



# Rethinking Plastic Materials for Product Packaging

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# Signify is the world leader in lighting

We provide high-quality energy efficient lighting products, systems and services

## Light sources



**LED and conventional lamps** (bulbs, spots, tubes, candles, lights strips, etc.) and **electronic ballasts, drivers and sensors**

## Luminaires



**Lighting fixtures containing lamps, wiring and other components** (pendants, downlighters, desk lamps, troughs, decorative, etc.)

## Systems and Services



Software for monitoring, controlling and managing lighting. Services comprising professional, lifecycle and managed services

# Our Brighter Lives, Better World commitments for 2020

Sustainable innovations, Sustainable revenues

## Sustainable revenues



More than 2 billion LED lamps and luminaires delivered by 2020



80% of revenues from sustainable products, systems and services



Energy



Weight & materials



Circularity



Packaging



Substances



Food availability



Human centric



Access to light

## Sustainable operations



100% carbon neutral & 100% renewable electricity



Zero waste to landfill in our operations



Safe and healthy workplace



Sustainable supply chain


# Packaging requirements and initiatives

Mid-1990s, an Ecodesign process introduced to reduce the environment impact of products and packaging

Since 2013, packaging requirements are specified in a dedicated QS document

- Recycled materials
- Paper preferred
- Alternative material promoted
- Responsible sourcing

2018: zero plastic packaging program initiated



Packaging requirements

QS-014359

1. Objective

The Signify Sustainable design process pursues a reduction of the environmental impact of its products and packaging by using responsible materials from renewable sources. This approach is governed by the Sustainability (QS-000164) and Environmental (QS-000165) policies. This Requirement document encourages packaging designers, purchasing community and suppliers to minimize the environmental impact of packaging materials in all phases of its life cycle by adhering to the following principles for a sustainable packaging design and -production including specific requirements and targets:

1. Maximize recyclability and the content of recycled materials to close the material loop

2. Minimize the amount of material considering weight, volume and form factor for container loading, while offering sufficient product protection

3. Use alternative materials like certified renewable resources or bio-based materials is promoted, in case recycled content is not or limited available by the local supply base

4. Adhere to all mandatory local and global regulations and policy requirements for packaging related to chemical substances, materials and gassing



5. Assure responsible sourcing and compliance with Signify packaging requirements by requiring suppliers to conduct a risk assessment

6. Avoid use of wood harvested in violation of traditional and civil rights, e.g. forests where high conservation values are threatened, or which are converted to plantations

7. Assure wood used for products and packaging originate from sustainable sources (FSC, PEFC, ...) or are based on alternative materials like bamboo, rattan and leftovers from sugar production (UNESCO) or pressed wood from wood shavings from timber production.

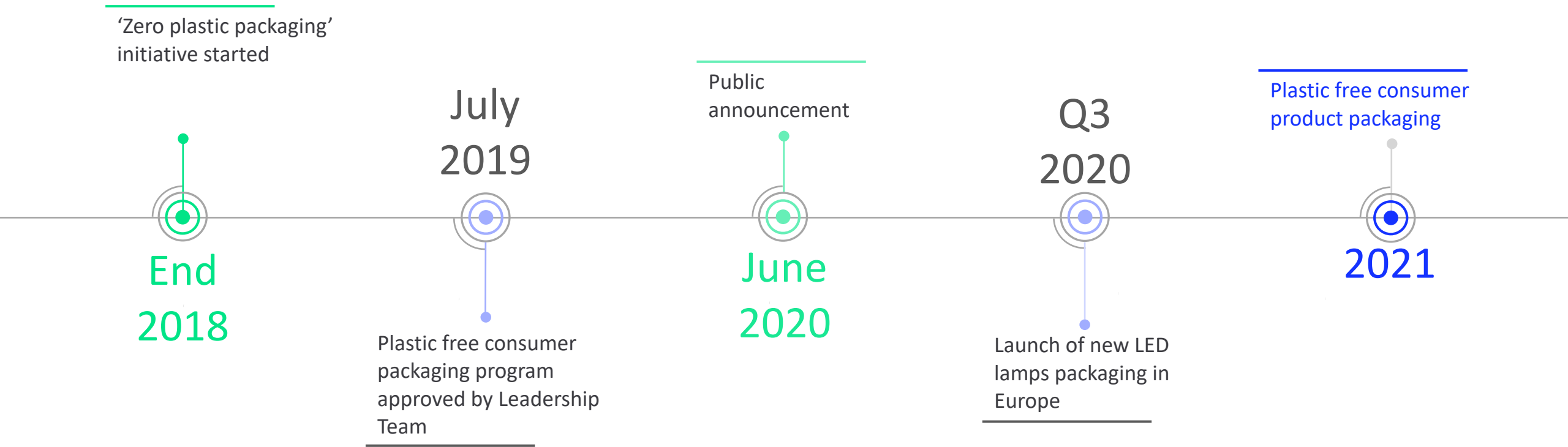
Table 1: Criteria for recycled paper, paper-pulp and (corrugated) cardboard in packaging

	Transport packaging of individual product packaging (incl. DfUs, warranty card, etc)
	From Jan 1, 2019 onwards
Production in Europe or the Americas	>80%
Production in Rest of the World	>80%



In line with the Signify ‘zero plastic packaging program’, plastics (incl. buffering materials) in B2C product packaging must actively be phased out before end of 2021.

# Plastic free consumer packaging by end 2021



# Plastic free packaging is the right thing to do

Plastic pollution has become one of the most pressing environmental issues. Coalitions are forming to address plastic waste, and companies are making pledges on more sustainable packaging.

And consumers are becoming critical on the packaging of products they buy.

**Signify aims to eliminate plastic from consumer product packaging by the end of 2021!**

# 8 million

tonnes of plastic  
end up in the oceans  
each year



# Hundreds

species of marine life  
are threatened by  
plastic





# Plastic free = really plastic free

## Allowed (not exhaustive)

- Paper and cardboard
- Materials that can go in the paper recycling
- Materials that can go in organic waste
- Materials that are home-compostable
- Cotton

## Not allowed (not exhaustive)

- Regular plastics (obviously)
- Bio-plastics
- Compostable plastics
- Paper with plastic lamination

# We're not starting from scratch

Many plastic inserts have already been replaced with paper-based alternative.

Still we are using:

- Plastic bags
- Protective films
- Plastic caps
- Cable binders
- Tape and stickers







## Going plastic free won't be easy

Over 2.5 million kilograms plastic used per year

- Equal to 125 million 0.5L PET bottles
- In a row these stretch 8,000 km or 5,000 miles - that is from Amsterdam to Beijing

Over 10,000 products will change packaging in 2 years

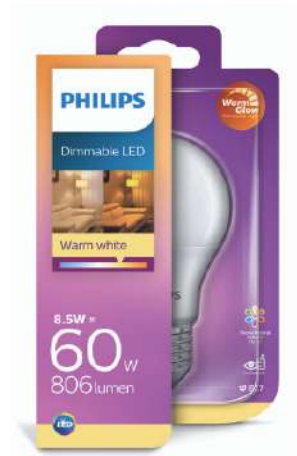
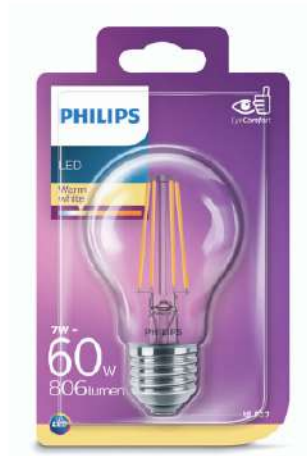
- Bulbs, spots, candles, tubes
- Luminaires with glass and fragile plastic
- Heavy metal luminaires

Global markets with many challenges

- Widely ranging customer expectations
- Dust, humidity, electro static discharge
- Transportation

# But it will be worth it!!

**2018**  
Plastic Blister



**2020**  
Paper Box





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