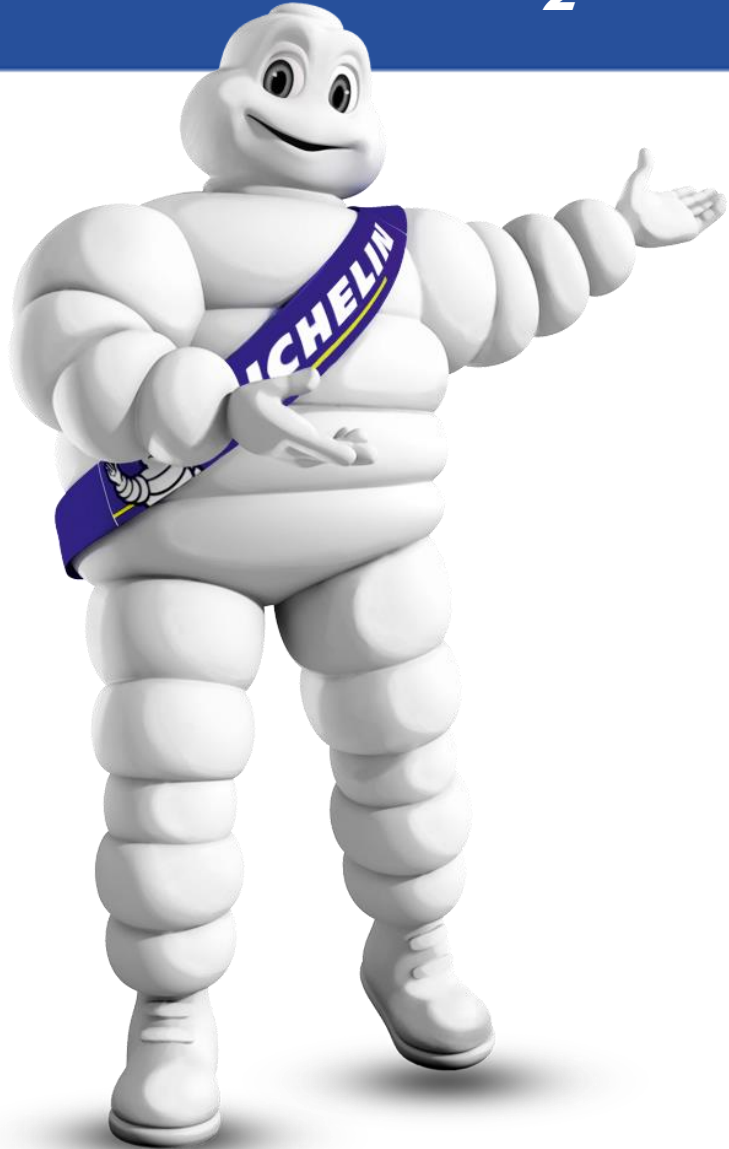




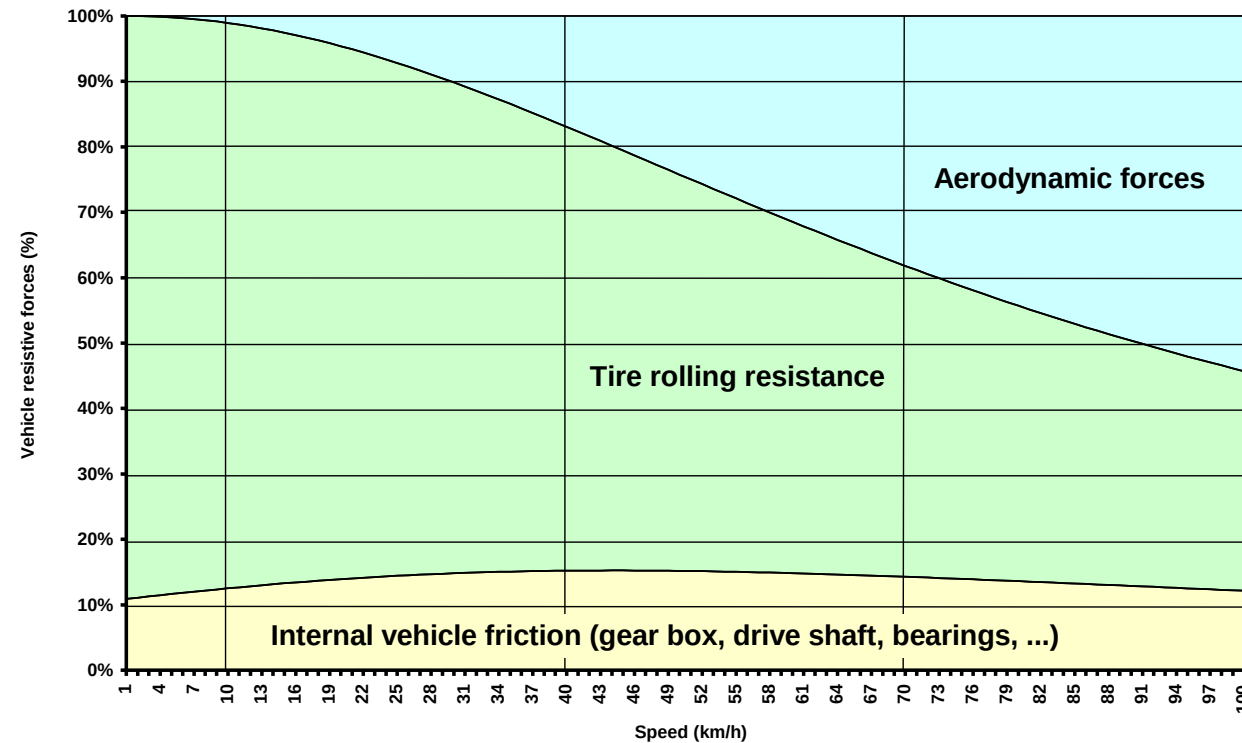
TYRES & CO₂



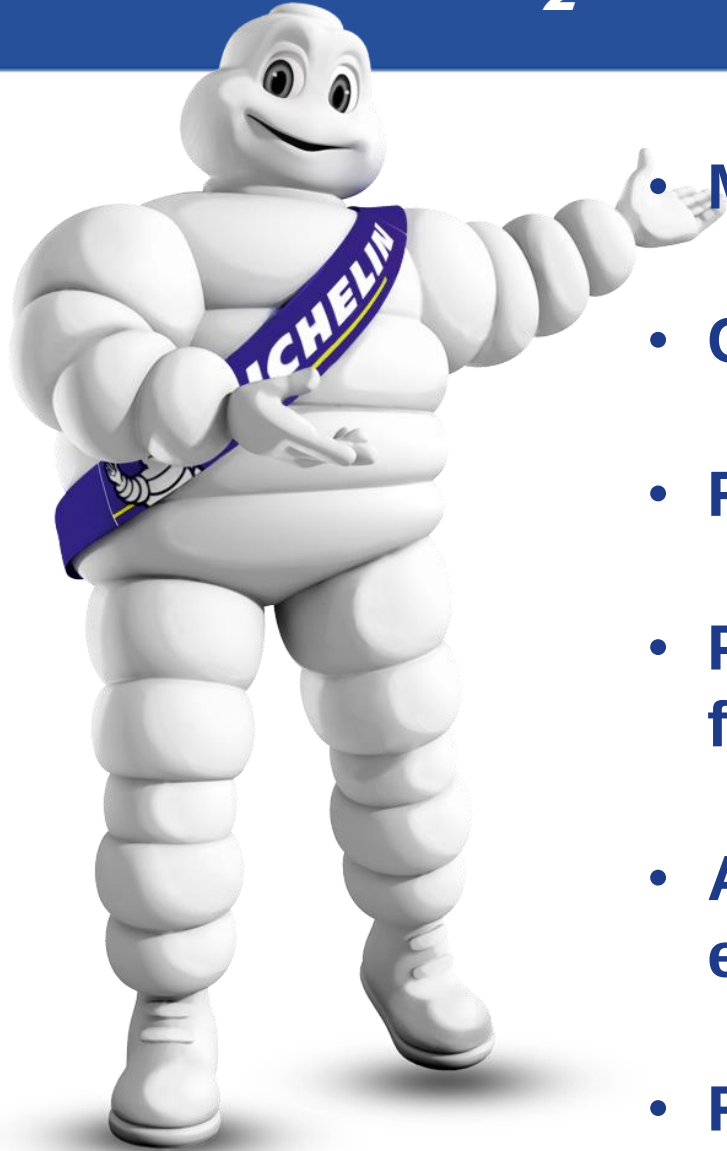
TYRES & CO₂



- Burning diesel produces CO₂
 - Approx 2.63 kgs for every litre
- Approx 1/3 of fuel is used overcoming RR of tyres



TYRES & CO₂ – managing your tyres



- Managing tyres can significantly reduce CO₂ emissions
- Consider low RR tyres (Energy) tyres
- Right tyre for the job – Energy tyres don't solve everything
- Pressures – correct pressures optimise wear, handling, fuel consumption and, therefore, CO₂ emissions
- Alignment – 1° of misalignment = approx 3% loss of fuel efficiency
- Regrooving



TYRES & CO₂ – regrooving



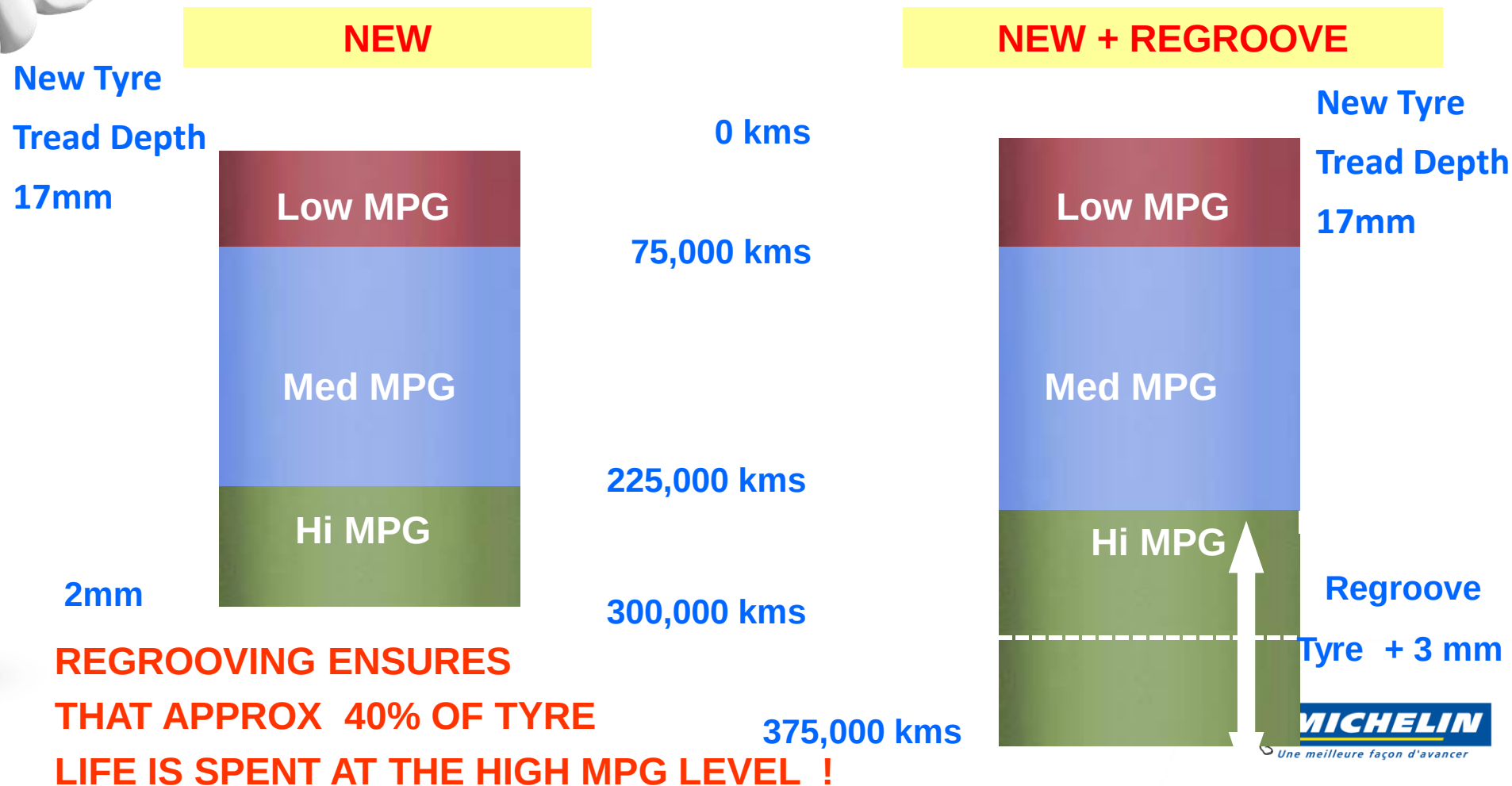
- **A tyre's rolling resistance decreases as it wears**
- **Therefore just before a tyre is removed from a vehicle it is operating in its most fuel efficient state**
- **By regrooving tyres they will continue to run longer when they are at their most fuel efficient**



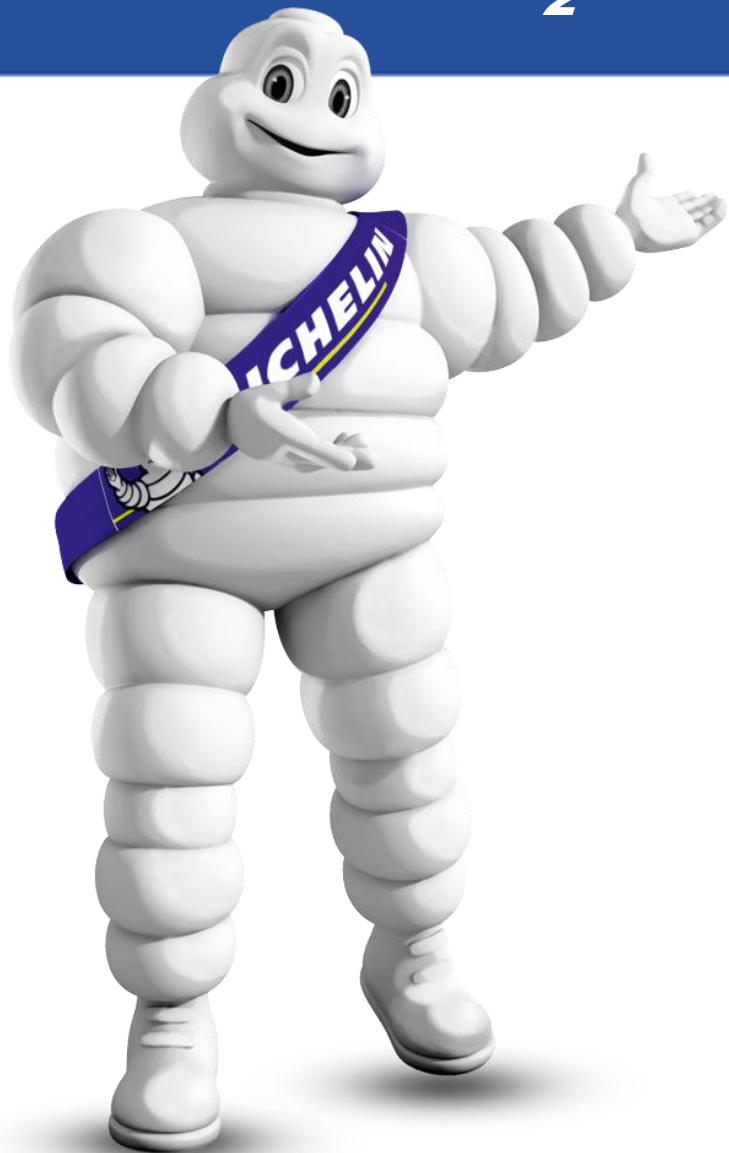
TYRES & CO₂ – regrooving



EXAMPLE: MICHELIN X MULTI D



TYRES & CO₂ – regrooving



Original profile

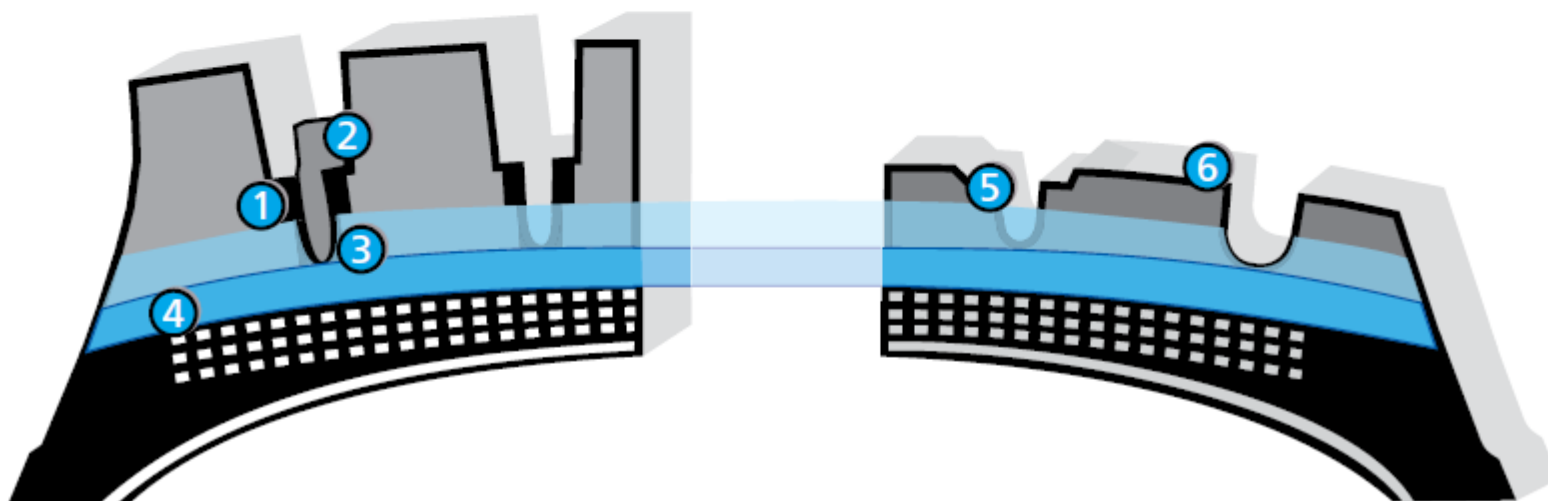
- ① Bottom of tread pattern
- ② Tread wear indicator

- ③ Regroove depth indicator
- ④ Layer of under tread rubber

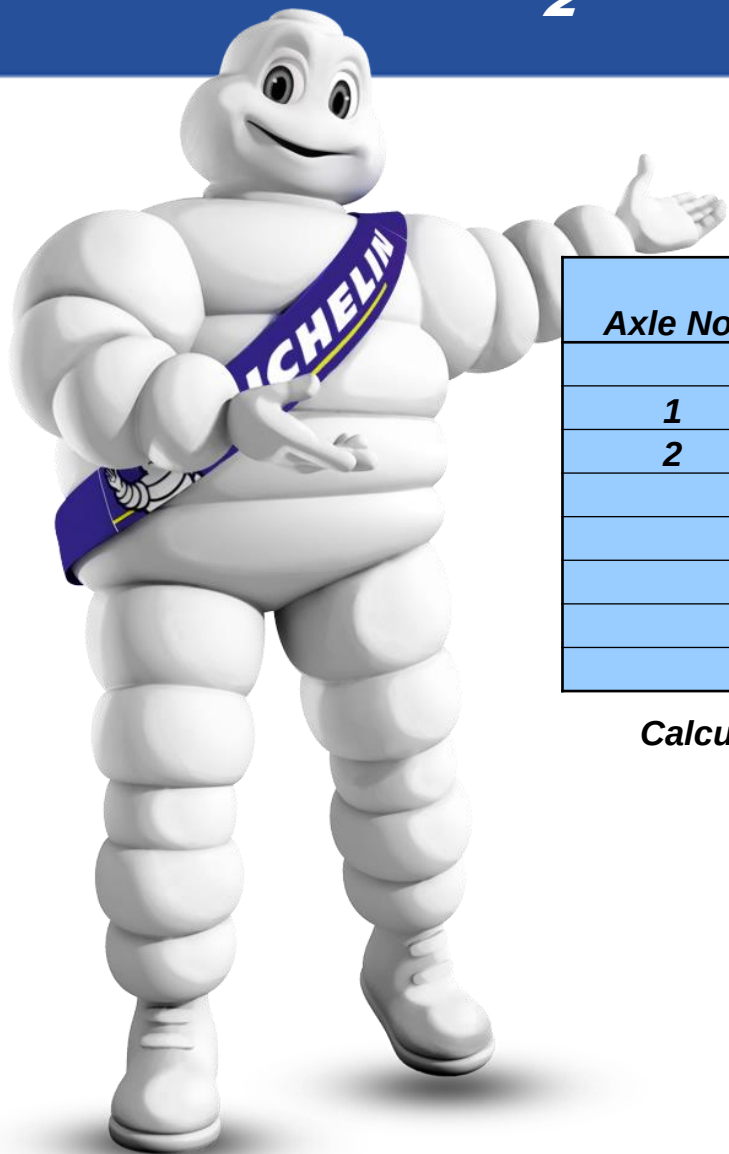
⑤ Profile before regrooving

⑥ Regrooved profile

-  Thickness of rubber to be regrooved
-  Thickness of rubber to be retained 2mm



TYRES & CO₂ – regrooving



Rolling Resistance Calculation (Laden)

315/70 R 22.5

Axle No.	Tread Pattern	Axle Load (T)	Rolling Res.(kg)	Tread Pattern	Axle Load (T)	Rolling Res. (kg)
1	X Multi Z	6.700	36.18	X Multi Z RG	6.700	21.44
2	X Multi D	9.000	55.8	X Multi D RG	9.000	28.8
Calculated RR (Kg)		91.98	91.98		50.24	50.24

Calculated reduction in rolling resistance (kg): 41.74

X Multi RG v X Multi will reduce RR by 45.38%

Approximate possible resultant fuel saving 15.13%



TYRES & CO₂ – regrooving



- If a 4x2 rigid does 11 mpg, that equates to 25.68 litres per 100 kms.
- 1000 kms = 256.8 litres
- 256.8 litres – 15% = 218.28 litres
- i.e. a saving of 38.52 litres OR

101.3 kgs of CO₂ saved per 1000 kms



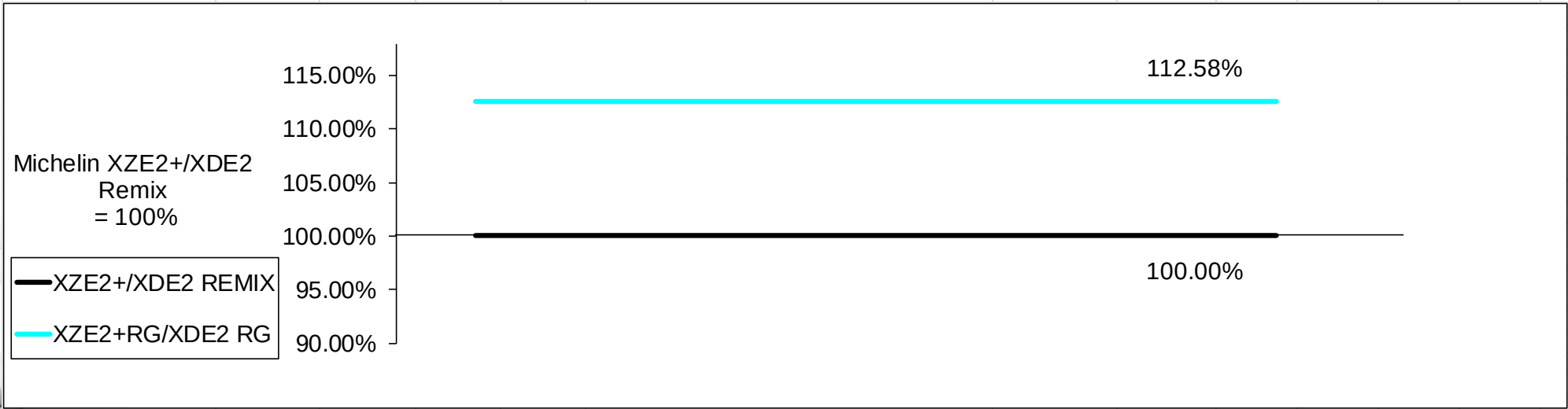
TYRES & CO₂ – regrooving



Millbrook trial

Rigid (New vs. Regroove Combined)

TEST MPG	
XZE2+/XDE2 REMIX	10.43 100.00%
XZE2+RG/XDE2 RG	11.74 112.58%
IMPROVEMENT IN MPG OF REGROOVE ALL ROUND OVER NEW & REMIX	
12.58%	





Regrooving percentages

- **What percentage of tyres is regrooved?**
 - **1st life tyres returned for Remix**
 - **45.5%**
 - **Remix tyres returned for Encore**
 - **41.5%**
- **That's a lot of CO₂ that is not being saved**





***THANK YOU FOR
LISTENING***

