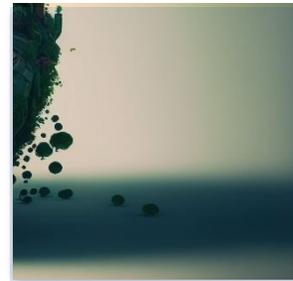


EXPLORING & SUPPORTING EMERGING CIRCULAR VALUE CHAINS & PARTNERING UP

Fabien Gaboriaud



THE CAR INDUSTRY IS GOING THROUGH PROFOUND CHANGES... AND SO ARE THE TIRE MARKETS.

4 major structural trends. Solutions that accompany...

The **ELECTRIC BOOM**

Vehicles that are increasingly **HEAVIER**

Increasingly unpredictable **WEATHER EVENTS**

The need to reduce **ENVIRONMENTAL IMPACTS**



TOWARD A FULLY SUSTAINABLE TIRE

Michelin has set itself an unprecedented innovation challenge

The Group is committed to acting at each stage of the tire life cycle, from the choice of raw materials to tire recycling solutions.





100% RENEWABLE & RECYCLED MATERIALS

Breakthrough technologies
in the field of bio-based or recycled materials

WE ANTICIPATE SIGNIFICANT HURDLES IN REALIZING OUR GOALS FOR RENEWABLE AND RECYCLED MATERIALS

On the way to 100% renewable & recycled materials :
how we commit, take action, and pave the way ?



3,3 Mt/y of raw materials



% renewable & recycled materials

AT MICHELIN, WE CLAIM CORPORATE ROAD MAP FOR EVERY MATERIAL CATEGORY

WHAT WE WANT ?

Reduce our environmental impacts by

- Preserving non-renewable & recycled materials
- Integrating renewable & recycled materials
- Selecting materials with less environmental impacts (Life cycle analysis)

HOW WE PROVE ?

- with Corporate commitment to reach 40% Renewable & Recycled Materials in 2030 and 100% in 2050
- with a Corporate roadmap with annual corporate communication
- With no promise at individual tire level to prefer acceleration at the corporate level

CORPORATE ROAD MAP % renewable & recycled materials

30%
TODAY

40%
2030

100%
2050

All categories of raw materials



ORCHESTRATE THE **CIRCULAR CHALLENGES** OF MICHELIN WITH OUR INTERNAL & EXTERNAL PARTNERS

DO-Solutions for Materials Circularity Missions:

Create partnerships & alliances to support our circularity ambitions
▶ whilst minimizing investments & operational involvement

Support Emerging Value Chains

Secure Renewable & Recycled Feedstocks

AIM FOR "ZERO FOSSIL"

TOP PRIORITY



Secure access to renewable & recycled materials & their primary feedstocks

1 Chains of custody vs corporate claims

2 Renewable butadiene



3 ELT pyrolysis

MAXIMIZE "CLOSED LOOP"

TOP PRIORITY



Create closed loops from ELT to recycled materials within tires

2050



ELT: End of Life Tires

PREFER CHAINS OF CUSTODY THAT ENSURE **PHYSICAL CONNECTIVITY**

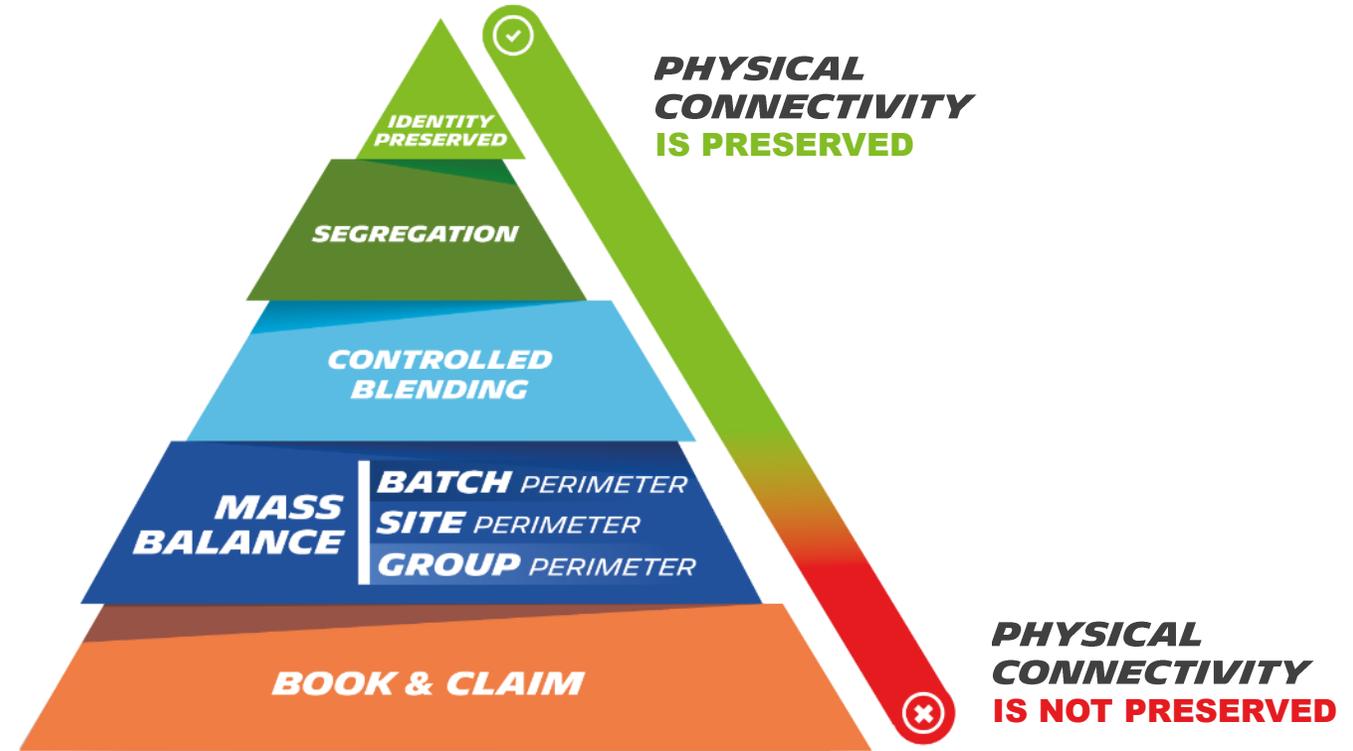
To support corporate claims & environmental transition

(1) Chains of Custody

(2) Renewable Butadiene

(3) ELT Pyrolysis

- To support our **corporate claims** to achieve the 100% renewable & recycled materials in 2050 (*no credits*)
- To support the **environmental transition** towards **structural changes** by using **synergy** between mass balance(s) with physical connectivity & segregated chains of custody



SUPPORT INNOVATION & EMERGING VALUE CHAINS

Leverage our R&D

- (1) Chains of Custody
- (2) Renewable Butadiene
- (3) ELT Pyrolysis

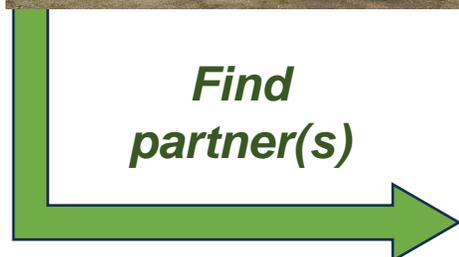




SUPPORT INNOVATION & EMERGING VALUE CHAINS

We are looking for partner(s) to operate, finance & buy renewable butadiene

Pilot (20 t/y)



Find partner(s)

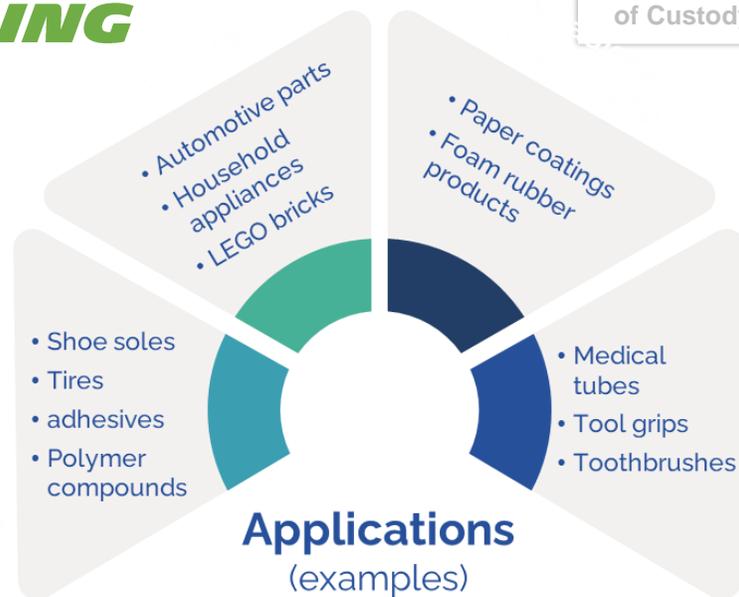
to operate & finance

&

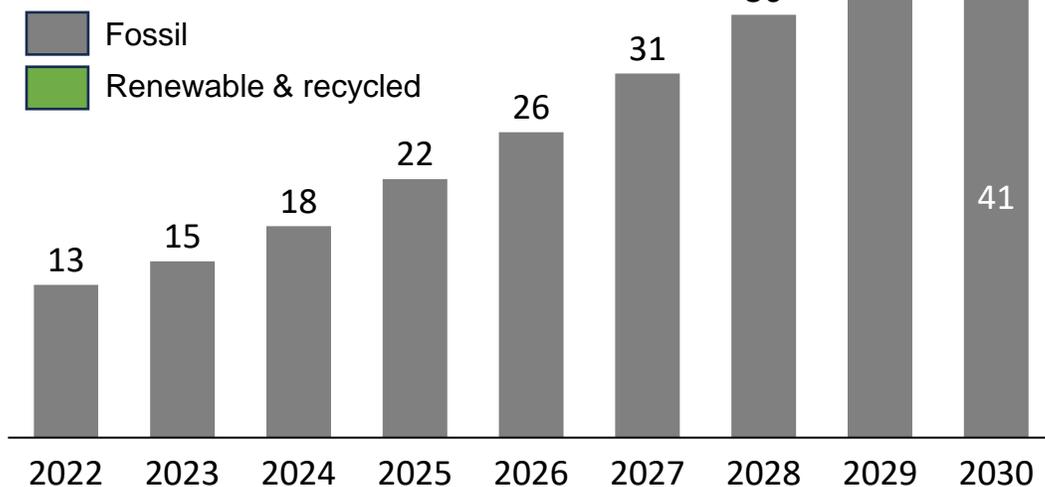


Plant(s) (100 kt/y)

to buy renewable butadiene



Global butadiene market size [USD bn]

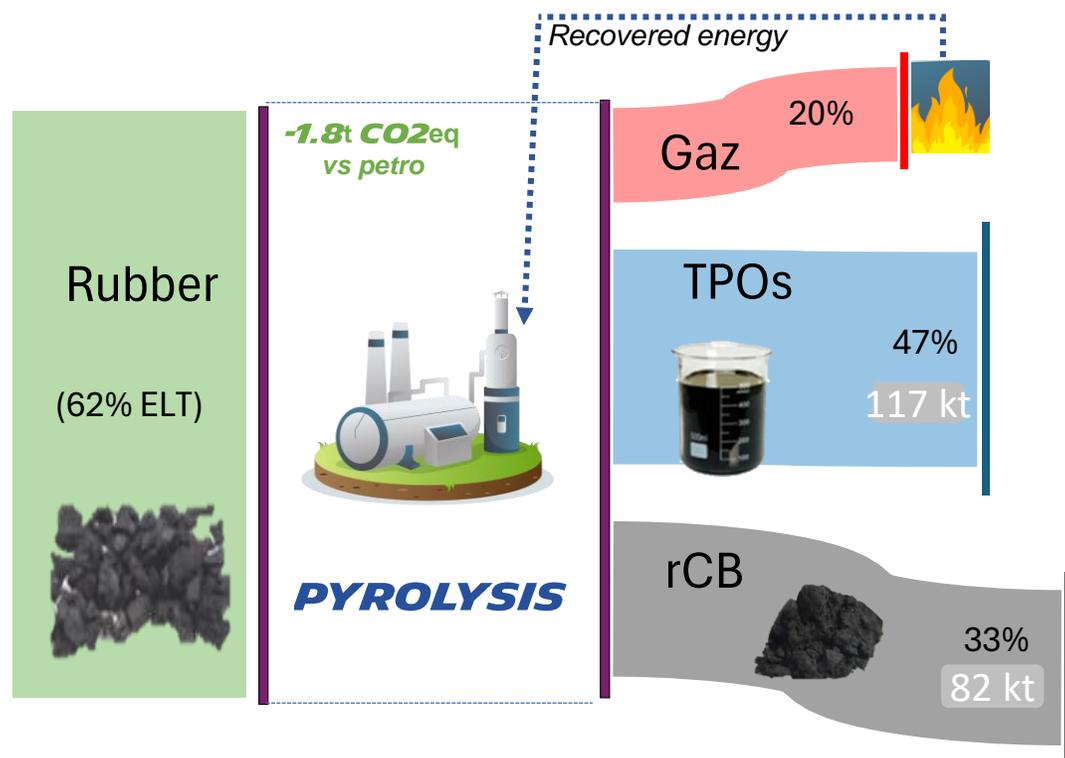


Source: Precedence Research, 1) Acrylonitrile Butadiene Styrene



SUPPORT INNOVATION & EMERGING VALUE CHAINS

We have found Partners to Operate & Finance for ELT Pyrolysis



(1) Chains of Custody

(2) Renewable Butadiene

(3) ELT Pyrolysis

➤ Enviro

Michelin supported Enviro through :

- ▶ Venture Capital via shareholder participation
- ▶ Board Member

ANTIN
INFRASTRUCTURE PARTNERS

➤ Enviro



1st Plant in 2025 (Sweden)
1 million tons of ELTs annually by 2030

Michelin supported the creation of the JV between Antin-Enviro

- ▶ Offtake agreement



ORCHESTRATE THE **CIRCULAR CHALLENGES** REVOLUTION OF MICHELIN WITH OUR INTERNAL & EXTERNAL PARTNERS

Create partnerships & alliances to support our circularity ambitions
 ► whilst minimizing investments & operational involvement

Support Emerging Value Chains

Secure Renewable & Recycled Feedstocks

3 KEY LEARNINGS:

- We need to identify **options**, not solutions.
- Circularity requires a change of **mindset** to increase the value of emerging value chains, which means increasing the cost of materials.
- There are strong **dilemmas** between customer willingness to pay and societal expectations for brands.





***THANK YOU
Q&A SESSION***

