

IN	FRODUCTION	3		
1 2	Purpose of these Best Practice Guidelines Objectives	3		
BACKGROUND				
3 4 5 6 7 8	The shift to new materials Confusion about terms used Infrastructure not in line with products Appropriate uses of compostable materials Legislative context Application	4 4 5 5 6 8		
THE GUIDELINES				
9 10 11 12 13	Biodegradable Industrially compostable Home compostable Degradable or oxo-degradable Environmentally friendly, environmentally safe, planet safe or green	10 11 15 17		
Glossary		20		
Appendix 1 Checklist for claims about compostability and labelling				
Appendix 2 Further reading				

#### **DISCLAIMER**

Reasonable efforts have been made to ensure the information contained within this documentation is as comprehensive and accurate as practicable as at 1 May 2019. The information may be printed or photocopied in part or whole only for personal or educational use and only as long as no changes are made, the source is acknowledged, and the purpose is non-commercial. Any reliance on the documentation is at your own risk and you should make reasonable independent enquiries, including checking further sources, if acting on the information in this documentation. WasteMINZ shall not be liable to any entity in any form (including in negligence) in relation to the contents of, use of, or in connection with this documentation (including external websites referred to) and does not make any representation as to the accuracy of information on any external website referred to in this documentation. If the reader is uncertain about information or issues raised, they should refer to the Commerce Commission's unsubstantiated representations and factsheet, and seek further expert advice where necessary.

## INTRODUCTION

### **Purpose of these Best Practice Guidelines**

As the demand for certified compostable packaging and products increases, it is essential that the word "compostable" is supported by a well-understood set of industry standards, communication and advertising requirements, and by rigorous compliance, so that businesses and consumers can make accurately informed purchasing decisions.

It is also important that businesses and consumers are aware of the best End of Life (EoL) disposal options for the certified compostable packaging, bags and serviceware they purchase, so it needs to be clear which industrial composters in New Zealand accept these items at any given time.

Currently, various terms are used to imply that a product is compostable or that it can break down naturally in the environment over a short time period without causing any harm. This has the effect of undermining the credibility and work of companies whose compostable products have gained recognisable certification standards for compostability under specified conditions.

These Best Practice Guidelines for the Advertising of Compostable Products and Packaging (hereinafter referred to as "The Guidelines") will help manufacturers and distributors of compostable products and packaging develop an understanding of the legislative requirements that should inform their advertising and communications strategies. The Guidelines outline the steps companies are recommended to take to ensure they have substantiated any claims they make regarding the compostability of their products, to avoid misleading consumers. The Guidelines also recommend how to communicate the best EoL disposal options currently available in New Zealand for specific products and packaging, in order to provide the transparency that consumers increasingly expect.

### **Objectives**

The objectives of the Guidelines are:

- To maintain the integrity of products and packaging that have substantiated EoL compostability claims.
- To help manufacturers educate consumers and retailers about the terminology used to advertise compostable products and packaging.
- To help manufacturers educate the public about the best EoL disposal options for compostable products and packaging.
- To ensure manufacturers comply with the requirements for substantial evidence under the Fair Trading Act 1986 and adhere to the Advertising Standards Authority Code.

## BACKGROUND

#### The shift to new materials

Public concern over plastic pollution, especially in marine environments, has contributed to a growing demand for products to replace singleuse traditional plastic items, such as disposable coffee cups, takeaway containers, serviceware, packaging and bags.

In response to this, brands are increasingly looking for materials that will make their products appear to be "greener" to the consumer. As a result suppliers are providing a range of materials with sustainability claims, such as degradability, biodegradability and compostability.

Major international brands are supporting this shift, resulting in the Ellen McArthur Foundation and UN Environment's New Plastics Economy Global Commitment. In New Zealand, businesses have signed up to the New Zealand Plastic Packaging Declaration, which commits signatories to using 100% reusable, recyclable or compostable packaging across their global operations by 2025 or earlier.

These commitments form part of a move towards a circular economy, in which resources are never abandoned to become waste. For example, in a circular economy system, materials made from renewable resources such as plants are composted at the end of their life to make compost to be used on farms and gardens.1

#### Confusion about terms used

Products that are designed to reduce the use of fossil fuels and improve waste outcomes are a positive step. However, there is often confusion regarding terminology such as compostable, biodegradable, oxodegradable and degradable, meaning retailers and consumers are sometimes misled by unsubstantiated "green" marketing claims.

Contributing to the confusion is that the EoL disposal options for certified compostable packaging, bags and serviceware in the New Zealand context are not always clear or widely available (see section 5 for more information on infrastructure challenges in New Zealand).

Another source of confusion is the absence of a New Zealand standard for industrial or home compostability. Anecdotal evidence is that some adopters of compostable packaging have been told that because there is no New Zealand standard they can advertise their packaging (made up of layers of individually certified industrially compostable film) as "home compostable". A group instigated by the Packaging Forum is investigating the need for a New Zealand standard and work is still ongoing in this area.

<sup>1</sup> See the Sustainable Business Network's 2018 report New Zealand's Plastic Packaging System: An Initial Circular Economy Diagnosis

## Infrastructure not in line with products

Industrially compostable material has been introduced into New Zealand ahead of infrastructure being developed to process these materials. WasteMINZ has been working with members who are industrial composters to create a web resource that details New Zealand industrial composters who will currently accept compostable packaging. This list will be regularly updated and can be viewed on the WasteMINZ website.<sup>2</sup> It outlines:

- The region the composter will accept material from.
- The material accepted.
- Which composting standard they require materials to comply with, if relevant (in the absence of a New Zealand Standard).

Some manufacturers of compostable products have established their own collection services, working with waste management contractors and industrial composters.

The ability to take compostable products and packaging varies across the country and it is the responsibility of the manufacturer to convey this by either indicating their own collection services in particular cities or linking to the list of composting facilities.

## Appropriate uses of compostable materials

New Zealand composters issued a position statement in 2019 that includes examples of items that are appropriate to make from compostable materials:

- Products and packaging that assist in the diversion of food waste from landfill e.g. compostable food waste caddy liners and serviceware (especially for large events).
- Small hard-to-remove items that currently cause contamination in both industrial and home composting systems e.g. fruit stickers, tea and coffee bags, etc.
- · Agricultural items that are currently made from conventional plastic, where there is a risk that they will inadvertently remain in the soil after use, such as vine clips.

The position statement includes examples of items that are not an appropriate use of compostable materials:

- Nappies and sanitary products.
- Containers used for fluids or solids that would impact compost quality and value, e.g. containers for janitorial products, cleaners, shampoos and pens, etc.

For the full position statement click here.3

#### 2 bit.ly/composting-facilities

## A note on claims of compostability and access to facilities

In New Zealand, industrial composters generally only have consent to process food related compostable packaging, meaning most industrial composting facilities cannot accept compostable nappies, compostable sanitary items, compostable dog poo bags or janitorial items. Regarding a claim that an item is recyclable, the Commerce Commission notes in their Guidelines for Green Marketing4:

[Claims of compostability] can be potentially dangerous if the product is not compostable or if the facilities to compost it are not readily available in New Zealand. Manufacturers and retailers should verify that their product can actually be collected and composted across most of New Zealand before using such claims.

This advice also applies to claims that an item can be industrially composted. Therefore, if an item is not accepted by any of New Zealand's industrial composting facilities it would be misleading to advertise that item as industrially (or commercially) compostable.

Some manufacturers of nonfood related compostable items have established their own small-scale composting facilities. In these cases advertising should reflect this.

bit.ly/compostersPositionStatement

bit.ly/FTAGuideGreenMarketing

### Legislative context

This section introduces the Fair Trading Act, which sets out the expectations for the advertising of goods in New Zealand and the role of the Commerce Commission in regulating this legislation. It also sets out the expectations of the Advertising Standards Authority's Code.

7.1 The Fair Trading Act 1986 provides the legislative support for standards of communication about environmental claims and the need for these to be substantiated (proven) to avoid misleading the consumer. The Commerce Commission is the government agency responsible for enforcing the Fair Trading Act.<sup>5</sup> Its website states:

If you make environmental claims — such as about sustainability, recycling, carbon neutrality, energy efficiency, use of natural products or impact on animals and the natural environment — these must be accurate, scientifically sound and able to be substantiated. Companies who fail to substantiate environmental claims may be prosecuted under the Fair Trading Act.

It is a breach of the Fair Trading Act to make false, unsubstantiated or misleading representations about a product. Traders must have reasonable grounds to make a claim at the time it is made and if the claim is made on an ongoing basis the grounds for making it must remain accurate.

Under the Fair Trading Act the overall impression created by an advertisement must not mislead consumers. Therefore, using terms such as "eco friendly" or "planet safe" or images of animals associated with environmental good health should be avoided.

Important terms or conditions relevant to representations used in advertising headlines must be prominent and close to the main claim, with sufficient detail, rather than hidden in the fine print. For more information on this see the Commerce Commission's Fine Print Fact Sheets.6

The Commerce Commission website has a great video "If you can't back it up, don't say it"7, which provides guidance on substantiating claims.

In 2013 the Commerce Commission successfully prosecuted<sup>8</sup> and fined two plastic bag manufacturers or wholesalers for \$60,000 and \$30,000 respectively, for their misleading claims about their "oxo-degradable" bags. The specific claims were that the oxo-degradable bags had an environmental benefit over conventional plastic bags, that the oxodegradable bags would degrade within a short timeframe, including when disposed of in landfill, and that they were suitable for home composting. The prosecutions took place before the introduction of the substantiation requirement under the Fair Trading Act, so the lack of substantiation of these claims was not included in the prosecution.

The main legislation that relates to advertising is the Fair Trading Act 1986.

Other legislation that may be applicable with regard to false advertising and the supply of goods are:

The Consumer Guarantees Act 1993, and

The Contract and Industrial Law Act 2017.

<sup>5</sup> bit.ly/MakingAccurateClaims

<sup>6</sup> bit.ly/FinePrintFactSheet

<sup>7</sup> bit.ly/IfYouCantBackItUpDontSayIt

bit.ly/comcomProsecution1 and bit.ly/comcomProsecution2

#### Example: "If you can't back it up, don't say it"



no timeframe has been given. A claim that a product will reduce the impact of littering cannot be substantiated. Any plastic or other material left in the open environment is litter and cannot be

There is no standard to back up  $\alpha$  claim of biodegradability and

- claimed to reduce the impact of it. If it is in the environment for even 5 minutes it could be swallowed by wildlife, therefore it has not reduced one of the impacts of littering.
- Including an image of an animal associated with a healthy environment may be interpreted by a consumer that this bag will not harm such animals if swallowed by them. All plastic is harmful to all animals if swallowed by them.

7.2 In addition to the Commerce Commission, the Advertising Standards Authority (ASA) Code<sup>9</sup> requires that all advertisements (including website and social media content) be truthful, balanced and not misleading. This code requires, amongst other principles, that advertising (including website and social media content):

Must not mislead or be likely to mislead, deceive or confuse consumers, abuse their trust or exploit their lack of knowledge. Equally, advertisements must not use tests, surveys, research results or quotations from technical and scientific literature in a manner which is misleading or deceptive.

The Code does not apply to product labels or packaging. However, "when a label or packaging appears in an advertisement it forms part of the advertisement and therefore any visible aspects are covered by the Code". In addition, if a cup is labelled "compostable" for the purposes of persuading a customer to buy that cup over a non-compostable cup then that label can be interpreted as advertising.

Advertising that fails to reflect the principles of this Code may receive a complaint. If the complaint is upheld by the ASA Complaints Board, the advertiser is expected to remove the advertisement.

bit.ly/ASAAdvertisingStandardsCode

## Example: Misleading advertising likely to be in breach of the **Advertising Standards Code**



- The phrase "100% degradable" implies an environmental benefit but most materials will eventually degrade, though it may take thousands of years to do so. No timeframe for this "degradation" is provided.
- This "certification" is a test guide only, so to say the bag is certified to it is misleading. There is no such certification and it does not mean the bag has passed a test for degradability.

## **Application**

The Guidelines should be used by manufacturers, distributors and retailers of compostable products that are for sale in New Zealand, whether New Zealand or overseas owned.

## THE GUIDELINES

The Guidelines are to be read in the context of the Fair Trading Act 1986's legislative framework (as outlined in section 7) with the aim of helping manufacturers advertise their product clearly, accurately and with substantiation.

Companies must ensure that people with no prior knowledge of compostable products are able to understand the claims made and are able to easily check that the claim is accurate. Therefore, it is recommended that manufacturers and retailers ensure:

- 1. Substantiation of any EoL disposal claims is made in all advertising (including print such as catalogues, and on websites and social media) and is prominent (rather than hidden in fine print). For example, for each product that has achieved industrial compostable certification it is recommended that the standard be displayed on the advertising. Where applicable, include a link to the certificate and the criteria the product meets to have achieved this standard (i.e. temperature and duration), as well as the third party certifier and the unique certification number that is issued when a product is certified. A link to the WasteMINZ page<sup>10</sup> that lists the databases where these unique certification numbers can be checked could also be included. Substantiation of any EoL disposal claims must be kept up to date.
- In all advertising (including print such as catalogues and on packaging, and on websites and social media) the best EoL disposal options is stated for each product.
- 3. If the product is industrially compostable, all advertising indicates that consumers will need to check with industrial composters in their area if this product is able to be processed by them (or provide a link to the WasteMINZ page<sup>11</sup> that provides this information) or explain how to be part of the manufacturer's own collection service.

#### The Guidelines provide:

- A definition for each term commonly used to advertise compostable products and packaging (i.e. commercially compostable, home compostable), as well as terms that can be confused with compostable products and packaging (i.e. biodegradable, degradable, oxo-degradable, environmentally friendly and so on).
- 2. An example of substantiation (proof) that is required for a company to be able to make these claims.
- 3. Best practice examples, where applicable, including information about EoL disposal OR misleading examples, where applicable.
- 4. A recommendation for the use of each term.

<sup>10</sup> bit.ly/compostable-packaging

<sup>11</sup> bit.ly/composting-facilities

## **Biodegradable**

This term is difficult to substantiate in environments other than compost and is misused by some companies as a form of greenwashing. Therefore, in our opinion, it is best to avoid it.

**Definition:** Biodegradable means the material is ingested by naturally occurring micro-organisms such as bacteria, fungi and algae and produces water, carbon dioxide, and biomass. No additives are needed and no fragments remain in the environment. However, there is no agreed standard timeframe for a definition of biodegradability. It is also important to note that something deemed to be biodegradable could potentially be toxic and still cause harm to aquatic ecosystems, animal and marine life.

Substantiation: To be accurate, a claim of biodegradability needs to specify the environment in which the product or packaging biodegrades, for example, in an industrial composting facility. The timeframe in which the product will completely biodegrade should also be specified.

Standards and accredited verification schemes exist for biodegradation in soil, water and marine environments, but these have been developed specifically for products that are designed to be used in these environments (e.g. mulch film, or mussel ropes). In addition, experts are concerned about the validity of these standards because these environments are more variable than composting. For example, it is difficult to prove that a product advertised as "biodegradable in marine" will biodegrade in all marine environments given the varying degrees of temperature and levels of oxygen present.

It is also extremely difficult to substantiate a claim that a product is biodegradable in landfill as landfill conditions are variable and no reliable standard exists for this claim.

Recommendation: Due to the misuse of this term by some companies we recommend avoiding the term biodegradable. If an item is biodegradable in an industrial composting or home composting environment it is recommended that you use these terms instead, as outlined below.

## 10 Industrially compostable

#### (also referred to as commercially compostable)

**Definition:** Industrially compostable products or packaging have been designed to break down (i.e. biodegrade) in an industrial composting environment.

Industrial composting facilities operate at much higher temperatures then the average home compost system. In New Zealand, industrial composters generally use windrow, vermicomposting or in-vessel methods. The compostable materials that go into an industrial composting system are called feedstock. Composting facilities need to apply for resource consent to operate and the conditions of the resource consent can limit and/or restrict the type of feedstock they can accept. Having organic certification additionally restricts the types of feedstocks accepted. Composting facilities in New Zealand can generally be classified as:

- 1. Greenwaste processing facilities: These facilities process garden waste, bark and wood chip to make compost or mulch and generally don't have resource consent or an appropriate composting process to accept food waste or compostable packaging.
- 2. Industrial composting facilities: These facilities process more complex waste streams such as food waste, waste from abattoirs or fish processing facilities, sludge etc and are more likely to be able to process compostable packaging (but don't necessarily accept it).

A product that attains an industrial composting standard has been tested in industrial composting conditions and then certified by an independent third-party organisation, to determine:

- That the components do not contain unacceptable levels of harmful chemicals such as heavy metals.
- How much of the carbon present in the starting material has been consumed and respired by microbes in the compost within a specified timeframe.
- That large fragments of the product do not remain within a specified timeframe.

Some standards also test that resulting compost will not have a negative impact on living organisms such as earthworms or germinating plants. However, ensuring the compost is not toxic to earthworms or other living organisms does not mean it is an appropriate source of food for worms. Therefore, it is recommended that advertising of industrially compostable products avoids making explicit claims that it is suitable for worm farms.

Substantiation: There is no current New Zealand certification standard for industrially compostable products. However, the following table demonstrates the international standards that are currently recognised in New Zealand, as well as the independent certification bodies who validate the standards.

## Verifying organisations

Contact Scion in New Zealand, or one of the overseas verifying organisations (DIN CERTCO, Australasian Bioplastics Association and TUV Austria) for more information about the standards or to enquire about having your product or packaging certified.

DESCRIPTION	AUSTRALIAN SEEDLING INDUSTRIAL COMPOSTING	SEEDLING INDUSTRIAL COMPOSTING	OK COMPOST INDUSTRIAL COMPOSTING	DIN INDUSTRIAL	BIODEGRADABLE PRODUCTS INSTITUTE / US COMPOSTING COUNCIL
REGION	Australia / NZ	Europe	Europe	Europe	USA
LOGO	Compostable AS 4736 ABAP 10006		OK compost  AUSTRIA  INDUSTRIAL  80315	Gepruit	COMPOSTABLE IN INDUSTRIAL FACILITIES Once hooks, in time to red with every compositing.  COST of Address.
VERIFICATION	Australasian Bioplastics Association / DIN CERTCO	DIN CERTCO	TÜV Austria	DIN CERTCO	DIN CERTCO
OVER ARCHING STANDARD	AS 4736	EN 13432	EN 13432	EN 13432	ASTM D 6400 OR 6868

#### Recommendation:

- Describe the product as industrially compostable (rather than biodegradable).
- Provide detail about the standard the product has attained, including a link to the certificate or the relevant database and the unique certification number.
- Provide detail about the materials used. For example, GMO-free cornstarch or waste byproduct from sugar cane, etc.
- Provide detail about EoL disposal including whether you offer a collection service OR link to where the customer can view the WasteMINZ list of industrial composters in New Zealand who accept industrial compostable products and packaging.
- Be clear about what part of the product or packaging is certified compostable. For example, if you are packaging certified compostable products in non-compostable packaging this should be made obvious on the labelling of both. Avoid mixing certified compostable materials with uncertified materials (such as a label placed after certification).

It is recommended that if a product is technically (i.e. certified) industrially/commercially compostable but is not accepted at any of the industrial composting facilities in New Zealand (because it is designed to capture human or animal waste, for example) that manufacturers do not advertise it as being compostable. To check the criteria of industrial composters in New Zealand visit the WasteMINZ website.12

## Important tips

If a product is certified industrially compostable, do not advertise it as being suitable for home composting.

Some councils provide specific compostable plastic liners to be used by householders as kitchen caddy liners for their organic collections, while some do not allow any compostable plastic liners. No council organics collections accept any other type of compostable plastic packaging. Therefore, if a product is certified commercially compostable, do not advertise it as being able to be put into council kerbside food or green waste collections.

<sup>12</sup> bit.ly/composting-facilities

## **Examples of best practice substantiation for** industrially compostable products

#### On website



#### INDUSTRIALLY COMPOSTABLE **HOT BEVERAGE CUPS**

- 1 ★ Certified by DIN CERTCO to the European Standard EN13432 for industrial composting, which means our product will completely decompose within 180 days in industrial composting conditions.
- \* FSC certified paperboard outer with plant-based (supplier name)® PLA (polylactic acid).



#### **END OF LIFE DISPOSAL**

- ↑ ★ WasteMINZ has an up-to-date list of the New Zealand industrial composters who accept compostable packaging **OR** 
  - \* Working with ABC Composting we offer α collection service for our products. Please contact us to sign up. Put in landfill if no industrial composting service is available. These cups cannot be recycled.

- Link to actual certificate or database.
- Include seedling logo and unique certification number that is supplied when the product is certified.
- Link to (supplier name) and FSC websites.
- Link to WasteMINZ website with up-to-date list.

### On packaging or product





#### On social media



#### **TIKA Products**

January 5 at 1:00PM

We are stoked to announce our latest arrival our industrially compostable coffee cups!

These babies are certified to AS4736 and we have partnered with ABC Composting to offer 2 an industrial composting collection service so we can make sure they end up as compost!

Check out WasteMINZ's list of New Zealand industrial composters who accept compostable packaging.



- Link to AS4736 database.
- Link to partner organisation's facebook profile.
- Link to WasteMINZ website list.

## **Examples of best practice substantiation for** industrially compostable products

#### On catalogues and print media

#### **CUPS**



use: cold liquid only

material: (supplier name) plant based polylactic acid (PLA). 1

certification: Industrially compostable to AS4736 2 Standard which means our product will completely decompose within 180 days in industrial composting conditions.



end of life: Industrially compostable where available. Landfill if not. These cups cannot be recycled.



use: hot and cold liquid

material: Paper from FSC certified plantations, 1 (supplier name) plant-based polylactic acid (PLA).

certification: Industrially compostable to AS4736 2 Standard which means our product will completely decompose within 180 days in industrial composting conditions.



end of life: Industrially 3 compostable where available. Landfill if not. These cups cannot be recycled.

- In another part of catalogue include detailed info about material used including what FSC means and a link to FSC certification and what PLA is.
- Include the certification standard (and in another part of the catalogue detailed information about this standard), the seedling logo, and the unique certification number that is supplied when the product is certified.
- Include detailed information in another part of the catalogue about own industrial composting collection service or where to find up-to-date information about industrial composters.

#### 11 Home compostable

**Definition:** A product that attains a home composting certification has been tested in composting conditions similar to a home composting system to determine:

- That the components do not contain unacceptable levels of harmful chemicals such as heavy metals.
- How much of the carbon present in the starting material has been consumed and respired by microbes in the compost within a specified timeframe.
- That large fragments of the product do not remain within a specified timeframe.
- That the resulting compost will not have a negative impact on living organisms such as earthworms or germinating plants.

The temperature they are tested in is much lower than an industrial composting facility and the timeframe for biodegradation and fragmentation is longer. As with industrially compostable certification, ensuring the compost is not toxic to earthworms or other living organisms does not mean that it is an appropriate source of food for worms. Therefore, it is recommended that advertising of home compostable products should avoid making explicit claims that it is suitable for worm farms.

Substantiation: As with industrial composting certification there is currently no New Zealand certification standard for home compostable products. However, the following table demonstrates the international standards that are recognised in New Zealand, as well as the independent certification bodies that validate the standards.

DESCRIPTION	AUSTRALIAN SEEDLING HOME COMPOSTING	OK COMPOST HOME COMPOSTING	DIN HOME
REGION	Australia / NZ	Europe	Europe
LOGO	Nema Compostable AS \$10 to ASAC 1999	OK compost AUSTRIA HOME S0315	Ceprutt
VERIFICATION	Australasian Bioplastics Association / DIN CERTCO	TÜV Austria	DIN CERTCO
OVER ARCHING STANDARD	AS 5810	Variation of EN 13432	AS 5810 / NF T 51-800

## Important tips

If a product is made up of layers of individually certified home or industrially compostable film but has not been tested or certified as home compostable in its final form, it should not be advertised as being suitable for home composting.

If a product has been tested by yourself in your compost and appears to be home compostable but has not been tested and certified home compostable by an independent third party organisation, it should not be advertised as being suitable for home composting.

If a product is designed to collect animal waste, customers should be advised that this should be composted in a separate home compost system and the finished compost should not be applied to fruit and vegetables, as animal waste can carry diseases and parasites.

#### Recommendation:

- Describe the product as home compostable (rather than as biodegradable).
- Provide detail about the standard the product has attained, including a link to the certificate, the logo of the verifying organisation and the unique certification number.
- Provide detail about the materials used, for example, GMO-free cornstarch or waste byproduct from sugar cane, etc.
- · Provide detail about EoL disposal.
- Be clear about what part of the product or packaging is certified compostable. For example, if you are packaging certified compostable products in non-compostable packaging this should be made obvious on the labelling of both. Avoid mixing certified compostable materials with uncertified materials (such as a label placed after certification).

Follow the best practice examples for commercially compostable products above but with the home compostable certification information. For example:



#### **HOME COMPOSTABLE FOOD CADDY LINERS**

- ★ Certified to Standard AS 5810 by the Australaisian 1 Bioplastics Association which means 90% of this product biodegrades within 365 days in home composting conditions.
- Made from non-GMO corn-starch PLA (polylactic acid).



#### **END OF LIFE DISPOSAL**

★ In home compost. Product may need to be cut up or moistened to help it break down. **These bags cannot be** recycled.

### Important tip

It is recommended that if a product or packaging is technically both recyclable and certified compostable, the manufacturer chooses the most relevant EoL disposal term to display in advertising. For example, if produce trays are made of fibre that is both recyclable and home compostable and is likely to have low food contamination, it is recommended the EoL is advertised as recyclable. A Kraft only takeaway container, however, is better to be advertised as home compostable as it will be too food contaminated to be recycled.

- Link to actual certificate or database.
- Include seedling logo and unique certification number that is supplied when the product is certified.
- Explain what PLA is and possible to link to or name supplier.

#### 12 Degradable or Oxo-degradable

**Definition:** Degradable means something can "break down" and includes all types of plastic that can break into little pieces, either over time, by mechanical cutting and shredding, or through pro-degradant additives. Most material will degrade or deteriorate given sufficient time and exposure to the right conditions. However, the length of time they take to break down can be hundreds or thousands of years and can result in microplastics, which enter the food chain and are harmful to all animals and humans.

Oxo-degradable, photo-degradable and landfill degradable products are traditional fossil-fuel based plastics with a pro-degradant added to make this product fragment faster than traditional plastic when exposed to light, oxygen or in a landfill. There is no conclusive evidence that these plastics will completely biodegrade, which could result in microplastic particles remaining in the environment indefinitely.

Substantiation: Most material will degrade or deteriorate given sufficient time and exposure to the right conditions but to substantiate such a claim the environment in which it occurs and the timeframe it occurs within would need to be specified.

There is no substantive evidence that oxo-degradable products are "better" for the environment than traditional plastic products. Oxodegradable products cannot be claimed to be recyclable or compostable and claims that they "lessen the impacts of litter" are not substantiated.

There are no recognised certification standards for "degradable" or oxodegradable products. There are test methods or guides that determine the laboratory conditions and procedures to test particular aspects of a material (see example below) but these do not provide an indication that a product or material has reached a particular state of "degradability".

Therefore it is misleading to use such a test guide or method in advertising.

Recommendation: The terms "degradable" or "oxo-degradable" should be avoided as these claims cannot legitimately be substantiated.

## **Examples of unsubstantiated advertising of degradable packaging**



- ASTM 6954 is a test guide (see below) and including it here implies an (unproven) environmental benefit and is misleading.
- The term "extended period" is vague and therefore does not provide substantive proof of biodegradability.

#### Examples of test guides that cannot be used to substantiate a claim

#### **ASTM D6954-18**

Standard guide for exposing and testing plastics that degrade in the environment by a combination of oxidation and biodegradation.

#### BS 8472

Methods for the assessment of the oxo-biodegradation of plastics and of the phyto-toxicity of the residues in controlled laboratory conditions.

## 13 Environmentally friendly, environmentally safe, planet safe or green

**Definition:** There is no definition for the vague terms **environmentally** friendly, environmentally safe, planet safe or green (and other similar terms). These terms can mislead consumers into thinking that a product causes no or minimal harm to the environment in its production, usage and disposal. In reality, almost all products have some adverse impact on the environment at some stage in their life cycle. In addition, using imagery of animals or plants associated with good environmental health can mislead the consumer into believing a product is better for the environment than products without this imagery.

Substantiation: There is no substantiation for these terms as they are subjective and vague.

Recommendation: Avoid using emotive and vague claims such as these. These claims are particularly prone to being investigated by regulators. Instead make specific and valid claims about your product, such as that it is certified industrially compostable or that it is made from FSC certified paper or non-GMO PLA (and explain what this means).

## **Examples of unsubstantiated advertising of environmentally** friendly and other vague packaging claims



- Using imagery associated with the environment such as trees or animals that are markers of good environmental health (i.e. frogs, dolphins, butterflies) aims to convince the viewer that this product is good for the environment and is therefore misleading.
- The term 'environmentally friendly' is vague, misleading and cannot be substantiated.
- This claim is unsubstantiated unless it includes a certification standard. The claim "eco-friendly alternative to traditional plastic bags" cannot be substantiated.

**Still confused?** If you are not certain that you have complied with the guidelines please go to the Commerce Commission's website and the Advertising Standards Authority website.<sup>13</sup> Otherwise please contact WasteMINZ.

<sup>13</sup> comcom.govt.nz OR asa.co.nz

## **GLOSSARY**

**Biodegradable** means the material is consumed by naturally occurring microorganisms such as bacteria, fungi and algae to produce water, carbon dioxide, and biomass. The process of biodegradation is hugely dependant on the environment. For example, compost, soil, water and marine environments all contain very different microorganisms and how active these are depends on the amount of oxygen and the temperature of their specific environment.

Bioplastic is an ambiguous term and plastics covered by this term are explained by the following diagram. A bioplastic can be made from biomass yet be non-biodegradable. Conversely a plastic can be fossil-fuel based and biodegradable. Use the following diagram to clearly describe the plastic used in your product.

Compostable see industrially compostable and home compostable

Degradable means something can "break down" and includes all types of plastic that can break into little pieces. This can be through mechanical forces (e.g. grinding, shredding, cutting etc) or from exposure to environmental forces (e.g. ultraviolet light from the sun), or through pro-degradant additives. Most materials will degrade or deteriorate given sufficient time and exposure to the right conditions, but in some cases, this can take hundreds or thousands of years. Terms used in advertising include oxodegradable, photo degradable and landfill degradable plastics as well as 100% degradable or 100% biodegradable. There is no standard with a reliable pass or fail requirement for proving degradability.

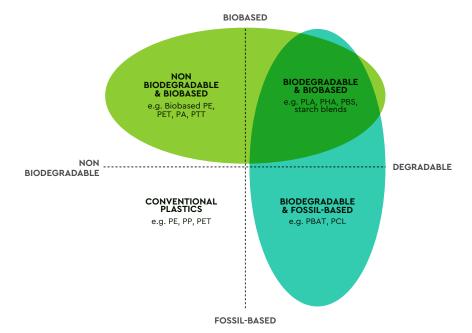
## End of Life (EoL) is used to indicate a product has reached the end of its useful life and is destined for disposal. In these Guidelines the focus is on providing the best option available for the EoL of any compostable product or packaging.

### Home composting

systems vary greatly in terms of methods used, the mean temperature they reach and the ratio of carbon rich material (i.e. compostable packaging, cardboard, paper towels, leaves) and nitrogen rich material (i.e. fruit and vegetable kitchen scraps, lawn clippings, egg shells, coffee grounds, tea leaves). They are unlikely to reach the temperatures able to be generated through industrial composting. Standards do exist for certified home compostable materials and it is important this standard is attained and verified to make a claim of home compostability.

## Industrial composting

(often referred to as commercial composting) facilities operate at much higher temperatures then the average home compost system. In New Zealand, industrial composters generally use windrow, vermicomposting or in-vessel methods. The compostable items that go into an industrial composting system are called feedstock. Composting facilities need to apply for resource consent to operate and the conditions of the resource consent can limit and/



or restrict the type of feedstock they can accept. Having organic certification additionally restricts the types of feedstocks accepted.

Composting facilities in New Zealand can generally be classified as:

- 1. Greenwaste processing facilities. These facilities process garden waste, bark and wood chip to make compost or mulch and generally don't have resource consent or an appropriate composting process to accept food waste or compostable packaging.
- 2. Industrial composting facilities. These facilities process more complex waste streams such as food waste, waste from abattoirs or fish processing facilities, sludge etc and are more likely to be able to process compostable packaging (but don't necessarily accept it).

It is important that a recognised industrial composting standard is attained and verified to make a claim of industrial (or commercial) compostability.

#### Polylactic acid (PLA)

is an industrial compostable thermoplastic polyester derived from renewable biomass via anaerobic fermentation of plant starch into lactic acid which is then chemically converted into polylactic acid polymer.

## **Unique Certification**

**Number** is the number issued by a verifying third party organisation to a product when it attains a specific composting standard. This number can be used by consumers and companies to ensure a claim of compostability is accurate.

# APPENDIX 1

## Checklist for claims about compostability and labelling

Will the average consumer understand the claim? (Test it on a customer!)
Have you stated the industrial or home compostability standard attained (e.g. EN13432, AS5810)?
Have you stated that the standard has been certified by an approved independent third-party organisation, used the relevant logo (such as the seedling logo) and provided the unique certification number issued?
Does the claim clearly refer to the product, packaging or both?
Are there recycling signs or other symbols or images on the packaging or marketing materials that may confuse consumers?
Have you clearly indicated the End of Life disposal options for the product or packaging?
Have you indicated where consumers can find out the availability of an industrial composting facility and collection program in the location where the product or packaging is available, and will they accept the product or packaging?
Are clear and conspicuous disclaimers included to account for limited facility availability, variances from the certification conditions, improper collection/disposal/recycling or other factors potentially important to purchasers i.e. "industrially compostable where facilities exist"?
Are claims/disclaimers on websites and other marketing materials accurate and consistent with the actual claims on the product or packaging?
Have you followed this checklist for each of the products for which you are making claims of compostability?

## APPENDIX 2

#### **Further reading**

American Institute for Packaging and the Environment (2019) Packaging Materials Management Definitions: A Review of Varying Global Standards Guidance Document. Available online from bit.ly/AMERIPEN-recycling-definitions.

Australian Competition & Consumer Commission (ACCC) (2010) Biodegradable, degradable and recyclable claims on plastic bags. Available from bit.ly/ACCC-plasticbag-claims.

Commerce Commission (2018) Making Accurate Claims. Online resources available from bit.ly/MakingAccurateClaims.

Department for Environment, Food and Rural Affairs (2010) Assessing the Environmental Impacts of oxy-degradable plastics across their life cycle. Available from bit.ly/DEFRA-oxoplastics-impact.

European Commission (2016) The impact of the use of oxodegradable plastic on the environment. Available from bit.ly/EC-oxoplastics-impact.

Federal Trade Commission (FTC) (2012) Environmental Claims: Summary of the Green Guides. Available from bit.ly/FTCenviro-claims-greenguide.

Ministry for the Environment Biodegradable and compostable plastics. Online resource available from bit.ly/MfEbio-compostable-guide.

Parliamentary Commissioner for the Environment (2018) Biodegradable and Compostable Plastics in the Environment. Online resources available from bit.ly/PCE-plastics-in-enviro.

WasteMINZ (2018) Compostable Packaging. Online resources available from bit.ly/compostable-packaging.

WasteMINZ (2019) Composting Facilities in New Zealand that accept compostable packaging. Online resource available from bit.ly/composting-facilities.

WasteMINZ (2019) A Quick Guide to Environmental Claims for Plastic Products and Packaging. Available from bit.ly/composting-guides.

WasteMINZ (2019) It's Complicated: A Guide to Biodegradable & Compostable Plastic Products & Packaging. Available from bit.ly/composting-guides.

WasteMINZ (2019) A Flowchart on End of Life Disposal for Compostable, Biodegradable and Degradable Products and Packaging. Available from bit.ly/composting-guides.