in the Major Projects Strategic stream.
- 2. Projects can be partially developed, where initial scoping has occurred, but more detailed scoping needs to be facilitated by Trust Administration in consultation with stakeholders. Again the requirement for more comprehensive scoping is similar to the approach applied to proposals in the Major Projects Strategic stream.
- 3. Fully developed proposals or concepts which identify the issue needing to be addressed, intervention and expected outcomes. These projects are <u>not</u> subject to further scoping by Trust Administration and once approved in principle by the Trust move into the business plan development stage.



The Program was proposed for Trust funding in 2013 by the Minister under the New Government Priorities stream. The Program proposal and business plan were developed by the EPA.

The evaluation observes that the scoping process for category 3 projects submitted under the New Government Priorities stream is inferior to the scoping processes for category 1 and 2 projects submitted via that stream and proposals brought forward under the Major Projects Strategic stream. This is primarily because for category 3 projects Trust Administration has a limited or no role in undertaking the robust design process (including stakeholder consultation), that it would usually apply during project scoping. Rather the responsibility for undertaking sound project design, including adequate stakeholder consultation, as part of scoping projects is the responsibility of agencies who have been nominated by the Minister to deliver category 3 projects. If projects do not include sound design principles and not developed with adequate stakeholder consultation prior to Trust consideration and approval there is a higher risk that funding will not support the most effective interventions and/or not achieve expected results.

The requirement for stakeholder consultation is a key feature of the Trust's procedures for scoping Major Projects as illustrated in the table below.

Table 5: Stakeholder consultation requirements for scoping, planning and developing major projects<sup>29</sup>

Trust	procedure for stakeholder cons	Application to funding streams within Major Projects fund	
Criteria to assess in project scoping	assess in		
Opportunities for collaboration	Collaboration with other parties to maximise gains, share or minimise costs or deliver multiple benefits is explored and pursued wherever possible.  Focus on identifying:  Who to consult with.  Who is the target audience.	<ul> <li>Ensure potential stakeholders/partners/grantees are involved early in investigating opportunities for collaboration and in planning to optimise the outcomes</li> <li>Analyse the costs and benefits of possible collaborations</li> <li>Ensure roles and responsibilities appropriate to each stakeholders interest and capacity are defined and assigned</li> <li>Ensure meaningful communication and coordination of collaborative arrangements</li> </ul>	Major Projects Strategic Stream  Every two years the Trust Administration proactively identifies strategic projects to include in the Major Projects Prospectus by undertaking:      Extensive stakeholder consultation to identify contemporary and emerging environmental issues and gaps; and     Strategic analysis of the identified issues to determine priorities for funding.

<sup>&</sup>lt;sup>29</sup> NSW Environmental Trust, Major funded projects internal procedure for scoping major projects, p1



Trust procedure for stakeholder consultation when scoping Major Projects			Application to funding streams within Major Projects fund
Criteria to assess in project scoping Required outcome Guideline for achieving outcome			
		Define a process for the early identification and timely resolution of conflicts	New Government Priorities categories 1 and 2
		<ul> <li>Identify mechanisms to promote and ensure co-investment and to gain firm commitment to collaboration</li> </ul>	Trust Administration undertakes stakeholder consultation as part of further project development prior to Trust consideration.
		<ul> <li>Liaise with the Biodiversity Conservation Trust (BCT) about potential synergies, linking to</li> </ul>	New Government Priorities category 3
		their priority areas, and/or avoiding duplication.	The Trust Administration has no role in undertaking project scoping including stakeholder consultation. Accordingly agencies nominated for delivering fully developed projects can develop projects without reference to the Trust's procedures for scoping Major Projects. This can increase the risk that the Trust requirements for sound project design principles including stakeholder consultation are not applied.

Beyond stakeholder management there are seven other scoping criteria which the Trust's procedures apply to projects in the Major Projects Strategic stream. These criteria can also be applied to New Government Priorities (categories 1 and 2) depending on the extent to which the Trust Administration is involved in scoping them. However New Government priorities (category 3) are not necessarily subject to these scoping criteria because projects are fully developed at the time they are presented to the Trust for approval. This means that the extent to which such projects comply with the Trust's project scoping requirements depends entirely on the capacity of other agencies to develop these projects in line with Trust expectations. Other agencies may not have this capacity in all cases and there is nothing in the New Government Priorities scoping requirement which mandate that other agencies refer to the Trust's Major Projects scoping requirements when developing projects for Trust funding.

The evaluation observes that the inferior nature of project scoping required to be applied to the Program meant that the Program was exposed to an increased risk of failure from the time it was conceived and the planning and decision making process governing New Government Priorities was unable to avoid this risk. This hindered the compliance of the Program with best practice program management.

The table below compares the process for scoping and Trust approval of projects submitted under the Major Projects Strategic and New Government Priorities streams.



Table 6: Comparison of scoping and approval of Major Projects Strategic and new government priorities projects<sup>30</sup>

Process for considering projects	Major Projects Strategic stream <sup>31</sup>	New Government Priorities stream <sup>32</sup>	Observation by this evaluation about process risks
Project inception prior to submission to Trust for consideration	<ul> <li>Trust Administration undertakes broad stakeholder consultation on contemporary and emerging environmental issues and gaps, within the context of the Trust Objects and the Trust's Major Projects Funding principles.</li> <li>These workshops are specifically focussed on issues and gaps rather than any pre-determined project ideas or solutions.</li> </ul>	<ul> <li>Minister brings details of the proposal to the Trust for consideration. Proposals can be:</li> <li>High level (category 1)</li> <li>Partially developed (category 2)</li> <li>Fully developed (category 3)</li> </ul>	
Stage 1 consideration by Trust	<ul> <li>Trust Administration undertakes a strategic analysis of the issues raised in stakeholder consultation and present these to the Trust for its discussion of priority issues.</li> <li>Trust selects priority issues for further development of project concepts.</li> </ul>	■ Trust considers and discusses the proposal and determines whether and how to progress through the project scoping (where required) and business planning process. This will vary according to the type of request and level of detail presented at the Trust meeting. For example:  ➤ Projects which are high level (category 1) and partially developed (category 2) require further scoping by the Trust Administration.  ➤ Projects which are fully developed (category 3) move straight to a business planning stage which is	<ul> <li>Fully developed (category 3) projects can be scoped and developed by nominated delivery agencies without any reference to Trust guidelines for scoping major projects.</li> <li>This appears to have been the case in relation to the Program.</li> </ul>

<sup>30</sup> Aegis analysis

<sup>&</sup>lt;sup>31</sup> NSW Environmental Trust, governance procedure for funding strategic major projects

<sup>&</sup>lt;sup>32</sup> NSW Environmental Trust, governance procedure for funding new government priorities



Process for considering projects	Major Projects Strategic stream <sup>31</sup>	New Government Priorities stream <sup>32</sup>	Observation by this evaluation about process risks
		undertaken by the relevant agency nominated for project delivery.	
Project scoping and planning prior to Trust in principle approval	■ Trust Administration works with stakeholders to develop project concepts to address the priority issues and present these to the Trust as a draft Prospectus. The scoping process is informed by Trust guidelines which set out:  ➤ 8 criteria the Trust Administration must use to assess the viability of projects including for example, project scale; opportunities for collaboration; risk management; and monitoring and evaluation.  ➤ Defined outcomes the Trust Administration must achieve against these eight criteria.  ➤ Detailed guidance on the actions the Trust Administration should undertake to achieve the defined outcomes.  ➤ Detailed examples of the kind of evidence the Trust Administration should obtain to demonstrate that the project is capable of meeting the defined outcomes.	Trust Administration works with the proposed delivery agency and relevant stakeholders to further scope the category 1 and 2 projects in line with the Trust guidelines for scoping major Projects.	
Stage 2 consideration by Trust	Trust considers the Prospectus and selects projects for business planning.	<ul> <li>Trust appoints a relevant subcommittee or technical committee to assess the merits of projects and make recommendations to the Trust.</li> <li>The assessment criteria compromise 11 questions which are consistent with the Trust's 8 criteria for scoping Major Projects</li> </ul>	<ul> <li>This process increases the risk of project failure for New Government Priority (category 3) projects because the:</li> <li>The Trust technical or sub-committee and Trust are being asked to recommend projects for funding without those projects having been first assessed against the</li> </ul>



Process for considering projects	Major Projects Strategic stream <sup>31</sup>	New Government Priorities stream <sup>32</sup>	Observation by this evaluation about process risks
•		but are not as detailed because they are not accompanied by guidelines on outcomes sought and indicators to achieve outcomes.  For category 3 projects the technical or sub-committee would assess the project on the basis of a business plan prepared by the nominated agency delivering the Program.	existing detailed scoping criteria which the Trust uses to consider projects in the Major Projects Strategic and New Government Priorities (categories 1 and 2) streams.  The absence of a detailed scoping exercise which the Trust administration normally applies increases the potential for the Trust technical or sub-committee and Trust to suffer from information asymmetry (lack of all the relevant issues to consider) when making an in principle purchasing (grant award) decision.  The 11 questions which the technical or subcommittee needs to ask to assess the project merits are not a safeguard against inappropriate scoping in a New Government priority category 3 project business plan.
Business planning to inform Trust decision on funding amount	<ul> <li>Trust Administration undertakes the business planning of projects which have been approved by the Trust.</li> </ul>	The nominated delivery agency incorporates into its business plan any comments provided by the Trust technical or sub-committee.	



# 4.2 Best practice management

Any program involving grant administration should seek to apply a best practice approach to managing and measuring the allocation and performance of funds to achieve clear benefits. This best practice approach is framed by seven key principles that should govern grant administration. These principles are described in the table below.

# Table 7: Seven principles of grant administration<sup>33</sup>

	Principle Princi
1	Robust planning and design which underpins efficient, effective and ethical grants administration, including through the establishment of effective risk management processes.
2	An outcomes orientation in which grants administration focuses on maximising the achievement of intended government outcomes from the available funding.
3	<b>Proportionality</b> in which key program design features and related administrative processes are commensurate with the scale, nature, complexity and risks involved in the granting activity.
4	<b>Collaboration and partnership</b> in which effective consultation and a constructive and cooperative relationship between the administering agency, grant recipients and other relevant stakeholders contribute to achieving more efficient, effective and equitable grants administration.
5	Governance and accountability in which a robust governance framework is established that clearly defines the roles and responsibilities of all relevant parties; establishes the policies, procedures and guidelines necessary for defensible funding recipient selection and administration processes that comply with all relevant legal and policy requirements; and supports public accountability for decision-making, grant administration and performance monitoring.
6	<b>Probity and transparency</b> in which program administration reflects ethical behaviour, in line with public sector values and duties; incorporates appropriate internal and fraud control measures; ensures that decisions relating to granting activity are impartial, appropriately documented and publicly defensible; and complies with public reporting requirements.
7	Achieving value with public money which should be a prime consideration in all aspects of grant administration and involves the careful consideration of costs, benefits, options and risks.

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<sup>&</sup>lt;sup>33</sup> Commonwealth Grant Guidelines—Policies and Principles for Grants Administration, Financial Management Guidance No. 23, July 2009 and NSW Department of Premier and Cabinet, Good Practice Guide to Grants Administration



# 4.3 Compliance with best practice management

#### 4.3.1 Robust planning and design

Planning and design is robust if the funding and reporting flows that underpin the Program are all clearly based on purchasing activities (outputs) and reporting the benefits (actual outcomes) of these activities against the goals and objectives of the Program (desired outcomes). There are risks to the planning and design of the Program if this is not occurring as it reduces the capacity of the Trust to assess the Program's value for money. These risks can also create barriers to applying the other principles of best practice program management. If these risks are recognised and managed by the Program this increases the opportunities to properly ensure value for money.

#### Overview of business plan

The Program business plan clearly and comprehensively provides guidance for Program managers on Program objectives and outcomes; structure and governance; engagement and communication with stakeholders; risk management; monitoring and reporting on expenditure of the grant and outcomes; and allocation of resources by the EPA and Trust. Consultations with Program managers during the evaluation confirmed that the business plan is a vital guiding document on which they could rely.

#### **EPA and Trust expectations**

Based on a review of the literature and stakeholder consultation the evaluation observes that there were some key areas where the expectations of the Trust and EPA were not aligned. This continued throughout the Program even though the Trust's Environmental Hazard's Subcommittee (EHS) to which the EPA reported made its concerns known on a consistent basis<sup>34</sup>.

The misalignment of expectations can be a risk for projects proposed to the Trust under the New Government Priorities stream, because scoping of these projects prior to Trust consideration is not subject to the same rigorous approach applied to projects in the Major Projects Strategic stream<sup>35</sup>. More rigorous scoping at an early stage ensures that business plans are able to more comprehensively anticipate and address risks and ensure that the expectations of the Trust and agencies seeking funding are consistent.

<sup>&</sup>lt;sup>34</sup> Minutes of the meetings of the Environmental Hazards Sub-committee throughout the Program

<sup>35</sup> See section 4.1 in this report



#### Outcome measurement

One major area of varying expectations between the Trust and EPA was in relation to the monitoring and evaluation of Program outcomes. This is a key criteria in the scoping of Major Projects. Throughout the Program implementation the Trust's EHS consistently raised the need for attention to and clarity on how Program success would be measured. The EHS considered this to be especially important because the Program was designed to stimulate market responses leading to consumer behaviour change, which can be difficult to ascertain over the long term. Key concerns raised by the EHS about framing and ongoing implementation of the Program to enable permanent consumer behaviour change included the following:

- The need for the business plan to include action to support the delivery of outcomes beyond the life of the Program. To achieve this the EHS suggested the use of mandatary training for retailer staff; communication to residential do it yourself (DIY) consumers through DIY magazines, point of sale (POS) banners, television advertising where appropriate and collaboration with local Councils<sup>36</sup>.
- The need for communication activities to have a long lasting impact on consumers. The EHS was particularly concerned about the temporary impact of any advice retail staff provided to consumers. To address this the EHS endorsed the first annual report of the Program subject to the EPA assessing the ongoing impact of the project on retail staff and customers with a view to the impact and longevity of project outcomes<sup>37</sup>.
- The need for the Program to include robust mechanisms to measure whether its desired outcomes have been achieved. The EHS was concerned that the Program did not include techniques to measure whether its activities were actually leading to consumer behaviour change consistent with Program objectives. The EHS suggested that these techniques could include audits of consumers at hardware stores, following up with retailers and consumers on a consistent basis over a defined time period to assess any change in consumer behaviour, assessments of changes in the sale of treated timber and surveys of the volume of treated timber in waste streams. The EHS approved the first annual report of the Program subject to the EPA developing and monitoring meaningful measures of success<sup>38</sup>.

These concerns indicate that the EHS was focussed on how it would be proven that the Program was achieving over the long term its agreed ultimate outcomes which were:

- Consumers are better informed so that they can choose appropriate products.
- CCA treated timber users have available education and training to enable better management of CCA treated timber product.

<sup>&</sup>lt;sup>36</sup> Minutes of the meeting of the Environmental Hazards Sub-committee on 2 September 2014

<sup>&</sup>lt;sup>37</sup> Minutes of the meeting of the Environmental Hazards Sub-committee on 26 August 2015

<sup>38</sup> Ihid



Improved practice and behaviour change around management of treated timber to reduce contamination of recycling and waste streams.

However the EPA's expectations about outcomes at the beginning and during the project differed to some extent. Based on its reporting to the Trust, the EPA appears to have been focussed largely on producing the training and marketing materials outlined in the business plan which were assumed to be able to stimulate behaviour change. The EPA does not appear to have been as focussed on measuring the extent and nature of behaviour change itself to the degree the EHS was concerned with<sup>39</sup>. The business plan sets out the immediate outcomes which the EPA was focussed on achieving:

- Information and training are available to CCA timber users/potential users regarding the environmental impacts and appropriate uses.
- Stakeholders are engaged and responding/ taking an active part.
- Stakeholders have been engaged by a successful campaign launch and the profile of CCA treated timber hazards and management has improved.

The evaluation requirements in the business plan suggest that the respective expectations of the EHS and the EPA about outcomes were based on agreed indicators. Some indicators in the evaluation requirements support a focus on achieving the agreed activities which are assumed to stimulate behaviour change, and others support actions to assess actual behaviour change. The table below captures the approach to Program evaluation during its life and the varying priorities of the EHS and EPA.

Table 8: Program evaluation indicators in business plan<sup>40</sup>

Evaluation indicators (questions) in business plan to assess Program progress		When will it be evaluated	Person responsible for evaluation	EHS/EPA priorities <sup>41</sup>
•	How are we progressing towards our outputs and outcomes?	Six-monthly	Project manager	Both
-	How effective are the actions being undertaken in achieving the desired long-term outcomes?	Six-monthly	Project manager	EHS
•	What is the preliminary change in the extent/condition/behaviour arising from the actions?	Six-monthly	Project manager	EHS
•	What is the aggregated change?	Annually	Project manager	EHS
-	How are we progressing against our predicted measures and outputs?	July each year and at the conclusion of the project	Project manager	EPA
•	Was the training module developed and launched? Were education materials produced and distributed?	July 2015	Project Manager	EPA

<sup>&</sup>lt;sup>39</sup> EPA reports to the Trust in 2014, 2015, 2016 and 2018

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<sup>&</sup>lt;sup>40</sup> Program business plan

<sup>&</sup>lt;sup>41</sup> Aegis Consulting Group analysis based on literature review and stakeholder consultation



Evaluation indicators (questions) in business plan to assess Program	When will it be evaluated	Person responsible for evaluation	EHS/EPA priorities <sup>41</sup>
progress			
Did the launch of the initiative have an impact in the media?	December 2015	Project Manager	EPA
<ul> <li>Did the launch improve knowledge, awareness and understanding of</li> </ul>			
the problem?			
Have stakeholders been engaged successfully?			
Did industry adopt improved labelling?			
Are users taking up the online training module?	July 2016	Project Manager	EPA/EHS
<ul> <li>Is the message being delivered to retailers and are consumers</li> </ul>			
responding?			
Is the education campaign effective?			
Is practice around the use of CCA treated timber improving?			
<ul> <li>Impact of Smarter Choices involvement in customer choices.</li> </ul>			

The experienced differences in expectations about outcomes and their measurement are reflected in the:

- EPA's view that the Trust should require project proponents to be more specific about how they will evaluate, but also make requirements simpler<sup>42</sup>; and
- Trust Administration's view that the EPA chose not to measure a robust baseline of consumer attitudes from which to determine why and how attitudes needed changing and whether any desired changes were achieved but did not inform the Trust until after the final report was submitted and this information was lacking<sup>43</sup>.

The Program business plan includes specific references to the baseline data that was identified for collection to inform the measurement of outcomes. The table below illustrates this.

Table 9: Outcomes and related baseline data identified for collection<sup>44</sup>

Outcomes	Baseline data to be used to assess outcomes from Program		
Ultimate outcomes	Training statistics.		
Consumers are better informed so that they are able to choose appropriate	■ Website: "Google Analytics".		
products	<ul> <li>"Smarter Choices" program reaches 150 hardware/home outlets</li> </ul>		
CCA treated timber users have available education and training to enable better	No existing participation in industry/trade events		
management of CCA treated timber product	Survey of training participants before training		

<sup>&</sup>lt;sup>42</sup> Consultations with the EPA

<sup>&</sup>lt;sup>43</sup> Consultations with Trust Administration

<sup>&</sup>lt;sup>44</sup> Program business plan, p9-10



Outcomes		Baseline data to be used to assess outcomes from Program		
•	Improve practice and behaviour change around management of treated timber to	•	Survey as part of Smarter Choices program, including in-store and telephone	
	reduce contamination of recycling and waste streams is achieved		survey	
		•	EPA audit of timber treatment companies	
In	termediate outcomes	•	Training statistics.	
•	Information and training is available to CCA timber users/potential users	•	Website: "Google Analytics".	
	regarding the environmental impacts and appropriate uses	•	"Smarter Choices" program reaches 150 hardware/home outlets	
•	Stakeholders are engaged and responding/ taking an active part	•	No existing participation in industry/trade events	
		•	Survey of training participants before training	

According to the EPA it faced difficulties collecting this baseline data and this is discussed in detail below. The Trust Administration expressed concern to the evaluation that it was not made aware of the problems with baseline data collection until the final report was submitted. This led the EHS to note that while the project delivered good outputs, there was no actual demonstration of outcomes such as better delivery of community information, improving practice or changing behaviour around management of treated timber<sup>45</sup>. This result was not consistent with the expectations of the Trust at the beginning of the Program.

#### Impediments to outcome measurement

The EPA suggests that it experienced some significant barriers to conducting evaluations during the Program which reduced its capacity to undertake baseline data collection and address the concerns expressed by the EHS about actual project impact<sup>46</sup>.

The business plan included a requirement that people who undertake the training module will be evaluated by survey at the time of taking the training <sup>47</sup>. Consistent with the originally planned baseline data collection, the EPA considered implementing this via a pre and post training survey within the Office of Environment and Heritage (OEH) Smarter Choices program learning module which it was expected retailers would incorporate into their Learning Management Systems (LMS).

However the consultant commissioned by the EPA to develop the training module subsequently advised that this kind of evaluation would deter participation by retail staff in the training and would complicate the training software. This concern was echoed by the OEH Smarter Choices program which the EPA had planned to use as the platform to connect with retailers. It is not clear why these concerns of the OEH Smarter Choices program were not identified during the

 $<sup>^{45}</sup>$  Minutes of the meeting of the Environmental Hazards Sub-committee on 23 October 2018

<sup>&</sup>lt;sup>46</sup> Consultations with the FPA

<sup>&</sup>lt;sup>47</sup> Program business plan, 11 November 2014, p8



development of the Program business plan. Doing so would have enabled the business plan to develop an alternative approach to assessing the gaps in training and behaviour change it could support. Accordingly the EPA did not incorporate this evaluation component in the training module 48.

In response to this problem, the EPA identified that an alternative could be to interview staff undertaking the training module. However the retailers participating in the Program did not permit or support this and it was therefore not pursued. The view of retailers about this may have been able to be identified earlier if the Program was co-designed with industry.

The EPA suggests that the only part of the project planned to be assessed within the Smarter Choices program was the volume of people who completed the version of the training module that was produced for retailer employees and delivered via their LMS. The inclusion of the training module in retailers LMS was consistent with the expectations of the EHS<sup>49</sup>. The EPA indicates that while Bunnings and Mitre 10 initially reported that over 500 of their employees completed the training module, participation after that was small.

The EPA also advises that there were barriers to engaging with consumers to assess the extent any knowledge gained via the Program had contributed to their behaviour change. These included the following:

- Retailers participating in the Program did not permit interviews of consumers.
- The EPA considered that the Program did not have a level of public awareness to warrant a telephone survey that could produce meaningful information.
- The budget was limited in the final year of the Program when it may have been possible to conduct a survey and therefore funds were considered better allocated to a digital advertising campaign and the report on an EPR scheme. In relation to this the evaluation observes that in January 2016 the Trust Administration was concerned that the Program had spent about 30 percent of allocated funds with only one year of the Program schedule remaining<sup>50</sup>.

In response to the concerns raised by the EHS about measuring Program impact the EPA proposed to engage a market research firm in late 2016 to undertake an assessment of Program outcomes. The EHS was supportive of the approach proposed by the EPA<sup>51</sup>. According to the EPA that research was conducted in September 2017, via a field survey to assess campaign awareness and display of materials at a sample of 37 businesses (timber and hardware) and council customer service centre locations. The survey results indicated that about 30 per cent of the staff spoken to at these sites had knowledge of the Program. Only 20 per cent had materials on hand or displayed. However, interest in the Program was strong (75 per cent), including among those who had not previously been aware of the Program. Additional stocks materials were handed out at these site visits with an invitation to contact the EPA for more information.

<sup>49</sup> Minutes of the meeting of the Environmental Hazards Sub-committee on 26 August 2015

<sup>&</sup>lt;sup>48</sup> Consultations with the EPA

<sup>&</sup>lt;sup>50</sup> Consultations with the Trust

<sup>&</sup>lt;sup>51</sup> Minutes of the meeting of the Environmental Hazards Sub-committee on 19 September 2016



One of the actions in the Program business plan to collect baseline data was an audit by the EPA of timber treatment companies. It appears that this was not pursued because there was no industry engagement for co-design purposes. An audit of this nature may have identified the extent to which retailers were already undertaking consumer education and the impact of these activities on demand for and use of treated timber.

#### Risk management<sup>52</sup>

The Program business plan included a risk management plan, however the approach to risk management appears to have been unable to anticipate and address some key risks that should normally be identified in the business planning phase. This is primarily because the risk management plan did not include a comprehensive analysis of the kind of market, consumer, commercial or marketing issues which were likely to have an impact on Program success. These are discussed below.

#### Baseline data about consumers and markets

One of the key lessons the EPA suggests can be learned from the Program is that "when proposing a behaviour influencing project it is important to have a baseline of data so that you can measure improvement, and to understand what is realistically feasible to achieve in measuring"<sup>53</sup>. As discussed above, while the Program business plan included the intention to collect baseline data, the EPA suggests that this information was difficult to obtain and this hindered its capacity to measure Program performance against outcomes. Both the EPA and the EHS suggested to the evaluation that more work should have been done to identify whether the Program was necessary and if so, to what extent.

Obtaining baseline information was essential for the EPA to be able to satisfy the EHS which suggested at an early stage that the business plan needed to address the longevity of outcomes beyond the life of the program to effect behaviour change, not just development of the training module, and should utilise recurrent points of contact. The EHS proposed that this could include mandatory training, targeting DIY magazines, point of sale banners, improved labelling on products, TV (as appropriate), and key contacts at Councils<sup>54</sup>.

The assessment of risks during the development of the draft and final business plan did not include a needs/gaps analysis or an assessment of strengths, weaknesses, opportunities, threats (SWOT). This kind of analysis is often important to ensure that a Program's scope and direction is delivering public goods and addressing market failures in targeted and necessary ways.

<sup>&</sup>lt;sup>52</sup> Program business plan, 11 November 2014

<sup>&</sup>lt;sup>53</sup> Consultations with the EPA

<sup>&</sup>lt;sup>54</sup> Minutes of the Environmental Hazards Sub-committee meetings on 23 September 2014



A needs/SWOT analysis may have assisted the business plan to secure a fuller understanding of what timber retailers and other identified government partners, such as TAFE and WorkSafe NSW, were already doing to increase consumer awareness of CCA treated timber risks, use and disposal. Existing activities may have offered the business plan some insights about existing levels of consumer awareness and where gaps lay. However because the Program was not co-designed with hardware and other retailers whom the Program implementation relied on, there were limited opportunities for a needs analysis and obtaining baseline data.

The business plan assumed that "there is little in the way of practical guidance currently available to industry or, particularly, consumers on choosing treated timber, managing hazards around its use and waste management (disposal), and that which does exist is not easily accessible or well-distributed. In addition, there is no training available that addresses the full range of hazards associated with treated timbers"<sup>55</sup>. However, it does not appear that this key conclusion justifying the Program was based on an assessment of existing approaches including consultation with industry. Timber retailers advised the evaluation that they have their own consumer information strategies and therefore were unmotivated to participate in the Program. A needs analysis would have identified this.

#### Commercial barriers to retailer participation

The Program business plan could have included a more detailed understanding of the incentives for and barriers to retailers participating in the Program. This is something that should usually occur if a Program is being co-designed with stakeholders who are important to Program implementation. It is also something that would arise in a risk assessment. The EPA indicates that while the risk management plan included a non-response from industry as a risk, the analysis of why this may occur and ways to mitigate it was not as robust as it could have been<sup>56</sup>. A SWOT analysis may have better equipped the Program to anticipate and deal with this risk which became a major challenge for the Program.

For example the risk management plan does not assess the degree to which commercial entities, such as timber retailers, would be willing to display EPA branded material and promote such material to consumers or whether companies are subject to business protocols and needs which would normally disincentivise them from participating in the Program. Consultations with the EPA indicate that during the Program implementation it was discovered that timber retailers did not wish to display EPA branded material and that a preferred approach would have been for the EPA to provide retailers with template material which they could individually brand.

The discovery that retailers were not as keen to participate in the Program as first anticipated occurred after the EPA produced and distributed its consumer-oriented material to retailers. This distribution occurred in 2016, well into the Program cycle. The absence of extensive industry consultation to assist Program co-design increased the risk that Program funds would be spent on materials which retailers did not wish to distribute.

<sup>56</sup> Consultations with the FPA

<sup>&</sup>lt;sup>55</sup> Program business plan, p2



The Trust process anticipates that Programs can face challenges and risks and therefore permits program variations with Trust approval. The EPA took advantage of this and adapted to the challenge by refocussing its campaign to engage consumers via councils, schools, TAFEs, Home Shows, and digital marketing.

Consumer marketing and communication issues

The Program business plan could have included a communications strategy fully informed by marketing expertise at the project planning stage. This would have helped to fully address the EHS concern that the communications strategy needed to be further developed and better articulated in the plan.<sup>57</sup>

The business plan indicates that the Program aim to assist retailers educate consumers at the point of sale (POS) was based on (1) research findings from Sustainability Victoria which suggested that consumer decisions about purchasing appliances on the basis of energy star ratings occurred at POS with assistance from retail staff; and (2) advice provided to the EPA by the NSW Office of Environment and Heritage (OEH) about its Smarter Choices program. The business plan indicates that the advice from OEH was that when consumers made purchasing choices aligned with sustainability objectives, they preferred POS assistance and brochures which they could take home<sup>58</sup>.

These sources of advice naturally influenced the Program to focus on developing training modules to assist retail staff to provide information about CCA treated timbers at POS, and publishing material with which to inform consumers at POS. The EPA advises that when these strategies did not seem to be successful, it considered an on-line digital marketing strategy with the assistance of marketing experts and this proved much more successful in distributing consumer information. The EPA suggests that, in hindsight, it would have been preferable if it had engaged marketing and communication consultants at the outset to design the consumer information campaign.

One consumer group the EHS was concerned about was residential do it yourself (DIY) users of CCA treated timber. The EHS considered that traditional communication methods and education techniques proposed by the business plan may not influence these DIY consumers to change their behaviour. The EHS believed that the business plan should examine examples of other campaigns targeting DIY consumers to inform the communications strategy<sup>59</sup>. Despite various revisions to the business plan the initial communications strategy did not include this examination or deploy any specific methods to influence DIY consumers. However when it became clear that retailers would not be communicating with consumers to the extent first anticipated a digital communications strategy was developed. The on-line nature of this strategy, such as an EPA video explaining CCA and treated timber use, was better suited to the way in which DIY consumers would normally access information.

<sup>59</sup> Minutes of the Environmental Hazards Sub-committee meetings on 2 September 2014

<sup>&</sup>lt;sup>57</sup> Minutes of the Environmental Hazards Sub-committee meetings on 2 September 2014

<sup>&</sup>lt;sup>58</sup> Program business plan. P4



#### 4.3.2 An outcomes orientation

#### **Current arrangements**

The Program business plan contains a robust outcomes hierarchy and evaluation framework based on standard templates used within government. This includes specific outputs to achieve outcomes and indicators to evaluate whether outcomes and outputs have been achieved. That framework is outlined in the figure below. What is clear is that the framework emphasises the evaluation of outputs, rather than outcomes. This is not unusual because the ultimate outcomes sought by the Program, namely behaviour change amongst consumers, is difficult to measure particularly in the absence of solid baseline data about consumer attitudes towards CCA treated timber.

However as noted in section 4.3.1 the EPA and Trust had varying expectations about the measurement of outcomes. The Trust was focussed on how the intended outcomes would be met, namely the number of consumers who changed their behaviour. This was based on an expectation that the baseline data identified in the Program business plan would be collected and used to assess Program impact. On the other hand, the EPA had difficulties collecting baseline data and this was not clearly communicated to the Trust during the Program. In the absence of appropriate information to measure actual impacts, the EPA relied on reporting on Program outputs as the indicators of these were assumed to reflect the achievement of the Program's intention.

The figure below illustrates the outcomes hierarchy in the Program business plan.



Figure 4: Outcomes and evaluation framework

lr	tended outcomes (results)	E۷	aluation indicators
•	Effective participation in the TTI by retailers, Councils, trade organisations and other government and non-government organisations to support the program objectives.	•	Number of consumers who have changed their behaviour
•	A substantial increase in retailer, user and consumer awareness to an extent that significantly reduces the use of treated timber and improves its appropriate disposal consistent with waste policy priorities.		
•	Enduring partnerships between government, business and non-government organisations to maintain consumer awareness and responses after the grant has ended.		
-	The ongoing availability of education materials after the grant has ended.		
•	An examination and report on options for an Extended Producer Responsibility (EPR) scheme for treated timber.		



<b>-</b>	
Stipulated outputs (actions) to achieve outcomes	Evaluation indicators
<ul> <li>Development and implementation of a training module for retailers, users and potential users of CCA treated timber, councils and associated trades and professions.</li> <li>Training for point of sales staff at retailers to enable them to advise consumers.</li> <li>Development and application of public communication and education materials including displays at retail outlets; information dissemination via mass media, specialised media and trade and public events; and other educational materials tailored to general and specialised audiences.</li> <li>Improved labelling of CCA treated timbers (this activity was no longer required by the grant following legislative change affecting the marketing of timbers).</li> <li>Building strategic partnerships between government, industry and non-government organisations to achieve reductions in the use of CCA timber in applications for which it is not suitable and improve waste management.</li> </ul>	<ul> <li>Number of stakeholders engaged</li> <li>Number of users who have completed the training modules</li> <li>Retail training visits undertaken by EPA</li> <li>Number of brochures distributed by EPA to retailers</li> <li>Number of brochures distributed by retailers to consumers</li> <li>Number of on-line visits to EPA website</li> <li>Number of brochures downloaded via EPA website</li> <li>Number of media mentions or appearance of Program</li> </ul>

#### **Potential improvements**

Consultations with the EPA and Trust's EHS suggest that outcome setting may have been improved by the following factors.

• Early advice from a marketing/communications specialist. Outcome setting and evaluation in consumer awareness campaigns generally requires the assistance of marketing and communication expertise. This is because the identification of audiences, understanding the ways in which different audiences respond to messages and developing the varying tools needed to reach audiences requires specialist knowledge and experience.



Experts can bring knowledge about behavioural science which underpins insights about the motivations of consumers and citizens and how to influence these motivations to shape responses to policy/regulatory objectives. The NSW Government is increasingly applying behavioural insights to inform the nature of policy, programs and regulation via specialist teams in the Department of Premier and Cabinet and other agencies. The data and knowledge being gained within government about consumer and citizen behaviour could be harnessed by the Trust to inform its program choices and design.

The EPA and some members of the Trust's EHS suggest that they did not have the requisite expertise in communication campaigns when shaping the direction of the Program. This affirms that the Program would have benefited from the assistance of a marketing/communications expert during its design. The EPA has conducted a range of community awareness campaigns over many years including in relation to waste management, litter control and the recent container deposit scheme. Accordingly it may be expected that it retains a deep corporate knowledge about community engagement which could have informed the Program business plan. However it is not clear that this knowledge was harnessed as there is no reference to it in the business plan and consultations with the EPA do not suggest any previous lessons learned by the EPA were applied. This may reflect a lack of communication between divisions within the EPA or the absence of a repository of corporate knowledge within the EPA which its various project teams can access.

The Program business plan focuses communication activities on consumers of treated timber (the general public); tradesman using treated timber (building professionals); timber retailers and business and government organisations with whom the EPA can partner to disseminate the information intended by the Program. While this selection of audiences seems reasonable, outcome setting would have benefited from a more detailed examination of how these different audiences could be reached based on their preferences and priorities.

When the EPA sought advice from digital marketing specialists during Program implementation those experts appear to have successfully applied the "inbound marketing or nurturing marketing" methodology. This methodology has been used for the last 10 years by major companies and public relations and communication agencies. It is based on the concept of attracting an audience instead of competing in the on-line space for their attention. It is a *pull* methodology rather than a *push* one and based on sharing content of a type and nature that motivates an attracted audience to disseminate it more widely<sup>60</sup>.

The inbound marketing methodology enables organisations to choose from an array of sophisticated communication activities to achieve desired outcomes and shape outcomes based on available communication platforms relevant to audiences. An example of this methodology in practice is illustrated in the table below.

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<sup>&</sup>lt;sup>60</sup> Aegis Consulting Group, Evaluation of the NSW Environmental Trust's Dissemination Program, 2017, p67



Table 10: Pull and push communication strategies to achieve outcomes<sup>61</sup>

Types of desired outcomes	Types of target audiences	Inbound Communication/Marketing (New pull strategy)	Outbound Communication Actions (Traditional push strategy)
Increase general awareness about issues	<ul><li>General Public</li><li>Education staff and teachers</li></ul>	<ul> <li>Blog Posts,</li> <li>Social media</li> <li>Newsletters</li> <li>Call to Actions</li> <li>Survey</li> </ul>	<ul><li>Workshops</li><li>Events</li></ul>
Increase Technical awareness about dedicated topics and generate good practice	Technical Expert audience (scientists, farmers, rural experts)	<ul> <li>Dedicated landing pages with forms to fill up</li> <li>Newsletters</li> <li>Blog Posts Calendar</li> <li>Blog Posts</li> <li>Social media dedicated page for each expert group</li> </ul>	<ul> <li>Workshops</li> <li>Professional committees, events</li> <li>Industry newsletters</li> </ul>
Increase corporate knowledge that could be used to create or improve specific future action	<ul><li>Companies</li><li>Local Councils</li></ul>	<ul> <li>Blog Posts,</li> <li>Dedicated landing pages with forms to fill up</li> <li>Emails</li> <li>Call to Actions</li> <li>Survey</li> </ul>	<ul> <li>Workshops and expert committees mixing public and private stakeholders for maximum impact and practical solutions</li> </ul>
Actual individual and/or collective action based on the information	<ul><li>Local communities</li><li>General Public</li><li>Householders</li></ul>	Blog Posts,     Social media     Newsletters     Call to Actions	<ul> <li>Marketing collaterals (leaflets, posters, letters)</li> </ul>
Tangible behaviour change to apply the learnings in the information	All above	<ul><li>Survey</li><li>Social media monitoring</li></ul>	Survey

Systematic consideration of the need to align communication strategies with audiences usually targeted by the Trust for behaviour change outcomes. Across its programs the Trust generally seeks to target four kinds of audiences which are described below. It is good practice for program outcome setting to consider the relevance of these audiences and the extent to which reaching them will assist achieving outcomes in practical and

<sup>61</sup> Aegis Consulting Group, Evaluation of the NSW Environmental Trust's Dissemination Program, 2017, p71



measurable ways. Opportunities to develop and pursue specific outcomes can increase if these target audiences and their characteristics are clearly identified at an early stage and systematically applied to select preferred program results and related actions.

Each target audience has their own characteristics which affect the kind of information they may wish to receive and the ways in which they may prefer to receive it in order to understand and apply knowledge. Some of these features are discussed below<sup>62</sup>.

Landholders. This audience is likely to be reasonably knowledgeable about management of their land. This is particularly the case for farmers and other rural land holders. Accordingly, this audience is likely to prefer detailed technical information that can advance their knowledge and specific visual examples of the impacts of knowledge application. Rural landholders may also tend to represent an older population demographic and therefore be more comfortable with face to face communication, such as workshops and forums. These kinds of forums also support the provision of information by experts consistent with the knowledge sought by this audience.

It is not clear from the Program business plan that this audience was considered. It may have been necessary to do so given the extent to which farmers and other rural landholders may use treated timber for fencing and other purposes. The risks that treated timber may create for waste streams is also likely to be higher in rural communities because of limited waste management options.

- Business. This audience is likely to be reasonably knowledgeable about environmental issues affecting and created by their organisations. Accordingly, this audience is also likely to prefer detailed technical information that can increase their knowledge and be applied in practical and efficient ways. Incentives for this audience would include information that can secure and improve their organisational performance in line with triple bottom line reporting and offers opportunities for business growth. Long term commitment from business to environmental management change motivated by commercial outcomes may create opportunities for the Trust to identify and facilitate funding partnerships with business for ongoing information dissemination activities. Businesses often prefer communication through digital marketing, workshops, conferences and newsletters. Communication activities should be able to consider the different degrees of interest and capacity within the large business and small and medium enterprise sectors and within and between industries.
- Government agencies. Federal and state government agencies and local councils are likely to have a significant suite of existing knowledge and be keen to maintain continuous improvement to satisfy their own policy and program goals and priorities. As a result, they may be particularly motivated

<sup>&</sup>lt;sup>62</sup> Aegis Consulting Group, Evaluation of the NSW Environmental Trust's Dissemination Program, 2017, p44



by partnerships that can leverage joint program funding, and which enables them to promote their activities to their stakeholders. Internal government communication mechanisms such as the intranet, email and collaborative forums can be effective to disseminate information.

Consultations with the EPA indicate that while it identified a range of government partners, the response of these organisations was below expectations. For example, while WorkSafe NSW may have been considered initially to be a strong program partner, it did not prioritise treated timber as a workplace hazard and had limited participation in the Program.

- Households. Individuals and families within households may have limited technical knowledge about environmental management activities. Some may have pre-existing commitments to issues, while others may have no current interest. It is important therefore for information dissemination activities to be able to target households for reasons and in ways that reflect the degree of pre-existing commitments to receiving and applying knowledge. Digital marketing via social media, banner advertising in search engines, letter box drops, and general media advertising may be preferred ways to inform households.
- > School age children. Children at school are likely to receive a wealth of information about the environment and how to conserve and protect it within the normal curriculum applied by government and non-government schools. In circumstances where a program wishes to target schools it would need to ensure that the messages, whether new or reaffirming, were delivered in ways children respond to. This includes making learning fun through online games and interactive mobile applications supplemented with booklets and other written material.

Consultations with the Trust's EHS suggest that while targeting this audience was not an early priority, when schools did participate it proved to be an effective way to achieve Program outcomes. This is because of the capacity of children to pass on things they have learned about to their parents and the assumed tendency of parents to change their behaviour to reinforce what their children believe to be important. Earlier targeting of this communication pathway may have increased the potential for Program outcome delivery.

- Examination of market and waste stream issues to properly identify Program need and deliverables. During Program implementation the EPA commissioned a report from independent consultants on the options for managing CCA treated timber via an Extended Producer Responsibility (EPR) scheme. The EPA and Trust's EHS indicate that this report should have been undertaken prior to Program scoping because the information it contained on treated timber market dynamics was invaluable to outcome and output setting. The evaluation has reviewed the consultant's report and agrees that it should have been undertaken as part of a needs/gap analysis informing outcome and output design.
- Baseline setting to measure behaviour change outcomes. The outcome and evaluation framework in the Program business plan indicate that sources of baseline data about existing consumer attitudes to CCA treated timber included training statistics, Google analytics, and information obtained from the



Smarter Choices program. It is not clear that these sources could provide a robust baseline of consumer attitudes from which to determine why and how attitudes needed changing and whether any desired changes were achieved by the Program. Other proven ways to obtain solid information about the extent to which consumer attitudes needed changing include sample surveys of the audiences normally targeted by the Trust, and consultation with manufacturers and retailers who interact and receive feedback from consumers. Obtaining a solid baseline of data about consumer choices and habits is an important input to any outcome setting when programs are seeking to achieve behaviour change.

#### 4.3.3 Proportionality

The Program business plan suggests that thought was given to the scale, nature, complexity and risks involved in undertaking the activities. It states that:

"The Treated Timber Initiative has been planned to maximise its impact by operating over a range of spaces and timeframes and partnering various institutions. This includes utilising on-line learning to target training to timber users, publication of information suitable for members of the public who seek it out on the EPA's website, using the mass media to inform and raise public awareness generally, and using the "Smarter Choices" program to target the retail stores where the product is sold. Partnering with government, non-government and industry stakeholders also provides scope for linking to government work health and safety, public health programs, industry and community programs into the future. The outputs of the Treated Timber Initiative are designed to be maintained on an ongoing basis. In the case of user training, this is intended to be handed over to a government, community and industry partnership to operate at the end of the project 63.

However as discussed in the preceding sections the implementation of the Program had problems maximising scale and overcoming complexity and risk. For example:

- Its scale was limited by the lack of participation by hardware and timber retailers and other government agencies and councils, which Program planning and risk mitigation did not fully anticipate and address. Achieving the scale originally intended was assisted by the digital campaign implemented in the later stages of the Program which reportedly attracted a wider on-line audience. However in the absence of any baseline data and measurement of impact the Program cannot demonstrate that it resulted in any consumer behaviour change other than that which may be assumed to occur simply because the Program existed.
- Its scale was also limited by the funds the EPA sought from the Trust to complete the Program. Given the complexity of educating a diverse mix of consumers and the fact that the EPA considered the Program to be a substitute for regulating CCA use and a platform for potential future regulation, the small quantum

<sup>63</sup> Program business plan, p4



of funds requested by the EPA does not seem appropriate to achieve these tasks. The EHS for example suggests that to achieve and measure consumer behaviour change the Trust would need to invest sizeable funds over the long term<sup>64</sup>. This is the experience of other Major Projects funded by the Trust which generally receive multi-million dollar funding support over 5-10 years. Thus, the small amount of funding sought by the Program and short-term nature of the Program meant that from the outset it faced a high risk that it would be unable to achieve its main desired objective.

- Its scale was further limited by the fact that, contrary to its original intention, Program implementation did not identify or secure a government, community or industry partner willing and able to continue the Program. This objective was a key reason the Trust funded the Program and in response to the Program's final report the EHS recommended that the EPA make available a budget to further build on this work and to consider a possible future project in this area<sup>65</sup>.
- The complexity of obtaining baseline and impact data to support a robust evaluation of consumer behaviour change stimulated by the Program was not identified as risk in the Program risk management plan. This is a significant omission given the intention of the Program and complexity of assessing behaviour change. This combined with the barriers to obtaining data experienced by the Program disabled the Program from doing anything more than delivering its outputs. This outcome did not meet the expectation of the Trust.
- The planning process did not identify at an early stage the need for external marketing/communications expertise to assist the development of the communications strategy. The need for this was communicated to the evaluation by the EPA and members of the EHS who suggested that such expertise would have potentially improved tailoring of community engagement. It is not clear why the business plan did not identify this need at an early stage.
- The business plan was not based on a market analysis. The Trust's EHS proposed in September 2014 that the EPA prepare a report on an Extended Producer Responsibility (EPR) scheme to inform the Program on supply chain issues that could assist the delivery of its objectives. In 2016 the EPA sought a contract variation from the Trust to commission an independent report on an EPR. This was granted, however the commissioning of this work towards the end of the Program meant that it could have no influence on Program design.
- Both the EPA and EHS advised the evaluation that the planning and implementation of the Program was reasonably burdensome. For the EHS this occurred because the business plan and 6 monthly reports prepared by the EPA required significant scrutiny and revision because the EHS remained dissatisfied about the EPA's focus on outcome measurement and pace of output delivery. The EPA considered the level of scrutiny by the EHS to be onerous. However the degree of intervention by the EHS to offer guidance seems proportionate to the problems the Program was experiencing. For example, in August 2015 the EHS had to respond to delays in Program implementation by asking the EPA to reconsider Program design to 'assess the ongoing impact of the project

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<sup>&</sup>lt;sup>64</sup> Consultations with the FHS

<sup>&</sup>lt;sup>65</sup> Minutes of the Environmental Hazards Sub-committee meetings on 23 October 2018



on retail staff and customers with a view to the impact and longevity of project outcomes and develop and monitor against meaningful measures of success'66.

# 4.3.4 Collaboration and partnership

The Program design recognises the importance of collaboration and partnership and contains strong plans for the development and implementation of these features. Some key indicators of this include the following.

- Liaison with Office of Environment and Heritage (OEH). The EPA indicates that it enjoyed substantial support from OEH, which attempted to share the knowledge it gained from the Smarter Choices program, which had similar behaviour change goals. This included research on consumer preferences for receiving information. Implementation of the Program was planned to rely on Smarter Choices program, which had existing relationships with 130 hardware retailers across NSW via a team of field representatives visiting retail outlets to deliver point of sale information and train staff on communicating Smarter Choices program information. The Program's user training module was planned to be delivered (and initially hosted) in partnership with the OEH Learning and Development Section via the OEH Learning Management System (LMS), which would include an external interface for a range of future environmental training modules.
- Consultation with NSW Health and SafeWork NSW. The EPA planned to integrate the Program delivery with existing work health and safety programs, and public health initiatives managed by these other agencies. The EPA advises that it expected strong support from these agencies. However, during the implementation phase, these agencies did not prioritise the Program to the degree expected by the EPA.
- Identification of other government and non-government stakeholders. The Program business plan included plans to build strategic partnerships with various stakeholders to the extent that the delivery of enduring collaborative partnerships is one of the outcomes of the Program. Stakeholders identified for partnerships included:
  - > Department of Education (Schools)
  - > TAFE (timber trades education)
  - Department of Local Government (and 152 local councils)
  - > ECEEN (Early Childhood Environmental Education Network)
  - > Early Childhood Australia (ECA)
  - ➤ Key environment groups (e.g., CUA, KAB, Planet Ark, ACF "Greenhome")

<sup>&</sup>lt;sup>66</sup> Minutes of the Environmental Hazards Sub-committee meetings on 26 August 2015



- Plastics and Chemicals Industry Association (PACIA)
- Waste Management Association of Australia (WMAA)

Despite these intentions the Trust's EHS considers that one major impediment to the effectiveness of the Program was the lack of a whole of government approach to dealing with CCA treated timber issues. The EPA suggests that one of the reasons for this was confusion within government about which agency ultimately held the responsibility for the issue. For example, there was confusion about whether dealing with treated timbers was a public health, workplace or environmental portfolio responsibility.

#### 4.3.5 Governance, accountability, probity and transparency

#### Governance by the Trust and EPA

The Program is within the functions of the Trust as defined in the *Environmental Trust Act* 1998. Section 8 of the Act specifies that the Trust may make grants for projects that help to carry out its objectives. The goals, objectives and outcomes of the Program are consistent with the objects of the Trust to promote waste avoidance, resource recovery and waste management.

Section 9(1) of the *Environmental Trust Act 1998* (the Act) requires that a Technical Committee be established to assess applications for funding under each of the programs administered by the Trust. The Program business plan requires the Trust to appoint and be advised by the Environmental Hazards Subcommittee (EHS) on the strategic direction of the Program.

The Trust has complied with the Act and business plan requirements. The EHS was appointed and advised on the Program. The EHS has performed its functions in accordance with s.14 of the Act which requires that:

- The Trust is to refer each application for a grant to a Technical Review Committee of the Trust;
- The committee is to assess the practicability and overall worthiness of each application referred to it and provide the Trust with its assessment; and
- A member of a committee may nominate another person to take the member's place in assessing a particular application if the member considers that the nature of the application requires the expertise of that other person.

The funding principles of the Trust govern the use of the Program grants it allocates. These principles are that:

- Grant funding is most appropriate for:
  - > actions that will fix a problem or significantly change behaviours around that problem
  - niche filling (where no other funding is available)



- > early intervention of emerging issues, where an early injection of resources will allow innovation and address a persistent problem
- > actions that provide a platform for further action
- > additionality/complementary actions
- > proof of concept projects
- Grant funding should be used to foster co-contributions, strategic collaboration, and longevity of outcomes.
- All funded projects must meet at least one of the objects of Trust.
- Projects cannot be for core business/cost shifting/replacement funding/ongoing maintenance or to fix policy or program failings.

The primary ways the Trust and EPA appear to maintain the accountability of the Program are through the:

- Business plan on which the purpose and selection criteria for Program funding is based;
- Grant agreement between the Trust and EPA which sets out their respective roles and responsibilities;
- Reliance on recommendations for funding from the EHS;
- Milestone and completion reporting by EPA including budget expenditure and compliance with project measures;
- Regular feedback by the Trust to the EPA on grant management; and
- This current evaluation of the Program.

The figure below illustrates the Program governance structure.



#### Figure 5: Program governance<sup>67</sup>

#### **Program approval**

- Trust provided in principle approval based on recommendation from Minister under New Government Priorities stream
- Trust final approval of funding subject to business plan prepared by EPA and recommendation by the Trust's Environmental Hazard's Subcommittee (EHS)



#### Program design/management

- Business plan prepared by EPA defined outcomes, outputs and project measures
- Trust's EHS reviewed business plan and recommends funding approval to Trust
- Grant Agreement between EPA and Trust governs respective roles

#### **Grant allocations**

- Made by Trust to EPA in line with its funding principles
- EPA contractually required to report on milestones
- Milestone payments subject to compliance with milestone objectives, project measures and expenditure conditions
- Trust can terminate grant agreement for non-compliance

#### Program oversight by EPA

 Hazardous Incidents and Environmental Health section manages the grant on behalf of the EPA

### **Program oversight by Trust**

- EHS appointed by the Trust reports to Trust on program issues.
- EHS is supported by Trust Administration

 $<sup>^{67}</sup>$  Aegis Consulting Group 2018 based on information from the Environmental Trust and EPA



#### Risks to governance

There are some risks to governance which are similar to the other risks identified in this report. These are as follows:

- The differences in scoping requirements for projects proposed under the New Government Priorities stream. As discussed elsewhere in this report the process enabling Ministerially supported concepts/projects to be proposed for Trust approval without the same scoping requirements as other Major Projects streams increases the risk that programs in the New Government priorities stream will not meet their objectives or deliver the expectations of the Trust.
- Accountabilities within agencies. The EPA program management team suggests that the Program lacked an executive sponsor within the EPA and any Ministerial level support. The program managers suggest that this disabled them from seeking wider organisational support to solve barriers to Program effectiveness such as confusion within government about portfolio responsibilities for treated timber and disinterest from retailers. Stronger support may have potentially assisted in securing retailers interested at CEO level. It may also have assisted in encouraging hardware, renovation and other relevant television shows to feature information on the selection of timber products and the public health issues associated with CCA. These outcomes would have increased the capacity of the Program to achieve its results.

It is not clear why the program managers felt isolated from executive support within the EPA, given that the Program was proposed to the Trust with Ministerial backing. In normal circumstances Ministerial support for a Program should enable program managers to elevate problems within agency hierarchies and gain support for solutions. However it is also not uncommon for agencies to suffer from structural or organisational dysfunction which disrupts normal operations, particularly when they are exposed to ongoing reforms, loss of corporate knowledge, staff turnover and other related issues. The Trust should be especially mindful of this and when considering proposals under the New Government Priorities stream and it should pay special attention to assessing the capacity of agencies to design and deliver programs.

• Inability of the EPA to control communications outside its control. The EPA suggests that its capacity to ensure that retailers and other project partners were displaying promotional material and providing information brochures to consumers was limited because the Smarter Choices platform on which the Program was relying switched from site visits to on-line training. Because the EPA was relying on OEH staff on the ground, this reduced the capacity of the EPA to regularly assess the extent to which material it supplied to retailers was being distributed to consumers by them. The EPA commissioned at audit of retailers at the end of Program implementation to identify the extent to which information was being disseminated, and this demonstrated that only about 20 per cent of retailers contacted were distributing material. By switching its primary means of communication to a digital platform the EPA was able to overcome this problem.



• Reporting on implementation. Based on the responses of the EPA and EHS the evaluation observes that the EHS was required to provide the EPA with significant feedback and revisions to the 6 monthly and annual reports throughout the Program. The EPA has a view that responding to these revisions increased its administrative burden. However the EHS and Trust Administration consider that their level of oversight and report revisions were necessary to ensure the Program continued in the agreed direction and that the EPA maintained a focus on assessing the extent to which the Program led to actual consumer behaviour change. The Trust Administration was particularly concerned that the EPA did not advise it or the EHS until at the end of the Program that the agreed actions to collect baseline and impact data had not been possible to pursue. These problems may have been avoided if the Program design had included a comprehensive market analysis to inform realistic data collection and Program objectives.

#### Recommendation 2: Program management

The following important lessons for program management should be considered:

- (a) Prior to being considered by the Trust, all proposals under the New Government Priorities funding stream should be subject to the same process and requirements for co-design and scoping as the Trust's Major Projects Strategic funding stream. This will provide the Minister the flexibility to continue to bring forward new priorities for funding but will ensure proposals are well designed and fit for purpose by meeting Trust Objects, satisfying expectations arising from an analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT), and meeting risk management standards. This will reduce the risk of design failures which lead to projects being less effective and efficient.
- (b) Agencies who are proposed to deliver projects for funding under the New Government Priorities stream should demonstrate that there are no other more cost effective solutions to influencing consumer action, such as via regulation. Proposals should detail the costs and benefits of regulatory and other options previously considered and why they are inferior to receiving program funding from the Trust.
- (c) Proposals for Trust funding under the New Government Priorities stream which are specifically submitted as substitutes for regulation or a foundation for future regulation should include the detailed reasons why immediate regulation is an inferior solution and the timeframe for proposed future regulation. This will assist the Trust to examine the need for funding and whether project funding is sustainable until regulation is introduced.
- (d) Prior to being approved for funding by the Trust projects which propose interventions for consumer behaviour change should demonstrate the following design features:
  - All projects should have examined their Strengths, Weaknesses, Opportunities and Threats (SWOT) to ensure they have properly evaluated actual market need for the intervention and are proposing solutions which can address that need effectively and efficiently. This should include:



- Analysis to identify how the market is operating, whether there are any barriers to consumers and stakeholders participating in the Program, and the best ways to communicate with consumers based on their preferences/priorities and the outcomes being sought;
- > Analysis of preliminary baseline data about consumer behaviour and application of this data as a platform from which to detail how and why the proposed project will influence behaviour change;
- > Demonstrated consultation with the behavioural insights teams within the NSW Government to gain data and advice to inform their design; and
- An outcome measurement regime that is based on realistic assumptions about risks and barriers to obtaining data from consumers and includes risk mitigation strategies which can satisfy the Trust's minimum expectations about outcome delivery.
- Where required, relevant external experts should have been engaged at an early stage to advise on market and supply chain dynamics, relevant commercial issues affecting program implementation and preferred communication/marketing techniques to influence the audiences the Trust normally targets for behaviour change.
- The scope and implementation of programs requiring the participation on non-government and government stakeholders should be designed in consultation with those stakeholders. Projects which have not been co-designed with stakeholders who are being proposed as implementation partners should not be supported by the Trust.
- (e) All proposals considered by the Trust which are interventions for consumer behaviour change should be subject to the following additional assessment:
  - Agencies should demonstrate that they have the internal capacity and organisational commitment to manage this kind of program over the long term. This should include:
    - A demonstrated holistic approach to tackling a problem within which a consumer education campaign is one component and supported by other policy and regulatory solutions:
    - > Demonstrated solid relationships between the agency and any industry and non-government partners who may be required to implement the program:
    - > A funding commitment from the agency to continue supporting program objectives after the Trust funding has expired; and
    - > The corporate knowledge and capacity to manage the program with and without the assistance of external expertise.



# 5. PROGRAM EFFECTIVENESS

The effectiveness of the Program depends on whether funding is delivering the Program outputs, outcomes and related benefits. The Program results in relation to these issues are discussed below.

### 5.1 Program outputs

During Program implementation the originally agreed outputs were varied to remove the action regarding improved labelling of CCA treated timbers. This was because of legislative changes affecting the marketing of timbers which made this action redundant. The remaining outputs have been assessed by the evaluation and discussed below.

# 5.1.1 Development and implementation of a training module for retailers, users and potential users of CCA treated timber, councils and associated trades and professions

During the Program scoping in 2014 the Trust proposed that distribution of materials and training to retailers be conducted in partnership with the OEH Smarter Choices hardware sector program. In 2016 the Smarter Choices program was assessed as part of an evaluation of all OEH's sustainability programs<sup>68</sup>.

Key findings of that evaluation about the Smarter Choices program included the following.

- The program had been a collaboration between OEH and Sustainability Victoria since 2010.
- In 2014/15 the program was focussed on face to face training of staff in hardware retail stores with 234 retail outlets participating and 1,611 store employees receiving training. The two major hardware retail companies participating in the activity were Mitre 10 and Bunnings Warehouse. One of the key benefits expressed about the activity from external participating stakeholders was that the training was neutral to product type and this had customer benefits.
- In 2015/16 the program was varied to an on-line module to extend the scale and scope of training. At the same time the Australian Government Department of Industry's Equipment Energy Efficiency (E3) team joined the collaboration with a view to apply the approach nationally. To test the viability of the approach pilot projects were designed to focus training on treated timber and lighting. These pilot projects commenced in April 2016.
- The program was intended to influence consumer behaviour change by addressing the information asymmetry consumers experience in relation to sustainable products. However, behaviour change is a long-term exercise that should be framed within rigorous assessment methodologies which the program lacked. There was no evidence that the training was framed in this way or delivered desired results in behaviour change by consumers.

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 $<sup>^{68}</sup>$  Aegis Consulting Group, Mid-term evaluation of sustainability programs 2016  $\,$ 



Key recommendations of the 2016 evaluation of OEH's sustainability programs, including the Smarter Choices program included the following 69:

- "OEH should develop and apply a stricter template methodology for the practice and measurement of collective impact and behavioural change based on existing Australian and international lessons including lessons from the behavioural insight teams in the NSW Departments of Premier and Cabinet and Family and Community Services.
- If OEH is committed to consumer and market behaviour change as a policy and program tool, it should consider reimagining the sub-programs and activities in the sustainability programs into a separately funded stand-alone program dedicated to enabling OEH to learn lessons and build its capability as an agent of change".

The Treated Timber Initiative was developed 2 years before the evaluation of OEH's sustainability programs and thus the lessons and recommendations of that evaluation were not available to the Trust and EPA during the design of the Program.

As a result, the Program was subject to the changes in the Smarter Choices program from face to face to on-line training. The EPA reports that two training modules were published in 2016. One was part of the OEH Smarter Choice program for retail sector employees (substantially funded by OEH) and another was a consumer/user training module launched on the EPA website. Improvements to the EPA module were published in 2017.

The training modules were clearly intended to provide appropriate advice to consumers which supported the delivery the Program objectives. However, there is no evidentiary basis that supports a conclusion that:

- Trained retail staff delivered the appropriate messages on a consistent basis or that consumers changed their behaviour temporarily or permanently in response to any provided advice; or
- General users/consumers using the training module on the EPA website changed their behaviour temporarily or permanently in response to any provided advice.

No specific training modules appear to have been developed for local councils or associated trades and professions. This may have reduced the impact of the Program because a large proportion of CCA treated timber enters the waste stream via construction and industry waste and workers and businesses in this sector do not appear to have been subject to specific communications.



#### 5.1.2 Training for point of sales staff at retailers to enable them to advise consumers

The Program reports that the training module was completed by 596 employees of Bunnings and Mitre 10 nationwide<sup>70</sup>. This volume of employees is consistent with the findings of the 2016 evaluation of OEH's sustainability programs which identified that 608 employees of Bunnings and Mitre 10 had completed the treated timber online training module from April 2016 under the Smarter Choices program<sup>71</sup>.

However, there is one inconsistency. The Program reports that its figure is nationwide. If this is the case, then it reduces the effectiveness of this output as there is limited benefit to the Trust from funding training for retail staff to advise consumers in other jurisdictions.

# 5.1.3 Development and application of public communication and education materials including displays at retail outlets; information dissemination via mass media, specialised media and trade and public events; and other educational materials tailored to general and specialised audiences

Based on Program reporting it appears that substantial material was produced and distributed to support the delivery of this output. It is estimated that:

- 30,000 print brochures and 1500 posters were produced and distributed. Versions in English, Chinese and Arabic were produced and distributed.
- Recipients of material included 175 NSW Bunnings and Mitre 10 stores, 93 Home Timbers & Hardware Group and 162 other hardware and timber retailers and a range of councils, EPA offices, National Parks and Wildlife workshops, TAFES and technology departments in all State high schools.

In addition, the Program reports that the EPA attended and promoted information at 7 Events which were the 2015 Sydney Home Show; 2016 Sydney Home Show; 2016 Penrith Home Show; 2016 St George & Sutherland Home Show; Local Government NSW Conference; NSW Council Rangers Conference; and Environmental Health Conference.

Beyond this the Program reports that the EPA developed comprehensive information on its website including the interactive training module for the general public who may be interested in using CCA treated timber. The evaluation has reviewed the EPA web-based information and considers it to be robust and fit for purpose. To drive on-line traffic to the EPA website and generate wider interest in the objectives of the Program the EPA engaged digital marketing experts in 2016 to develop what the evaluation understands to be an inbound marketing strategy. The Program reports that this strategy, which included on-line

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<sup>&</sup>lt;sup>70</sup> Program, final report October 2017, p2

<sup>&</sup>lt;sup>71</sup> Aegis Consulting Group, Mid-term evaluation of sustainability programs 2016, p58



advertising to target audiences and click bait, attracted over 46,000 views of a CCA treated timber information video embedded in the EPA website and EPA YouTube channel.

A key lesson identified in Program reporting is that on-line digital marketing strategies are much more successful in targeting and attracting audiences than traditional paper (brochure/poster) based initiatives. This lesson is consistent with the conclusions of the evaluation in section 4 regarding outcome setting.

## 5.1.4 Building strategic partnerships between government, industry and non-government organisations to achieve reductions in the use of CCA timber in applications for which it is not suitable and improve waste management

The Program reports that during its implementation partnerships were developed with:

- Key state government agencies and programs including OEH's Smarter Choices program, NSW Health's Environmental Health Branch, SafeWork NSW, the National parks and Wildlife Service, NSW Department of Local Government's Sustainable Choice program, and the public education and TAFE sectors.
- NSW local councils; and
- Major hardware and timber retail chains, independent retailers, and timber merchants.

The scope of the evaluation has not extended to consulting with government agencies and local councils to assess the strength and success of these partnerships. However, a range of timber retailers were attempted. When contacted, these retailers either did not respond; expressed reluctance to contribute to the evaluation; or provided cursory responses indicating that they had no participation in the Program and little interest in doing so. These responses suggest that the Program has not successfully established partnerships with retailers or where relationships have been initiated, they are unlikely to have any lasting effect beyond the life of the Program.

Members of the Trust's EHS expressed the view that a significant barrier to the effectiveness of the Program was the absence of a whole of government approach to dealing with treated timber and its risks. Consultations with the EPA suggest that a barrier to the effectiveness of the Program was some level of confusion within government about which portfolio should lead a response to treated timber risks. This occurred because there was uncertainty whether treated timber primarily represented an environment, health or workplace risk.

These views suggest that while partnerships with government agencies were pursued, they may not be able to be regarded as strong, enduring and effective. The one exception to this is likely to be the partnership between the EPA and OEH.



## 5.2 Program outcomes

The agreed Program outcomes and their effectiveness is discussed below.

## 5.2.1 Effective participation in the TTI by retailers, Councils, trade organisations and other government and non-government organisations to support the program objectives

As discussed in section 5.1 the Program reached out to a range of organisations in these sectors to harness their participation. In some circumstances participation by third parties was effective. For example, the availability of OEH's Smarter Choices program knowledge and resources was a critical input for the Program. However, there is limited evidence that other organisations participated in the Program effectively to deliver the suite of desired outcomes.

# 5.2.2 A substantial increase in retailer, user and consumer awareness to an extent that significantly reduces the use of treated timber and improves its appropriate disposal consistent with waste policy priorities

The assessment of whether the Program has achieved this outcome depends almost entirely on the quality of:

- Baseline data about the extent to which retailers, users and consumers were aware of treated timber issues and risks prior to the Program;
- Baseline data about the nature of treated timber use and disposal consistent with waste policy principles prior to the Program; and
- Program data about the extent to which the Program has improved these baselines.

The Program design included a range of baseline data that the EPA undertook to collect. However during the Program implementation the EPA faced a range of difficulties collecting this information and was unable to provide any assessments on the actual extent to which the Program has achieved its intended improvements in relation to awareness and action. The Trust advised the evaluation that it was not aware that the EPA had not collected this data until the final report was submitted.

It can be assumed that some positive impact has been made on retailer, user and consumer awareness by virtue of the Program's success in:

- Distributing a large volume of printed material directly to a wide range of timber retailers;
- Distributing printed material and communicating key messages at building industry events;
- Enabling a reported 596 retail staff in hardware stores to undertake a training module to equip them to increase consumer awareness and improve consumer action; and
- Attracting about 46,000 views of an on-line video intended to increase consumer awareness and influence action.



However, the actual nature and extent of this impact is unknown. The Program reports that there were barriers to obtaining data about the impact of the Program for the following reasons:

- The training module available on the EPA website for general users did not include a methodology to assess its impact on behaviour change because the module developer recommended against it to reduce complexity and encourage users to complete the module. The Trust Administration advises that this amendment was not communicated to it until the end of the Program and thus it had no opportunity to consider alternative approaches which could have satisfied this need. The EPA reports that it considered conducting interviews with retailer staff as an alternative, however this was not supported by retailers. There is no evidence that the EPA considered other options or raised this with the Trust to jointly examine alternatives.
- The training module for retail staff available via the OEH Smarter Choices program did not contain a methodology to assess its impact on behaviour change;
- Hardware companies did not permit their retail staff who had competed the training or more generally to be surveyed to assess whether they had influenced
  any behaviour change.
- A wider consumer survey was not undertaken because it was considered that the Program did not have sufficient recognition within the general public. This suggests that the Program had little opportunity to succeed in meeting its objectives as a high awareness amongst consumers could be a regarded as a pre-requisite for achieving the Program intention.

# 5.2.3 Enduring partnerships between government, business and non-government organisations to maintain consumer awareness and responses after the grant has ended

Section 5.1.4 discusses the barriers to the effectiveness of partnerships between the EPA and other government and non-government organisations during Program implementation. These barriers mean there is limited evidence that any partnerships are enduring beyond the life of the Program.

In September 2017 the Program conducted a site audit of 37 organisations (timber retailers and council customer service centre locations) to assess ongoing awareness of the issues promoted by the Program and display of printed materials. The Program reports that:

- About 30 percent of the staff spoken to at these sites had knowledge of the Program.
- 20 percent of sites had materials on hand or displayed (either they had run out or not displayed at all).
- However, interest in the Program was strong (75 per cent), including among those who had not previously been aware of it. Accordingly, additional stock
  materials were handed out at these site visits with an invitation to contact the EPA for more information.

This suggests that while ongoing Program participation is low, there remains a significant appetite for information. This is consistent with the general gaps that can occur between good intentions to be involved in something perceived to be useful and putting intentions into practice. The effectiveness of any program depends on its capacity to bridge these naturally occurring gaps. As discussed in section 4, to overcome these gaps programs often require a robust



understanding of need, market dynamics, consumer preferences and commercial incentives which program partners respond to. This was not present in the case of the Program.

#### 5.2.4 The ongoing availability of education materials after the grant has ended

The Program business plan included the following assumptions/intentions about the continuity of Program impacts. The business plan proposed that:<sup>72</sup>.

- "The on-line timber user training module may be made mandatory for CCA treated timber users using an appropriate regulatory mechanism and the cost of hosting the training could be taken up by a partnership of stakeholders (similar to the Electrical Industry Asbestos E-Learning Package). This partnership may include CCA producers/suppliers and timber treatment companies and major retailers, government organisations (e.g., the EPA, WorkCover, and NSW Health and local government), and non-government organisations.
- The training and public communication/educational materials will remain available and be used into the future and distributed via Environment Line and the EPA's website, retailers, via stakeholders (such as councils) and through the regulatory activities of the EPA's Chemicals Policy function. The EPA also intends partnering with TAFE so that the program messages can be integrated into the curriculum.
- Materials, including training, developed in the course of the Treated Timber Initiative will support future regulation around the use of treated timber".

The capacity of the Program to fulfil all of these objectives was affected by its inability to secure the support of anticipated partners during the Program. This is discussed in detail elsewhere in this report.

The EPA continues to provide access to Program material via its website and this is an enduring benefit delivered by Program funding. However the on-line traffic to the EPA website seeking this information is likely to be less significant than during Program implementation when specific digital marketing techniques were used to drive this traffic. The EPA does not seem to have developed any strategy to respond to the recommendation of the EHS that the EPA provide funding to build on the work already undertaken<sup>73</sup>. Given that the EPA proposed the Program as a substitute for regulation and platform for potential future regulation it would seem appropriate that it invest in continuing a digital marketing strategy to maintain awareness of CCA and support its original rationale for the Program.

Printed materials provided to retailers, councils and other organisations may continue to be used by those organisations, depending on their level of commitment to maintaining consumer awareness about treated timber. This may be an enduring benefit to the extent these materials are consumed and acted upon.

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<sup>&</sup>lt;sup>72</sup> Program business plan, p3

<sup>&</sup>lt;sup>73</sup> Minutes of the Environmental Hazards Sub-committee meetings on 23 October 2018



### 5.2.5 An examination and report on options for an Extended Producer Responsibility (EPR) scheme for treated timber

During the Program a report on an EPR scheme was completed. The evaluation has reviewed the report and considers it to be valuable. The EPA and Trust's EHS also consider the report to be valuable. As discussed in section 4 the EPA and Trust's EHS acknowledge that the report should have been prepared as part of Program scoping and doing so may have improved the effectiveness of the Program. Nevertheless, the report is an enduring benefit funded by the Program to the extent that the Trust, EPA and OEH use it to shape other programs intended to promote behaviour change in response to materials which are hazardous risks and problem wastes.

## **Recommendation 3: Program effectiveness**

- (a) Future program design should consider applying recommendations 1 and 2. This would reduce risks to the effectiveness of program outputs and outcomes which are often created by failures in program design, scope and ongoing assessment during implementation.
- (b) The EPA should consider funding an ongoing digital marketing strategy to drive traffic to its website to increase and maintain community awareness about CCA treated timber. This is consistent with deploying a community education campaign as a substitute for regulation.



## 6. PROGRAM EFFICIENCY

## 6.1 Approach to assessing efficiency

## 6.1.1 Allocative efficiency

A traditional approach to assessing whether any program is an efficient allocation of resources involves examining whether the grant is maximising the economic well-being (welfare) of society. The efficient allocation of resources usually occurs in a competitive, freely functioning market when supply is in equilibrium with demand and therefore the marginal cost of government expenditure is equal to the marginal benefit gained by people using it. However, this approach is not applicable to the Program for the following reasons:

- As established in section 2.3.3, the size and nature of the Program does not require an assessment of the whole of life cost issues that would form the basis of determining the efficiency of the allocation.
- Expenditure in the environmental sector does not lend itself to a traditional assessment of allocative efficiency<sup>74</sup> because environment values are complex and multi-dimensional. Many environmental activities are not valued by markets but communities intrinsically value them. Even where individuals have little or no use for a given environmental asset or attribute, they would nevertheless feel a 'loss' if such things were to disappear. Thus, it can be meaningless to assign an economic value to an environmental asset, activity or expenditure.

In circumstances where a traditional approach to assessing allocative efficiency is not possible governments can still consider that it is efficient to allocate spending to environmental programs to achieve policy, legislative or program objectives to achieve a public good or to address market failure. The objective of the Program is consistent with strengthening the capacity of NSW to reduce the risk of hazardous materials to environment and human health and to meet its resource recovery targets, both of which represent a public good. Accordingly, to the extent possible given the sources of data, this evaluation considers whether the Program represents allocative efficiency in non-price terms based on its value to the consumers of its services.

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<sup>&</sup>lt;sup>74</sup> **Allocative efficiency** occurs when there is an optimal distribution of goods and services. This involves considering the preferences of consumers and calculating whether the price that consumers are willing to pay is equivalent to the marginal benefit that they receive from the service of good. Allocative efficiency occurs when the marginal benefit of the good or service equals the marginal cost of purchasing it.



### 6.1.2 Technical efficiency

Technical efficiency requires that goods and services be produced at the lowest possible cost. This is a key component of cost-effectiveness which is the measure of how efficiently the outcomes of a service were achieved.

As discussed elsewhere in this evaluation, the primary purpose of the Program is to increase public awareness of the appropriate use, management and disposal of hazardous materials and waste. There is evidence that the Program engaged with various organisations to disseminate information to pursue this purpose and that there was some consumer consumption of the information provided.

However, the management of the Program does not include methodologies which provide evidence of any long-term benefits or trends towards long term benefits. Currently, reporting under the Program is based on providing evidence of inputs and outputs to pursue the purpose of activities, not evidence of outcomes of those activities. For example, the evaluation could not identify any evidence that consumers changed their behaviour in line with the Program purpose after consuming Program information.

Accordingly, there is insufficient data to assess the cost-effectiveness of the Program. But the evaluation considers some issues about technical efficiency.

## 6.2 Assessment of efficiency

## 6.2.1 Allocative efficiency

#### Market and intrinsic value

The complexity of environmental expenditure assessment partly arises because there is a need to examine (1) sustainability issues such as how the welfare of society is affected if future generations have reduced opportunities to enjoy 'natural assets'; and (2) the intrinsic value of activities that are not valued by markets. The very existence of the Program and the kinds of activities pursued under it are based on the fundamental assumption that the welfare of society would be worse off if poor environmental management reduced access to and the quality of environmental resources for future generations. Consistent with this assumption, the Program has the primary purpose of enabling and encouraging action in relation to improved environmental management.

The initial interest of organisations to participate in the Program may be one indicator that they attach an intrinsic value to environment protection and resource recovery. The reported ongoing similar interest amongst 75 percent of surveyed organisations after the Program ended may affirm the presence of this intrinsic



value. Although this would need to be qualified by the findings of this evaluation that organisations had limited ongoing interest in Program participation and that their participation may have had limited effectiveness. The volume of on-line views of the EPA's video communicating the Program's key messages is a further indicator that consumers many attach an intrinsic value to environment protection and resource recovery.

#### Impediments to efficiency

There are some impediments to potential allocative efficiency (value to consumers) which arise from issues discussed in detail elsewhere in this report. These issues are as follows.

- Program outcomes and outputs. As discussed in the evaluation the Program outcomes and outputs were not developed with reference to any needs/gap or SWOT analysis or full understanding of market dynamics affecting treated timber in waste streams, commercial incentives which business and industry partners respond or marketing expertise to identify and target consumers and consumer messaging. This increases the risks that Program funding is allocated to expenditure on activities which are not able to maximise delivery of Program objectives.
- Opportunity costs. While the Program is intended to increase consumer awareness, it may have dissuaded more effective engagement with and responses by organisations and consumers. This is because the small amount of funding sought by the EPA was not based on a deep analysis of the market need and the risk assessment did not fully anticipate the likely responses of assumed partner organisations. A SWOT analysis during Program planning may have identified a different funding amount or need that was more able to meet similar Program objectives.
- **Program evaluation**. A fundamental barrier to Program efficiency is the long-term nature of consumer behaviour change. The short-term nature of the Program means that it cannot genuinely be involved in guiding and monitoring behaviour change. It's capacity to stimulate an enduring process of behaviour change is limited by failures in Program design and limited responses from third party organisations who are also agents of change.

The recommendations in this evaluation in relation to Program appropriateness, program management and effectiveness can improve the allocative efficiency of the Program.



## 6.2.2 Technical efficiency

#### Inputs and outputs

As identified in this evaluation, the cost of the Program (primary input) is \$330,000 or 0.004 per cent of total Trust funding in 2014-15 alone. The Program funding included an allocation to the EPA of:

- About \$176,000 for staff salaries. This represents the administrative budget of the Program and is 53 percent of the total funding. At the end of the Program actual costs were 6 percent higher than originally budgeted for.
- About \$59,000 for the cost of consultancies. At the end of the Program actual costs were 4 percent higher than originally budgeted for.
- About \$35,000 for the cost of producing campaign materials. At the end of the Program actual costs were 8 percent lower than originally budgeted for.
- About \$40,000 for the cost of Program publicity. At the end of the Program actual costs were 1 percent lower than originally budgeted for.

During 2016-17 the EPA amended the original budget allocations to assist the effectiveness of the Program in meeting its outputs and outcomes. The amendments were:

- An increase in the consultancies budget at the expense of the salaries budget to support the preparation of an independent report on the ERP scheme. The preparation of this report was a defined outcome of the Program. The EPA gained retrospective approval of this variation from the Trust on the basis that the EPA required external expertise to prepare this report.
- An increase in the publicity budget at the expense of the materials budget to support the digital marketing campaign intended to drive on-line traffic to the EPA website. This was necessary after the distribution of materials to organisations proved ineffective in expanding consumer awareness. The EPA gained retrospective approval of this variation from the Trust on the basis that the digital marketing campaign would increase the opportunity to deliver Program objectives.

For these costs, the activities (outputs) of the Program deliver several common characteristics.

- They are ambitious in nature. They demonstrate this by seeking to maximise consumer awareness about CCA treated timber across NSW and contribute to improvements in risk management and resource recovery. This is a positive output if the Trust is willing to absorb increased risk that comes with this ambition.
- They have wide reach. The demand for the activities is high amongst consumers and a wide range of government and non-government organisations. This is evidenced by the level of consumption of information available on the EPA website and the number of organisations willing to be contacted by the



EPA. This is a positive output given the small amount of funding requested by the EPA. It can have positive consequences for the reputation of the EPA and Trust, unless the ambition of the activities creates expectations amongst stakeholders that cannot be met.

- They are facilitative. The activities require voluntary financial and/or in-kind contributions from participating organisations including costs associated with their staff undertaking training via the on-line modules provided by the Program and time taken to display and distribute materials to consumers. The activities also encourage individual consumers to spend their time accessing and absorbing material. This is a positive output.
- They are based on volume of action. They generally measure their significance by the number of consumers reached, number of organisations engaged or partnered, and volume of materials produced and distributed. This is not unusual amongst programs as government tends to direct funding to measurable outputs. However, in the absence of evidence of long term benefits these measures alone do not support an assessment of outcome delivery.
- They attract good responses. The stakeholders consulted during this evaluation are generally supportive of the activities and consider them to be valuable. This enables the Trust to build on the activities and leverage stakeholder interest more widely.

### Impediments to efficiency

- Program design. As discussed elsewhere in this report the Program was not developed on the basis of a SWOT analysis, co-designed with industry, nor on a full understanding of market need. This created the risk from the outset that the Program had unrealistic objectives and would spend funds on activities that did not maximise the capacity of the Program to deliver its objectives. This is what occurred. The failure to engage the assistance of communications/marketing expertise during Program design increased the burden on the EPA and the EHS to respectively shape and advise on communications activities which they admit they were not expert in. This increased the risk that the Program would experience inefficient and ineffective community engagement. When the EPA did commission external assistance to produce the EPR report and develop a digital marketing campaign, it was able to extract increased value for Program expenditure.
- Insufficient collection of data on baselines and long-term benefits. The value of allocated funding depends on whether it is supporting the delivery of key outcomes such as stimulating behaviour changes which increase recovery and reuse of problem wastes. The delivery of these outcomes can occur over the long term. To assess long term results solid baseline data should inform Program objectives to ensure they are necessary, practical and achievable. The Program included these features but the EPA faced barriers to their delivery and was not able to achieve them.

All the recommendations in this evaluation in relation to Program management and effectiveness should improve the technical efficiency of the Program.



## Recommendation 4: Program efficiency

(a) Future program design should consider applying recommendations 1, 2, and 3. This would improve potential allocative efficiency (value to consumers) and technical efficiency.



#### 7. VALUE FOR MONEY

#### 7.1 Assessment

It cannot be concluded that Program outputs have no or limited value. The existence of the Program is evidence of its importance to government objectives. Stakeholders attribute a reasonable amount of value to the Program. However, it is also not conclusive that the activities of the Program represent value for money because current approaches to program management are deficient to an extent that reduces program effectiveness and efficiency. These have been discussed in the evaluation and are applied in the value for money assessment in this section.

The value for money assessment based on the methodology outlined in section 2 of this evaluation is provided in the table below. While the methodology to assess value for money is based on examining delivery of government objectives and non-cost issues, the table also includes an assessment of cost issues arising from the assessment of allocative and technical efficiency.

The assessment in the table can be read in accordance with the following key.

Meets value for money criteria	Needs improvement to meet value for money criteria	Does not meet value for money criteria
This means that an assessed	This means that an assessed element of the Program has some	This means that an assessed element of the
element of the Program contributes	features which are valuable, but other features may not	Program does not support the overall value for
sufficiently to the overall value for	contribute to value. Accordingly, the assessed element requires	money.
money.	improvement for it to fully support the overall value for money.	

The assessment shows that overall the Program requires improvement in relation to most non-cost and cost criteria to represent value for money. The Program includes some risk exposures which limit the Program's value for money and should be addressed if the Program is to be continued.

## Recommendation 5: Value for money

(a) Recommendations 1 to 4 in this evaluation should be implemented to improve the overall value for money of future initiatives like the Program.



Table 11: Value for money assessment

Assessment factor	Criteria	Value for money assessment	Status
Delivery of government objectives	Delivery of legislative and/or policy objectives	To the extent that the EPA, Trust and NSW Government are committed to improving the management of hazardous wastes and increasing the diversion of problem wastes from landfill, the intent and principles underpinning the Program are broadly consistent with the:  Specific legislative obligations of Trust.  Corporate goals of NSW EPA.  Policy priorities of the NSW Government contained in the Pesticides Act, WARR Act and WARR Strategy.  The Program is also consistent with the traditional role that governments play in educating consumers about risks.  However, the appropriateness of the Program also depends on the practicality of implementing its purpose and the nature of implementation actions (the fitness for purpose). The Program is not entirely fit for purpose (see non-cost issues below).	
	Promotion of public good	The goals and related objectives of the Program are a public good. This assumes that the welfare of future generations would be decreased if current behaviours fail to manage hazardous materials effectively and increase the recovery and reuse of problem wastes.	
	Support for regional service delivery	The Program is intended to be available to consumers and organisations state-wide including regional councils.	
Non-cost issues	Fitness for purpose	The Program is not entirely fit for purpose because of the risk exposures identified below. The fitness for purpose can be improved by implementing recommendations 1,2,3 and 4 in the evaluation.	
	Risk exposures	<ul> <li>There are several risks associated with the Program including:</li> <li>Program design and scope including outputs and outcomes were not developed on the basis of a needs/gap analysis including (1) a full understanding of market dynamics that shape the</li> </ul>	



Assessment factor	Criteria	Value for money assessment	Status
		demand for treated timber, its use and contribution to the waste stream as a problem waste; (2) commercial issues that would discourage and encourage businesses to participate in the Program; and (3) marketing strategies and techniques that respond to the preferences and priorities of consumers and other target audiences. This increases the risk that the Program is not addressing genuine market failures, has the wrong ambition and direction and/or funds activities that do not optimise outcome delivery.	
		There was a lack of interest from assumed Program partners within and outside government.	
		<ul> <li>There was no whole of government approach to dealing with CCA treated timbers and this</li> </ul>	
		contributed to confusion within government about which portfolio should lead a response to its risks and management.	
		The EPA was unable to collect the following data sets which the Program business plan had included as actions:	
		Baseline data about the extent to which retailers, users and consumers were aware of treated timber issues and risks prior to the Program;	
		<ul> <li>Baseline data about the nature of treated timber use and disposal consistent with waste policy principles prior to the Program; and</li> </ul>	
		Program data about the extent to which the Program has improved these baselines.	
		The evaluation makes recommendations to improve the management of these risks in the future.	
	Benefits to be obtained from the	The Program delivers a range of immediate benefits. These include:	
	purchase	<ul> <li>The Program supports the NSW Government's management of the Pesticides Act, waste hierarchy and resource recovery targets.</li> </ul>	
		<ul> <li>Management of the Program is broadly consistent with best practice principles.</li> </ul>	

**Evaluation of the Treated Timber Initiative** 



Assessment factor	Criteria	Value for money assessment	Status
		<ul> <li>A collaborative approach was taken by the Trust, EPA and OEH in relation to implementing the Program via available platforms for maximum potential reach – the OEH Smarter Choices program.</li> </ul>	
		A wide range of government and non-government organisations were made aware of the Program and the need to increase consumer awareness about CCA treated timber.	
		The Trust and EPA have obtained important insights about options for managing problem wastes from the report the Program commissioned into Extended Producer Responsibility (ERP) Schemes.	
		The Trust and EPA have learned a key lesson that campaigns to increase consumer awareness about environmental issues should be based on on-line digital marketing and inbound marketing methodologies which pull consumers towards messages.	
	Compliance with specifications where relevant	The Program has defined objectives, outcomes and outputs. The grant agreement is supported by project measures against which the EPA must report. Project measures and expenditure reporting must be included in reporting by the EPA.	
Cost Issues	Allocative efficiency (value to consumers)	The risks identified in relation to the project are also risks to the allocative efficiency of the Program.	
		Potential allocative efficiency would be improved by implementing the recommendations in this evaluation in relation to Program appropriateness, management and effectiveness.	
	Technical efficiency	The Program costs (inputs) represent a very small proportion of the Trust's overall spending. However, the funding supports activities (outputs) that are ambitious in purpose and design; have a wide reach amongst stakeholders; are facilitative within communities and between stakeholder groups; are founded on the volume of action to demonstrate value; and receive good responses from stakeholders.	



Assessment factor	Criteria	Value for money assessment	Status
		<ul> <li>Impediments to technical efficiency are the:</li> <li>Problems with Program design conducted by the EPA: and</li> <li>Failure of the EPA to obtain baseline and impact data required in the Program business plan to assess behaviour change.</li> </ul>	