

# MICHELIN & CIRCULAR ECONOMY

SCG - SUSTAINABLE DEVELOPMENT SYMPOSIUM 2018,  
July, 9, 2018

# MICHELIN - COMPANY PROFILE (2017)

## Michelin Group

EMPLOYEES

**114 070**

NET SALES

**€21.96 bn**

Investments

**€1.77 bn**

R&D BUDGET

**€718 m**

## Michelin in Thailand

EMPLOYEES

**6 800**

Industrial footprint

**6 sites**

Responsibility

**Headquarters  
East-Asia**

# CONTEXT: COMMON ENVIRONMENTAL CHALLENGES

## World

*Air pollution and climate change*

*Deforestation*

*Species extinction*

*Soil degradation*

*Overpopulation*

## Thailand

PM2.5 dust in Bangkok at 72-95 micrograms per m<sup>3</sup> (02/18) compared to the WHO guideline (no more than 10 micrograms)

Between 1973 and 2009, Thailand's forests declined by 43%

Although there were 100,000 elephants in Thailand a century ago, the population of elephants in the wild has dropped to an estimated 2,000

Mangroves and beach erosion, between 1961 and 2010, mangroves declined by 51%

Urbanization challenges in Bangkok (congestion, water, etc.)

Thailand is the 22<sup>nd</sup> largest CO<sub>2</sub> emitter in the world and 5<sup>th</sup> largest in the East Asia and Pacific region → Need continuous effort to transform Thai economy into a more sustainable one → **circular economy** will help to concretize and direct this transition

# CIRCULAR ECONOMY



Looking beyond the current take-make-dispose extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. Underpinned by a transition to renewable energy sources, the circular model builds economic, natural, and social capital. It is based on three principles:

- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems

# MICHELIN STRATEGY

**MICHELIN'S PURPOSE:**  
*GIVING PEOPLE a better way forward*

*Sustainable growth strategy:  
to sustainably enhance our customers' mobility*

**1. tires**  
*that TRULY meet  
our customers'  
needs*

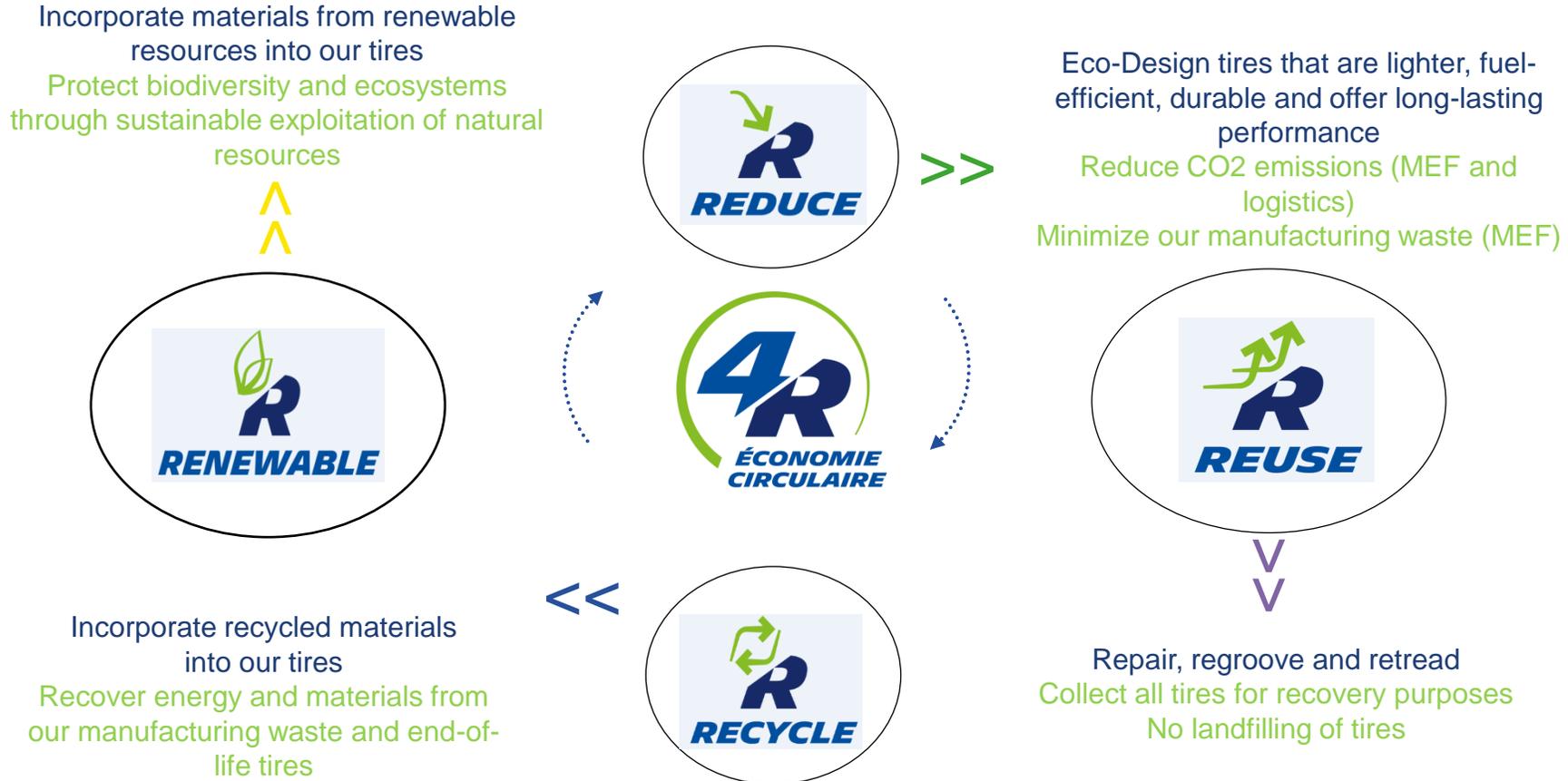
**2. TIRE-RELATED  
Services  
and solutions**

**3. Enable our  
customers to  
enjoy  
unique Michelin  
mobility  
experiences**

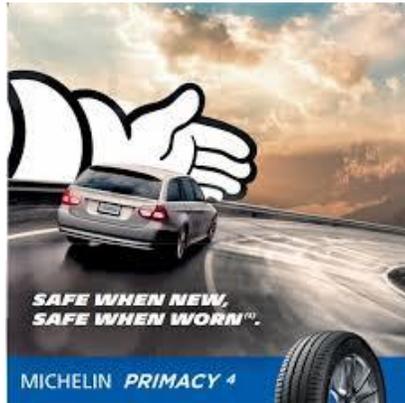
**4. Our expertise in  
high-tech  
materials**

# 4R STRATEGY

With the prospect of more than 2 billion vehicles in circulation by 2050, mobility must become safer, cleaner, more efficient, and more pleasant →  
From design to end-of-life, an offer of products & services using fewer resources and minimizing negative externalities



# MICHELIN CONTRIBUTION IN THAILAND



*With long-lasting performance*



*AND fuel-saving features*



Manufacturing



Reduction of environmental footprint by 50%

Energy  
Water  
Waste

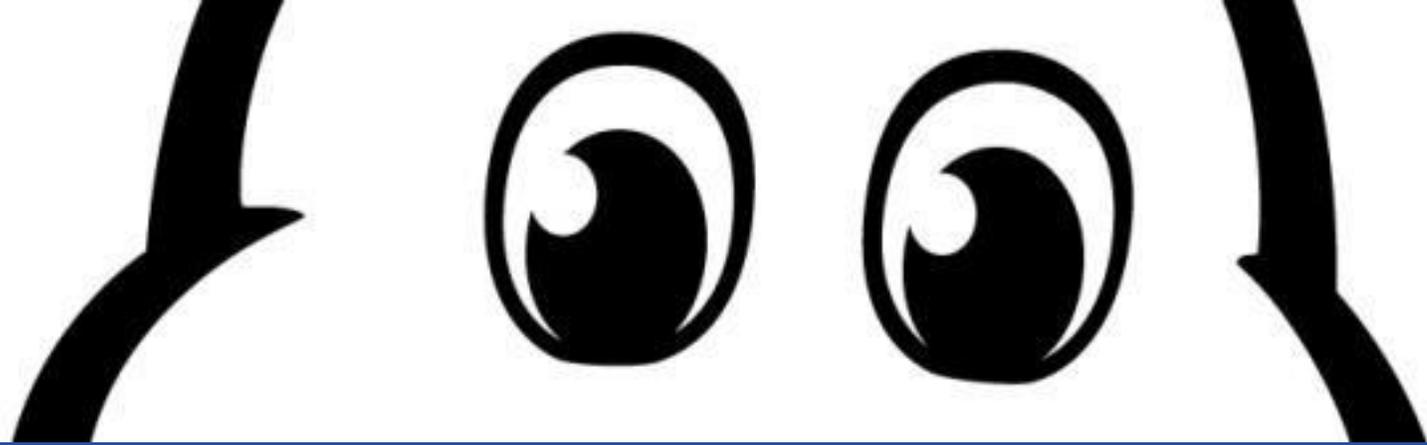




# OUR VISION



An airless, rechargeable, 3-D printed organic tire, developed from bio-sourced, biodegradable materials. A connected tire, it provides real-time information about its condition and is integrated with innovative services.



THANK YOU