



## Best Practice PVC Scheme Update

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Vinyl Council Australia

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# Background

The Green Building Council of Australia (GBCA) will soon be releasing updated versions of the suite of Green Star rating tools, including Green Star for New Buildings.

This program of work has been dubbed 'Future Focus' and represents not just an upgrade of existing Green Star credits, but a retooling of Green Star based on what GBCA deems to be its important strategic priorities for sustainability in the built environment.

This Green Star update initiated discussions between the GBCA and the Vinyl Council of Australia (VCA) regarding the need to update the Best Practice PVC scheme, which has not been updated since its inception in 2010. The update also provides an opportunity to address issues that have become more relevant in recent times, such as embodied carbon and modern slavery.

Broadly our aims in updating the Best Practice PVC scheme are:

- To align with the new Green Star rating tool to ensure continued recognition of accredited PVC products
- To streamline the process of Green Star recognition for PVC products
- To update the Best Practice PVC scheme to reflect what is current best practice

To that end, this paper aims to:

- Outline the relevant Green Star changes for products
- Summarise where the current BEP scheme stands
- Obtain stakeholder input on the scope for an updated scheme

**There is no intention to remove any of the current verification pathways recognised under BEP.**

A second round of consultation will take place in the July-September 2020 quarter which will ask for feedback on the detailed compliance criteria and verification requirements for the scheme.

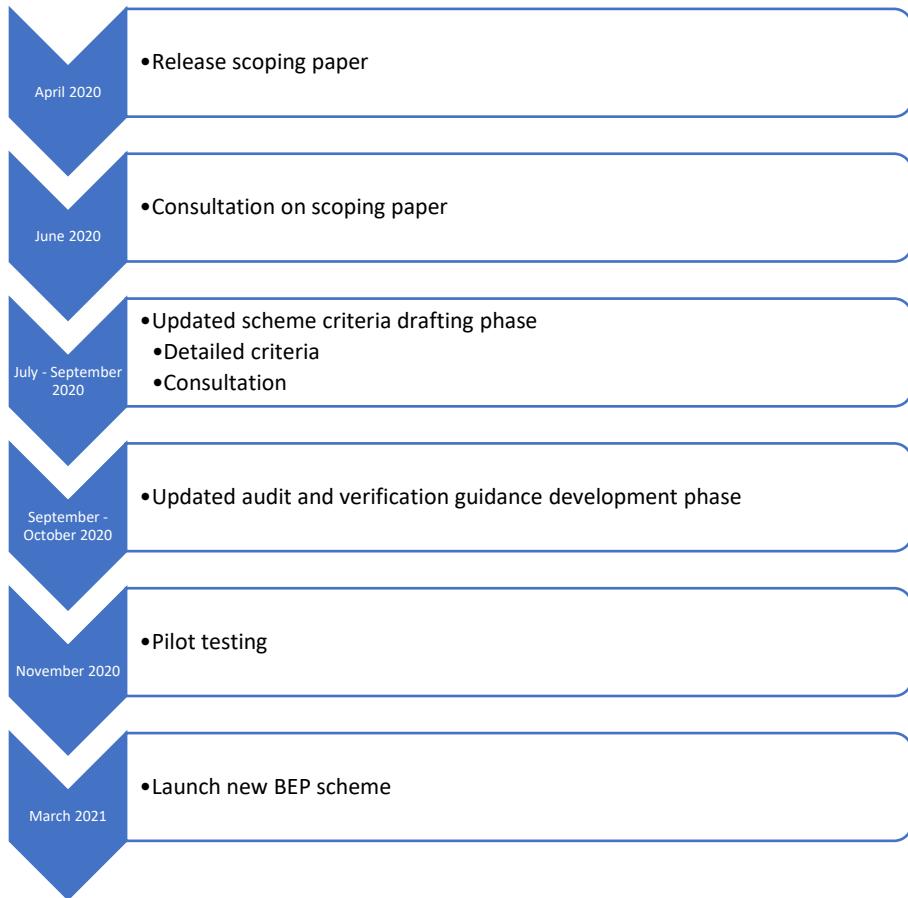
## Stakeholders

The stakeholders impacted by this project, and from whom we wish to solicit feedback, are listed below:

Internal	External
VCA members and working groups VCA Board PVC Stewardship Scheme (PSP) signatories	Green Building Council of Australia (GBCA) and its members Best Environmental Practice PVC (BEP) auditors BEP-accredited manufacturers Regional and global PVC industry Major building product procurers and specifiers

## Timeline

The expected timeframes for the scheme update is provided below:



## Your Input

There are **two ways** to provide feedback:

1) Using this document

Throughout this paper there are questions for you to respond to. We've included a separate Word document that you can edit and circulate to your stakeholders for comment.

Please respond to these questions and email [info@vinyl.org.au](mailto:info@vinyl.org.au) with the subject line 'BEP Update Feedback'.

2) Through an online survey form

An online feedback survey with the questions from this document is available at this link  
<https://www.surveymonkey.com/r/BEPupdate>.

# Introduction

## Who we are – the Vinyl Council of Australia

The Vinyl Council of Australia (VCA) is the peak industry body representing the Australian PVC (vinyl) value chain. Its members come from across the PVC industry, representing a wide range of products and entities in the supply chain.

It partners with similar organisations globally to share knowledge and engage stakeholders across industry and government, with the aim of showing how vinyl products have a valuable role to play in a sustainable society through responsible manufacture, use and disposal of PVC.

The VCA has been instrumental in advancing sustainability of the Australian PVC industry, evidenced by its involvement in inclusion of a PVC credit in Green Star, as well as the continued success of the PVC Stewardship Program.

## Programs

Currently two programs are managed by the VCA, representing leadership in different aspects of sustainability.

### Best Environmental Practice PVC (BEP)



The Vinyl Council's Best Environmental Practice (BEP) PVC trademark is awarded to PVC products compliant with the GBCA's Best Practice Guidelines for Manufacturing PVC upon application by any manufacturers or suppliers in accordance with the relevant licence terms and conditions. It is an accreditation mark for specific products. Applicants must provide evidence of the independent assessment of compliance in accordance with the process set out in the GBCA's Verification Assessment Guidance document for Best Practice PVC. The BEP PVC mark signifies the products have been found by independent auditors to be compliant with Green Star's PVC Best Practice Guidelines.

There are 13 requirements across the four areas of Supply Chain, Manufacture of PVC Resin, Manufacture and End of Life Management of PVC Product and use of PVC Recyclate in PVC products.

Upon receipt of evidence of compliance, the products are recorded in an online Register by product category and the BEP PVC licence mark is issued to the applicant.

Compliance is demonstrated through three pathways:

- 1) Environmental Management System (EMS) – BEP requirements are demonstrated as part of an audited ISO14001 EMS.
- 2) Manufacturers' Declaration – Independently audited manufacturer or supplier declaration to confirm compliance with BEP requirements.
- 3) Product Certification – Compliance through independently audited accreditation programs or product certification schemes (e.g. Watermark)

BEP is recognised as a way for PVC products to demonstrate compliance with the Green Star "PVC credit", now part of the Responsible Building Materials credit. The auditor's certificate can be provided by product manufacturers to Green Star project teams for their submissions to increase the star rating of the Green Star building from the use of sustainably manufactured PVC. These PVC products can earn points towards a building project's Green Star certification.

Under the current set up for Best Practice PVC, companies can attain a compliance certificate from an auditor and present this to Green Star projects. They do not need to apply for the licence mark or online register.

### PVC Stewardship Program (PSP)

The PVC Stewardship Program (PSP) is an ongoing, long-term, voluntary undertaking by the Australian PVC industry to recognise, and progressively address, all relevant environmental, health and safety issues along the PVC product life cycle within responsible deliverable timeframes. It is an approach that enables raw material suppliers, product manufacturers and distributors to be joint stewards of the safe and beneficial production, use and disposal of PVC products in Australia.

A steering group consisting of industry, VCA and external stakeholders meets quarterly to assess new issues and evidence and develop new or extended commitments if appropriate.

The program, which commenced in 2002, is based on five key themes associated with the life cycle of PVC:



PVC STEWARDSHIP	
transparency and engagement	best practice manufacturing
resource efficiency	safe and sustainable use of additives
energy and greenhouse gas management	
Company performance	Product accreditation
Life cycle / supply chain assessment	Life cycle / supply chain assessment
Continual improvement – a journey	Full product compliance at a point in time
Industry developed with stakeholder input	Stakeholder developed with industry input
Industry driven recognition	Market driven – Green Star
Annual self-assessment and reporting with periodic external audit	Third party verification (2–3 years)

Each theme includes a series of commitments which Signatories are required to implement and report progress on annually. There are 18 commitments across the four areas of Best Practice Manufacturing, Safe and Sustainable Use of Additives, Energy & Greenhouse Gas Emissions, and Resource Use.

Given the varied nature of Signatory businesses, the list of commitments applicable to each company varies depending on its activity and position in the supply chain. The key purpose of the program is to seek the continuous improvement of the PVC industry.

Through annual self-assessment reports and periodic independent audits, Signatories' compliance performance is measured and benchmarked, and the information collated to provide a measure of the industry's overall progress.

Depending on how a Signatory's performance scores against the commitments, each year they are awarded Gold, Silver or Bronze status. Those companies assessed by the VCA as achieving full compliance with the commitments relevant to them (i.e. Gold performance), are recognised with an Excellence in Stewardship Award and the use of a year-specific licence mark.

Independent audits of Signatories are done on a random basis, with 20-25% of Signatories audited each reporting cycle. The issuance of the Excellence Award may, but is not necessarily, based on third party auditing.

Annual progress reports are made publicly available on the VCA website. The implementation and effectiveness of the Program is reviewed every five years.

At this stage, the PSP does not earn points under the current Green Star tool. However, Green Star Future Focus is proposing to recognise Signatories who receive the PSP Excellence Award to achieve points under the new Responsible Products credit in the new suite of Green Star rating tools.

Where possible, specific performance benchmarks in BEP and the PSP have been aligned, however the schemes are different and have different aims. The major differences are shown in the table graphic above.

# Green Star

Launched by the Green Building Council of Australia in 2003, Green Star is an Australian voluntary rating system for buildings and communities. Green Star consists of a series of credits awarded towards certification of a building construction project. The credits are based on demonstrating compliance with a number of environmental and health-related aspects of construction and building occupancy.

## Current Status of PVC in Green Star

Best Practice PVC is recognised in Green Star under 'Responsible Building Materials', where a PVC credit is relevant for commonly used PVC products (flooring, formwork, pipe, cable, blinds) with a Best Practice PVC certificate.

The PVC Stewardship Program, while not recognised currently, has been included in the upcoming Responsible Products Framework for the new version of Green Star (at Excellence level only).

In current Green Star tools, a PVC (or other) product can contribute to points under the Sustainable Products credit through several options, which are scored in the Sustainable Products Calculator, contributing to points under this credit. Only one pathway may be selected from the following:

- Reused products
- GBCA-recognised ecolabel
- Environmental Product Declarations (EPDs)
- Recycled content

It is important to note that this Sustainable Products credit does not directly recognise BEP.

## Future Focus

Green Star Future Focus is the program of activities outlining the future Green Star rating tools, anticipated to be launched in July 2020.

These new Green Star rating tools will bring significant changes to the rating tool and certification process to better reflect what GBCA perceives as key issues in built environment sustainability.

It is expected that there will be a transition period of at least one year as the construction industry adopts the new suite of rating tools, similar to previous Green Star releases.

GBCA indicated its intention to move away from individual material credits (for example, Timber/PVC/Steel/Concrete) in the new tools, while also recognising the impact of embodied carbon and the need to encourage specification of products that lead to beneficial health and environmental outcomes.

To that end, they kickstarted a consultation process with an Industry Reference Group, of which VCA is a member. This positions the VCA to be across the changes to Green Star and how these will impact our members.

## Responsible Products

The credit will consist of a framework to recognise product suppliers' sustainability efforts aligned with the following key principles:

- Responsibility – the manufacturing process avoids significant environmental impact
- Transparency – product impacts and content are transparent and meet high standards
- Stewardship – the product supply chain is operated ethically, respecting human rights and lower environmental impact
- Foresight – the manufacturer organisation is preparing for future low-carbon production and the circular economy

The intent is that product manufacturers and suppliers will be recognised for multiple sustainability initiatives that fall within any of the above principles in Green Star, rather than just based on one initiative as currently.

Points may be claimed based on ecolabels, organisation-level initiatives, and in some cases self-declaration of impacts. Claims with third party independent audits are favoured under this new framework, which will award potentially double the points for third party verified claims.

In summary, the changes being introduced are:

**Product credits will look at the different applications of building products – in structures, envelopes, systems, and finishes - rather than a single credit encompassing all building materials.**

**A new Responsible Products framework, with a points matrix that awards product sustainability and transparency initiatives (e.g. EPDs, Environmental Management Systems)**

This will widen the recognition of product sustainability initiatives a product can claim.

Points claimed are cumulative, i.e. if a product has two sustainability initiatives, such as BEP and an EPD, it is intended the product can earn points for both to increase the total score for a product.

**Introduction of an online 'Green Star Product Register'**

An online register of products that comply to the new Responsible Products framework above. GBCA will validate claims and the product score (for a fee), and manufacturers can link to this database rather than submit all their documentation to every Green Star project team. This service is optional.

# Future Options for Best Practice PVC

## Summary

The Green Star update is a good opportunity to assess the state of the current Best Practice PVC scheme, and retool it to make it more relevant to the sustainability challenges that we face today as an industry.

In order to continue recognition of PVC products in Green Star, the options below have been identified.

### **Option 1) Update the existing Best Practice PVC scheme**

In this option, the scheme will need to be reviewed and upgraded where necessary to demonstrate it continues to define 'best practice' for PVC manufacturing and earns a significant score for a product under the new Responsible Products Framework.

Under the current Green Star Future Focus proposals, Best Practice PVC ('BEP') will continue to be recognised. As it is currently, BEP will score 7 points in the draft Green Star Responsible Products matrix criteria; exactly how many points an updated version of BEP will contribute towards a product's rating will depend on how it addresses the matrix criteria.

GBCA has indicated it would like the VCA to administer the Best Practice PVC scheme going forward, including future updates. The VCA would therefore need to develop suitable governance and scheme verification requirements.

The VCA would continue to ensure a range of independent auditors are available to provide verification services. However, certificates and accreditation would be issued by the VCA alone.

The PSP Excellence Award, which also scores 6 points against the matrix criteria, may also be recognised in Green Star as an alternative pathway to score points under this credit. The VCA issues the Excellence certificates based on its assessment of the Signatory's performance.

This option means that Best Practice PVC will continue to focus on the environmental impact from manufacturing of the product life cycle. However, in the long-term this may not be a strategic option as the built environment shifts its sustainability focus to carbon, social and health impacts throughout the lifecycle of a product. As the number of existing Best Practice PVC accredited manufacturers show, industry has been able to adapt to the requirements of the scheme – it is now time to revisit whether being 'best practice' should be extended beyond the manufacturing process.

### **2) Merge the Best Practice PVC and PSP Excellence Awards in a single scheme to simplify the industry's reporting and auditing requirements.**

In this option, a review of the differences in criteria and evidence requirements between Best Practice PVC and the PSP needs to be finalised and the PSP Excellence Award modified to address all required criteria.

A combined scheme would broaden the scope of Best Practice PVC as the PSP currently includes a number of additional assessment criteria such as greenhouse gas emission reduction and a commitment to address Modern Slavery.

In effect, under this option, Best Practice PVC would be identical to the PSP Excellence Award, but apply to specific PVC products, independently audited.

Although both schemes currently earn 6-7 points under the GBCA's draft Responsible Products matrix, a combined scheme may have the scope to earn one or two additional points.

Other signatories to the PSP may continue to be recognised as achieving Excellence in Stewardship, but would not be recognised in Green Star.

Product manufacturers and suppliers who are not signatories to the PSP would have to seek third party verification that they meet the Best Practice PVC requirements but will only be accredited through the Vinyl Council.

At this stage, Option 2 – merging the 2 schemes – is preferred by VCA due to the following benefits:

- Reduced duplication of certification schemes for industry;
- Improved ongoing oversight into PVC industry stewardship;
- Consistent and up-to-date documentation and compliance requirements;
- Streamlined annual reporting and assurance process; and
- Improved governance of the Best Practice PVC scheme.

Ultimately, an updated scheme is expected to drive improved sustainability outcomes and greater marketing impact.

Apart from determining the governance and verification arrangements for this scheme, a challenge will be structuring the scheme to ensure accessibility both to members and non-members of the VCA, while also ensuring that the relevant elements from the PSP and other best practice schemes are considered.

*At the end of the gap analysis section, we will be requesting your feedback on these options.*

# Gap Analysis

The bulk of this paper aims to take you through the analysis and the work done to understand the areas that may need to be scoped in the updated scheme, and provide an opportunity to collect your thoughts on the direction that this could take.

We first tried to understand how the current scheme performs against the newly-released GBCA Responsible Products Framework.

## 1) GBCA Framework

At this stage, the GBCA is considering recognising both Best Practice PVC and PSP (Excellence) schemes in their new Responsible Products matrix.

It is important to note that only the Excellence tier of the PSP may be recognised. Additionally, points cannot be claimed for both of these schemes, i.e. a manufacturer with both Best Practice PVC accreditation and who has achieved Excellence under the PSP will not be awarded 13 points in total.

The GBCA has considered both schemes and scored them against their criteria. Some of the examples given by GBCA for each criterion have been provided for reference.

Table 1 showing GBCA Framework Criteria and PVC Schemes qualification (as assessed by GBCA)

Key:

- GBCA criteria the existing PVC scheme is currently expected to meet (showing points GBCA allocates)
- GBCA criteria that would be addressed by other ecolabels/initiatives rather than Vinyl Council schemes.
- GBCA criteria that could be met through additional criteria in a PVC scheme

GBCA Criterion	Description	How products can achieve a score for this	BEP	PSP (Excellence)
3rd Party Verified Claims (scores 2x)	Claims are third party verified	Ecolabelled products verified by an Exemplar Global auditor every 2 years can claim 2 points (e.g. Best Practice PVC, GECA, GreenTag)	2	
Environmental Preferability (scores 2x)	Initiative indicates that the product is an environmentally preferable choice	Products?	2	2
Environmental Impacts	Initiative examines the environmental impacts of product and/or production process	Products manufactured in a facility with EMS	1	1
Transparency: Environment	Quantitative environmental impacts are transparently declared	Products have EPDs or other certification that presents quantitative data		
Transparency: Carbon	Quantitative carbon impacts are transparently declared	Products are Carbon Neutral certified or quantify carbon content		
Transparency: Health	Health impacts are transparently declared	Eg Products with a GreenTag PHD		
Transparency: Content	Quantitative content of product is transparently declared	Eg Products with a Declare label or openly reporting constituents		1
Life-cycle basis	Initiative examines product impacts across whole of life cycle	LCA applied in methodology of initiative		

Occupational Hazards	Initiative examines the occupational hazards associated with producing and/or using the product	Certification includes criteria for occupational safety.	1	
Social / Human Rights	Initiative examines social / human rights performance	Product manufacturer has achieved requirements for human rights eg Modern Slavery		1
Ethical Business Conduct	Initiative examines ethical business conduct OR demonstrates high ethics in business	Products have been verified to achieve requirements for human rights (e.g. SA8000)		
Circular Economy Benefits	Initiative demonstrates benefits to the circular economy for the product	Products with an initiative/certification that addresses reuse, high recycled content, recyclability or recoverability at end of life	1	1
Investment in Low Carbon Future	Initiative significantly contributes to decarbonising future production	Products with an initiative to demonstrate significant investment to decrease carbon intensity of product within the next 10 years		
Chain of Custody	Initiative can show traceable history of the product	E.g. products with FSC or PEFC certification		
Strategic/Other (strategic weighting)	Initiative achieves other significant strategic outcomes supported by GBCA	To be confirmed by GBCA		
<b>Total score</b>			<b>7</b>	<b>6</b>

## 2) Comparison of BEP, PSP and VinylPlus

The EU VinylPlus (VP) ecolabel is a voluntary sustainability certification scheme for a PVC product or product family. This programme looks at several criteria encompassing environmental, legal and social concerns. A company's performance under each criterion is scored by an independent third-party auditor based on its level of achievement from basic to outstanding. This scheme incorporates some of the broader social and transparency commitments seen in the PSP, strengthened with mandatory third-party verification.

Comparing to a third ecolabel is useful to analyse gaps and previously unidentified issues of concern that could be included in the updated scheme. The EU Vinyl Plus ecolabel was examined because it would indicate elements considered an issue of importance for the PVC industry.

The various criteria and commitments across all three PVC schemes are broadly categorised as follows:

- Organisational Sustainability
- Best Practice Sourcing and Manufacturing
- Safe & Sustainable Use of Additives
- Resource Efficiency
- Energy & Greenhouse Gas Emissions
- Transparency & Engagement

The gap analysis is presented in Table 2 to show the alignments among the VCA schemes and the Vinyl Plus ecolabel, showing where the programs are aligned and where the gaps are that need to be addressed. Several criteria have been flagged for possible inclusion in an updated scheme, either as part of compulsory criteria, or optional criteria.

Table 2 Gap analysis for established PVC schemes

Key:					
	Schemes have aligned / similar criteria				
	Partial alignment				
C	Compulsory criteria in VinylPlus scheme				
Add?	Potential compulsory criteria for an updated scheme				
Optional?	Potential optional criteria for an updated scheme				
Initiative	Description	GBCA Responsible Products Framework	Best Practice PVC	PVC Stewardship Excellence	Vinyl Plus EU
	Applicability	Products	Products	Organisation	Products
	Verification	3rd party Verified Claims	Yes. 3rd party Verified Claims	Partial. Self-reported with periodic audits by limited assurance providers; random selection of auditees	Yes
	Accreditation term	2 years	1-3 years	1 year	2 years
	Compliance		Full compliance	Full compliance with compulsory commitments required.	Full compliance with compulsory criteria required. Plus Optional criteria
<b>Organisational Sustainability</b>					
Integration of obligations into business	Adheres to prescribed sustainability principles	Ethical Business Conduct	Add?	Yes	Yes
Responsible sourcing policy	Written Responsible Sourcing Policy				Yes - C
Legal compliance	System to access and update applicable legislation				Yes - C
Quality management system	QMS or ISO 9001				Yes - C
Supplier management system	Purchasing process, including due diligence, risk assessment & approved suppliers	Chain of custody			Yes - C
<b>Best Practice Sourcing &amp; Manufacturing</b>					
Supply Chain mapping	Audited flow chart/declaration of supply chain & constituents	Chain of custody	Yes	Yes - preliminary step, checked by VCA.	

Initiative	Description	GBCA Responsible Products Framework	Best Practice PVC	PVC Stewardship Excellence	Vinyl Plus EU
Material traceability through the supply chain	Traceability of min. 60% constituent materials demonstrated				Yes - C
Environmental management systems (EMS)	EMS in place to control waste, water, air, product-related emissions	Environmental impacts	Yes - Covering specific BEP criteria (apart from ISO14001 reqs).	Yes, requires meeting minimum acceptable standards	Yes – C includes EMS traceability through supply chain
EMS – plastic leakage to water	Criteria addressing marine pollution controls and plastic leakage			Yes	
Chlorine Sourcing / Mercury avoidance	Criteria addressing mercury cell plants and chlorine sourcing	Environmental Preferability	Yes - No asbestos/modified diaphragm. No mercury cells.	Yes - No mercury cells, no acetylene carbide route plants.	Optional – mercury avoidance, Cl sourcing
PVC Sourcing	PVC sourced from non-mercury production processes, closed-lid plants		Yes - Air & water: 43g/tonne rVCM: 1ppm	Yes - Air & water: 43g/tonne rVCM: 1ppm	Yes – C Follows ECVM Charter: 100g/tonne rVCM: 5ppm
Halogenated Emissions Management (waste, water, air)	Criteria addressing halogenated hydrocarbons such as dioxins		Yes	Add?	Optional - Follows ECVM Charter
Occupational Health & Safety	OHS limits met	Occupational hazards	Yes – Specific occupational exposure limits	Add?	Health & Safety Management Systems required, traceable through supply chain
Life Cycle Thinking	Consideration of life cycle impacts before introduction of a new PVC product to market	Transparency: Environment	Optional?	Yes - LCT and optional EPD	Yes - LCA & EPD
Modern Slavery (MS)	Reasonable efforts to investigate that supply chain has no MS	Social/human rights	To be added?	Yes	Partial – ILO compliance

#### Safe and Sustainable Use of Additives

Stabilisers	Criteria addressing hazardous stabilisers	Occupational hazards/Toxicity	Yes - no cadmium or lead stabilisers	Yes - no cadmium, lead or hex chrome stabilisers	Yes – C REACH compliance
Pigments	Criteria addressing hazardous pigments		Add?	Yes. No cadmium, lead or hex chrome pigments.	Yes – C REACH compliance

Initiative	Description	GBCA Responsible Products Framework	Best Practice PVC	PVC Stewardship Excellence	Vinyl Plus EU
Plasticisers	Criteria addressing hazardous plasticisers		Yes - no DEHP, BBP & DBP	Partial. Voluntary phaseout of DEHP, BBP and DBP.	Yes – C REACH compliance
Recycling PVC containing legacy additives	Criteria addressing legacy additives in recyclate		Add?	Yes	
<b>Resource Efficiency</b>					
Waste Management	Reduction/diversion of post-industrial waste from landfill	Circular economy benefits	Add?	Yes	Yes- C
End-of-Life Management	Takeback schemes and recycling/waste provider arrangements (product stewardship)		Yes	Partial - Where recyclate cannot be used in product.	
Design for Reuse or Recycling	Product design for reuse & recycling of PVC elements		Optional?	Yes - Life cycle thinking	Optional
Use of PVC Recyclate in Recycled Products	Criteria addressing PVC recyclate in products			Yes - Some products must contain recoPVC	Optional - Awards points based on recyclate content
Diversion of Packaging Waste from Landfill	Diversion of packaging material from landfill			Yes – target to divert 70% from landfill	
Consumer Responsible Care	Publicly inform consumers on how & where to reuse, recycle & dispose		Add?	Yes	
<b>Energy &amp; Greenhouse Gas Emissions</b>					
Energy Efficiency Targets	Energy efficiency targets & policies	Environmental Preferability/ Transparency: Carbon	Add?	Yes - Comply with PVC Industry charter targets	Yes – C Policy & metrics re energy efficiency improvements
Greenhouse Gas Emission Reduction Targets	GHG reduction targets & policies			Yes - Comply with PVC Industry charter targets	Yes – as above
Use of renewable energy resources	Use of renewable energy 10-40+ % higher than the nationally calculated average			Optional?	Optional
Transport impacts	Policy & measurement to reduce impacts of transport			Partial. Option referred to in Charter.	Optional

Initiative	Description	GBCA Responsible Products Framework	Best Practice PVC	PVC Stewardship Excellence	Vinyl Plus EU
<b>Transparency &amp; Engagement</b>					
Open Disclosure of Additives	Disclosure of additive info upon request	Transparency: Content	Add?	Yes	Optional - disclosure to customers
EPDs	Transparency of quantitative enviro impacts	Transparency: Environment	Optional?	Partial – option recognised in Energy Charter	Optional
Demonstrate commitment and communicate	Sustainability learning & development of employees, value chain and local communities				Yes

Several key items emerged from this gap analysis, which are discussed in detail below.

## Scheme Criteria

### Applicability

Description	Best Practice PVC	Product Stewardship Program	Vinyl Plus EU
Compliance	Full compliance	Full compliance with compulsory commitments required.	Full compliance with compulsory criteria required. Non-compulsory criteria are scored depending on performance.

The BEP scheme is a verification of specific **products** supplied by a company into the market. The PSP is a verification of a **company's** performance across all its PVC products supplied to the market. This is being emphasised here because if BEP were to become the 'Excellence' performance under the PSP, a question is whether a company can choose to verify a selection of products it supplies, or whether it applies to all of its PVC products.

One of the key considerations for a scheme taking elements from both BEP and PSP is the structure of the scheme and how compliance is achieved. For the current BEP, all criteria must be achieved to get certified – that is, **full compliance** with BEP criteria is required. The same approach applies for PSP Excellence, where all the requisite commitments must be fully met before achieving an Excellence award.

Vinyl Plus EU has a slightly different approach. This scheme mandates several compulsory criteria, but additional points can be achieved by meeting higher requirements within a certain criterion. For example, a compulsory requirement is to have a quality management system. However, additional points can be scored by having an ISO 9001 certified quality management system.

The Vinyl Council believes a similar structure could be used for an updated scheme, with mandatory Core Criteria that need to be met (at least equivalent to existing BEP criteria), plus a minimum number of Optional (new) Criteria to qualify for Best Practice PVC, which would provide some flexibility to companies seeking to achieve accreditation.

**A. Gap Analysis – Scheme Parameters**

A.1 Should BEP accreditation apply to all PVC products supplied to the Australian market (as per PSP) or only those a company selects to have verified?

A.2 Which approach do you prefer:

(a) Compliance with all criteria?

(b) Compliance with Core Criteria plus a selection of Optional Criteria?

A.3 Comments

## Organisational Sustainability

It is clear from the summary table above that business management systems and organisational sustainability are not material components of the scheme. This is in contrast to Vinyl Plus, which has a number of criteria that relate to management systems, responsible sourcing, and legal compliance.

PSP requires companies to have embedded their commitment to the Program into their management systems/business so that there is a general awareness in the company of the commitment.

What additional management policies and systems related to corporate sustainability, sourcing, and quality management, if any, would be applicable for Australian companies and strengthen the BEP / PSP schemes?

In addition, we ask stakeholders to consider how transport or OHS incidents or regulatory infringements in the product supply chain should affect eligibility for accreditation under an updated scheme. An approach could be requiring applicants to declare any known occurrences in the previous twelve months and providing evidence of action plans and implemented changes to address these risks.

**For Feedback:****B. Gap Analysis – Organisational Sustainability**

B.1 To what extent do you agree with this statement: An updated scheme should address legal compliance, supply chain incidents and/or product conformance (including health & safety) compliance.

(Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree)

B.2 To what extent do you agree with this statement: An updated scheme include criteria on quality and supplier management.

(Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree)

B.3 Comments

## Best Practice Manufacturing

Generally, the extensive stakeholder engagement and industry consultation undertaken by GBCA when BEP was first launched ensured that the criteria covering sourcing, manufacturing and additives have been comprehensive.

For an updated scheme, we are looking for input on improving the criteria, e.g. adjusting emissions limits and whether there are issues not currently being addressed in the scheme.

A number of specific items are briefly discussed below.

### Scope of EMS

The EMS requirements within the two schemes differ in that the BEP has specific PVC-related emissions requirements (waste, water, air, product) for resin manufacturers (but not for end-product manufacturers) whereas the PSP commitment requires only that manufacturers have an EMS that complies with an industry minimum or with ISO14001. When this

commitment was developed, it was noted that not all manufacturers will seek ISO certification but may nevertheless have in place a comprehensive EMS.

VinylPlus requires that a minimum 60% of constituent material (final product only, excluding packaging) be traceable to suppliers with EMS. An approach which specifies a benchmark like this could also be considered, or BEP could specify that end product manufacturers and Tier One suppliers of the PVC resin are required to have EMS.

Under an updated BEP scheme, should EMS requirements relate to just PVC resin manufacturers, or the product manufacturer or both? What minimum standards should be expected (industry determined or ISO 14001 certified)?

#### Control of Halogenated Wastes

BEP includes requirements for EDC, VCM and PVC resin to be sourced from closed lid production manufacturing plants and has requirements for the control of halogenated wastes (such as dioxins & furans), and emissions to water and air. This is not addressed to the same extent in the PSP.

BEP also includes specific occupational exposure limits for VCM in PVC resin manufacture to be met, and this earns one point under the GBCA matrix. The PSP does not yet include this target and it will need to be added to align the schemes

VCA is considering aligning the emissions limits and requirements between these two schemes for consistency. Do you agree with this approach?

#### Treatment of LMW Phthalates/Heavy Metals

This is addressed as part of 'Safe and Sustainable Use of Additives' in the PSP, which looks at minimising the impacts of hazardous stabilisers, pigments, and plasticisers.

A key distinction between the two schemes is how low molecular weight (LMW) ortho-phthalate plasticisers and certain heavy metals are treated. In BEP there is a blanket prohibition on the use of these substances, whereas in PSP the commitments call for a phaseout by 2022 for LMW ortho-phthalates (lead and cadmium are to be avoided).

We would anticipate that compatibility between BEP and 'PSP Excellence' would mean that avoidance of the use of LMW phthalates, lead, cadmium and hexavalent chrome would need to be met. Do you agree?

#### Modern Slavery

Addressing Modern Slavery has recently been added as a commitment to the PSP following stakeholder input. It is the first 'social' commitment in the program, scoring a point under the GBCA Responsible Products Framework. Aligning BEP and PSP Excellence would mean adding this commitment or equivalent to the BEP scheme.

#### **For Feedback:**

#### **C. Gap Analysis – Best Practice Manufacturing**

C.1 Under an updated scheme, should EMS requirements relate to just PVC resin manufacturers, or the product manufacturer, or both?

C.2 What minimum standards should be expected for EMS: Industry determined environmental criteria, or ISO 14001 certified?

C.3 To what extent do you agree with this statement: All existing BEP/PSP manufacturing criteria (emissions, OH&S) should be aligned and merged.

(Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree)

C.4 Comments

## Resource Efficiency

### PVC Recyclate

While BEP accepts the verification of product with recycled PVC, exempting the recyclate from the BEP manufacturing requirements, the use of PVC recyclate is a specific requirement for products under the PSP, unless product conformance standards prohibit its use.

BEP has requirements for product suppliers to manage the end of life of their products in Australia through take back arrangements or waste recovery for recycling. The PSP includes the same conditions, but only for those products that are unable to contain recycled PVC because of product conformance standards.

Vinyl Plus on the other hand awards points under an Optional requirement based on the percentage of recycled content.

With this context, stakeholders are invited to consider if an updated scheme should:

- Incorporate compulsory or optional requirements for products to contain recycled content where standards permit (*without setting specific percentage requirements*);
- Accept alternative pathways if products are unable to have recycled content (similar to PSP approach);
- Or consider other approaches that encourage use of recycled PVC.

### Waste Management

Waste is addressed in a number of ways within the PSP commitments, depending on the type of Signatory involved. Post-industrial PVC waste minimisation, recoPVC, B2B packaging waste and recyclable packaging are all considered. PSP also has a commitment to publicly inform the consumer on where and how to recycle or safely dispose of the product at end of life.

On the other hand, the focus for BEP is product stewardship, as evidenced by a takeback scheme or contractual arrangements with waste collection/recyclers. Aligning to the PSP will introduce a number of new commitments to BEP.

Meanwhile, Vinyl Plus looks at waste management as a whole and requires policy and metrics as a minimum for waste reduction.

As waste is a key issue for our industry and the world at large, it is anticipated that a compulsory criterion will require reduction of post-industrial waste to landfill. An optional criterion could be on diversion of packaging waste from landfill.

#### **For Feedback:**

#### **D. Gap Analysis – Resource Efficiency**

D.1 To what extent do you agree with this statement: Reduction of post-industrial waste to landfill should be a compulsory criterion?

(Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree)

D.2 Should the PSP commitment to divert incoming packaging waste from landfill be included as a compulsory or optional criterion?

- Compulsory
- Optional
- Neither, not included (please explain why in Comments box)

D.3 How should PVC recyclate and recycled content be addressed in an updated scheme?

- Incorporate requirements for products to contain recycled content where standards permit (*without setting specific percentage requirements*);
- Accept alternative pathways if products are unable to have recycled content (similar to PSP approach);
- Or consider other approaches that encourage use of recycled PVC.

#### **D.4 Comments**

## Energy & Greenhouse Gas Emissions

Carbon is a strategic focus of GBCA, and the indications are that the updated Green Star rating tool will include an Embodied Carbon credit which will make use of an Embodied Carbon calculator. Product manufacturers who have already started to undertake carbon accounting could be at an advantage here, as they are more likely to be able to provide accurate data for input into this calculator. However, the GBCA's preference for Responsible Building Products is to demonstrate carbon neutrality through independent certification.

BEP is silent on energy and greenhouse gas emissions, whereas the PSP Energy and Greenhouse Efficiency Charter encourages Signatories to adopt energy efficiency measures, to consider carbon in the supply chain and the use of recyclate to reduce the carbon footprint of their products. The PSP commitment requires product manufacturers have an energy efficiency policy, commence energy use monitoring, and have commenced measures to improve energy efficiency to reduce carbon emissions (e.g. improvement plan, supply chain assessment, carbon footprinting).

Vinyl Plus requires implementation of energy efficiency improvements and greenhouse gas emissions reductions at the organisational level. It also looks at the use of renewable energy (RE) resources as an optional credit and awards points where the percentage of RE use exceeds the national average RE use.

Another aspect that Vinyl Plus considers is transport impacts, which asks organisations to record distances and types of transport used for product delivery, quantify the adverse social and environmental impacts of these, and potentially report to stakeholders and external verifiers.

For an updated scheme, a compulsory criterion could be around energy measurement and monitoring, adopting the PSP criteria, with RE use and transport impacts as optional criteria.

### For Feedback:

#### E. Gap Analysis – Energy & GHG Emissions

E.1 To what extent do you agree with this statement: BEP should adopt the PSP requirements for energy efficiency and greenhouse gas reduction?

(Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree)

E.2 Should an updated scheme include the following as OPTIONAL criteria:

- Incentivise renewable energy use?
- Consider transport energy impacts?

E.3 Comments

## Transparency & Engagement

### Open Disclosure

The GBCA Responsible Products Framework rewards schemes where "Quantitative content of product is transparently declared". In BEP, there is no requirement to publicly disclose information regarding product additives and other relevant information.

PSP requires a willingness to disclose additives upon request (verified through evidence such as Product Data Sheets that provide composition ingredients) without any specified amounts. This approach could be acceptable in an updated scheme to ensure transparency without compromising commercially vital information.

### Commitment & Communication

Vinyl Plus includes a credit on sustainability learning and development for employees, as well as a complaints management procedure for local community. While we recognise that this may be a hurdle for some of smaller companies, this may be something that could be incorporated easily in existing operational excellence/human resources policies and procedures. If a similar credit is included in an updated scheme, it would be an optional rather than a mandatory criterion.

**For Feedback:****F. Gap Analysis – Transparency & Engagement**

F.1 To what extent do you agree with this statement: An updated BEP scheme require disclosure of additives, e.g. through Product Data Sheets, without specifying amounts?

(Strongly Disagree / Disagree / Neutral / Agree / Strongly Agree)

F.2 Would it be useful for an updated scheme to include an optional credit on employee sustainability training?

F.3 Comments

## Hot Spot Analysis / Other Issues

A 'hotspot analysis' was also undertaken as part of the process for GBCA recognition. This has been interpreted to be a review of the aspects of the product life cycle or supply chain that may today be considered particularly material to the PVC life cycle.

At the time of drafting the Guidelines for the PVC credit in 2010, the GBCA conducted a literature review into the health and environmental concerns related to PVC production and end of life product management. These issues are broadly summarised below, and formed the basis for the current scheme criteria for BEP.

- Chlorine Manufacture
- Vinyl Chloride Monomer and Ethylene Dichloride
- Dioxin Emissions during PVC Production
- Additives Health Concerns
- End of Life Product / Recycling

A hotspot analysis identifies stages in the product life cycle, and the types of impact a product will have over its life cycle, categorised as follows:

- Environmental – considering *inputs* that lead to depletion of resources, and *outputs* that lead to production of pollution
- Social – considering impacts on different stakeholders, specifically workers, consumers, the community, and organisations
- Health – considering health risks and toxicity to consumers and workers
- Other – any other impact or issues relevant to the product not already addressed in the above categories.

Today there are growing concerns about – for example – labour practices in supply chains and plastic leakage to the environment. It is thus important to consider which aspects of the PVC product life cycle deemed material by industry and stakeholders have not been addressed by any of the criteria of the existing VCA schemes.

More than a tick box exercise, it is informed by the gap analysis above, as it shows some clear areas where both BEP and PSP have no criteria or commitments, but which other schemes such as Vinyl Plus have deemed important.

Your input is requested into which additional aspects of the PVC product life cycle are significant to warrant being considered in any form of a new or aligned scheme. Some examples of life cycle aspects not directly addressed in BEP and/or PSP but addressed in other ecolabels are listed below:

Table 3: Hot Spot analysis

Environment	Water use
	Land use
	VOC emissions from product in use
	Plastic leakage in supply chain
	Biodiversity and emissions to soil

Social	Human rights and labour standards
	Community rights
	Legal / building code or Aust Standards compliance
Health	Any issues of toxicity not already addressed
	Additives in product such as High Molecular Weight Phthalates, SVHCs under REACH
Other	Other issues not mentioned here.

#### For Feedback:

#### G. Issues of Concern (Hot Spot Analysis)

G.1 Please add any material issues that you think an updated scheme should address.

### Scheme Update Preferences

At the start of this section, 2 options were presented, briefly summarised below. We now invite you to provide your thoughts on a preferred option and scheme structure.

#### Option 1: Update the existing Best Practice PVC scheme

- Current BEP scheme criteria to be reviewed and upgraded where necessary
- Vinyl Council to develop suitable governance and scheme verification requirements. VCA would continue to ensure a range of independent auditors are available to provide verification services. However, certificates and accreditation would be issued by the VCA alone.
- Points cannot be claimed concurrently with PSP Excellence

#### Option 2: Merge the Best Practice PVC and PSP Excellence Award in a single scheme to simplify the industry's reporting and auditing requirements.

- Combined scheme would broaden the scope of Best Practice PVC as the PSP currently includes a number of additional assessment criteria
- BEP will be identical to PSP Excellence, but apply to PVC products rather than company performance, independently audited
- Product manufacturers and suppliers who are not signatories to the PSP would be able to seek third party verification that they meet the Best Practice PVC requirements but will only be accredited through the Vinyl Council
- Could earn additional points in Green Star

#### For Feedback:

#### H. Future Options

H.1 To what extent do you agree with this statement: BEP and PSP should be aligned into one updated scheme?  
(Strongly Disagree / Disagree / Neutral / Agree)

H.2 To what extent do you agree with this statement: All existing BEP /PSP criteria should be aligned and merged?  
(Strongly Disagree / Disagree / Neutral / Agree)

H.3 In your opinion, which of the following criteria should not be included? Please provide reasons in comment box below.

- Integration of obligations into business
- Halogenated emissions management
- Occupational exposure limits
- Criteria addressing hazardous pigments
- Recycling PVC containing legacy additives
- Reduction of post-industrial waste in landfill
- Consumer responsible care

- Disclosure of additives upon request

H.4 Which criteria would you support being added as Optional criteria? This would offer flexibility and facilitate potentially earning additional points under the Green Star matrix.

- Life cycle thinking
- Use of PVC recyclate in recycled products
- Diversion of packaging waste in landfill
- Use of renewable energy
- Environmental Product Declarations
- Others (please add details below)

H.5 Comments

## Scheme Verification and Governance

Auditing requirements in terms of documentary evidence vary in some aspects between BEP and PSP for similar criteria. A key advantage of merging the existing BEP and PSP schemes into one is being able to streamline verification requirements for companies undertaking both programs. For VCA members in particular, this means signing up for a single scheme rather than having to contend with the various criteria of several different schemes.

GBCA rewards schemes that rely on third party verification and has indicated that a maximum 2-year validity of verification is preferred. The current BEP offers 3 pathways to achieve compliance by third party verification: ISO14001 EMS, Manufacturers' Declaration and ISO Type 5 product conformance certification (such as Watermark). At this stage, there is no intention to change these options. However, the audit frequencies for the various BEP compliance pathways do not align. BEP certificates are valid for between 1 and 5 years depending on the audit pathway used and the terms of the assessor.

In addition, BEP requires a third-party verification audit whereas PSP Excellence Award relies largely on self-reporting, with random periodic external audits of Signatories which means an Award recipient may or may not have been externally audited at the time the Award is granted. PSP Excellence Awards are valid for one year. We anticipate that if BEP and PSP Excellence are aligned, recipients will have to have undergone a third party verification.

Evidence requirements also vary between the BEP and PSP schemes, where PSP accepts manufacturer declarations from suppliers as to compliance with PVC resin requirements, while BEP verifies information through additional documentary evidence (copies of licence permits, EMS scopes etc) and independent reports such as UNEP/EuroChlor mercury chlorine plant lists. Input will be sought on how these varying evidence requirements can be unified without disadvantaging any party, while promoting best practice.

A major gap identified for the current Best Practice PVC scheme is the absence of a clear process for developing and revising the scheme criteria, and systems to manage external auditors. In contrast, the PVC Stewardship Scheme has a documented process that requires approval of its Technical Steering Group and consensus of all Signatories for any commitment additions or revisions.

These governance and verification system approaches will be discussed in a separate paper, including key items such as:

- Criteria revision procedures
- Auditor qualification, training and information dissemination
- Evidence requirements
- Data management and retention
- Quality management
- Transitional period arrangements for accredited members/Signatories once the new scheme is launched.

Any specific comments on auditing and governance can be provided as feedback in the next paper specific to these areas.

# Summary of Questions for Feedback

## A. Gap Analysis – Scheme Parameters

A.1 Should BEP accreditation apply to all PVC products supplied to the Australian market (as per PSP) or only those a company selects to have verified?

A.2 Which approach do you prefer:

- (a) Compliance with all criteria?
- (b) Compliance with Core Criteria plus a selection of Optional Criteria?

A.3 Comments

## B. Gap Analysis – Organisational Sustainability

B.1 To what extent do you agree with this statement: An updated scheme should address legal compliance, supply chain incidents and/or product conformance (including health & safety) compliance.

(Strongly Disagree / Disagree / Neutral / Agree)

B.2 To what extent do you agree with this statement: An updated scheme include criteria on quality and supplier management.

(Strongly Disagree / Disagree / Neutral / Agree)

B.3 Comments

## C. Gap Analysis – Best Practice Manufacturing

C.1 Under an updated scheme, should EMS requirements relate to

- (a) Just PVC resin manufacturers, or
- (b) Product manufacturer, or
- (c) Both?

C.2 What minimum standards should be expected for EMS:

- (a) Industry determined environmental criteria (please provide details) or
- (b) ISO 14001 certified?

C.3 To what extent do you agree with this statement: All existing BEP /PSP manufacturing criteria (emissions, OH&S) should be aligned and merged.

(Strongly Disagree / Disagree / Neutral / Agree)

C.4 Comments

## D. Gap Analysis – Resource Efficiency

D.1 To what extent do you agree with this statement: Reduction of post-industrial waste to landfill should be a compulsory criterion?

(Strongly Disagree / Disagree / Neutral / Agree)

D.2 Should the PSP commitment to divert incoming packaging waste from landfill be included as a compulsory or optional criterion?

- Compulsory
- Optional

- Neither, not included (please explain why in Comments box)

D.3 How should PVC recyclate and recycled content be addressed in an updated scheme?

- Incorporate requirements for products to contain recycled content where standards permit (*without setting specific percentage requirements*);
- Accept alternative pathways if products are unable to have recycled content (similar to PSP approach);
- Or consider other approaches that encourage use of recycled PVC (provide details below)

D.4 Comments

#### **E. Gap Analysis – Energy & GHG Emissions**

E.1 To what extent do you agree with this statement: BEP should adopt the PSP requirements for energy efficiency and greenhouse gas reduction?

(Strongly Disagree / Disagree / Neutral / Agree)

E.2 Should an updated scheme include the following as optional criteria?

- Incentivise renewable energy use
- Consider transport energy impacts

E.4 Comments

#### **F. Gap Analysis – Transparency & Engagement**

F.1 To what extent do you agree with this statement: An updated BEP scheme require disclosure of additives, e.g. through Product Data Sheets, without specifying amounts?

(Strongly Disagree / Disagree / Neutral / Agree)

F.2 Would it be useful for an updated scheme to include an optional credit on employee sustainability training?

F.3 Comments

#### **G. Issues of Concern (Hot Spot Analysis)**

G.1 Please add any material issues that you think an updated scheme should address.

#### **H. Future Options**

H.1 To what extent do you agree with this statement: BEP and PSP should be aligned into one updated scheme?

(Strongly Disagree / Disagree / Neutral / Agree)

H.2 To what extent do you agree with this statement: All existing BEP /PSP criteria should be aligned and merged?

(Strongly Disagree / Disagree / Neutral / Agree)

H.3 In your opinion, which of the following criteria should not be included? Please provide reasons in comment box below.

- Integration of obligations into business
- Halogenated emissions management
- Occupational exposure limits
- Criteria addressing hazardous pigments
- Recycling PVC containing legacy additives
- Reduction of post-industrial waste in landfill

- Consumer responsible care
- Disclosure of additives upon request

H.4 Which criteria would you support being added as optional criteria? This would offer flexibility and facilitate potentially earning additional points under the Green Star matrix.

- Life cycle thinking
- Use of PVC recyclate in recycled products
- Diversion of packaging waste in landfill
- Use of renewable energy
- Environmental Product Declarations
- Others (please add details below)

H.5 Comments