

Sustainability – A food packaging converter's view

Jukka Moisio, CEO

Handelsbanken seminar in Helsinki, September 26, 2018

Huhtamaki



Huhtamaki in a nutshell

Net sales

€3.0bn

Comparable growth

3%



EBIT margin

9.0%

ROI

13.6%



Our ambition

The preferred global
food packaging brand

Employees

18,200



Manufacturing sites

78

Operations in
34 countries



Our purpose

Helping great products
reach more people,
more easily.

Our business is consumer food and drink packaging

Food-on-the-go

Pre-packed food



Convenience

Short shelf life

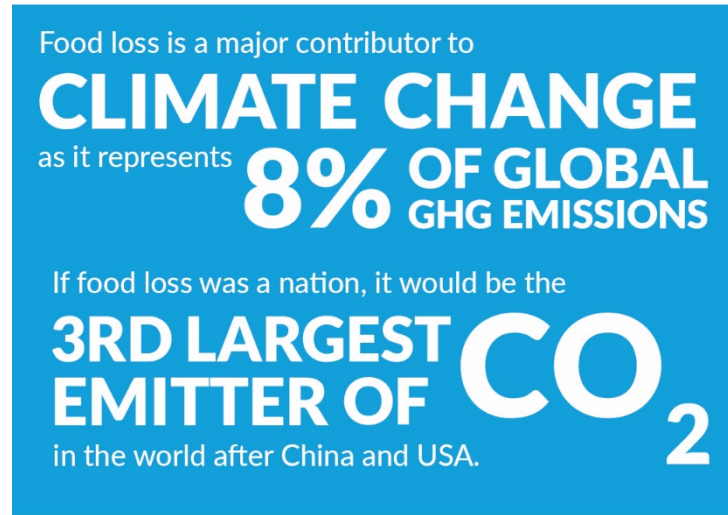
Food Safety

Long shelf life

Waste prevention

Our packaging protects food and drink products, delivering them to consumers safely and in good condition, helping to reduce food waste.

Food waste and loss is a global challenge



- Using appropriate packaging can help reduce food waste at almost every stage of the food chain*

Packaging accounts for app. 5% of food's CO₂ footprint



- Proper packaging results in less greenhouse gas emissions
- In many applications more packaging leads to lower overall carbon footprint due to reduced food waste

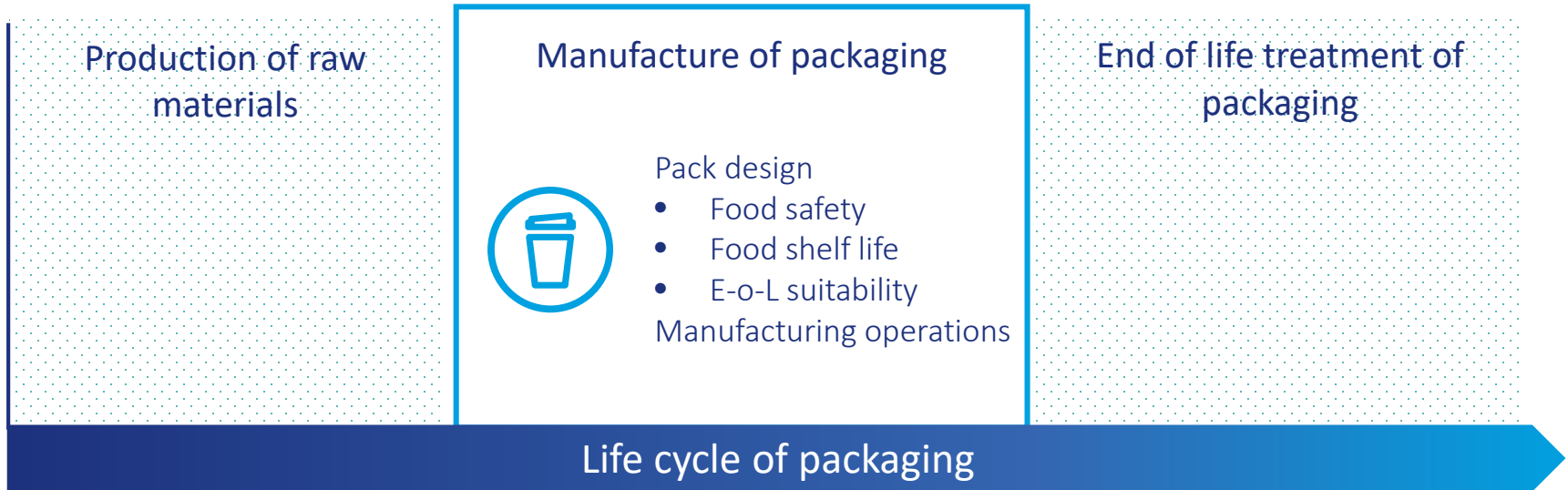
Marine plastics is also a global challenge

Rank	Item	% of total debris
1	Cigarettes	21%
2	Plastic bags	11%
3	Food wrappers/containers	9%
4	Caps & lids	9%
5	Plastic beverage bottles	9%
6	Cups, plates & utensils	5%
7	Glass beverage bottles	4%
8	Beverage cans	4%
9	Straws & stirrers	4%
10	Paper bags	3%
Top 10 combined		79%

Source: Ocean Conservatory

Human behavior
and poor waste
management
practices result in
leakage to the
environment

As a packaging converter, we can directly impact the environmental footprint via packaging design and the efficiency of our own operations



We use different materials for different purposes, aiming for optimal packaging

2/3 of raw material we use is renewable

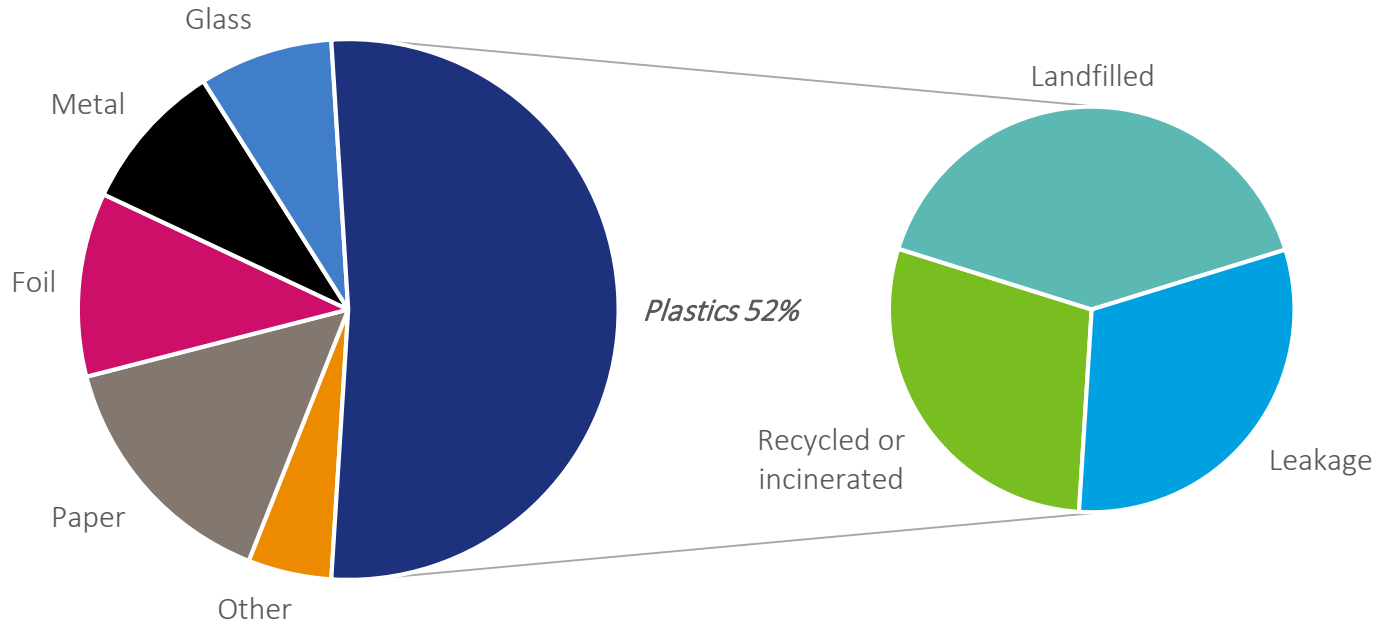


Recycled fibers are derived from either post-consumer or post-industrial recycled materials

– Virgin fiber is used due to food contact regulation
– 97% of virgin fiber used is certified

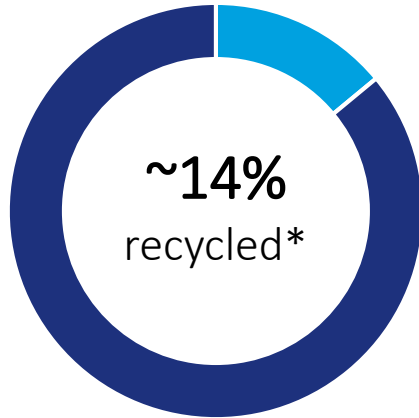
Different plastics are used to achieve lightweight, fit-for-purpose, long shelf life barrier structures

52% of global consumer packaging is made of plastics – of which 14% get recycled today

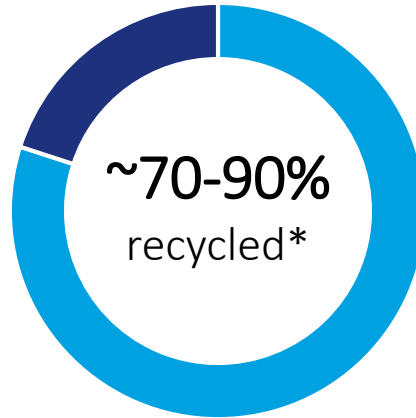


Recycling rates vary – upside potential to utilize valuable materials remain

Plastic packaging



Steel



Paper



Advantages and challenges of plastics

- Plastics is durable, light-weight, affordable, versatile and energy efficient to produce
- Easily scalable
- Good barrier properties
- Long degradation time
- Affordability vs. incentives to recycle
- Underdeveloped recycling infrastructures lead to leakage to the environment

Nearly all types of plastics can be recycled, however the extent to which they are recycled depends upon **local** technical, economic and logistical factors.

Examples of alternatives to plastic food packaging

- Paper, paperboard & other fiber-based packaging
 - Renewable, recyclable, compostable – suitable for several end-of-life treatment options
 - Work for many applications
 - Typically need a barrier layer (plastic, bio-plastic, chemical) to hold liquids and/or fat, and for oxygen and aroma barriers
- Glass
 - Heavy and space-consuming, breakage
 - Endlessly recyclable but value of recycled material is low
 - Does not degrade
- Metal
 - Aluminum is widely recyclable
 - Oxidation
 - Applicability for large sizes ?
- Bio-plastics
 - A wide range of products with different properties
 - can be renewable-based or fossil-based
 - Not necessarily compostable
- (Do without – high food waste or change of lifestyle)

Whatever the material, packaging must be disposed of responsibly

Waste collection and recycling infrastructure plays a significant role

- Waste collection rates increase with the average income of a country
 - Infrastructure must be in place
 - What is the financial incentive to collect and recycle?
- Collection mechanisms as well as materials collected vary from country to country and in cases at the city/locality level
 - Consumers need to know what goes where

Recyclable \neq Recycled

What makes something recyclable?

Packaging design

We have most control here – we can design the packaging with recyclable materials



Infrastructure

We have little control here – some ability to influence via partnership. We can drive demand by designing more recycled content



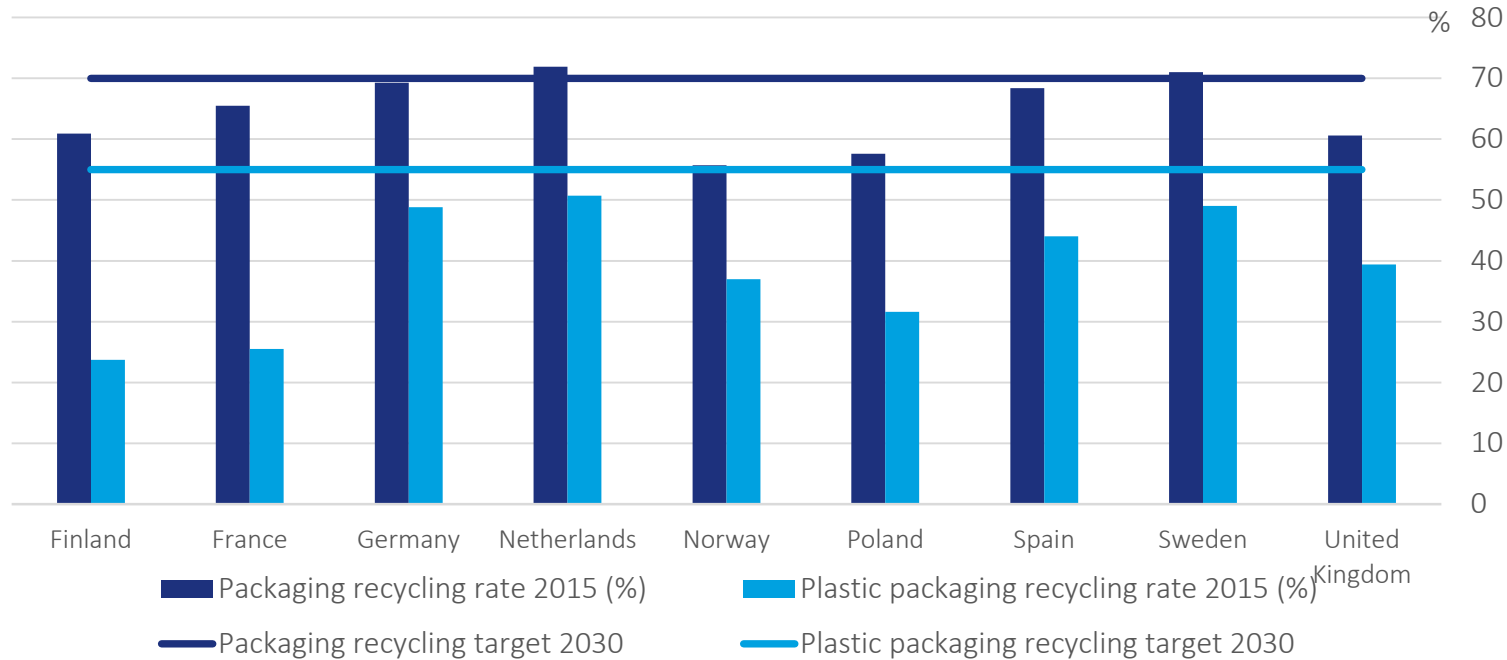
Consumer

We can inform the consumer but can't make the consumer recycle even when the other two requirements have been met.



We have very little influence here

Recycling rates vary even within Europe



China's ban on import of plastic waste has had an impact

- China accounted for almost half of the global recycling trade in 2016
 - Local recycling infrastructures in exporting countries did not develop
- In 2017 China imposed severe restrictions on import of waste
 - From 8 million metric tons of plastic waste to nearly zero
 - Mixed paper contaminant limit from 3-5% to 1.5%



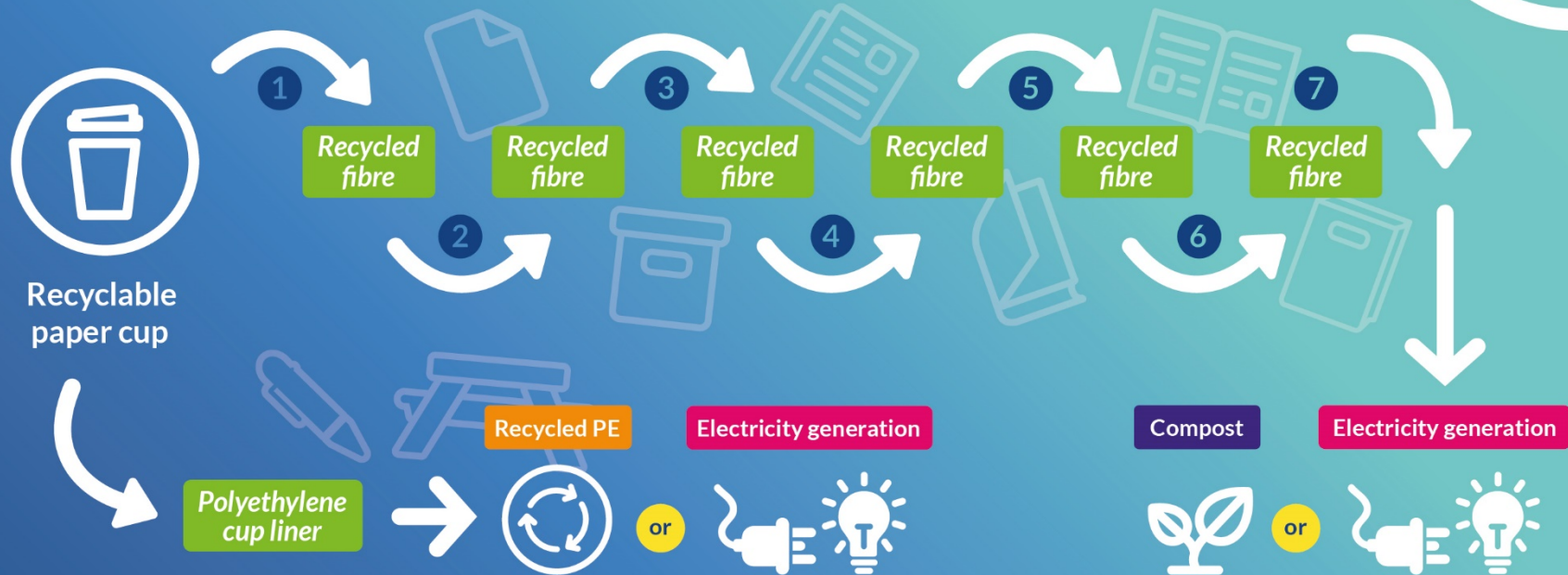
Oversupply of waste in Western ports



Exporters of waste will have to expand domestic recycling and/or cut back on the level of waste being produced

Paper cup recycling

The fibre in our recyclable cup can be used up to seven times and then composted or used to generate electricity



Good for the environment. Good for the economy. Good for people

Trends that shape the world as well as the packaging industry

Urbanization

Growing cities in emerging economies require more safe food shelf life

Convenience

Busier lifestyle requires more ease in availability and consumption of food

Sustainability

Consumers growing more conscious of impact packaging has on environment

- We serve the growing demand for on-the-go & prepacked food and drink with sustainably-sourced, recyclable and compostable packaging solutions, designed to minimize environmental impacts across the value chain.
- As a converter we choose the most appropriate material for protecting and serving food in a sustainable and affordable manner

Consumer food packaging in the future?

- Made of responsibly sourced raw materials
 - that are recycled or renewable
- Manufactured efficiently
 - with as little resources used as possible
 - by a responsible company
- Is efficiently delivered to the customer
 - who is able to pack and serve food in it safely
 - with minimal waste created in the process
 - enables use of all contents
- Is easy to dispose of correctly after use
 - information to consumer
- Gets recycled into new similar or alternative products
 - waste management infrastructure in place

In summary

Key tasks of food packaging:

Ensure food safety

Minimize food waste

Enable convenience and responsible consumption

The environmental assessment of food contact packaging should look at its life-cycle performance (packaging and the food it contains).

Increasing restrictions on materials used in food contact packaging pose challenges for use of recycled materials

vs.

Increased need and appetite for recycled materials

Helping great products reach
more people, more easily!

Thank You!

Huhtamaki