



TRINIDAD AND TOBAGO BUREAU OF STANDARDS

PROPOSED REQUIREMENTS

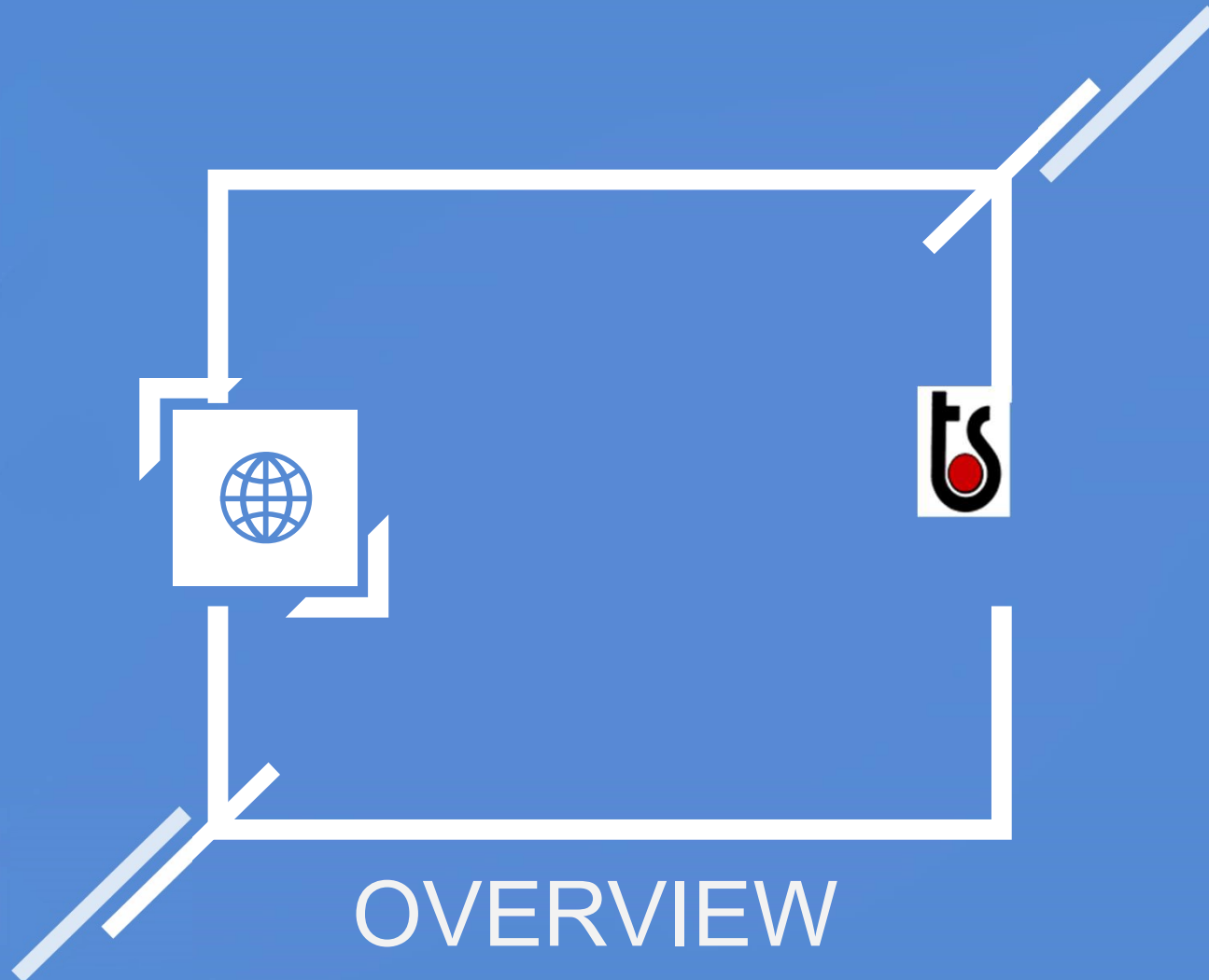
**TTCS 9:20XX, BIODEGRADABLE MATERIALS –
FOOD-CONTACT, SINGLE-USE PRODUCTS AND
PACKAGING**

*Fostering Excellence,
Improving Lives*

Contents

- 01** Overview
- 02** Key requirements
- 03** Benefits of the standard
- 04** Next steps





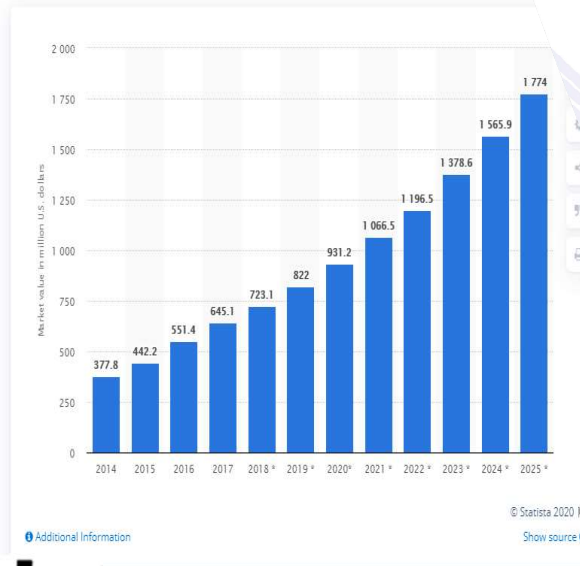
Worldwide Action

Legislation

Standards

Chemicals & Resources > Plastic & Rubber

Market value of biodegradable plastics in the United States
(in million U.S. dollars)

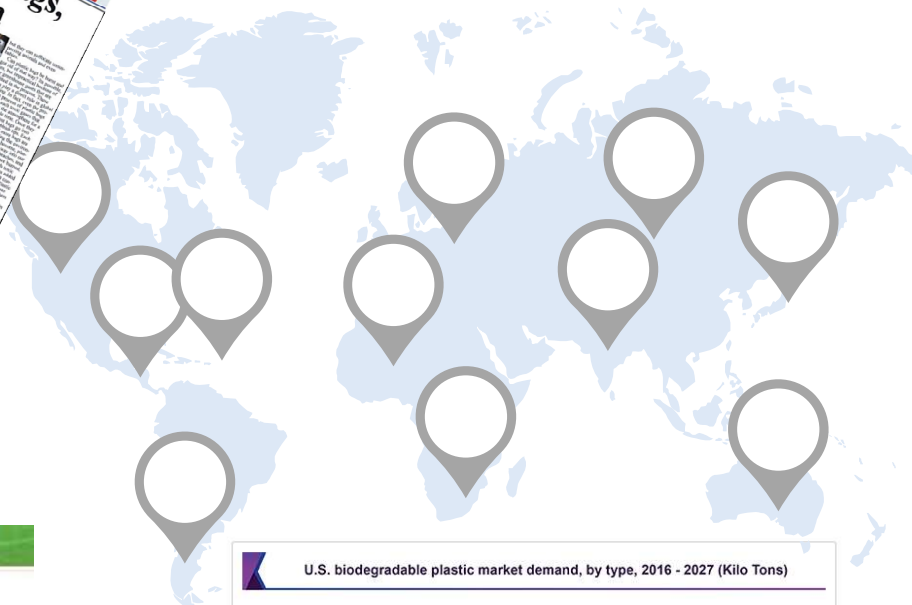


Relevance of Biodegradable and Compostable Consumer and Plastic Products and Packaging in a Circular Economy
For the European Commission DG Environment. Project conducted under Framework Contract No BW.8-3/PA/2017/005

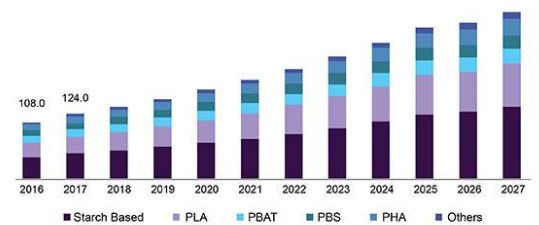


Position of European Bioplastics concerning BIOPLASTICS AND THE CIRCULAR ECONOMY

European Bioplastics (EUBP) welcomes the transition away from a linear to a circular economy, which requires regulatory to consider resources, which minimise the sustainable development of Europe's bio-economy to environmental



U.S. biodegradable plastic market demand, by type, 2016 - 2027 (Kilo Tons)



UN Environment Programme Report 2019

Wider Caribbean



Trinidad and Tobago joins **Clean Seas** Campaign – March 2019

UN Environment Assembly

The goal is to address, within the next five years, the root-cause of marine litter by targeting the production and consumption of non-recoverable and single-use plastic.





Draft Legislation

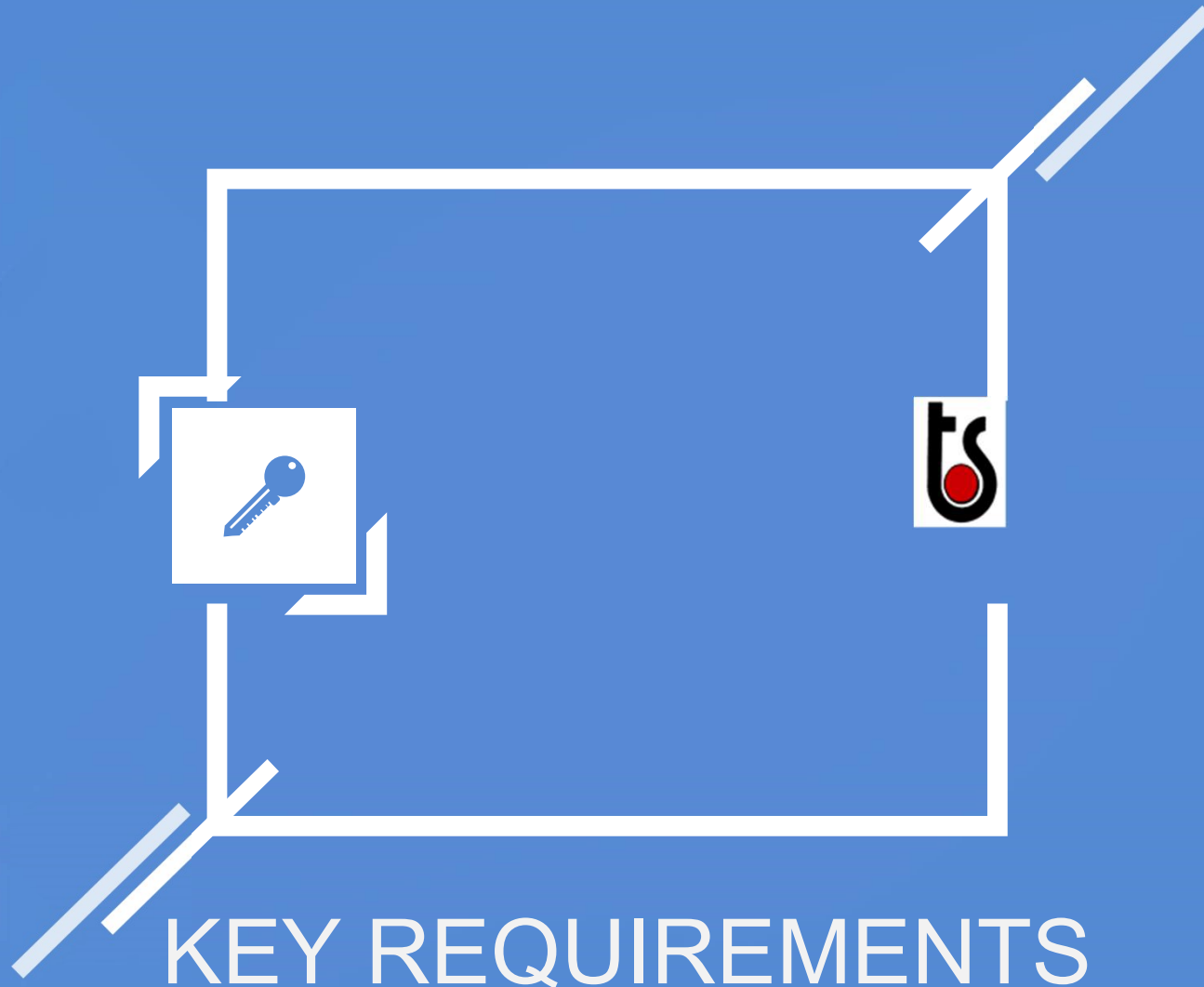
Proposed ban Expanded Polystyrene

At the time of development of this draft standard, the Government of the Republic of Trinidad and Tobago signalled its intent to establish legislation to control the manufacture, import and sale of expanded polystyrene products.

Single-use plastics, including expanded polystyrene (EPS) are a major source of environmental pollution. This standard was developed to support legislation on the control of expanded polystyrene products used in the food and beverage sector.

Milestones







Biodegradable
Materials –

Food-contact, single-use
products and packaging
– Compulsory
requirements

TTCS 9:20XX



TTCS 9



S C O P E

This standard applies to imported and locally manufactured biodegradable food-contact, single-use products and packaging.

It outlines the compulsory requirements for the aforementioned products and packaging as well as the mechanisms to demonstrate compliance to these requirements and also includes measures to be taken in the event of non-compliance.

This standard does not apply to secondary packaging, that is, outer wrappers or cartons or non-food contact products.

It also does not apply to packing material used as stuffing to prevent damage to products.





Products

Packaging





Normative References

Documents to which reference is made in a standard in such a way as to make it indispensable for the application of the standard

ASTM D6400
ASTM D6868
EN 13432
EN 14995

**Minimum
requirements**

ISO 16929
ISO 20200

**Test Methods
Disintegration**

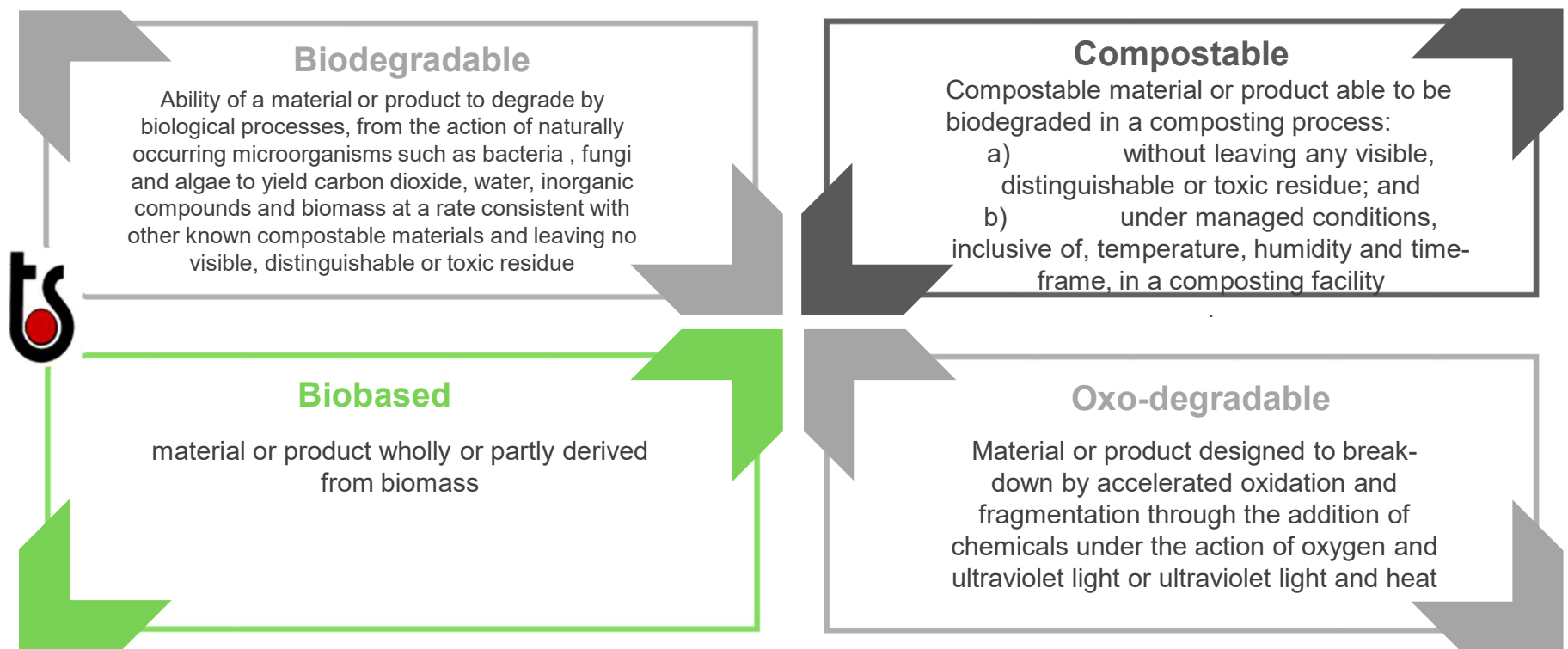
ISO 14855-1
ISO 14855-2
ASTM D5338
ISO 14851
ISO 14852

**Test Methods
Biodegradability**

CR 13695-1
OECD
Guideline 208

**Test Methods
Heavy Metals
and
Eco-toxicity**

Definitions



Misrepresentation

The words “green”, “safe”, “environmentally friendly”, “eco-friendly” or any other such designation shall not be used in lieu of “biodegradable” or “compostable”.



BIODEGRADABLE

SPECIFIC
TIMEFRAME

LEVEL OF
BIODEGRADATION

CONDITIONS



Just because a product is made from natural material doesn't mean it can be labelled biodegradable



Specific Labelling Requirements

Branding



Brand name

Name and address of the manufacturer or distributor or retailer

Origin



country of origin, preceded by “product of”, “manufactured by”, “made in”, or any similar wording

Description

Description of the product, inclusive of number of units, volume, weight, size, or other measurements and specification as relevant

Packaging constituents;

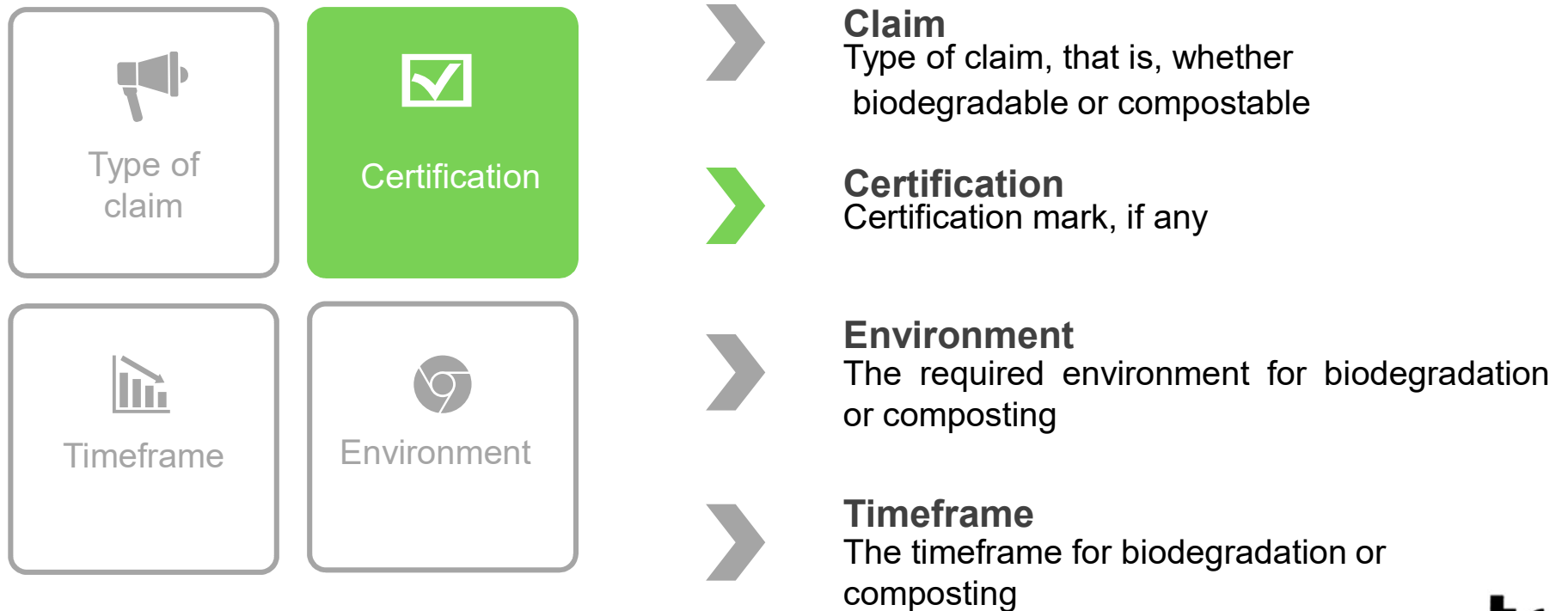
Consumer Information


An indication of whether the packaging is microwave, oven, or freezer safe or a combination of these, as applicable

Storage conditions



Labelling Requirements





Single/ Individual Products

Brand name

**Marking biodegradable or
compostable
based on which is the most
applicable**



Product Characteristics

Secondary components

Secondary components also have to meet the requirements for biodegradability

Heavy metal content

The sum of concentration levels of lead, cadmium, mercury and hexavalent chromium present in products or packaging shall not exceed 100 mg/kg



01

Minimum requirements

Meet requirements when tested in accordance with ASTM D6400, ASTM D6868 or EN 13432 and found to be within all the specified limits.

03

Flourine content

The maximum fluorine content shall not exceed 100 mg/kg

05

Oxodegradable products

Products and packaging which are oxo-degradable shall not be considered as biodegradable



Criteria for Biodegradability

Key Tests and Pass/Fail Criteria

10%
@ 2mm

Disintegration
Maintained under test
scale composting
conditions .



Compost process
Absence of negative
effects on the
composting process

84 days



These requirements must be met simultaneously

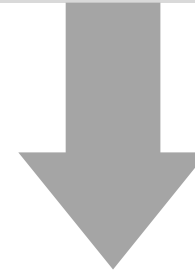
90%
CO₂

Biodegradability
Metabolic, microbial
conversion under
composting
conditions



Compost
Almost absence of
any negative effects
on the compost

180 days



Oxo TERMS



Oxo-
bio/degradable



Photo/Thermo
degradable



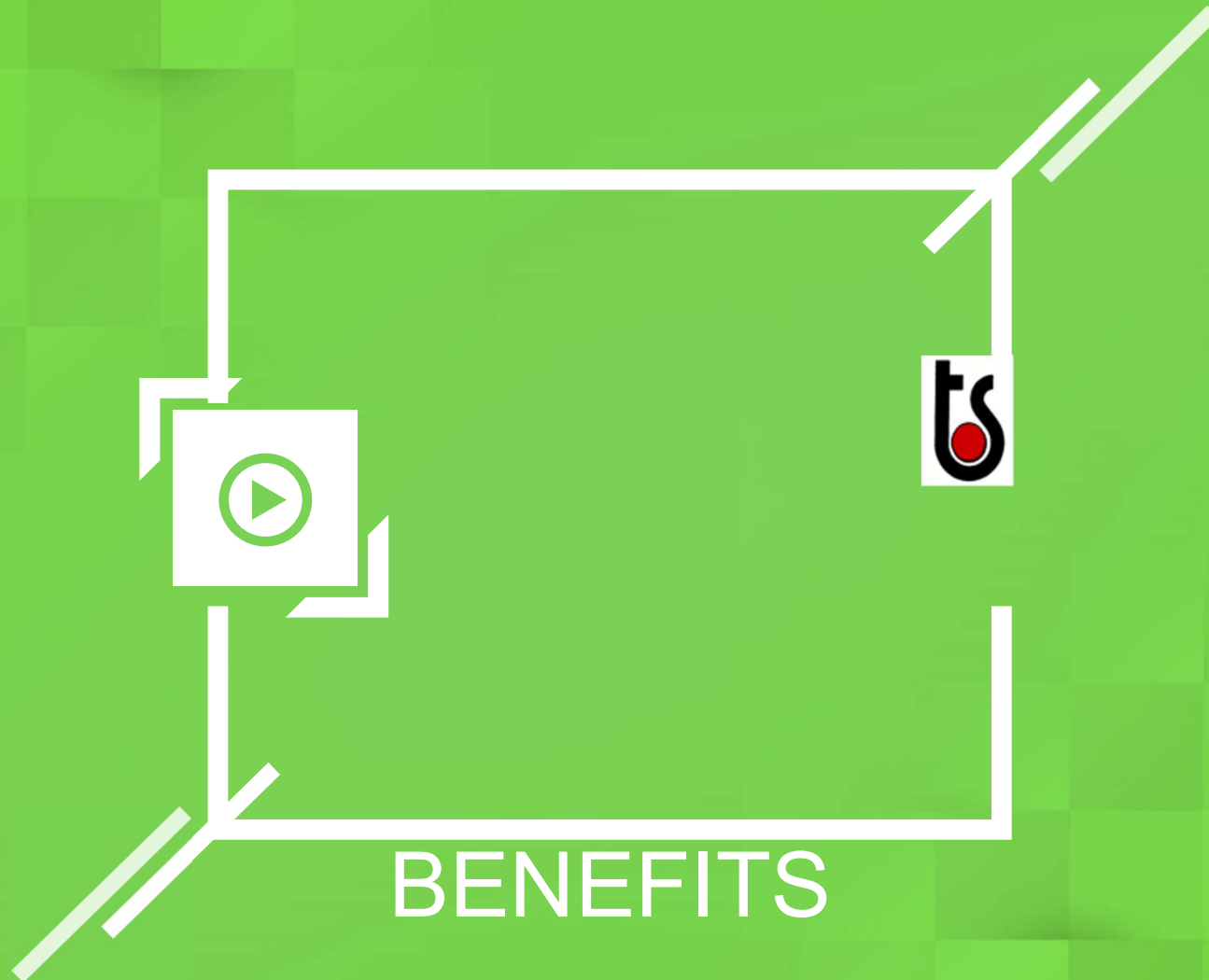
Oxo-
fragmentable

Products and Packaging
not equivalent to
Biodegradable or
Compostable



Bio-based





The background of the slide is a photograph of several brown paper coffee cups, some with white sleeves, and a glass coffee pot with a cork handle. A semi-transparent green rectangular overlay covers the left side of the image, containing three lines of white text.

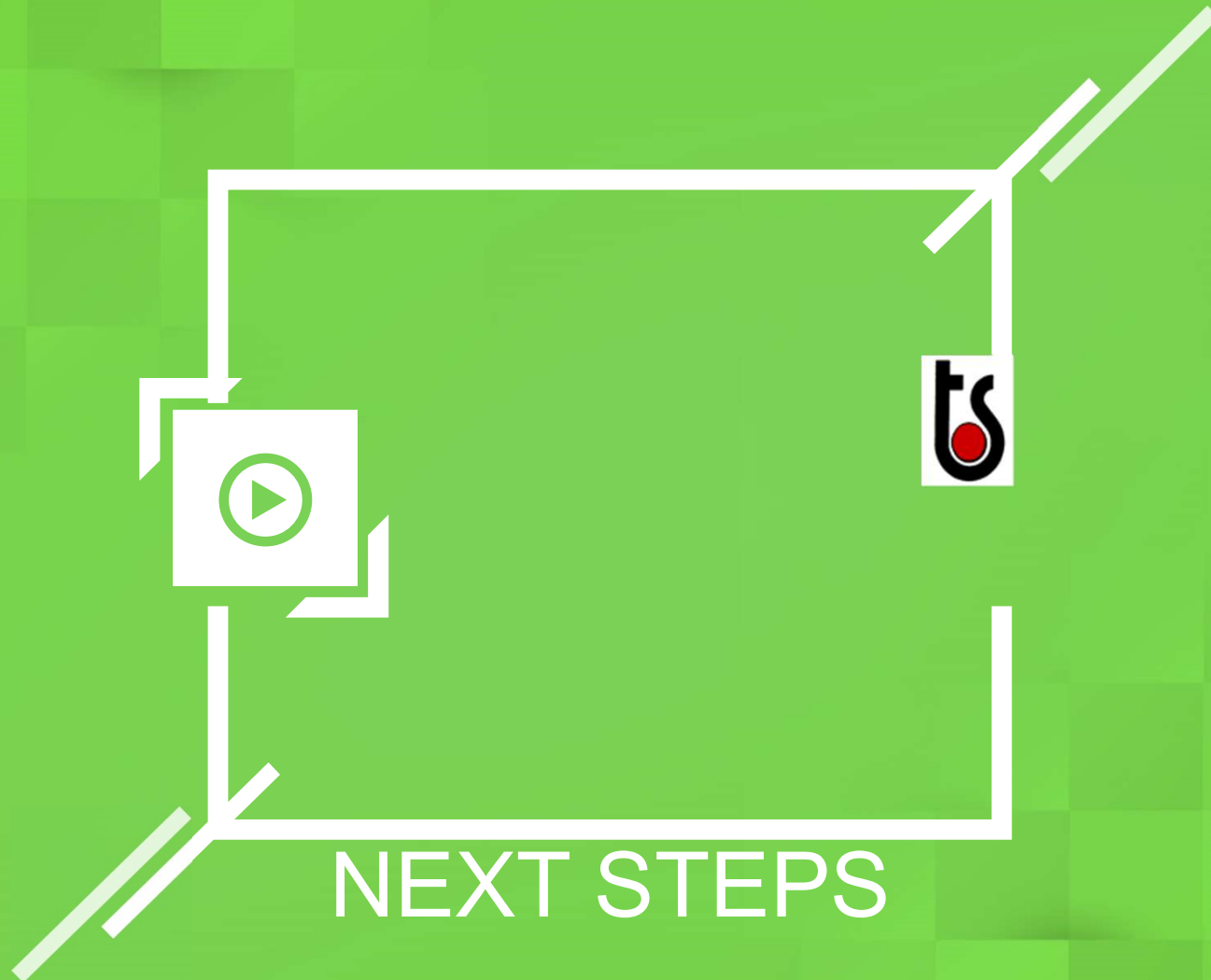
**Consumer
clarity**

**Consumer
confidence**

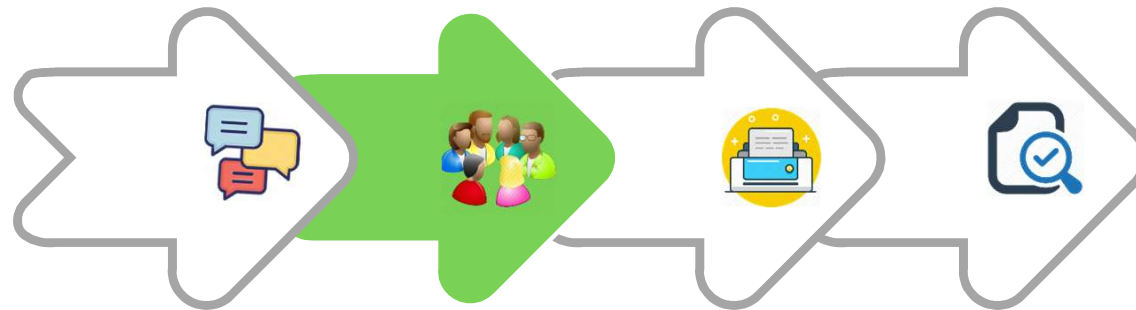
**Common market
requirements**

“Better Business,
Better Regulation,
Better Products and Services” - ISO





STANDARD FINALIZATION



01 Public Comment
The standard is now at Public Comment until end January 2021. WTO notified

02 Committee Reconvenes
All comments received are discussed and changes made to the standard as necessary

03 Standard Approved & Published
The standard is published and Stakeholders notified

04 Notification Conformity Assessment
Stakeholders are consulted on the implementation of the standard



Thank You



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Questions  Comments  Suggestions

