

PACKAGING SUSTAINABILITY

WHERE LESS IS MORE

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Mondelez International



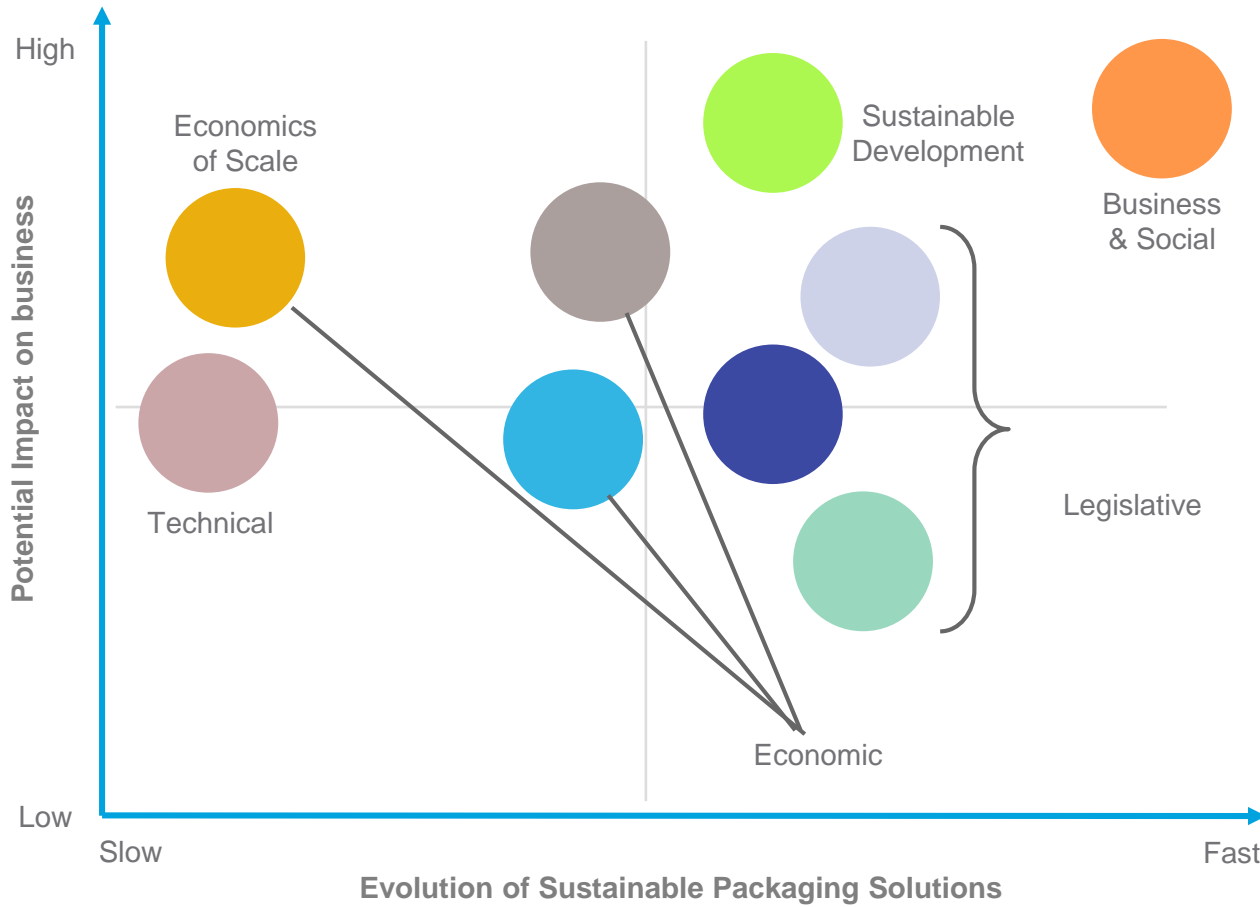


How do you take a bull by the horns...



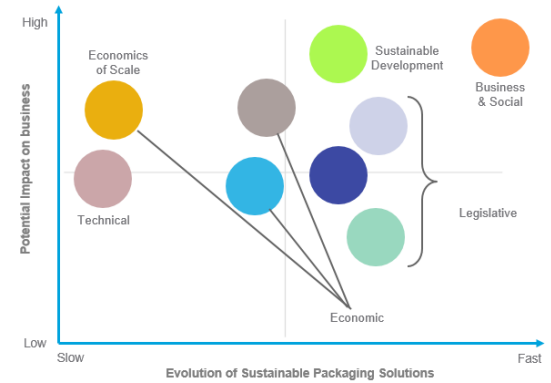
more than three horns in fact...

Yes, there are many challenges....



Legend	Driver
	Economies of Scale
	Technical Performance
	Sustainable Feedstock
	Tax incentives / penalties
	Circular Economy
	Bans, RoHS
	Peers, Consumer, Retailers and Lobbies.
	Cost of Disposal
	Sustainable Development (Ref. Latest UN Approach)

But the Good News is....



...that all these challenges are being successfully met as we speak.....

because, when there is a will, there is a way.....

Mondelez International remains committed to our Sustainability 2020 climate change goals and the Paris Climate Agreement.



“As a global company with sales in more than 165 countries, we believe acting on climate change is critically important.

Growing our positive impact for people and the planet is not only at the core of who we are as a company, it also helps to accelerate our growth. Smart and sustainable use of natural resources to reduce our environmental impact is necessary now more than ever.”

Irene Rosenfeld
Chairman & CEO
Mondelez International
June 2017

Our goals place us at the forefront of the fight against climate change by setting science-based targets to support the global effort to limit climate change to less than 2°C. We've reduced CO2 emissions from our factories by 7 percent since 2013 and we're on track to deliver our 2020 goal of 15 percent reduction in CO2 emissions.

Beyond this, we're also addressing deforestation in our key supply chains - the biggest single contributor to our end-to-end carbon footprint. We have just published a new Cocoa Life strategy to combat climate change in cocoa producing countries and we were founding members of the Cocoa and Forest Initiative. Our palm oil action plan aims to make sustainable palm oil the mainstream option by requiring suppliers to improve practices across their operations.

1. THE ARENA

Harnessing the evolution



A winning approach in action- the MDLZ Way

- ✓ Relentless innovation in packaging sustainability arena in a ***strategic, scientific & collaborative manner***.
- ✓ We commit & deliver against all odds. Pre-defined sustainability **metrics are treated sacrosanct internally**. We track & report them externally as well, e.g., DJSI.
- ✓ **Less is more**. Therefore, constantly reduce the source itself, i.e., pursue packaging weight reduction while at the same time, ***keep harnessing the evolution taking place in the materials, designs, conversion & technology arena*** in strategic manner.
- ✓ Well over **70% of MDLZ packaging usage is already recyclable**. We are working on changing the rest without compromising with our product quality, shelf life or the consumer benefits.

2. TOOLS

+ Success Stories



...taking bull by the horns; the key levers that we use

Raw Materials & Designs



Packaging Conversion



Resource usage



Infusing Common Purpose



External Collaboration



Scientific base & Information



Executive Engagement



Programmes & Leadership



Using a combination of these has helped us exceed our packaging sustainability targets some of the examples follow

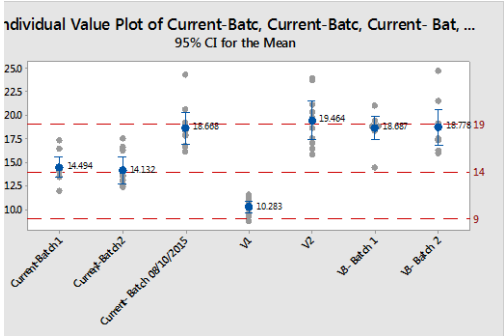
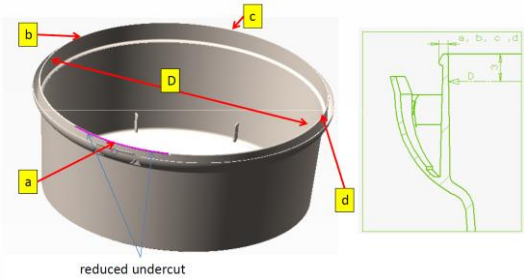
A big HERO



- New Heroes tubs shape: 17% less material
- New shipping pallet count
- Improvement in opening force



- New incoming shipping pallet count: 1160 tubs/pallet (instead of 720)
- No Capex



Small steps make big difference



Before

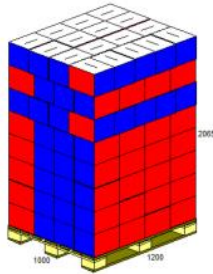
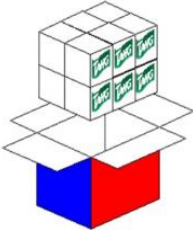
After

↓ 17%

Less packaging material used.

958

(MT/ year)



reduced pouch height

+4 Pouchs/ Display Unit

+ 48 Pouchs/ Box

+8 Boxes/Pallet
+8M Pouchs/Pallet

Number of trucks required reduced by 550 pa

Then the best practices are extended to other SKU's



- 5 mm at pouch height
(10 mm at web width)



- 139 tons
of flexible
film per
year

-5%

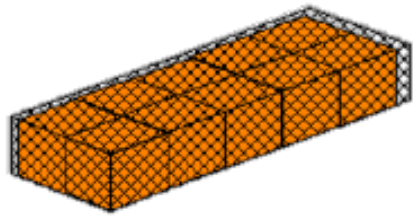
- 22 mm at display length
eliminating head space



- 371 tons
of paper
per year

-12%

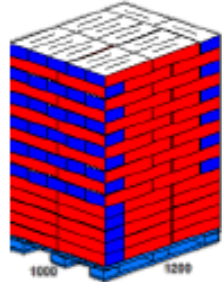
+ 5 mm at length to accommodate
+ 2 displays in a iso modular case
+ ECT (resistance)



- 788 tons
of paper
per year

-19%

+ 2 shippers per layer
+ 3 layers



+ 13200
pouches
per pallet

+85%

+ 343200 pouches per truck



- 2531
trucks
per year

-46%

Sustainability through brand footprint

Harmonized Canadian and US Packs from a **24 x 50g** to a **30 x 42g** count carton.

The Canadian product reduced its corrugate consumption by **25%**, film consumption by **7%** while both products increased transport efficiency by **10%**

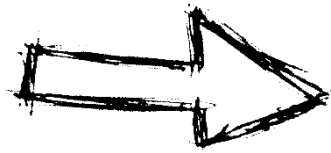


MUP Carton Specification Review

Objective	Reduced paper board thickness from 26pt to 20pt
Manufacturing	<u>North America:</u>
Annual Material Savings	330M LBS annually



SHIVA Removing Intermediate Layers Packaging



This resulted in approximately:

Just the examples you saw today also resulted in a cost savings well in excess of \$3 Million per annum in monetary value as well.

Many more projects are always in the pipeline

- ↓ 57% - Small Packs
- ↓ 42% - Medium Packs
- ↓ 27% - Large Packs

389 MT of packaging material eliminated /year

3. STRATEGY

and overcoming the hurdles



Overcoming some of the hurdles to Sustainable Packaging

Costs

Find different ways to optimize costs while making packaging more sustainable. We constantly monitor & harness the evolution in the materials arena, design, & conversion technology etc. Combining the power of big & small, we also find elements in the packaging that can be recycled or that can be made from post-consumer waste.

Scientific Basis

Don't just design for the highest efficiency at the time and forget about the rest of the process. We use Eco Tool to calculate the overall Life Cycle Impact for choosing the most environment friendly option. We use structural design to reduce the carbon footprint for shipping.

Engage the consumer

Keep it simple - make the directions short and clear, consumers don't have the patience to read complex recycling instructions. New processes are also being developed to further recyclability in packaging. Keep an eye & emulate/ build upon them where beneficial.

Diversity of standards in the global arena

Deep dive into the regulations both, global and local. This is imperative when making design decisions and selecting substrates. The simplest method may be to follow Japan, EU or California's lead and implement their norms to keep ahead of mere compliance also for the rest of the places.

Food Protection vs. Green

Focus on research to find alternatives that will make the packaging more sustainable, protective & still look aesthetically pleasing .

Use of color, hierarchy and graphics to convey the simple brand message.

4. MAKING THE DIFFERENCE

YOU yourself are making a BIG difference





TUESDAY
THOUGHTS

"The beach may
be long.
There may be
millions of starfish.
But throwing one back
means one life saved.
You can make
a difference!"

-PRAKASH TYER



**TIME TO STEP UP YOUR
INDIVIDUAL OWNERSHIP
AND MAKE A BIGGER
DIFFERENCE TO THE
SUSTAINABILITY VALUE
STREAM TODAY**

THANK YOU

Keep making the difference

