



# The New Zealand Ecolabelling Trust

**Licence criteria for**

**Carpets and Rugs**

**EC-63-25**

The New Zealand Ecolabelling Trust  
Office 201, 48 Greys Avenue  
Auckland CBD  
Auckland 1010  
New Zealand

Ph: +64 9 845 3330

Email: [info@ecochoice.org.nz](mailto:info@ecochoice.org.nz)

Website: <http://www.ecochoiceaotearoa.org.nz>

## Specification change history

Minor clarifications, corrections or technical changes made since the specification was last reviewed and issued in October 2025.

Publication Date	Version	Change
01/04/2026	October 2025	The updated standard introduces a new criterion under Hazardous substances requiring publicly available SDSs, alongside revisions to Environmental Management Systems, Modern Slavery and Social Accountability (and Appendix), Energy Management and Greenhouse Gas Emissions and Waste Management, bringing all criteria in line with current ECA standards.

## Table of contents

<b>1</b>	<b>Introduction</b>	<b>5</b>
<b>2</b>	<b>Background</b>	<b>6</b>
<b>3</b>	<b>Interpretation</b>	<b>7</b>
<b>4</b>	<b>Category definition</b>	<b>10</b>
<b>5</b>	<b>Environmental criteria</b>	<b>11</b>
5.1	Legal requirements 🌍	11
5.2	Product information	12
5.3	Modern slavery and social accountability 👤👤	13
5.4	Materials	14
5.4.1	Wool	14
5.4.2	Acrylic fibres 🌍	16
5.4.3	Polyamide (nylon) 🌍	17
5.4.4	Polyester 👤👤 🌍	17
5.4.5	Polypropylene 👤👤	17
5.4.6	PVC 👤👤 🌍	17
5.4.7	Natural rubber 🌍	18
5.4.8	Latex, synthetic rubber and bitumen 👤👤	18
5.4.9	Plant-sourced fibres 👤👤 🌍	19
5.5	Manufacturing	19
5.5.1	Environmental Management System 🌍	19
5.5.2	Procurement 🌍	20
5.5.3	Reused, recycled, rapidly renewable or compostable content 🌍	21
5.6	Hazardous substances 👤👤 🌍	21
5.7	Yarn	23
5.7.1	COD in dyehouse effluent 🌍	23
5.7.2	Insect resistance treatment 🌍	24
5.8	Dyes and dye processes 👤👤 🌍	25
5.9	Waste management 🌍	27
5.10	Energy management and greenhouse gas emissions 🌍	28
5.11	Water management 🌍	29
5.12	Emissions to indoor air from the finished product 👤👤	29
5.13	Product stewardship	30
5.13.1	Recycling or composting of finished product 🌍	30
5.13.2	Take-back schemes 🌍	31
<b>6</b>	<b>Product characteristics</b>	<b>32</b>
6.1	Fitness for purpose 👤👤 🌍	32
6.2	Product warranty 🌍	33
<b>7</b>	<b>Requirements and notes for Licence Holders</b>	<b>33</b>
<b>Appendix A :</b>	<b>Composition table</b>	<b>35</b>
<b>Appendix B :</b>	<b>Treatments table</b>	<b>36</b>
<b>Appendix C :</b>	<b>Modern Slavery and social accountability</b>	<b>37</b>
	C1 International Bill of Human Rights	37
	C2 ILO Declaration	38
<b>Appendix D :</b>	<b>Hazardous substances</b>	<b>39</b>
<b>Appendix E :</b>	<b>Ozone Depleting Substances</b>	<b>40</b>



# 1 Introduction

Eco Choice Aotearoa (ECA) is an environmental labelling programme which has been created to help businesses and consumers find products and services that ease the burden on the environment. The programme results from a New Zealand Government initiative and has been established to improve the quality of the environment by and maximising the beneficial minimising the adverse environmental impacts generated by the production, distribution, use and disposal of products, and the delivery of services. The programme is managed by the New Zealand Ecolabelling Trust (The Trust).

ECA operates to the ISO 14024 standard "Environmental labels and declarations – Type I environmental labelling – Principles and procedures" and The Trust is a member of the Global Ecolabelling Network (GEN) an international network of national programmes also operating to the ISO 14024 standard.

ISO 14024 requires environmental labelling specifications to include criteria that are objective, attainable and verifiable. It requires that interested parties have an opportunity to participate and have their comments considered. It also requires that environmental criteria be set, based on an evaluation of the environmental impacts during the actual product or service lifecycle, to differentiate product and services on the basis of preferable environmental performance.

The lifecycle approach is used to identify and understand environmental issues (adverse or beneficial impacts) across the whole life of a product or service (within a defined product or service category). This information is evaluated to identify the most significant issues and from those to identify the issues on which it is possible to differentiate environmentally preferable products or services from others available in the New Zealand market. Criteria are then set on these significant and differentiating issues. These must be set in a form and at a level that does differentiate environmentally preferable products or services, is attainable by potential ECA licence applicants and is able to be measured and verified. As a result of this approach, criteria may not be included in an ECA specification on all aspects of the lifecycle of a product or service. If stages of a product or service lifecycle are found not to differentiate environmentally preferable products or services, or to have insufficient data available to allow objective benchmarking in New Zealand, those stages will not generally be included in criteria in the specification. For some issues, however, (such as energy and waste) criteria may be set to require monitoring and reporting. These criteria are designed to generate information for future reviews of specifications.

The Trust is pleased to publish this revised specification for Carpets and Rugs. The specification has been published to take account of substances and processes harmful to the environment, energy management, waste management, and end of life disposal of products and packaging.

This revised specification sets out the requirements that carpet and rug products will be required to meet in order to be licensed to use the ECA Label. The requirements include environmental criteria and product characteristics. The specification also defines the testing and other means to be used to demonstrate and verify conformance with the environmental criteria and product characteristics.

This revised specification has been prepared based on an overview level lifecycle assessment, information from specifications for similar products from other GEN-member labelling programmes, relevant information from other ECA specifications, publicly available information, and information provided by current licensees.

This specification is valid for a period of five years. Twelve months before the expiry date (or at an earlier date if required), the Trust will initiate a further review process for the specification.

## 2 Background

The environmental impact of carpet and rug products occurs throughout the product lifecycle from raw materials through to manufacturing and disposal of the product. Each stage of the product's lifecycle presents an opportunity to reduce environmental harm and increase environmental benefit.

Both natural and synthetic fibre manufacture requires water and energy intensive processes. Processing of the materials used in carpet and rugs can involve use of hazardous substances including dyes, heavy metals additives, degreasing and cleaning agents, solvents, adhesives, preservatives, biocides, and flame retardants. Some of these substances are carcinogenic, mutagenic, toxic, ecotoxic, or harmful to human reproductive systems. Discharges of these substances from processing operations can have adverse impacts on the environment and people.


Some of the hazardous substances used in manufacturing can also become incorporated into the materials, and can result in discharges from the finished carpet or rug. These can have adverse effects on human health during use, such as carcinogenic emissions of volatile organic compounds (VOCs).


Ensuring products are durable and have a long life will help to reduce the overall burden of these products on the environment. Historically there have been limited options to avoid disposal of carpet and rug products to landfill. Initiatives on product design for recyclability, product stewardship, waste reduction, reuse and recycling will prolong the effective life of the raw materials used in manufacturing.

Based on a review of currently available information, the requirements of this carpet and rug specification will produce environmental benefits by:

- reducing hazardous substance use, discharges and emissions to the environment;
- reducing the exposure of people to hazardous substances;
- encouraging the effective and responsible use of resources and sustainable management of resources;
- minimising waste; and
- improving energy efficiency and conservation.

### 3 Interpretation

 (Environmental Responsibility) means a criterion or sub-clause within the ECA specification which addresses an environmental concern.

 (Social Responsibility) means a criterion or sub-clause within the ECA specification which addresses a social concern.

**ASTM:** American Society for Testing and Materials

**Blowing agent** means a substance (gas, liquid) that is able to produce cells in the plastic structure of a foam. This process can vary according to the property of the substance, e.g. a liquid may develop cells when changing into gas and a gas may expand when pressure is released.

**Backing:** Tufted carpets (and rugs) have backing systems or chemistry to keep tufts in place. Backing systems are made from a variety of materials. Backing systems generally comprise a primary backing and a chemical adhesive. Frequently a secondary backing is included. Commonly the yarn is secured into the primary backing by synthetic latex, and a secondary backing (or cushion) is attached with a bonding agent or adhesive to add stability to the carpet structure.

Woven carpets interlace face yarns and backing yarns into a complete product, eliminating the need for a secondary backing. A small amount of latex back coating is usually applied for bulk.

**Carpet tiles** are carpet squares, often 500 mm x 500 mm or 18 inches by 18 inches (457 x 457 mm) each but also available in other sizes, with or without attached cushion backing. These products may also be referred to as modular carpet.

**CFCs** means Chlorofluorocarbons.

**Chemical Oxygen Demand (COD)** means the mass concentration of oxygen equivalent to the amount of dichromate consumed by dissolved and suspended matter when a water sample is treated with that oxidant under defined conditions.

**Energy management programme** means a programme to achieve and sustain efficient and effective use of energy including policies, practices, planning activities, responsibilities and resources that affect the organisation's performance for achieving the objectives and targets of the Energy Policy.

**Environmental management system** means a framework that helps an organisation achieve its environmental goals through consistent review, evaluation, and improvement of its environmental performance.

**Fibre** is a natural or artificial material with a very high aspect ratio. That is, lengths hundreds to thousands of times greater than their widths. Useful textile fibres have high tensile strengths, flexibility, and in the case of polymer (synthetic) yarns, resistance to heat, light, chemical, and abrasives. Any substance which can be made into yarn.

**GEN** means the Global Ecolabelling Network.

**Greenhouse Gas (GHG)** means a gas that absorbs and emits radiant energy within the thermal infrared range, causing the greenhouse effect (a process that occurs when energy from a planet's sun goes through its atmosphere and warms the planet's surface, but the atmosphere prevents the heat from returning directly to space, resulting in a warmer planet).

**Global Warming Potential (GWP)** is a measure of how much a gas is estimated to contribute to global warming. It is a relative scale that compares the contribution of the gas to that of the same mass of carbon dioxide (CO<sub>2</sub>), which has a GWP of 1, over a defined time frame, usually 100 years. E.g. methane has a GWP of 21 (100-year time frame). This means that, over 100 years, methane will be approximately 21 times more heat-absorptive than CO<sub>2</sub> per unit of weight<sup>1</sup>.

**HSNO** means Hazardous Substances and New Organisms Act 1996.

**HCFCs** means hydrochlorofluorocarbons.

**HFCs** means hydrofluorocarbons.

**ILO** means International Labour Organisation, which is a United Nations agency whose mandate is to advance social and economic justice through setting international labour standards.

**ISO** means International Organisation for Standardisation.

**IWTO** means International Wool Textile Organisation.

**Label** means the Eco Choice Aotearoa Label.

**Living Wage** means a concept that was launched in New Zealand in 2012. It is the hourly wage a worker needs to pay for the necessities of life and participate as an active citizen in the community.

**Ozone Depleting Potential (ODP)** is a relative value that indicates the potential of a substance to destroy ozone gas (and thereby damage the Earth's ozone layer) as compared with the impact of a similar mass of chlorofluorocarbon-11 (CFC-11). CFC-11 is assigned a reference value of 1. E.g. a substance with an ODP of 2 is twice as harmful to the ozone layer as CFC-11<sup>2</sup>.

**Recycling** means turning waste materials into useful materials. Examples include vinyl backing into vinyl backing, or face fibre into automotive parts.

**Recycled includes:**

- **Post-Consumer:** Material generated by households, or by commercial, industrial and institutional facilities in their role as end-users of a product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
- **Post-Industrial:** Material diverted from the waste stream during a manufacturing process. Excluded is re-utilisation of materials such as rework, or scrap generated in a process and capable of being reclaimed within the same process that generated it.

**Re-use/Reusability** is the ability of a product to be used again by another user or for another purpose. An example would be an extended life programme, where tiles are taken back, refurbished and then re-supplied to the same or another user to begin a 'second life'.

**Rapidly Renewable** is a resource capable of being replaced in less than 10-year time (harvest maturity) by natural ecological cycles. Examples include natural fibres, bio-based polymers and regenerated bamboo. Cellulosic fibres such as acetate, viscose rayon and lyocell are excluded.

**Safety Data Sheet (SDS)** means a document that describes the properties and uses of a substance, that is, identity, chemical and physical properties, health hazard information, precautions for use and safe handling information in accordance with the New Zealand Chemical Industry Council – Preparation of Safety Data Sheets Code of Practice.

**Solution dyed yarn** is created when the colour pigments are added to the material before extrusion (which is the process used to create the yarn) as opposed to yarn dyed after it has been converted to yarn. Note that there are also numerous means of dyeing face fibre prior to tufting or dyeing carpet after it has been tufted including beck, injection dyeing, topical dyeing, print dyeing or continuous dyeing.

**Total recycled content** is a combination of post-consumer content and post-industrial content. That is the amount of pre- and post-consumer recovered material introduced as a feed stock in a material production process, usually expressed as a percentage by total weight.

**Tufted / Tufting** Is a process for attaching yarn to primary backing. Several hundred needles stitch hundreds of rows of pile yarn tufts through a backing fabric called the primary backing. Other methods include weaving, and fusion bonding.

**Volatile organic compound (VOCs)** are any organic compound having at 293.15 K a vapour pressure of 0.01 kPa or more or having a corresponding volatility under the particular conditions of use.

**Waste management programme** means a programme to achieve and sustain efficient and effective minimisation and disposal of waste including policies, practices, planning activities, responsibilities and resources that affect the organisation's performance for achieving the objectives and targets of the Waste Policy.

## 4 Category definition

This category includes carpet and rug products with the following fibre types:

- Natural fibres including wool.
- Synthetic fibre comprising acrylic, polyamide (nylon), polyester (PET) or polypropylene, recycled PVC.
- Blends of the above fibre types.

At least 90 % of the face fibre by weight must comprise one or more of the materials covered in clause 5.4 of this specification. No other single material shall comprise more than 5 % weight of the face fibre used.

At least 80% by weight of the backing must comprise of one or more of the materials covered in clause 5.4 of this specification. In this context backing includes the primary and secondary backing materials and the stabilising adhesives; but excludes the fillers.

To be licensed to use the Label, the carpet or rug product must meet all of the environmental criteria set out in clause 5 and product characteristics set out in clause 6.

## 5 Environmental criteria

### 5.1 Legal requirements

#### Criteria

- a. The product must comply with the provisions of all relevant environmental laws and regulations that are applicable during the product's life cycle. The laws are expected to include the following:
  - Ensuring that areas of high ecological value are not impacted and are protected from sourcing or manufacturing processes.
  - Engagement with indigenous communities/ communities at risk directly impacted by sourcing or manufacturing processes, and that free, prior and informed consent is achieved.

**Note:** In the event there are no laws or regulations that covers the above requirements, the licence applicant/holder will be expected to implement processes to fulfil these requirements.

- b. Materials or processes involved in the production of carpet/rug products may not be under the direct control of a licence applicant/holder. Where this is the case, the licence applicant/holder must implement a formal supplier regulatory compliance management/assurance programme that:
  - includes documented requirements to comply with the items outlined in criterion a.
  - includes documented requirements for suppliers to provide raw materials or services compliant with applicable environmental regulatory requirements (for example in supply contract conditions).
  - identifies suppliers, materials or processes that involve, or would be expected to be subject to a high level of regulatory control and/or which present a high potential risk of regulatory non-compliance.
  - includes appropriate requirements (based on the risk assessment) for suppliers to provide assurance to the licence applicant/holder on the supplier's environmental regulatory compliance.

#### Verification required

Conformance with this requirement shall be demonstrated by providing a written statement on regulatory compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company/licence holder. This statement shall be supported by current documentation:

- Identifying the applicable regulatory requirements including specific obligations arising from permits, regulations, and regulatory plan rules.
- Demonstrating how compliance is monitored and maintained.
- Copies of wording from supply contract conditions or other documented requirements for contract manufacturers (if applicable).

Verification of continued compliance with legal requirements will form part of the Licence Supervision Plan.

#### Explanatory notes

Relevant laws and regulations could, for example, include those that relate to:

- Producing, sourcing, transporting, handling and storing raw materials and components for manufacture.
- Manufacturing processes.
- Handling, transporting and disposing of waste products arising from manufacturing.
- Transporting product within and between countries.
- Using and disposing of the product.

The documentation required may include, as appropriate:

- Procedures for approving and monitoring suppliers and supplies.
- Information provided to customers and contractors regarding regulatory requirements.
- Evidence of a formal certified environmental management system (for example an ISO 14001 certificate) and supporting records on regulatory compliance (for example, copies of regulatory requirements registers, procedures to manage regulatory compliance, monitoring and evaluation reports on regulatory compliance, internal or external audits covering regulatory compliance and management review records covering regulatory compliance).
- Copies of published environmental, sustainability and/or annual reports expressly addressing environmental regulatory compliance (for example verified Environmental Statements prepared under the European EMAS regulations).
- Audit reports completed by independent and competent auditors addressing regulatory compliance (for example, reports for other eco-label licences or reports from regulator audits).

It is not intended to require licence holders to accept increased legal responsibility or liability for actions that are outside their control. The Trust's intention is to ensure any potential for environmental regulatory non-compliance associated with an ECA labelled product is managed to a level that minimises risk of reputation damage to the ECA label and programme.

## 5.2 Product information

### Criteria

- a The face fibre must comprise at least 90% by weight of one or more of the materials covered in clause 5.4. No other single material shall comprise more than 5% weight of the face fibre used.
- b The backing must comprise at least 80% by weight of one or more of the materials covered in clause 5.4 of this specification. In this context backing includes the primary and secondary backing materials and the stabilising adhesives; but excludes the fillers.
- c Licence applicants/holders and/or carpet and rug manufacturers must provide the following information:
  - The composition of the finished carpet or rug, including all material types used in the face fibres and backings, % by weight of the finished product, recycled content of materials used and % by weight of the finished product (see Table 1 in Appendix A);
  - A list of all chemicals and treatments added during and after manufacturing of the carpet (see Table 2 in Appendix B).

### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by:

- Completed tables from Appendix A and Appendix B.
- When claiming that the material is recycled, documentation will be required to demonstrate that the polymers are recycled and to describe management systems in place (with relevant quality control and production documentation) to ensure that the claimed percentages are consistently met.

### Explanatory notes

Licence holders must maintain and update this information and advise The Trust about any changes to this information.

Changes to information, in particular to products and suppliers, will require assessment before the changed product can be verified as compliant.

### 5.3 Modern slavery and social accountability

#### Criteria

- a. The applicant / licence holder and manufacturer must have a publicly available policy / policies on human rights, diversity & inclusion, and anti-bullying. At a minimum, it should comprise:
- An explicit commitment to respect all internationally recognized human rights standards – understood, at a minimum, as the International Bill of Rights and the International Labour Organization (ILO) Declaration on the Fundamental Principles (see below) and Rights at Work;
  - Stipulations concerning the company's expectations of personnel, business partners and other relevant parties e.g. a code of conduct; and
  - Information on how the company will implement its commitment and monitor compliance with it.

**Note:** The Trust expects the applicant / licence holder and manufacturer to show that it is undertaking activities to create more equitable conditions for those affected by, or involved in, the sourcing and manufacturing of products and materials, supported by a publicly available document.

- b. Where an applicant / licence holder and manufacturer has found instances of modern slavery in their business operations and or supply chains\* in the past two years, there shall be evidence of corrective action.
- c. In addition to the above, the applicant / licence holder and manufacturer shall consider:
- Providing information to confirm whether the requirements of Social Accountability International Standard, SA8000 have been considered;
  - Being a Living Wage employer (or equivalent); and
  - Having a senior member (example: manager, director, or C-suite level roles) of its organisation responsible for social and environmental sustainability.

**Note:** From ILO Declaration on the Fundamental Principles and Rights at Work, there are the following core labour standards:

- Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87);
- Right to Organise and Collective Bargaining Convention, 1949 (No. 98);
- Forced Labour Convention, 1930 (No. 29);
- Abolition of Forced Labour Convention, 1957 (No. 105);
- Minimum Age Convention, 1973 (No. 138);
- Worst Forms of Child Labour Convention, 1999 (No. 182);
- Equal Remuneration Convention, 1951 (No. 100); and
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111).

\*Supply chains refer to the products and services (including labour) that contribute to the ECA-licensed products and services. This includes products and services sourced in NZ or overseas and extends beyond direct suppliers.

#### Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant/licence holder. This statement shall be accompanied by documentation that:

- Copies of the relevant policies, procedures and plans; and
- Records demonstrating the plans are being effectively implemented (including monitoring results).

#### Explanatory notes

Information on the United Nations International Bill of Human Rights and the ILO Declaration on the Fundamental Principles and Rights at Work is provided in **Appendix C**.

## 5.4 Materials

### 5.4.1 Wool

#### 5.4.1.1 Wool sourcing

##### Criteria

The licence applicant/holder must be a signatory to the New Zealand Farm Assurance Programme (NZFAP) and/ or have an animal welfare policy that its wool suppliers are aware of and adhere to. This should cover the Five Freedoms of animal welfare:

- Freedom from hunger and thirst
- Freedom from discomfort
- Freedom from pain, injury, and disease
- Freedom to express normal behaviour
- Freedom from fear and distress

##### Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by a copy of the NZFAP approval or animal welfare policy.

#### 5.4.1.2 Wool scouring

##### Criteria

Wool must be scoured in a scour that meets the requirements set in the ECA specification EC-47 Wool Scouring Services.

##### Verification required

Conformance with this requirement shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by documentation as follows:

- a copy of the ECA certificate covering the wool scour; **OR**
- an assessment report showing compliance with the requirements of EC-47 Wool Scouring Services, completed by an independent assessor from the ECA register and appointed by the Trust; **AND**
- production and quality control processes and records to demonstrate that the scoured wool to be licensed or finished carpet or rug product includes wool that was scoured in a scour meeting EC-47 requirements.

### 5.4.1.3 Pesticides

#### Criteria

- a. Licence applicant/holders must have and implement a fibre procurement programme for greasy wool with the objectives of purchasing wool from farmers:
- using pesticides with lower human toxicity and aquatic ecotoxicity;
  - using pesticides with higher efficacy (likely to be based on persistence and effectiveness over time on the animals and more targeted on problem pest species); and
  - implementing best practice in storing, handling, managing and using pesticides so as to avoid pesticide discharges to ground or water.

The procurement programme shall be supported by:

- records and information from the farmers on pesticides used and practices employed to apply and manage pesticides on their farms; and
- a programme of pesticide residue testing on greasy wool that provides for:
  - at least two samples and test results initially for each farmer supplying wool; and
  - additional testing if there are changes to the pesticides or application practices employed by the farmer that may impact on pesticide residue levels on wool.

The pesticide residue testing programme may be implemented progressively over a period of no more than three years, beginning with the farmers supplying the greatest volumes of wool. At least 10% of wool purchased must be tested at the time of application for an ECA licence.

The licence applicant/holder shall report to the Trust on application and thereafter annually on the procurement and testing programmes.

Testing shall be carried out using IWTO Draft Test Method 59 *Method for the Determination of Chemical Residues on Greasy Wool* or an equivalent test method approved by ECA. Test results shall be reported for the following pesticides.

Substance	CAS no
Organochlorine Insecticides (OCs)	
γ-hexachlorocyclohexane (Lindane)	319-84-6
α-hexachlorocyclohexane	319-85-7
β-hexachlorocyclohexane	58-89-9
δ-hexachlorocyclohexane	319-86-8
aldrin	309-00-2
dieldrin	60-57-1
endrin	72-20-8
p,p'-DDT	50-29-3
p,p'-DDD	72-54-8
Organophosphorous Insecticides (OPs)	
Propetamphos	31218-83-4
Diazinon	333-41-5
Dichlofenthion	97-17-6
Fenclorphos	299-84-3
Chlorpyriphos	2921-88-2

Chlorfenvinphos	470-90-6
Ethion	563-12-2
Pirimiphos-Methyl	29232-93-7
<b>Synthetic Pyrethroids (SPs)</b>	
Cyhalothrin	68085-85-8
Cypermethrin	52315-07-8
Deltamethrin	52918-63-5
Fenvalerate	51630-58-1
Flumethrin	69770-45-2
<b>Insect Growth Regulators (IGRs)</b>	
Diflubenzuron	35367-38-5
Triflumuron	64628-44-0
Dicyclanil	112636-83-6
Cyromazine	66215-27-8

### Verification required

Conformance with this requirement shall be demonstrated by providing a written statement on compliance signed by the Chief Executive or other authorised representative of the applicant company. This statement shall be supported by documentation as follows:

- details of the procurement and testing programmes for greasy wool; and
- reports on the implementation of the procurement and testing programmes, including sufficient detail to demonstrate that the requirements of clauses a) - c) have been met.

## 5.4.2 Acrylic fibres

### Criteria

- a The residual acrylonitrile content in raw fibres leaving the fibre production plant shall be less than 1.5 mg/Kg.
- b The emissions to air of acrylonitrile (during polymerisation and up to the solution ready for spinning), expressed as an annual average, shall be less than 1 g/Kg of fibre produced.

### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by:

- a test report showing compliance with (a) using the following test method: extraction with boiling water and quantification by capillary gas-liquid chromatography; and
- detailed documentation and/or test reports showing compliance with (b).

### 5.4.3 Polyamide (nylon) 🌍

#### Criteria

Emissions to air of N<sub>2</sub>O during monomer production, expressed as an annual average, shall not exceed 10 g/kg polyamide 6 fibre produced and 50 g/kg polyamide 6,6 produced.

#### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by a declaration on compliance from the supplier or information on the supplier's compliance.

### 5.4.4 Polyester 👤🌍

#### Criteria

- a The amount of antimony in the polyester fibres shall not exceed 260 ppm.
- b The emissions of VOCs during polymerisation and fibre production of polyester, measured at the process steps where they occur, including fugitive emissions as well, expressed as an annual average, shall not exceed 1.2 g/kg of produced polyester resin.

#### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by declarations on compliance from the supplier of the polyester or information on the supplier's compliance.

### 5.4.5 Polypropylene 👤🌍

#### Criteria

Lead-based pigments shall not be used.

#### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by declaration on compliance from the supplier or information on the supplier's compliance.

### 5.4.6 PVC 👤🌍

#### Criteria

- a. Virgin PVC shall not be used.
- b. For recycled PVC, the following information shall be provided to The Trust at application and thereafter reported annually on recycled PVC and/or phthalates used in the synthetic carpet or rug. This should include information from production records and/or suppliers on:
  - i. the percentages by weight of recycled PVC;
  - ii. the particular production processes (mechanical or feedstock recycling);
  - iii. information, where available, on waste disposal, wastewater treatment and emissions to air (occupational exposure, emissions from the factory and emissions from the final PVC resin);

- iv. information on any Environmental Management System (EMS) for the production process, including requirements for waste, water, air and product-related requirements;
- v. the types of stabilisers used;
- vi. the types and amounts of any phthalate plasticisers present in recycled PVC;
- vii. research and initiatives implemented on substitutes for phthalates identified as of concern by regulators; and
- viii. any product stewardship arrangements for the PVC.

### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by appropriate documentation including:

- product specifications;
- production methods;
- calculations and quality controls; and
- initial and ongoing annual reports to The Trust on PVC and plasticisers used.

### Explanatory notes

Regulators have identified the following phthalates to be of concern – dibutyl phthalate (DBP), diisobutyl phthalate (DIBP), butyl benzyl phthalate (BBP), di-n-pentyl phthalate (DnPP), di(2-ethylhexyl) phthalate (DEHP), di-n-octyl phthalate (DnOP), diisononyl phthalate (DINP) and diisodecyl phthalate (DIDP). These phthalates may be prohibited by the Hazardous Substances criteria in clause 5.6.

## 5.4.7 Natural rubber

### Criteria

The carpet and/or rug manufacturer must:

- a. have a system to trace and verify the origin of any natural rubber;
- b. maintain records of any certification of rubber material used in licensed products; and
- c. have, implement and report on an ongoing programme to review options to include Forest Stewardship Council (FSC) or equivalent certified rubber content in licensed products.

### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation:

- recording the supplier, nature and geographical source of all rubber inputs to the synthetic carpet or rug;
- including certificates or other evidence on forest management and certification; and
- including an initial and annual report to The Trust on the programme to review options to include Forest Stewardship Council or equivalent certified rubber content in licensed products.

## 5.4.8 Latex, synthetic rubber and bitumen

### Criteria

The carpet or rug manufacturer must have, implement and report on a procurement policy to avoid or minimise the use of hazardous additives in the production of rubber, latex, or bitumen based backing materials and stabilising adhesives (for example styrene and butadiene).

### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation:

- identifying the hazardous additives used in the latex, synthetic rubber or bitumen backing materials and stabilising adhesives;
- describing the procurement policy to avoid or decrease the hazardous additives added in the production of Latex, Synthetic Rubber or Bitumen;
- describing management systems in place with relevant quality control and production documentation to ensure that these requirements are consistently met; and
- including an initial and annual report to The Trust on the procurement programme and additives used.

### Explanatory notes

The use of some phthalates or additives may be prohibited by the Hazardous Substances criteria in clause 5.6 Hazardous Substances.

## 5.4.9 Plant-sourced fibres

### Criteria

Plant-sourced fibres - including cotton, natural seed, flax, jute and other bast fibres – must meet the plant-sourced fibre specific requirements of the ECA specification EC-31 Textiles, Skins and Leather.

### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation information to demonstrate that the fibre meets the applicable requirements in EC-31.

## 5.5 Manufacturing

### 5.5.1 Environmental Management System

#### Criteria

- a. The applicant / licence holder or manufacturer must have (or establish, if necessary) appropriate environmental management processes or an environmental management system (EMS), to manage the environmental impacts from the manufacturing of the product.
- b. The environmental management system or process [EMS] must include a process for identifying environmental risks and opportunities (hotspot analysis) and implementing programs to reduce identified impacts to air, water, and land from manufacturing activities.
- c. The risk assessment process discussed in **criterion b**, must also identify and classify hazards associated with non-compliant or banned materials/chemicals that have the potential to be used in the

manufacturing process, and implement control measures to mitigate identified risks appropriate to their risk level.

- d. Should banned chemicals (or restricted chemicals that are beyond the limits outlined in this standard) be found within the licensed product, manufacturers must substitute or replace chemicals to align with the standard.

### Verification required

Conformance with this requirement shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant / licence holder or manufacturer. The statement shall be supported by an EMS based on ISO 14001, and details of the supporting processes for controlling hazardous substances, discharges to air, land and water or other relevant environmental impacts.

## 5.5.2 Procurement

### Criteria

- a. Face fibre and backing materials used in carpet or rug products shall be sourced only from manufacturing facilities which:
  - i are committed to reducing use of water and energy;
  - ii are committed to reducing emissions to air and water, particularly greenhouse gases; and
  - iii have active programmes to investigate and increase post-consumer recycled content in the materials they supply.

The carpet or rug manufacturer shall have and implement a procurement programme that:

- i gives preference to suppliers who have environmental management systems that are ISO 14001 (or equivalent) certified;
- ii informs suppliers of the licence applicant/holder's preference for certified environmental management systems; and
- iii requests and pursues reporting information from the suppliers on their measures taken to increase recycled content and the origin of any post-consumer content and their programmes to reduce energy use, water use and emissions to air and water.

An annual report for b (iii) will be required to The Trust either prepared by the Licence holder or provided by the carpet or rug manufacturer or supplier.

### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by:

- copies or extracts of supply contracts with suppliers of fibre and backing that include requirements for programmes to reduce water and energy use and reduce emissions and to report on these;
- information on facilities at which fibre and backing materials destined for an ECA-licensed carpet or rug is manufactured, the certification status of their environmental management systems and/or plans or intentions regarding formal management systems and certification;
- A signed declaration from suppliers confirming commitment to social accountability and avoidance of modern slavery;
- a copy of the carpet or rug manufacturers procurement programme covering point b; and

- an annual report to The Trust on the supplier(s) programmes, prepared by the licence holder, or provided by the supplier(s).

### 5.5.3 Reused, recycled, rapidly renewable or compostable content

#### Criteria

- Synthetic or blended fibre carpet or rug products must contain a minimum of 35% by weight of reused, post-consumer/post-industrial recycled, rapidly renewable or compostable material.

The carpet and/ or rug manufacturer must:

- Have and implement an on-going programme, that includes objectives and targets, to increase reused, post-consumer/post-industrial recycled content, rapidly renewable or compostable content in ECA-licensed carpet or rug products to 50% within 5 years from their first ECA licence verification.
- Provide an annual report to The Trust on the quantity of total reused, post-consumer/post-industrial recycled content, rapidly renewable or compostable content by % of weight of the finished product, including:
  - The % in each of the facing and backing materials of the carpet or rug product;
  - The origin of any post-consumer or post-industrial content;
  - Information on the measures taken to increase reused, post-consumer/post-industrial recycled content, rapidly renewable or compostable content; and
  - Any barriers which are preventing reused, post-consumer/post-industrial recycled content, rapidly renewable or compostable content from being increased further.

#### Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation:

- demonstrating the reused, post-consumer/industrial recycled content, rapidly renewable or compostable content;
- recording the supplier, nature and source of all reused, post-consumer/industrial recycled content, rapidly renewable or compostable content;
- describing management systems in place with relevant quality control and production documentation to ensure that any claimed % of reused, post-consumer/industrial recycled content, rapidly renewable or compostable content is consistently met; and
- that includes an initial and annual report to The Trust on the programme and measures taken to increase the % of reused, post-consumer/industrial recycled content, rapidly renewable or compostable content in the carpet or rug.

### 5.6 Hazardous substances

The following are exempt from clause 5.6:

- Trace levels (<0.1 % by weight) of substances reported in SDS to be potentially present as contaminants or impurities in raw materials or component substances.
- These general requirements do not apply to substances that are specifically identified in substance-specific criteria elsewhere in this specification.

## Criteria

- a The carpet or rug product shall not be manufactured with materials or substances that are classified as, carcinogens, mutagens or reproductive/developmental toxins, as identified using any of the classifications (or combinations thereof) listed in the table in Appendix D including fillers, dyes, adhesives, and any chemicals used during manufacturing.

The following are exempt from clause a:

- 1,3 butadiene, N-nitrosamines, and styrene used in the production of rubber.
- b Raw materials or substances added to the carpet or rug product that are classified as ecotoxins (as identified using any of the classifications, or combinations thereof, listed in the table in Appendix D) must not comprise in total more than 2% by weight of the finished carpet or rug product.
- c Raw materials or substances added to the carpet or rug product that are classified as sensitisers or allergenic (as identified using any of the classifications listed in the table in Appendix C D) must not comprise in total more than 0.1% by weight of the finished carpet or rug product.
- d Organotin compounds must not be used.
- e Blowing agents with a global warming potential (GWP) of more than 140, measured over a 100-year time frame must not be used.
- f Blowing agents must have an ozone depleting potential (ODP) of zero.
- g The following substances shall not be part of any preparations or formulations used to treat textile fibres:
- i. alkylphenoethoxylates (APEOs)
  - ii. linear alkylbenzene sulfonates (LAS)
  - iii. bis(hydrogenated tallow alkyl) dimethyl ammonium chloride (DTDMAC)
  - iv. distearyl dimethyl ammonium chloride (DSDMAC)
  - v. di(hardened tallow) dimethyl ammonium chloride (DHTDMAC)
  - vi. ethylene diamine tetra acetate (EDTA)
  - vii. diethylene triamine penta acetate (DTPA).
- h The following substances shall not be actively added or used during transportation or storage of products and semi-manufactured products.
- i. antimony oxides;
  - ii. inorganic ammonium phosphates (diammonium phosphates, ammonium polyphosphates etc.);
  - iii. boron compounds (boric acid, borates);
  - iv. halogenated organic substances including (but not limited to) methylene chloride, binding agents, chlorophenols (their salts and esters), PCB , chlorinated/brominated paraffins, polybrominated diphenyl ethers and other halogenated flame retardants;
  - v. fluorochemical finishes; and
  - vi. sulphonated phenolic stainblockers.
- i Biocidal or biostatic products shall not be applied to products so as to be active during the use phase.
- j A publicly available document (example: safety data sheet) which discloses all hazardous substances and chemicals of concern in accordance with the Globally Harmonized System(GHS).

## Verification required

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation that includes:

- lists of materials and substances used in the manufacture of the carpet or rug;
- SDS for all ingredients;

- a publicly available Safety Data Sheet (SDS) may meet the requirements, provided it lists all hazardous substances in the product and other information to confirm that the requirements in are met.. Hazardous substances should be identified in accordance with the New Zealand Health & Safety at Work Act and Hazardous Substances and New Organisms Act, or local equivalent legislation in the country where the product is manufactured. SDS for products sold in New Zealand must meet New Zealand legislative requirements. Hazardous substance classifications should be in accordance with the Globally Harmonised System (GHS).
- calculations and other supporting documents demonstrating that the limits set for finished carpet or rug products are met;
- identifies the blowing agents used and their ODPs and GWPs; and
- relevant quality control and production documentation.

### Explanatory notes

- These requirements do not apply to substances that are specifically identified in substance-specific criteria elsewhere in this specification.
- Requirement (g) applies only to chemicals used to treat textile fibres. Other chemicals, such as those for cleaning production equipment do not need to fulfil the requirement.
- Compliance with the requirements in 5.6 may be demonstrated by providing data indicating that the substance does not have any of the classifications (or combinations thereof) listed in the table in Appendix D.

GWP and ODP for some ozone depleting substances are provided in Appendix E. The references in Appendix E include the ODP and GWP of further substances.

If alternative reference sources are used, The Trust will require full details of the reference source or a copy of the document, if it is not readily and freely available.

## 5.7 Yarn

Yarn shall be sourced only from yarn manufacturing facilities which comply with the following requirements.

### 5.7.1 COD in dyehouse effluent

#### Criteria

- a. The COD level in the dyehouse effluent shall not exceed 35 kg/tonne of fibre dyed.
- b. The carpet or rug licence applicant/ holder shall have and implement an improvement programme focused on reducing COD levels in the dyehouse effluent and report annually to The Trust on its implementation.

#### Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- test reports from a laboratory competent to carry out the relevant test methods;
- calculations to demonstrate the limit is met; and
- information on relevant sample collection procedures and quality control documentation and implementation of the improvement programme for COD levels in effluent.

#### Sampling and testing methods

Sampling shall consist of five daily samples (taken on five successive working days) each consisting of at least three samples per day taken at a minimum of one-hour intervals. All samples (minimum fifteen) shall be combined and duplicate analyses shall be performed on the resulting composite sample.

Sampling for COD analysis shall take place after the operation of any on-site wastewater treatment and at intervals not exceeding six months.

COD shall be determined on unfiltered samples in accordance with APHA 5220, or an equivalent test. If an equivalent test is used, The Trust may require details of the test method and its validation.

## 5.7.2 Insect resistance treatment

### Criteria

- a. Insect-resist agents shall not be applied during opening, carding or spinning operations.
- b. If permethrin or bifenthrin insect resist agents are used, the levels of these agents in total factory effluent shall not exceed:
  - 5g permethrin/tonne of wool treated.
  - 0.5 g bifenthrin/tonne of wool treated.

Total factory effluent includes effluent from the scour and effluent from the dye baths and other wet processes.

Any insect resist agent used, other than permethrin or bifenthrin, must meet the requirements of clause 5.6 Hazardous Substances in this specification.

Any insect resist agent used, other than permethrin or bifenthrin, must have lower *Ceriodaphnia dubia* (water flea) toxicity equivalent than permethrin, based on the rate of the insecticide(s) discharged per tonne of wool treated, calculated in accordance with the following method.

For permethrin:

- AW (grams active in factory effluent / tonne of wool treated) must be less than 5 g/tonne of wool treated.
- LC<sub>50</sub> for *Ceriodaphnia dubia* (48 hour) = 0.6 µg/L.

$$\text{Therefore AW/LC}_{50} \text{ (permethrin)} = 8.3 \frac{\text{grams active / tonne of wool treated}}{\mu\text{g active / Litre effluent}}$$

For an alternative insect resist agent:

- i. Calculate AW (grams active in factory effluent / tonne of wool treated) using the following formula:

$$\text{AW (insect resist agent)} = \frac{\text{AE} \times \text{E/W}}{1000}$$

Where:

- AE (µg/L) = Concentration of active in effluent from the factory.
  - E/W (L/tonne) = Effluent discharged from the factory (L) / tonne of wool treated.
- ii. Calculate AW/LC<sub>50</sub> for the insect resist agent.
  - iii. The AW/LC<sub>50</sub> for the insect resist agent must be less than or equal to 8.3.

### Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by the following information:

- for (a), information on production processes and controls;
- for (b), test reports from a laboratory competent to carry out the relevant test methods, production records and calculations and information on relevant sample collection procedures. Samples shall be taken at intervals not exceeding six months;
- for (c), copies of SDS and/or other technical information on the insect resist agent being used, sufficient to demonstrate it does not have any of the identified classifications; and
- for (d), the calculations required and source information for the value of LC50 *Ceriodaphnia dubia* (48 hour).

## Explanatory notes

Where insect resist agents are used in both the scour and dye bath or other wet processes, the term “factory effluent” refers to the total, combined effluent from all the processes involving the use of insect-resist agents.

## 5.8 Dyes and dye processes 🧑🏻‍🧑🏻‍🧑🏻 🌍

### Criteria

- a Dyes (including metal complex dyes) and pigments containing lead (Pb), cadmium (Cd), mercury (Hg) or chromium (Cr, chromium total) must not be used.

The exception is for wool carpets or rugs, where:

- the dye recipe shall not contain more than 150 mg of chromium per kg of wool dyed until 1 January 2026.
- after 1 January 2026 chromium must not be used to dye wool carpets or rugs.

- b The limit value for the total heavy metal content (including metal complex dyes) of a finished carpet or rug is 100 mg/kg.

- c Dyeing using after-chroming/chrome mordant techniques shall not be used.

- d Metal complex dyes based on copper or nickel can be used provided:

- Where these metal complex dyes are part of the dye recipe, less than 7% of each of those metal complex dyes applied (input to the process) shall be discharged to wastewater treatment (whether on-site or off-site).
- The emissions to water after treatment shall not exceed the value in the following table:

Substance (fibre, yarn or fabric)	Limit Value
Cu	75 mg/kg
Ni	75 mg/kg

- e Azo dyes shall not be used that may cleave to any one of the following aromatic amines:

Name(s)	CAS No.
Benzidine	92-87-5
2-Naphthylamine	91-59-8
5-Nitro-o-toluidine/2 amino-4 nitrotoluene	99-55-8
4-Methoxy-m-phenylenediamine/2,4 diaminoanisole	615-05-4
3,3-Dichlorobenzidine	91-94-1
3,3-Dimethylbenzidine	119-93-7
6-Methoxy-m-toluidine/p-cresidine	120-71-8
4,4.-Oxydianiline	101-80-4

o-Toluidine	95-53-4
2,4,5-Trimethylaniline	137-17-7
4-Aminoazobenzene	60-09-3
2,4-Xylidine	95-68-1
4-Chloro-o-toluidine	95-69-2
o-Amino azotoluene	97-56-3
p-Chloroaniline	106-47-8
4,4.-Methylenedianiline/4,4 diaminodiphenylmethane	101-77-9
3,3.-Dimethoxybenzidine	119-90-4
4,4.-Methylenedi-o-toluidine/3,3-dimethyl-4,4-diaminodiphenylmethane	838-88-0
4,4.-Methylenebis (2-chloroaniline)	101-14-4
4,4.-Thiodianiline	139-65-1
4-Methyl-m-phenylenediamine/2,4 diaminotoluene	95-80-7
O-anisidine	90-04-0
2,6-Xylidine	87-62-7
4-Aminobiphenyl	92-67-1

Source: specified in the 19<sup>th</sup> Amendment of Council Directive 76/769/EEC restrictions on the marketing and use of azo colourants according to the European legislation following the Directive 2002/61/EC ETAD information notice no. 6, Revised February 2008 <http://www.etad.com>

f The following dyes that are carcinogenic, mutagenic or toxic to reproduction shall not be used:

- C.I. Basic Red 9
- C.I. Disperse Blue 1
- C.I. Acid Red 26
- C.I. Basic Violet 14
- C.I. Disperse Orange 11
- C.I. Direct Black 38
- C.I. Direct Blue 6
- C.I. Direct Red 28
- C.I. Disperse Yellow 3

g No use is allowed of dye substances or dye preparations containing more than 0.1% by weight of substances that are classified as carcinogens, mutagens or toxic to reproduction as identified using any of the classifications (or combinations thereof) listed in the table in Appendix D.

h The following potentially sensitising dyes shall not be used:

<b>Name (s)</b>	<b>CI No.</b>
C.I. Disperse Blue 3	C.I. 61 505
C.I. Disperse Blue 7	C.I. 62 500
C.I. Disperse Blue 26	C.I. 63 305
C.I. Disperse Blue 35	
C.I. Disperse Blue 102	
C.I. Disperse Blue 106	
C.I. Disperse Blue 124	

<b>Name (s)</b>	<b>CI No.</b>
C.I. Disperse Brown 1	
C.I. Disperse Orange 1	C.I. 11 080
C.I. Disperse Orange 3	C.I. 11 005
C.I. Disperse Orange 37	
C.I. Disperse Orange 76	
C.I. Disperse Red 1	C.I. 11 110
C.I. Disperse Red 11	C.I. 62 015
C.I. Disperse Red 17	C.I. 11 210
C.I. Disperse Yellow 1	C.I. 10 345
C.I. Disperse Yellow 9	C.I. 10 375
C.I. Disperse Yellow 39	
C.I. Disperse Yellow 49	

### **Verification required**

Conformance with this requirement shall be stated in writing, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by:

- information on dye recipes demonstrating the heavy metal limit is met; and
- Supplier declarations and/or SDS (safety data sheets) or other information to demonstrate the risks, if any, assigned to dyes used.

If the products hold a current GUT label, they fulfil the heavy metal requirements of this clause.

## **5.9 Waste management**

### **Criteria**

- The carpet and/or rug manufacturer and licence applicant/holder must have effective waste management policies and procedures and/or a waste management programme.
- Licence holders must report annually to the Trust on their waste management, and this should include:
  - quantities and types of waste recovered for reuse internally and externally;
  - quantities and types of waste recycled internally and externally;
  - quantities and types of waste disposed of to landfill;
  - quantities and types of waste burned internally for energy recovery;
  - waste generation related to production;
  - initiatives taken to reduce waste generation and improve recovery/recycling of waste; and
  - Initiatives or requirements for suppliers or contract manufacturers.
- Licence holders must have improvement objectives and targets for reduction of waste generation, and the increase of reuse and recycling rates year on year (averaged over 5 years).
- Any divergence from objectives or targets should be explained in the annual report.

### **Verification required**

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/licence holder. This statement shall be supported by documentation (as relevant) that:

- describes the waste management policies, procedures and programmes;

- includes annual reports to the Trust on waste generation, minimisation and management; and
- details the improvement objectives and targets relating to the reduction of waste generation and the increase of reuse and recycling rates.

## 5.10 Energy management and greenhouse gas emissions

### Criteria

- The carpet and/or rug manufacturer and licence applicant/holder must have effective energy management policies and procedures and/or an energy management programme.
- The carpet and/or rug manufacturer **and** applicant / licence holder must have improvement objectives and targets to reduce energy use related to production (of ECA-licensed products), and associated greenhouse gas emissions on a year-by-year basis. Furthermore, ECA licence holders must publicly disclose a commitment to decarbonise between now and 2050 on a 1.5°C trajectory, with a significant reduction prior to 2030. Any divergence from objectives or targets should be explained in the annual report.
- Licence holders must report annually to the Trust on their energy management. The report should include:
  - total energy use;
  - breakdown of total energy use to types of energy used, including energy from renewable sources;
  - energy use related to production (i.e. the embodied energy of a product);
  - energy used during transport of raw materials\* (if the licence holder is the manufacturer), or transport of carpets or rugs that are imported from overseas manufacturers (if the licence holder is an importer/supplier);
  - initiatives taken to reduce energy use and greenhouse gas emissions, and to improve energy efficiency; and
  - initiatives taken to calculate greenhouse gas emissions per product (i.e. the embodied carbon of a product).

\* The Climate Action Toolbox (Business.govt.nz | Tools and resources) is a free tool that can be used to calculate transportation emissions. Information required for the inputs include weight of the raw materials / products (in tonne), the estimated distance of freight and the mode of transportation (rail freight, air freight, ocean freight).

**Please note** – an Environmental Product Declaration is **not** required to satisfy this clause.

### Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/licence holder. This statement shall be supported by documentation (as relevant):

- describing the energy management policies, procedures and programmes;
- including annual reports to the Trust on energy use and management; and
- detailing performance against improvement objectives and targets relating to the reduction of energy use related to production of ECA-licensed products, and associated greenhouse gas emissions, over time.
- confirms the licence holder has publicly committed to decarbonise between now and 2050 on a 1.5°C trajectory, with incremental reduction up to 2030 (any divergence from objectives or targets should be explained in the annual report)

### Explanatory note

New Zealand's Ministry for the Environment provides a guide to measuring emissions *Measuring emissions: A guide for organisations – 2022 quick guide*<sup>2</sup>.

## 5.11 Water management

### Criteria

- a The carpet and/or rug manufacturer and licence applicant/holder must have effective water management policies and procedures and/or a water management programme.
- b Licence holders must report annually to the Trust on water management during the carpet and/or rug making process. The report must include:
  - i objectives and targets;
  - ii explanation for any divergence from objectives and targets; and
  - iii initiatives taken to manage fresh water use better and improve water efficiency, including use of recycled water or harvested rainwater (e.g. during dyeing processes), if applicable.

### Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/licence holder. This statement shall be supported by documentation (as relevant):

- describing water management policies, procedures and programmes;
- where relevant, provide details of water recycling initiatives during dyeing processes;
- including annual reports to the Trust on water use and management; and
- detailing performance against continuous improvement objectives and targets relating to the reduction of water use related to production over time.

## 5.12 Emissions to indoor air from the finished product

### Criteria

The finished carpet or rug product shall have emissions to air that meet one of the following:

- The GuT requirements.
- The AGBB requirements.
- The Greenguard Gold requirements.
- The Carpet and Rug Institute's (CRI's) Green Label Plus programme.
- Australian Carpet Classification Scheme Environmental Certification Scheme ECS Level 4 Product Emissions requirements

### Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/licence holder. This statement shall be supported by documentation (as relevant):

---

<sup>2</sup> [Measuring emissions: A guide for organisations: 2022 quick guide | Ministry for the Environment](#)

- For compliance with the GuT requirements – either a GuT product passport or a test report (for testing using the methods specified by GuT) and calculations demonstrating the GuT limits (applicable at the time of application) are met for the carpet or rug;
- For compliance with the AgBB requirements – a test report (for testing using the methods specified by AgBB) and calculations demonstrating the AgBB limits (applicable at the time of application) are met for the carpet or rug;
- For compliance with Greenguard Gold – either a current certificate of compliance covering the flooring, issued by Greenguard, or a test report (for testing using the methods specified by Greenguard) demonstrating the limits set by Greenguard (at the time of application) are met for the carpet or rug; and
- For compliance with CRI Green Label Plus – either a current certificate of compliance covering the flooring, issued by the CRI, or a test report (for testing using the methods specified by the CRI) demonstrating the limits set by CRI Green Label Plus (at the time of application) are met for the carpet or rug.
- For compliance with Australian Carpet Classification Scheme Environmental Certification Scheme (ECS) Level 4 Product Emissions requirements – either a current certificate of compliance for Level 4 ECS issued by ACCS, or a test report (using the methods specified by the ACCS) demonstrating the limits set by ACCS are met.

### Explanatory notes

- Information on the GuT testing methods and limits is available at <https://gut-prodis.eu/en/product-testing-gut/emission-test>
- Information on the AgBB testing methods can be found at <https://www.umweltbundesamt.de/en/topics/health/commissions-working-groups/committee-for-health-related-evaluation-of-building>
- Information on the Greenguard requirements can be found at <https://www.ul.com/resources/ul-greenguard-certification-program>
- Information on the CRI Green Label Plus requirements is available at <https://carpet-rug.org/testing/green-label-plus/testing-protocol-and-requirements/>
- [Information on the Australian Carpet Classification Scheme Environmental Certification Scheme can be found at https://www.carpetinstitute.com.au/environmental/](https://www.carpetinstitute.com.au/environmental/)

## 5.13 Product stewardship

### 5.13.1 Recycling or composting of finished product

#### Criteria

The applicant/ licence holder or carpet and/or rug manufacture must:

- Report initially and then annually to the Trust on the current recycling and/or composting options for the licensed product that reduces the quantity of product being landfilled once it has completed its useful life and how the current manufacturing/ design process enables the finished product to be recycled.
- Have, implement and report annually on an ongoing programme to review design and manufacturing options that increase the licensed product's ability to re-enter the manufacturing process as quality raw material rather than being down-cycled after it has finished its useful life as a carpet or rug.

#### Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/licence holder. This statement shall be accompanied by documentation that includes an initial and annual report to The Trust on:

- current recycling options for the licensed product that reduces the quantity of product being landfilled and how the current manufacturing/ design process enables the finished product to be recycled, and
- the programme and measures taken to increase the licensed products ability to re-enter the carpet manufacturing process as quality raw material rather than being downcycled after it has finished its useful life as a carpet or rug.

### 5.13.2 Take-back schemes

#### Criteria

- a. The applicant/ licence holder must have and implement a programme in New Zealand to take back used carpet or rug products for one or more of the following purposes:
  - Re-use (to be on-sold as a second-hand carpet or rug)
  - Recycling (including sending back to the parent company for recycling within the parent company's product stewardship/ recycling systems)
  - Composting
  - Downcycling for an alternative use (such as weed-mat)
- b. Licence holders must report initially and then annually to the Trust on product stewardship for carpet or rug products that reduces the quantity of product being landfilled once it has completed its useful life. The report must include:
  - i programme improvement objectives to reduce the quantity of used carpet or rug product being disposed to landfill;
  - ii progress towards objectives;
  - iii explanation for any divergence from objectives;
  - iv the quantity of product collected and re-distributed/ recycled/ composted via take back schemes;
  - v the quantity of product collected related to production;
  - vi how the current manufacturing/ design process enables the finished product to be recycled;
  - vii quality control checks of take-back products received, to assess product suitability for the purposes stated in (a) (e.g. presence of hazardous substances);
  - viii initiatives taken to promote or implement take back schemes; and
  - ix initiatives or requirements for suppliers or contract manufacturers.

#### Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company/licence holder. This statement shall be accompanied by:

- initial and annual reports to the Trust; and
- supporting documentation, which may include documented processes for product take-back, marketing material to customers, a review of available options for re-use, recycling, composting and downgrading of carpet or rug products.

## 6 Product characteristics

### 6.1 Fitness for purpose

#### Criteria

- a The product must be fit for its intended use and conform, as appropriate, to relevant product performance standards.
- b The product must meet or exceed the performance requirements of the relevant local carpet classification scheme for its intended application and be rated at a minimum level of contract heavy duty;  
OR

The product must meet or exceed other applicable internationally accepted standards if it is to be exported.

- c Carpet tiles must meet accepted dimensional stability tests.

### **Verification required**

Conformance with this requirement shall be demonstrated by providing a written statement of compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation:

- identifying the applicable standards and or consumer/customer requirements; and
- demonstrating how compliance is monitored and maintained, including quality control and assurance procedures and records of customer feedback.

## **6.2 Product warranty**

### **Criteria**

- a Modular tile carpets and broadloom carpets must carry a standard 15-year minimum manufacturer's warranty.
- b All rugs must carry a standard 5-year minimum manufacturer's warranty.
- c Refurbished products must carry a minimum 5-year warranty.

### **Verification required**

Conformance with this requirement shall be demonstrated by providing a written statement of compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported by documentation setting out warranty information.

## **7 Requirements and notes for Licence Holders**

### **Monitoring compliance**

Prior to granting a licence, the Trust will prepare a plan for monitoring ongoing compliance with these requirements. This plan will reflect the number and type of products covered by the licence and the level of sampling appropriate to provide confidence in ongoing compliance with criteria. This plan will be discussed with the licence applicant and when agreed will be a condition of the licence.

As part of the plan, the Trust will require access to relevant quality control and production records and the right of access to production facilities. Relevant records may include formal quality management or environmental management system documentation (for example, ISO 9001 or ISO 14001 or similar).

The monitoring plan will require the licence holder to advise The Trust immediately of any noncompliance with any requirements of this specification which may occur during the term of the licence. If non-compliance

occurs, the licence may be suspended or terminated as stipulated in the Licence Conditions. The licensee may appeal any such suspension.

The Trust will maintain the confidentiality of identified confidential information provided and accessed during verification and monitoring of licences.

### **Use of the Eco Choice Aotearoa Label**

The Licence holder shall supply information on the proposed use of the label on products or promotional material.

The Label may appear on the wholesale and retail packaging, provided that the product meets requirements in this specification and in the Licence Conditions.

Wherever it appears, the Label must be accompanied by the Licence Number e.g. 'licence No1234'. It is optional to include the specification name.

The Label must be reproduced in accordance with:

- The Licence Conditions; and
- The Eco Choice Aotearoa programme's brand kit which includes examples of keyline art for the reproduction of the Label.

Any advertising must conform to the relevant requirements in this specification, in the Licence Conditions and in the keyline art.

Failure to meet these requirements for using the Eco Choice Aotearoa Label and advertising could result in the Licence being withdrawn





## Appendix C: Modern Slavery and social accountability

### C1 International Bill of Human Rights

In December 1948, the United Nations General Assembly adopted the Universal Declaration of Human Rights (UDHR). In December 1966, the UN General Assembly adopted two international treaties that would further shape international human rights: the International Covenant on Economic Social and Cultural Rights (ICESCR), and the International Covenant on Civil and Political Rights (ICCPR). These are often referred to as “the International Covenants.” Together, the UDHR and these two Covenants are known as the International Bill of Human Rights.

The ICESCR and the ICCPR set out the civil, political, economic, social and cultural rights that everyone is entitled to:

ICESCR	ICCPR
<ul style="list-style-type: none"> <li>• Freedom from discrimination</li> <li>• Right to equality between men and women</li> <li>• Right to life</li> <li>• Freedom from torture</li> <li>• Freedom from slavery</li> <li>• Right to liberty and security of person</li> <li>• Right to be treated with humanity in detention</li> <li>• Freedom of movement</li> <li>• Freedom of non-citizens from arbitrary expulsion</li> <li>• Right to fair trial</li> <li>• Right to recognition before the law</li> <li>• Right to privacy</li> <li>• Freedom of religion and belief</li> <li>• Freedom of expression</li> <li>• Right of peaceful assembly</li> <li>• Freedom of association</li> <li>• Right to marry and found a family</li> <li>• Right of children to birth registration and a nationality</li> <li>• Right to participate in public affairs</li> <li>• Right to equality before the law</li> <li>• Minority rights</li> </ul>	<ul style="list-style-type: none"> <li>• Freedom from discrimination</li> <li>• Right to equality between men and women</li> <li>• Right to work</li> <li>• Freedom to choose and accept work</li> <li>• Right to just and favourable conditions at work</li> <li>• Right to form trade unions</li> <li>• Right to strike</li> <li>• Right to social security</li> <li>• Right of mothers to special protection before and after birth</li> <li>• Freedom of children from social and economic exploitation</li> <li>• Right to an adequate standard of living</li> <li>• Freedom from hunger</li> <li>• Right to health</li> <li>• Right to education</li> <li>• Freedom of parents to choose schooling for their children</li> <li>• Right to take part in cultural life</li> <li>• Right to enjoy benefits of science</li> <li>• Right of authors to moral and material interests from works</li> <li>• Freedom to undertake scientific research and creative activity</li> </ul>

## **C2 ILO Declaration**

From the ILO Declaration on the Fundamental Principles and Rights at Work, there are the following core labour standards:

- Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)
- Right to Organise and Collective Bargaining Convention, 1949 (No. 98)
- Forced Labour Convention, 1930 (No. 29)
- Abolition of Forced Labour Convention, 1957 (No. 105)
- Minimum Age Convention, 1973 (No. 138)
- Worst Forms of Child Labour Convention, 1999 (No. 182)
- Equal Remuneration Convention, 1951 (No. 100)
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

## Appendix D: Hazardous substances

**Table 3: Hazardous substances classifications**

New Zealand HSNO Classes	Globally Harmonised System Hazard Statement*	Hazard Code**
<b>Acute toxicity</b>		
6.1A (oral, dermal, inhalation)	acute oral toxicity Category 1	H300
	acute dermal toxicity Category 1	H310
	acute inhalation toxicity Category 1	H330
6.1B (oral, dermal, inhalation)	acute oral toxicity Category 2	H300
	acute dermal toxicity Category 2	H310
	acute inhalation toxicity Category 2	H330
6.5A	respiratory sensitisation Category 1	H334
6.5B	skin sensitisation Category 1	H317
6.7A	carcinogenicity Category 1	H350
6.7B	carcinogenicity Category 2	H351
6.6A	germ cell mutagenicity Category 1	H340
6.6B	germ cell mutagenicity Category 2	H341
6.8A	reproductive toxicity Category 1	H360
6.8B	reproductive toxicity Category 2	H361
<b>Environmental hazards/Hazardous to the aquatic environment</b>		
9.1A	hazardous to the aquatic environment acute Category 1	H400
	hazardous to the aquatic environment chronic Category 1	H410
9.1B	hazardous to the aquatic environment chronic Category 2	H411

\* Hazardous Substances (Hazard Classification) Notice 2020, EPA, October 2020

\*\* *Globally Harmonised System of Classification and Labelling of Chemicals (GHS); Annex 3 Codification of hazard statements, codification and use of precautionary statements, codification of hazard pictograms and examples of precautionary pictograms*. Seventh revised edition, United Nations, 2017

## Appendix E: Ozone Depleting Substances

**Table 4 USEPA Class 1 Ozone Depleting Substances**

Chemical Name	Lifetime, in years	ODP*1 (Montreal Protocol)	ODP*2 (WMO 2011)	GWP1 (IPCC AR4)	GWP2 (IPCC AR5)	CAS Number
<b>Group I</b>						
CFC-11 (CCl <sub>3</sub> F) Trichlorofluoromethane	45	1	1	4750	4660	75-69-4
CFC-12 (CCl <sub>2</sub> F <sub>2</sub> ) Dichlorodifluoromethane	100	1	0.82	10900	10200	75-71-8
CFC-113 (C <sub>2</sub> F <sub>3</sub> Cl <sub>3</sub> ) 1,1,2- Trichlorotrifluoroethane	85	0.8	0.85	6130	5820	76-13-1
CFC-114 (C <sub>2</sub> F <sub>4</sub> Cl <sub>2</sub> ) Dichlorotetrafluoroethane	190	1	0.58	10000	8590	76-14-2
CFC-115 (C <sub>2</sub> F <sub>5</sub> Cl) Monochloropentafluoroethane	1020	0.6	0.5	7370	7670	76-15-3
<b>Group II</b>						
Halon 1211 (CF <sub>2</sub> ClBr) Bromochlorodifluoromethane	16	3	7.9	1890	1750	353-59-3
Halon 1301 (CF <sub>3</sub> Br) Bromotrifluoromethane	65	10	15.9	7140	6290	75-63-8
Halon 2402 (C <sub>2</sub> F <sub>4</sub> Br <sub>2</sub> ) Dibromotetrafluoroethane	20	6	13.0	1640	1470	124-73-2
<b>Group III</b>						
CFC-13 (CF <sub>3</sub> Cl) Chlorotrifluoromethane	640	1	1	14420	13900	75-72-9
CFC-111 (C <sub>2</sub> FCl <sub>5</sub> ) Pentachlorofluoroethane		1	1			354-56-3
CFC-112 (C <sub>2</sub> F <sub>2</sub> Cl <sub>4</sub> ) Tetrachlorodifluoroethane		1	1			76-12-0
CFC-211 (C <sub>3</sub> FCl <sub>7</sub> ) Heptachlorofluoropropane		1	1			422-78-6
CFC-212 (C <sub>3</sub> F <sub>2</sub> Cl <sub>6</sub> ) Hexachlorodifluoropropane		1	1			3182-26-1
CFC-213 (C <sub>3</sub> F <sub>3</sub> Cl <sub>5</sub> ) Pentachlorotrifluoropropane		1	1			2354-06-5
CFC-214 (C <sub>3</sub> F <sub>4</sub> Cl <sub>4</sub> ) Tetrachlorotetrafluoropropane		1	1			29255-31-0
CFC-215 (C <sub>3</sub> F <sub>5</sub> Cl <sub>3</sub> ) Trichloropentafluoropropane		1	1			4259-43-2

Chemical Name	Lifetime, in years	ODP*1 (Montreal Protocol)	ODP*2 (WMO 2011)	GWP1 (IPCC AR4)	GWP2 (IPCC AR5)	CAS Number
CFC-216 (C3F6Cl2) Dichlorohexafluoropropane		1	1			661-97-2
CFC-217 (C3F7Cl) Chloroheptafluoropropane		1	1			422-86-6
<b>Group IV</b>						
CCl4 Carbon tetrachloride	26	1.1	0.82	1400	1730	56-23-5
<b>Group V</b>						
Methyl Chloroform (C2H3Cl3) 1,1,1-trichloroethane	5	0.1	0.16	146	160	71-55-6
<b>Group VI</b>						
Methyl Bromide (CH3Br)	0.8	0.7	0.66	5	2	74-83-9

Retrieved on 13/5/2022 from <https://www.epa.gov/ozone-layer-protection/ozone-depleting-substances>

Note: the above table includes only a selection of recognised Ozone Depleting Substances and their Ozone Depleting Potential (ODP) and Global Warming Potential (GWP).

**Table 5 USEPA Class II Ozone Depleting Substances**

Chemical Name	Lifetime, in years	ODP1 (Montreal Protocol)	ODP2 (WMO 2011)	GWP1 (AR4)	GWP2 (AR5)	CAS Number
HCFC-21 (CHFCI <sub>2</sub> ) Dichlorofluoromethane	1.7	0.04		151	148	75-43-4
HCFC-22 (CHF <sub>2</sub> CI) Monochlorodifluoromethane	11.9	0.055	0.04	1810	1760	75-45-6
HCFC-31 (CH <sub>2</sub> FCI) Monochlorofluoromethane		0.02				593-70-4
HCFC-121 (C <sub>2</sub> HFCI <sub>4</sub> ) Tetrachlorofluoroethane		0.01-0.04				354-14-3
HCFC-122 (C <sub>2</sub> HF <sub>2</sub> CI <sub>3</sub> ) Trichlorodifluoroethane		0.02-0.08			59	354-21-2
HCFC-123 (C <sub>2</sub> HF <sub>3</sub> CI <sub>2</sub> ) Dichlorotrifluoroethane	1.3	0.02	0.01	77	79	306-83-2
HCFC-124 (C <sub>2</sub> HF <sub>4</sub> CI) Monochlorotetrafluoroethane	5.9	0.022				2837-89-0
HCFC-131 (C <sub>2</sub> H <sub>2</sub> FCI <sub>3</sub> ) Trichlorofluoroethane		0.007–0.05				359-28-4
HCFC-132b (C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> CI <sub>2</sub> ) Dichlorodifluoroethane		0.008–0.05				1649-08-7
HCFC-133a (C <sub>2</sub> H <sub>2</sub> F <sub>3</sub> CI) Monochlorotrifluoroethane		0.02–0.06				75-88-7
HCFC-141b (C <sub>2</sub> H <sub>3</sub> FCI <sub>2</sub> ) Dichlorofluoroethane	9.2	0.11	0.12	725	782	1717-00-6
HCFC-142b (C <sub>2</sub> H <sub>3</sub> F <sub>2</sub> CI) Monochlorodifluoroethane	17.2	0.065	0.06	2310	1980	75-68-3
HCFC-221 (C <sub>3</sub> HFCl <sub>6</sub> ) Hexachlorofluoropropane		0.015–0.07				422-26-4
HCFC-222 (C <sub>3</sub> HF <sub>2</sub> Cl <sub>5</sub> ) Pentachlorodifluoropropane		0.01–0.09				422-49-1
HCFC-223 (C <sub>3</sub> HF <sub>3</sub> Cl <sub>4</sub> ) Tetrachlorotrifluoropropane		0.01–0.08				422-52-6
HCFC-224 (C <sub>3</sub> HF <sub>4</sub> Cl <sub>3</sub> ) Trichlorotetrafluoropropane		0.01–0.09				422-54-8
HCFC-225ca (C <sub>3</sub> HF <sub>5</sub> Cl <sub>2</sub> ) Dichloropentafluoropropane	1.9	0.025	0.02	122	127	422-56-0
HCFC-225cb (C <sub>3</sub> HF <sub>5</sub> Cl <sub>2</sub> ) Dichloropentafluoropropane	5.9	0.033	0.03	595	525	507-55-1

Note: the above table includes only a selection of recognised Ozone Depleting Substances and their Ozone Depleting Potential (ODP) and Global Warming Potential (GWP).

### **Why are there multiple values given for the ODPs and GWPs?**

The numbers in the “ODP1” column are from the Montreal Protocol. Some numbers have been updated as per amendments to the Protocol.

Data in the “ODP2” column come from WMO’s *Scientific Assessment of Ozone Depletion: 2010*. ODP values listed are semi-empirical and can be found in Table 5-1 of the document.

The numbers in the “GWP1” column represent global warming potentials over a 100-year time horizon. The numbers are from the Intergovernmental Panel on Climate Change (IPCC) *Fourth Assessment Report: Climate Change 2007 (AR4)*. The values listed are for direct radiative forcing and can be found in Table 2.14 of the “Physical Science Basis” contribution to the report.

The numbers in the “GWP2” column also represent global warming potentials over a 100-year time horizon. The numbers are from the IPCC *Fifth Assessment Report: Climate Change 2014 (AR5)*. The values listed are for direct radiative forcing and can be found in Table 8.A.1 of the “Physical Science Basis” contribution to the report.