



**TRINSEO**<sup>™</sup>

# **Market Introduction of ISCC Certified Synthetic Rubber**

## *Opportunities & Challenges*

*ISCC Technical Stakeholder Meeting “Circular Economy & Bioeconomy”  
10<sup>th</sup> December 2020*

*Dr. Sarmenio Saliba | Asset & Product Manager | SR Trinseo*

# Our Company

- Trinseo focuses on delivering innovative and sustainable solutions to help our customers solve complex material challenges and create products that are intrinsic to how we live.
- Formed in 2010
- Synthetic Rubber, Rigid & Soft-touch Plastics and Latex Binders.

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MANUFACTURING SITES GLOBALLY



\$3.8 Billion

REVENUE 2019



2,700

EMPLOYEES

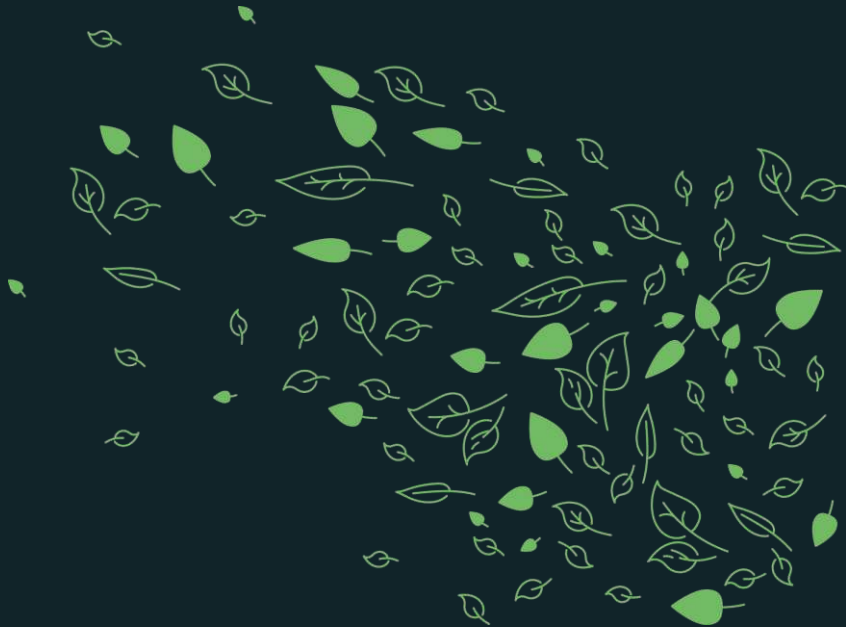


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R&D FACILITIES



# Trinseo - Commitment to Sustainability



## 2030 Sustainability Goals

- Offering a Sustainable Product Portfolio
- Addressing Climate Change
- Extending Supplier Responsibility
- Operating Responsible Worldwide
- Advancing Sustainable Workforce



**Silver Rating** for CSR activities with overall score in the 77th percentile of all companies

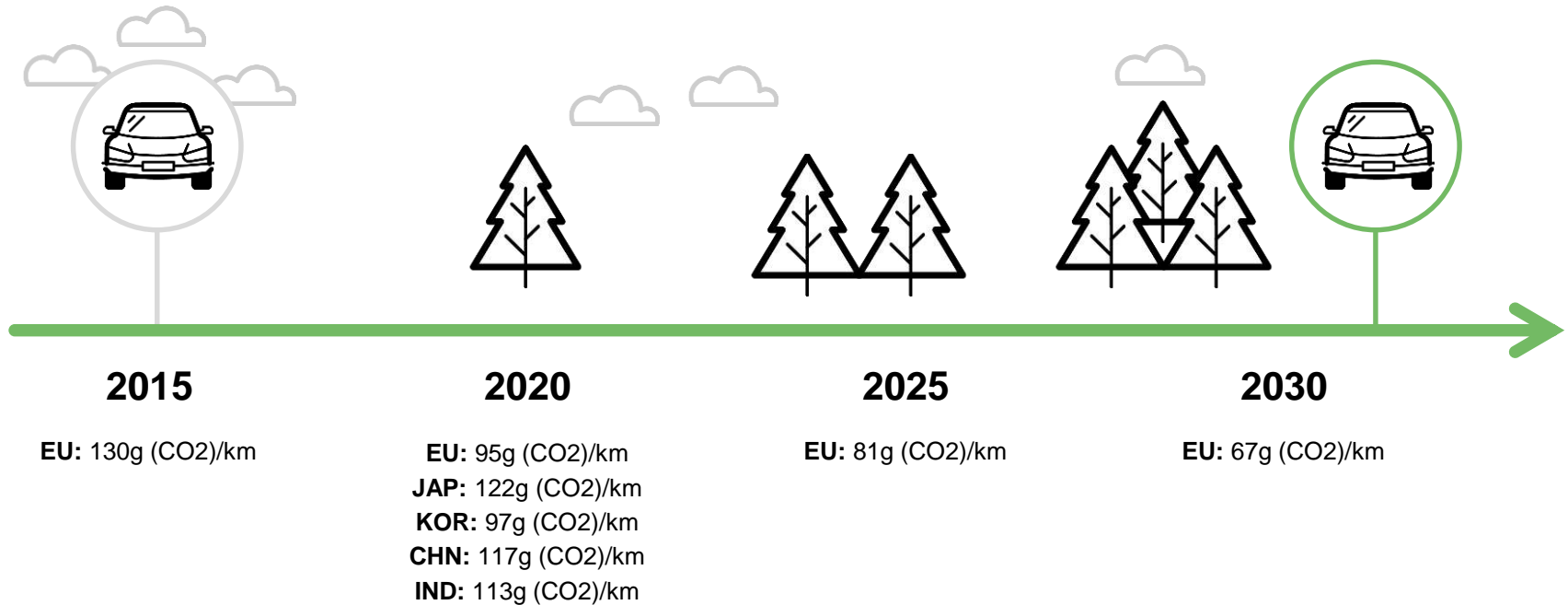


**2020:** Trinseo ranked #80 overall and #5 in the Materials industry.

**2021:** Trinseo ranks #53 overall and #3 in Materials Industry

# Why does Synthetic Rubber matter?

## Stringent Global Legislation



# Sustainability Ambitions in Synthetic Rubber

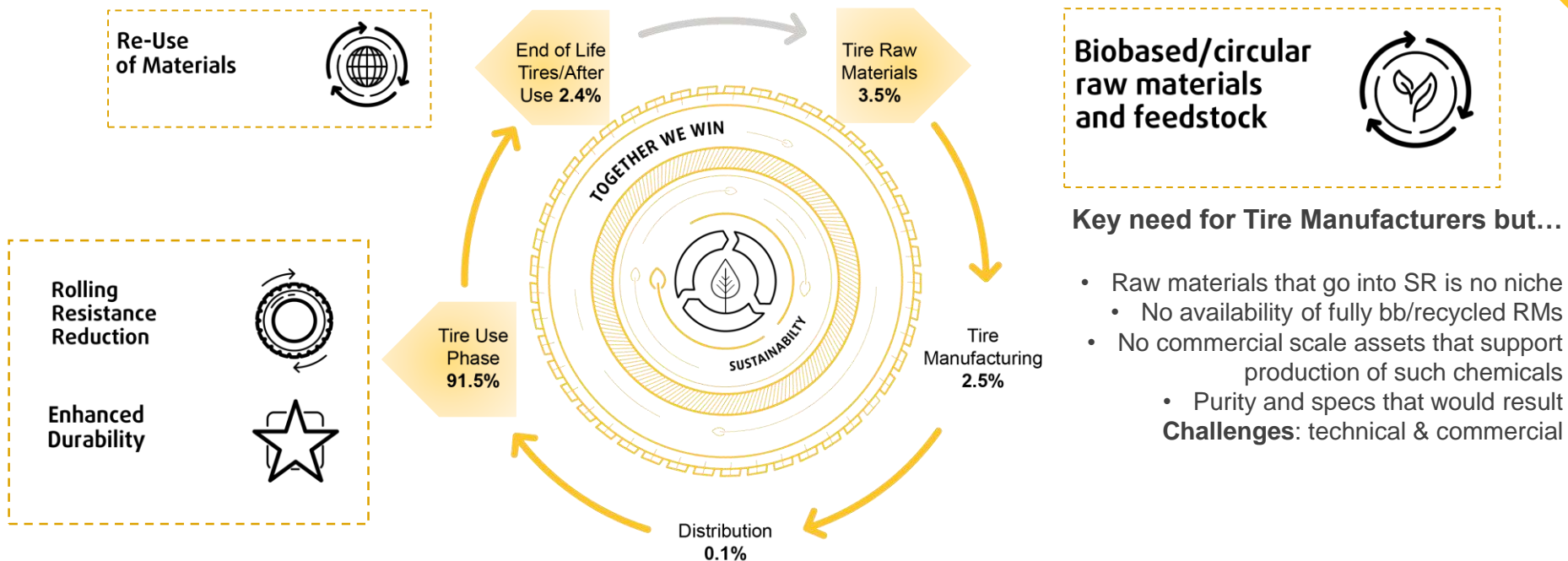
## Performance vs Sustainability

- Synthetic Rubber use is predominant in tire industry
  - SR properties defines performance of a tire
  - Sustainability in tire making will become key
  - Regulation, policy initiatives, social awareness...
- 
- Top tire producers with ambitious goals for the next 5-30 years
  - Bio/circular economies will become crucial towards a sustainable future for the tire industry
  - **Sustainability, yes, but not at the expense of performance.**
  - What are the options and what can we really address today?



# Trinseo Sustainability in Tires

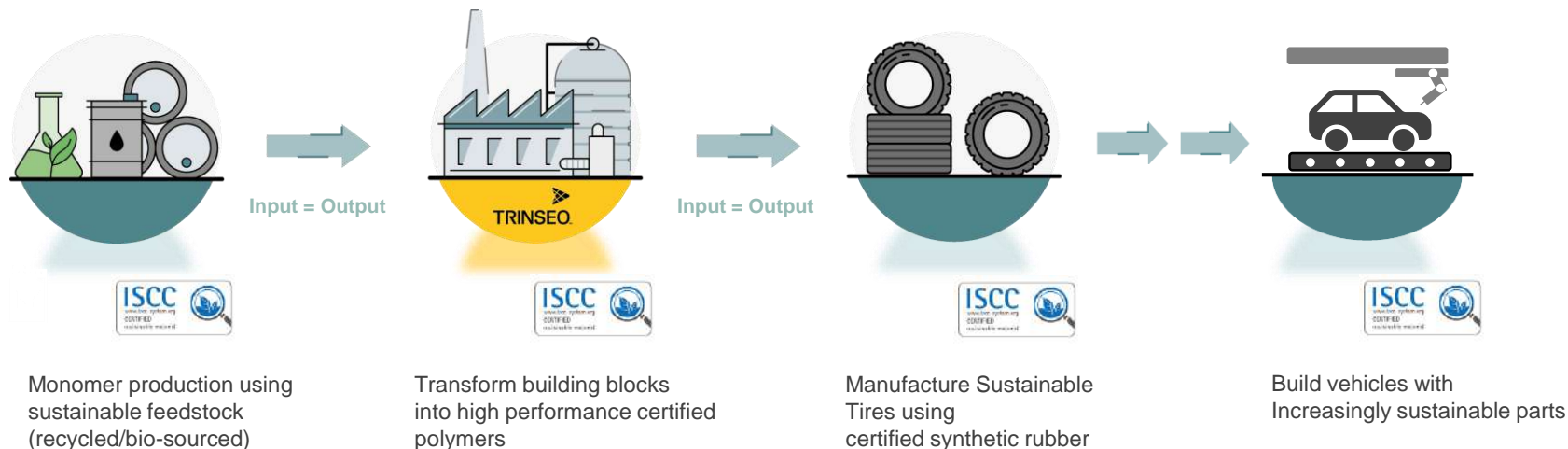
Closing in on the circle: Performance, Enabling and Composition



# Mass Balance Certification at Trinseo

## Kicking it off

- Mass Balance approach as a first commitment to our customers
- Implemented for PS, PC and SR
- First SBR producer to introduce the Mass Balance chain of custody in the industry
- ISCC Plus certification of our SBR Assets in Germany, a proven and credible sustainability certification scheme
- Replacing an amount of virgin feedstock by recycled or renewable feedstock at the beginning of the chain
- Attribution of sustainable content down to tires and OEMs

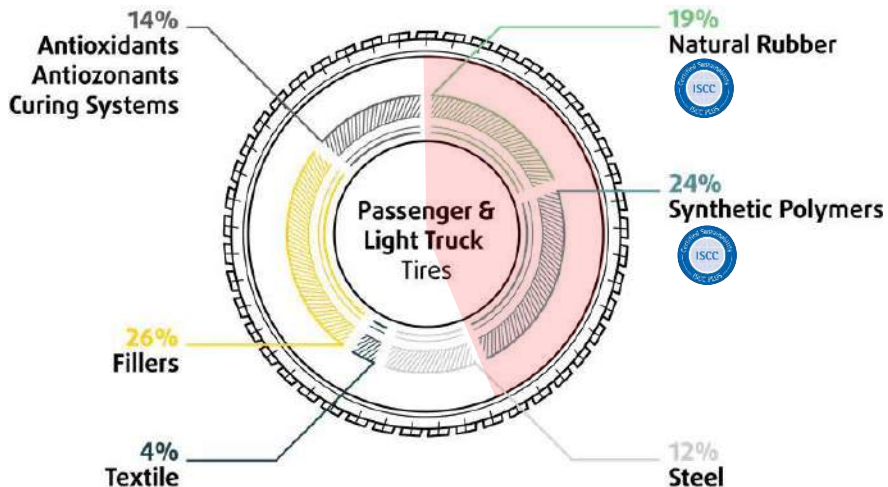


# Mass Balance in the Synthetic Rubber

## Opportunities

- No need for new chemical infrastructure
- Coexistence of traditional and sustainable feedstock
- No loss of performance
- No requalification of materials
- Only short-term significant solution to sustainable composition

- Synthetic Rubber makes up for 24%\* of a PC Tire
- Opportunity to use ISCC Plus on SR usage in tires



We sourced an equivalent amount of 100% ISCC certified bio-based material for the synthetic rubber in this tire

100% ISCC certified synthetic rubber\*

\*mass balance approach; excludes non-synthetic rubber components of the tire

By using ISCC certified synthetic rubber, this tire contributes to the bioeconomy and sustainability...

The synthetic rubber part of this tire is made with ISCC certified bio-material\*

\*mass balance approach

This tire supports the bioeconomy by using ISCC certified synthetic rubber in the production process.\*

\*The bio-content of the synthetic rubber is allocated using the ISCC mass balance approach.

- Marketing value for tire producers and auto industry
- Driving the increased use of bio/circular feedstock in the value chain
- ISCC Certification applicable to SR & NR (can cover up to 50% tire)
- **Ultimate Goal: increased sustainable production of tires thru' MB**



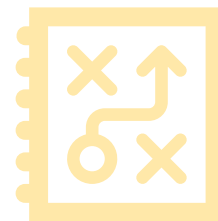
# Mass Balance in Synthetic Rubber

## Challenges

Generate market acceptance

New concept for the markets we serve...simple yet complex to explain

- **Education:** is key and this requires support (for industry, institutions, associations, governments...)
- **Access:** support in guiding the rubber markets what/how can one certify, cost-effective licensing schemes
- **Simplicity:** reducing red tape and consider how multi-site certification can be improved (tire industry as an example)
- **Availability & Cost:** raw materials accessibility is key to the future in sustainability (a 'niche' will not change the world)
- **Downstream:** cracker to polymers & beyond (1 entry cracked into many v multiple entries to form one product)
- **LCA:** guidelines/standard<sup>n</sup> on how we can use GHG protocols and existing standards to produce solid LCAs based on MB?



# Market Introduction of Certified Synthetic Rubber

## Final Remarks

- Sustainable Synthetic Rubber is the only way forward for Trinseo
- The future impact of materials in the markets we serve is only becoming greater
- The only viable short-term solution that makes a difference is the mass balance approach
- Cost-effective (chemical infrastructure), pragmatic, large scale impact & low technical risk
- The opportunity is there not only for synthetic rubber but also for tire producers and car manufacturers
- Market acceptance will grow as participants understand the contribution this brings to their sustainability goals
- Recipe for success: support, back-up, education across the entire value chain

At Trinseo, this is a strong start – a steppingstone for us and our customers towards a circular/bio economy





Thanks!

**Sustainability in Action**

Trinseo Mass Balance Certification (ISCC)