



# Strame

## Compostable Corn Straw

Presented By PMI Packaging Sdn Bhd

<http://www.pmipackaging.com>



**01**

**Compostable Corn Straw ( STRAME )**

**02**

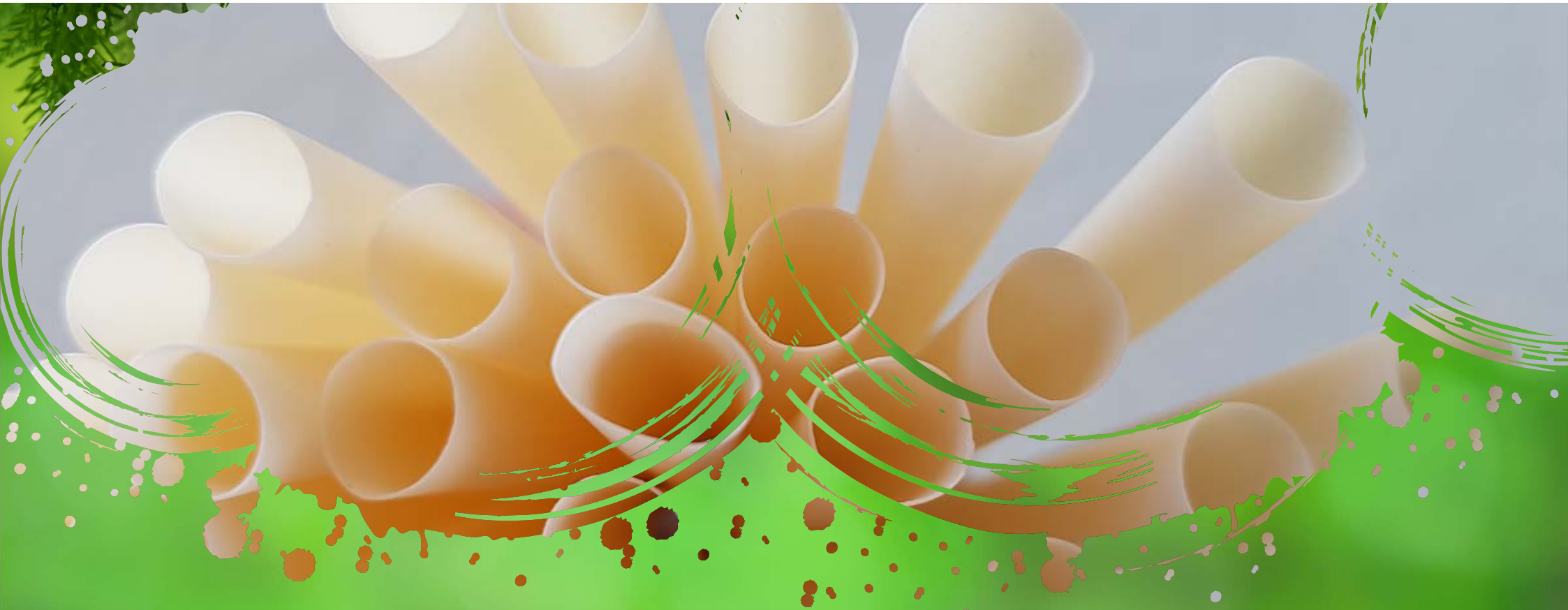
**Biodegradable VS Compostable**

**03**

**Plastic / PLA / Paper / Stainless Steel Straw**

**04**

**PMI STRAME ( Save The Earth )**



# Compostable Corn Straw ( STRAME )

PMI compostable range of straws made from 100%  
plant- based PLA ( corn starch)



## How are Corn Starch Compostable made ?

As the name implies, corn starch compostable are made from corn starch. The starch is converted into a polymer, the main ingredient in materials that have a plastic-like feel. The plastics can be clear or opaque, soft or hard. A kind of acid called polylactic acid (PLA) is made from the corn starch. This is why corn starch biocompostables are sometimes called PLA plastics.

# Specification of PLA Straw (Strame)

## Material 03

100% plant-based renewable resources (Corn Starch). Also known as PLA (polylactic acid)

## Certified Standard 05

SIRIM, Din-Certo, BPI, OK Compost, KWP, Compostable.

## Customized Size 04

Our Range starts from 5.5mm up to our 12mm straw – perfect for slurping smoothies or bubble tea.

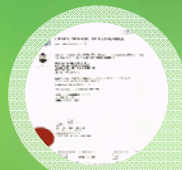
## 01 Wrapping

Individual single-piece transparent or corn film wrapped to meet the different consumer groups demands.



## 02 Packaging

Individual single color or multiple color packaging in retail box pack.





# Biodegradable Compostable

**A biodegradable material is not necessarily compostable. A compostable material is always biodegradable**

Biodegradable refers to the ability of a substance to break down into small enough parts so that microorganisms can consume it. Biodegradable products break down naturally when placed in a land fill, if given enough time. “Bio” meaning “life,” “degrade” meaning to break down, and “able” of course meaning that it can happen.



# Compostable

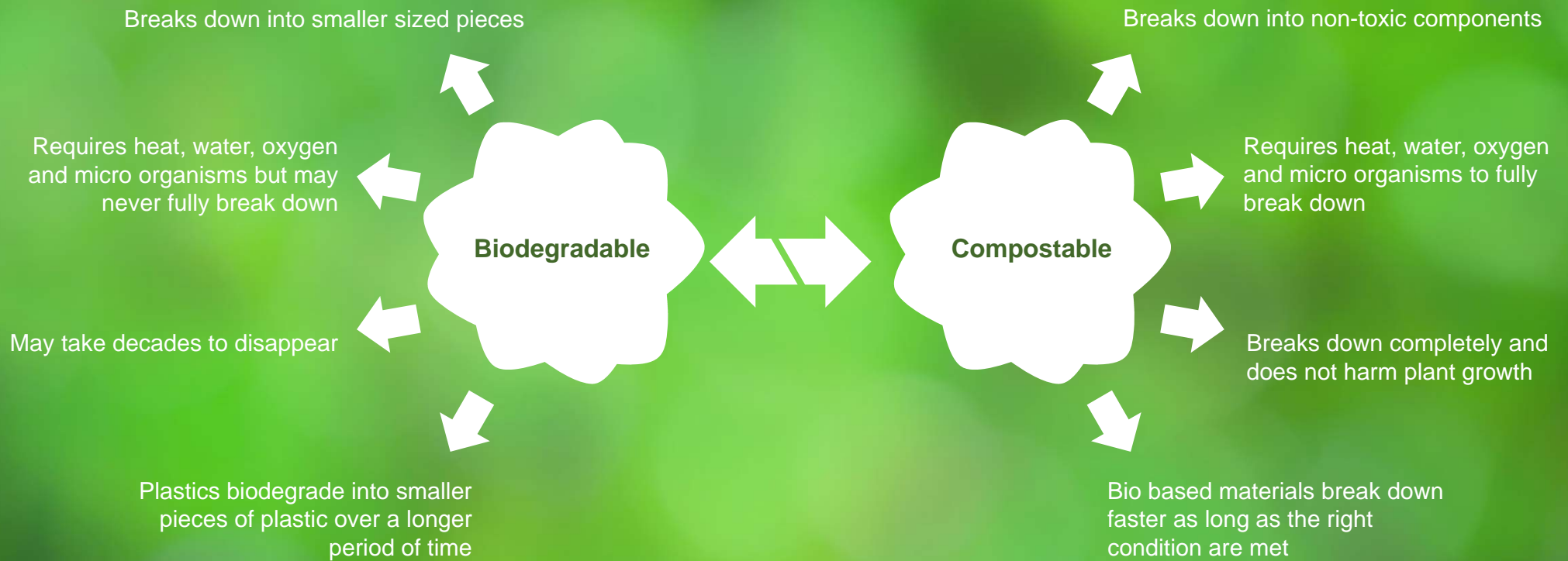
Compostable refers to the ability of a microbes to break down materials. Products that compost leaves no visible, distinguishable or toxic residue and generally help improve the soil. Composting is the process of recycling organic waste so that it can eventually be reused.



# Biodegradable

# Biodegradable vs Compostable

What's The Difference ??







# IS IT COMPOSTABLE?

Here's how to know which PRODUCTS are truly compostable in your curbside bin.

## ✓ YES, IF IT'S A PAPER PRODUCT *NOT* LINED WITH PLASTIC.

Many foodservice paper products are lined with petroleum-based plastics, which contaminate our soils when composted.

✓ These paper products are free of plastic.



wax paper & wax paper cups (wax will scrape off with your fingernail)

✗ These plastic-coated paper products go in the TRASH.



plastic-lined butcher or deli paper

## ✓ YES, IF IT'S A CERTIFIED COMPOSTABLE "PLASTIC."

If it looks like it contains plastic, it must be a certified "bio-plastic" to be safe for soils.

✓ Products that appear to contain plastic must be certified compostable by BPI.



Trust these compostable product labels:

ASTM D6400 ASTM D6868

ingeo NatureWorks LLC



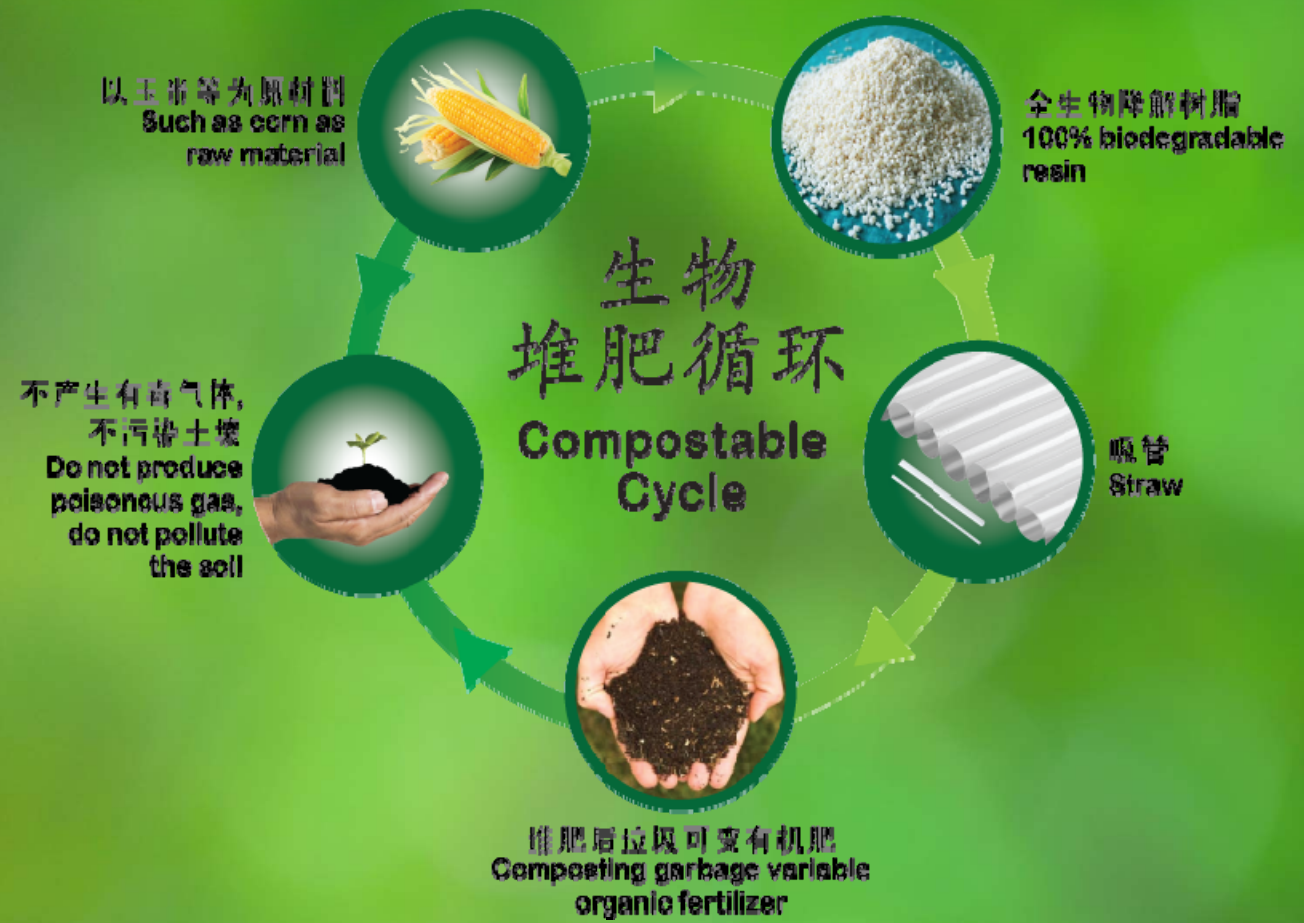
✗ These labels **DO NOT** mean compostable.

MADE FROM PLANTS  
MADE FROM PLANT STARCH  
BIODEGRADABLE  
OXO-DEGRADABLE  
BIO  
ECO-FRIENDLY  
EARTH-FRIENDLY  
MADE WITH RECYCLED CONTENT  
GREEN



Find out more compostable products at [www.pmipackaging.com](http://www.pmipackaging.com)

# Compostable Cycle Chart



# Features of Compostable Corn Straw



**Stainless Steel Straw**



**Paper Straw**



**PLA Straw**



**Plastic Straw**



# Plastic, PLA, Paper & Steel Straws

## What is the real difference?

The environmental impact from discarded plastic straws has drawn attention of consumers around the world. The global consumer movement targeting single-use plastic straws is completely justified.

We are strong advocates for saying no to plastic by providing biodegradable and compostable straws. However, before we can change consumer behaviour, it's important for people to understand the difference between common straw products and associated environmental impacts.

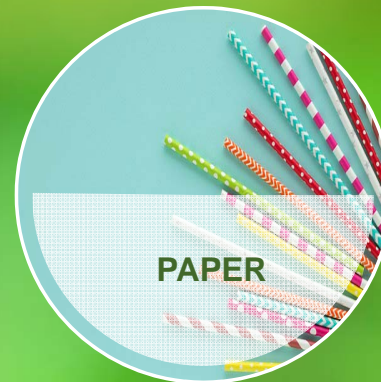
# Difference Between Common Straws



- one time use, end up in the landfill and pollute communities
- Plastic is not environmentally friendly
- contains BPA or other toxins that leach into our food and damages our health
- made out of petroleum bi-product polypropylene
- when exposed to hot water or steam, plastic straws can easily melt and leak toxins
- take up to **200 years** to decompose



- PLA stands for polylactic acid which is made from renewable resources, such as sugarcane or corn starch
- It decomposes forming carbon dioxide and water, which present no danger to the environment
- unlike recycling, no chemicals or processes are required to dispose of a biodegradable straws
- composting is a natural process of degradation of plant and animal material and returns nutrients back to the soil.



- paper straws getting soggy too quickly
- colour of paper straws leaching into drinks after few hours
- No certification provided from government
- Any quality which can get from market
- No food grade certification
- Anti wet chemical & glue solute into drinks might cause consumer health issue
- Bad carton smell



- can't see the liquid coming up the straw
- not convenient with little kids to see if they actually are drinking
- drinking a cold smoothie? The straw gets super cold
- Washing the straw in hot water? Careful, don't burn yourself
- most expensive investment if you are in huge usage
- Might be hard on sensitive teeth. May have sharp edges.

# Save The Earth



**NO**  
PLASTIC STRAWS PLEASE!

拯救地球，  
请勿使用塑料吸管！  
សង្គ្រោះភពផែនដីរបស់យើង បញ្ឈប់ការប្រើប្រាស់បំពង់ប៊ីកញ្ចាស្លឹក!

SAVE OUR EARTH

Say "NO" To Plastic, Use Compostable Straw



Did you know plastic straws are killing fish, turtles and sea life while also destroying the ocean environments ? The environmental impact from discarded plastic straws has drawn attention of consumers around the world. Many governments have begun to discuss this issue. Few of them have legislated restrictions on the use of plastic straws. In response to the urgent needs of the market, PMI has officially invested in the development and manufacture of plant-based PLA compostable straws ( Strame). PMI Strame are certified from SIRIM, OK Compost and SGS hence they are completely harmless to the environment and the ecosystem at large.

# Strame Production Process



**EXTRUSION**

**COOLING**

**CUTTING**

**PACKAGING**

**SHIPPING**



# PMI STRAME

Is a unique, biotechnology company that produces Biodegradable products that are 100% natural and completely compostable

We have started a new product (Compostable Straws) a replacement for plastic Straws. Highly, environment friendly, these products are all made from renewable resources. (Corn Starch)

Our straws are exclusively made in Malaysia so you can always trust that they are safely made and to the highest quality standard.

Our Range starts from 5.5mm up to our 12mm straw – perfect for slurping smoothies or cold ice tea. Our straws are flavour proof which means your favourite smoothies will not taste like paper



**STRAME**

Plastic products may take upto a thousand years to degrade, while these products biodegrade within 3-6 months in a composting system.

Our straw features: Use plant-based renewable materials, Compostable, Eco-friendly, Reduce carbon footprint, suitable for cold and hot drinks.

# STRAME International and Local Compostable Certification

DIN CERTCO  
GERMANY



SIRIM MALAYSIA

TUV AUSTRIA  
BELGIUM



DBKL MALAYSIA

COMPOSTABLE



BPI USA

# THANK YOU

PMI Packaging Sdn Bhd



biopmi



sales@ pmipackaging.com



www.pmipackaging.com



644, Jalan Idaman 3/9, Taman Perindustrian Senai, 81400 Senai Johor



+6016 – 733 5914  
+6018 – 788 1618



+607 – 595 1618