



Innovations that Support Safety & Drive Sustainability

Transport Forum Webinar
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Christopher de Saxe - Head of EV Transition



GoMetro: Proudly South African



- **2012** - Founded in Cape Town with real-time train app
- 2016 - Seed round with Tritech
- 2019 - GoMetro Fleet and Journey Planner launched
- **2021** - GoMetro UK Ltd opens in London (HQ)
- 2022 - GoMetro Bridge launched
- **2023** - £9 million Series A led by Zenobē & FutureGrowth
- 2024 - EV-FIT, ConnecTyre, plus more to come...



Our technology portfolio



ConnecTyre

Tyre pressure monitoring



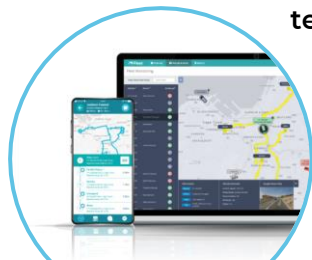
Bridge

Fleet virtualisation & telematics aggregator



EV-FIT

End-to-end EV feasibility planning



GoMetro Fleet

Bus fleet management platform



GoMetro Pro

Passenger demand & customer feedback tool



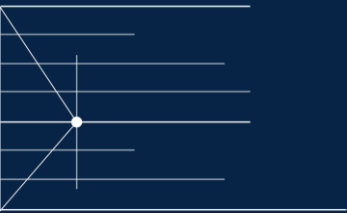
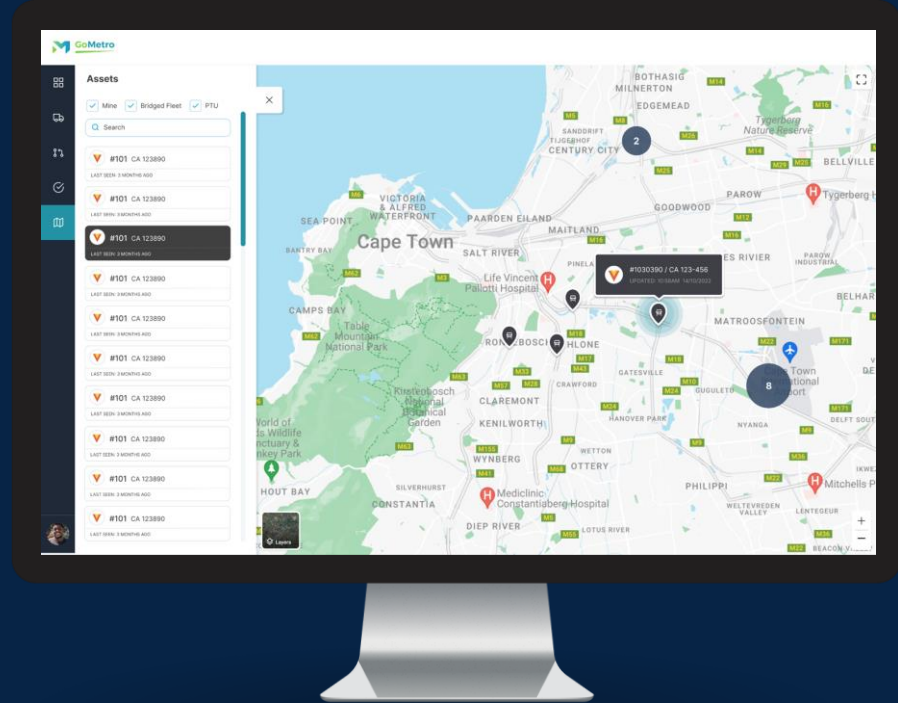
tirm technology

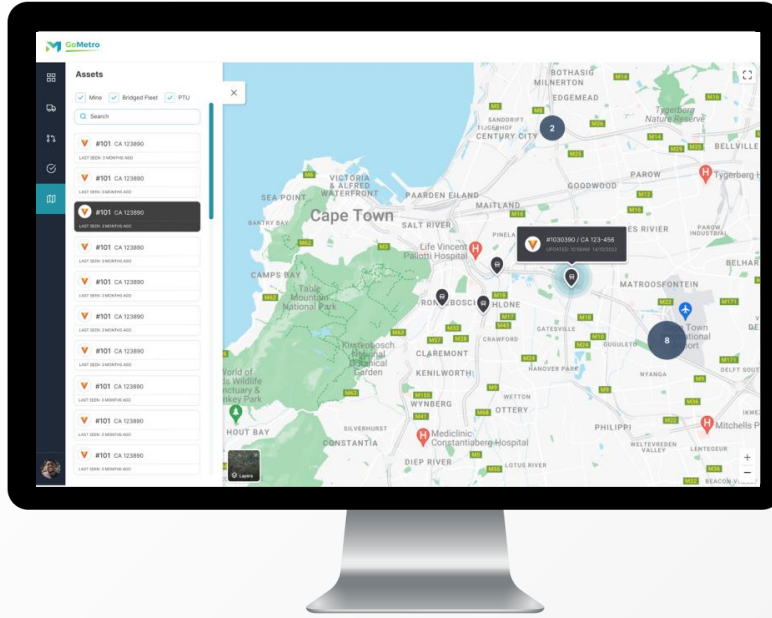
Vehicle energy consumption simulator

Advisory

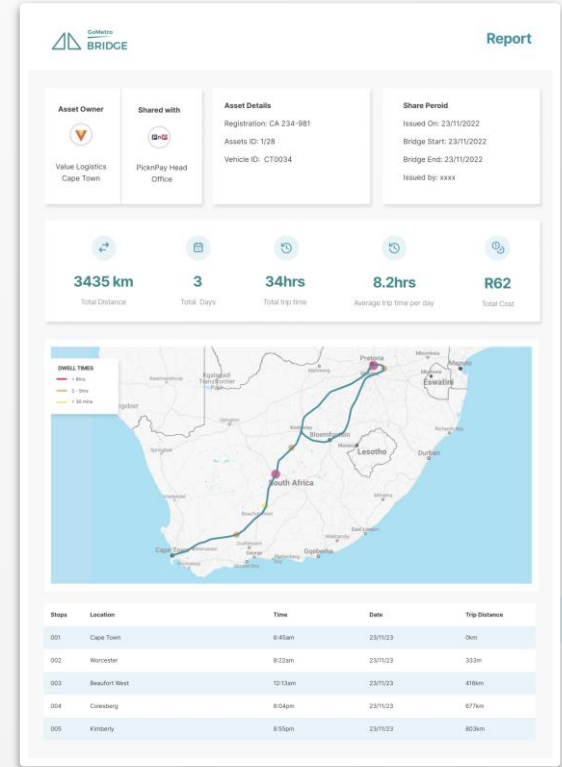
Bridge

Fleet visibility & virtualization layer





Bridge is GoMetro's fleet virtualisation layer – combining multiple telematics and vehicle data feeds into one unified API and unified reporting.



The EV transition for commercial fleets

External pressures

- Net zero targets
- ICE phase-out dates
- Low Emission Zones
- Scope 3 emission reporting
- Competition

Uncertainty

- Technology uncertainty
- Upfront investment costs
- Operational realities

Data visibility

- Sub-contracted fleets
- Multiple telematics providers
- Journey-level insights

Shippers & carriers need a **data-driven** EV transition plan, with streamlined **data collection & implementation** support

EV-FIT

Feasibility

Implementation

Transition

Market need (UK)



UK HGV fleet

500,000 vehicles
50,000 fleets
< 1% electric

Investment needed

£50 billion
(vehicles only)
+ infrastructure



Today

ICE phase-out (> 26 t)

2035

2050

2024

2040

ICE phase-out (< 26 t)

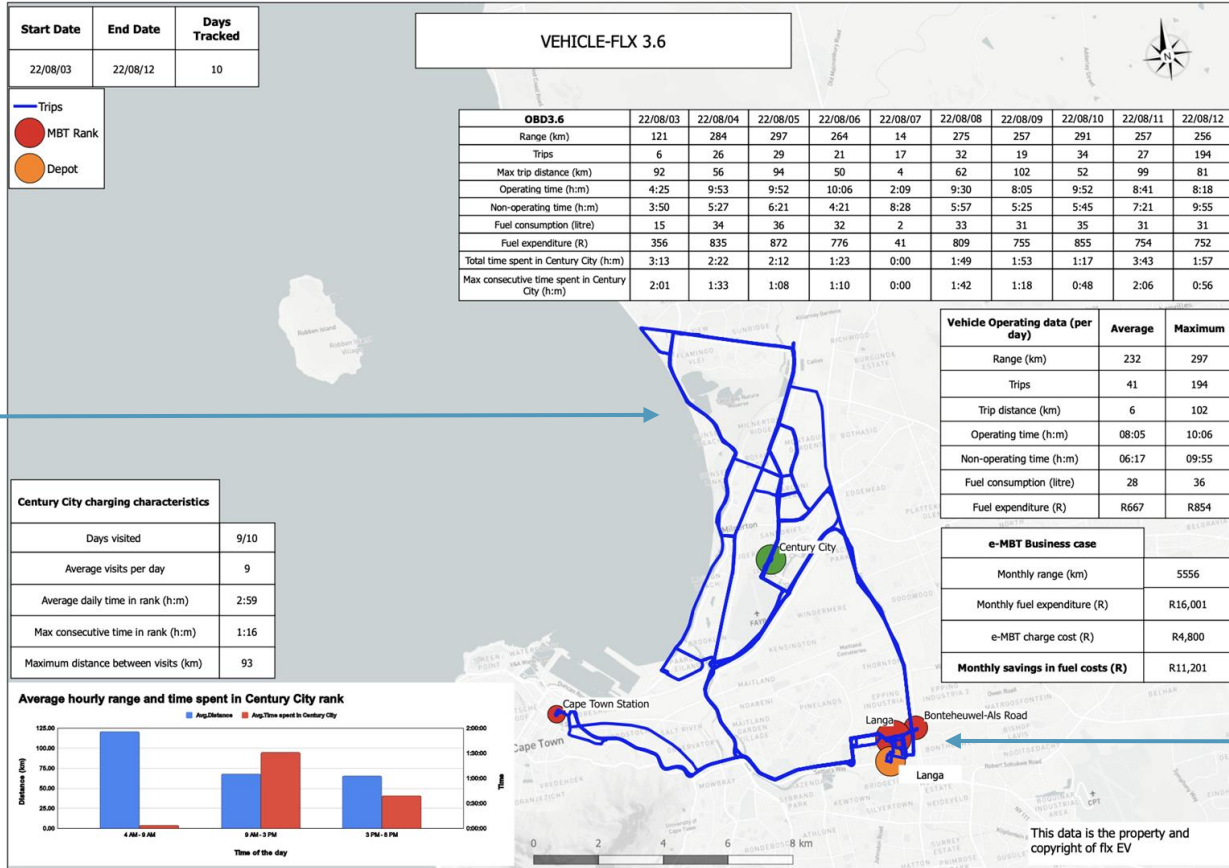
Approx. all HGVs replaced *

2,000 fleet transitions every year until 2050
Supporting > £2 billion annual investment

The EV-FIT ecosystem



Case study: Cape Town paratransit



Daily vehicle journey statistics

Full fleet summary statistics

TCO summary

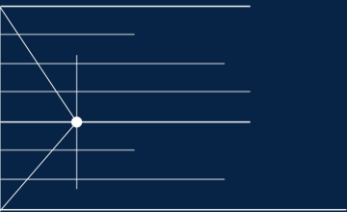
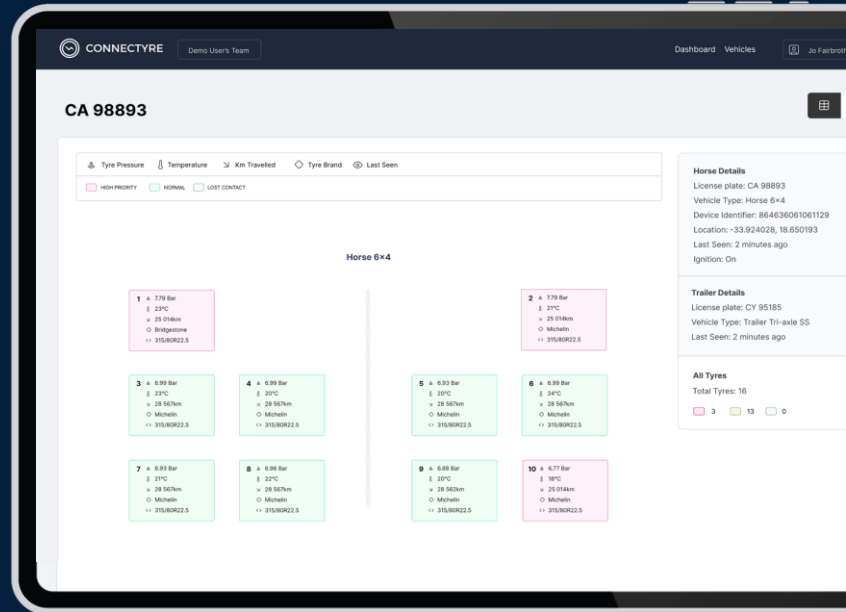
Dwell time hotspots & geofencing

Vehicle tracking histories

Depot statistics & charging opportunities

ConnecTyre

Real-time tyre pressure monitoring



ConnectTyre Hardware

A rugged sensor mounted on the rim or valve ensures comprehensive tire data collection, seamlessly integrating with GoMetro Bridge for advanced fleet management.

Main ConnectTyre hub display

Rim mounted sensors

Valve mounted sensors



ConnectTyre Platform

Dashboard views:

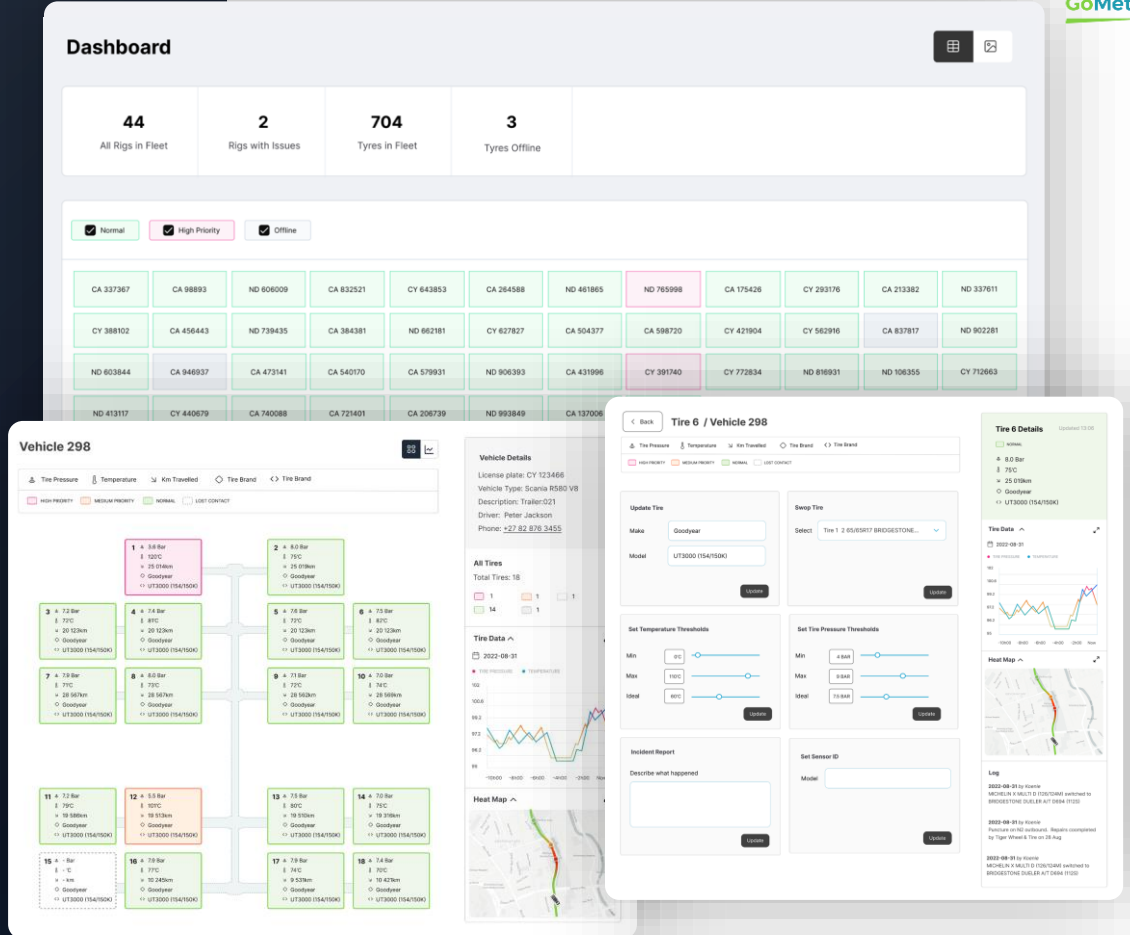
Offers detailed and overview displays of tyre status across the fleet.

Real-time monitoring:

Provides instant access to tyre pressure and temperature data.

Alerts and thresholds:

Allows setting thresholds for alerts to prevent tyre-related issues.



The image displays three overlapping screenshots of the ConnectTyre platform interface:

- Dashboard View:** Shows a high-level overview of the fleet. At the top, four summary cards indicate: 44 All Rigs in Fleet, 2 Rigs with Issues, 704 Tyres in Fleet, and 3 Tyres Offline. Below this is a filter bar with 'Normal', 'High Priority', and 'Offline' options. A grid of 120 individual rig cards follows, each displaying a rig ID and its current status (e.g., 'Normal' in green, 'High Priority' in pink, 'Offline' in grey).
- Vehicle 298 View:** Provides a detailed look at a specific vehicle. It includes a 'Vehicle Details' section with license plate (CY 123466), vehicle type (Scania R500 VR), driver (Peter Jackson), and phone number (+27 82 876 3455). Below this is a 'Tire Data' section with a line graph showing pressure and temperature over time. A 'Heat Map' shows the vehicle's location and movement. The main part of the view is a grid of 16 individual tyre cards, each showing pressure, temperature, and sensor ID.
- Tire 6 / Vehicle 298 View:** Focuses on a single tyre. It includes a 'Tire Details' section with sensor ID, pressure, and temperature. Below this are sections for 'Update Tire' (with fields for make, model, and location), 'Set Temperature Thresholds' (with sliders for min, max, and ideal), 'Set Tire Pressure Thresholds' (with sliders for min, max, and ideal), and an 'Incident Report' section for describing what happened.

Operational Impact of ConneCTyre

The Need - Enhance safety and efficiency

The Approach - Onboarded GoMetro's ConneCTyre for real-time monitoring on tyre conditions.

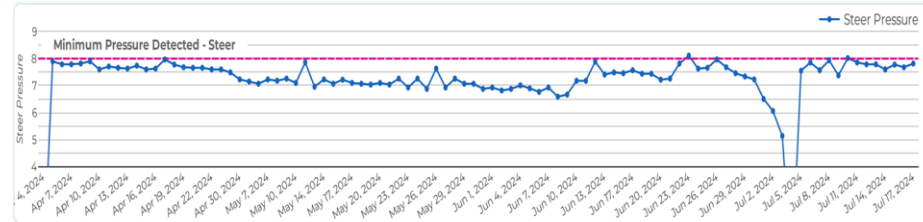
The Challenge - Other solutions were trialed, but did not solve the problem as the setup and configuration of equipment was inadequate.

The Customer - "In the past two years, we have experienced four incidents, where a steering tyre burst, causing vehicles to go off the road, resulting in approximately a 200k loss per incident. **This time, we avoided the loss.**"



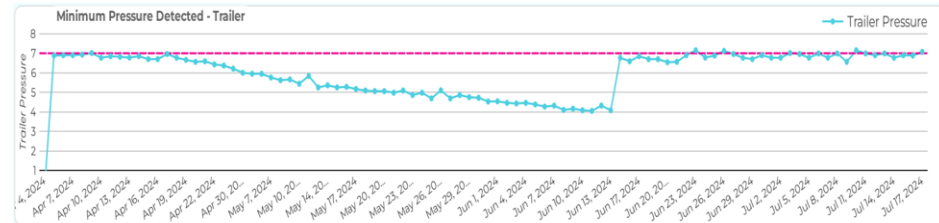
Real life Savings

Critical low pressure warning was triggered on steer tyre. Driver responded to an in cab alert, and was able to avert the loss of control.



Additional Savings

Slow pressure loss detected, issue logged by ops and leaking valve rectified.



Steer tyre pressure loss

Early Issue Detection:

- Day1 - Horse H2041 High Pressure of **9.65 bar** on pos 1 (**steer**)
- Day3 - Horse H2041 low pressure of **5.66 bar** on pos 8 (**drive**) @ **09:00 am** picked up and reported
- Day3 - Horse H2041 continued low pressure of **4.21 bar** on pos 8 (**drive**)
- Vehicle pulled over and inspected and a puncture detected at 11:00
- Vehicle was operational again by 13:00
- Mitigation of potential costly breakdown , further damage and risk

A screenshot of the CONNECTYRE mobile application interface. The top bar shows the vehicle name 'Horse H2041' and a status 'Fast & Fresh Transport'. Below this, there are filters for 'Tyre Pressure', 'Temperature', 'Tyre Brand', 'Tyre Dimension', and 'Last Seen'. A legend indicates 'HIGH PRIORITY' (pink), 'NORMAL' (green), and 'OFFLINE' (grey). The main content is divided into two sections: 'Horse 6x4' and 'Trailer Tri-axe SS'. Each section contains a grid of tyre data cards. The 'Horse 6x4' section has 10 cards, with card 8 highlighted in pink, indicating a high priority issue. The 'Trailer Tri-axe SS' section has 6 cards, all in green. At the bottom, there are sections for 'Horse Details' and 'Trailer 1 Details' with various identification and location information.

CONNECTYRE Fast & Fresh Transport

Vehicle H2041

▲ Tyre Pressure | Temperature | Tyre Brand | Tyre Dimension | Last Seen

HIGH PRIORITY NORMAL OFFLINE

Horse 6x4

Pos	Pressure (Bar)	Temp (°C)	Brand	Dimension	Last Seen	Priority
1	9.17	22°C	Bridgestone	385/65R22.5	12 seconds ago	Normal
2	8.79	20°C	Bridgestone	385/65R22.5	12 seconds ago	Normal
3	7.8	21°C	Michelin	315/60R22.5	12 seconds ago	Normal
4	7.18	23°C	Michelin	315/60R22.5	12 seconds ago	Normal
5	7.71	24°C	Michelin	315/60R22.5	12 seconds ago	Normal
6	8.48	21°C	Michelin	315/60R22.5	12 seconds ago	Normal
7	7.3	21°C	Michelin	315/60R22.5	12 seconds ago	Normal
8	4.21	23°C	Michelin	315/60R22.5	12 seconds ago	High Priority
9	7.41	20°C	Michelin	315/60R22.5	12 seconds ago	Normal
10	7.79	20°C	Michelin	315/60R22.5	12 seconds ago	Normal

Trailer Tri-axe SS

Pos	Pressure (Bar)	Temp (°C)	Brand	Dimension	Last Seen	Priority
1	8.3	19°C	Bridgestone	385/65R22.5	1 hour ago	Normal
2	8.22	19°C	Bridgestone	385/65R22.5	1 hour ago	Normal
3	8.48	19°C	Bridgestone	385/65R22.5	1 hour ago	Normal
4	8.11	21°C	Bridgestone	385/65R22.5	1 hour ago	Normal
5	8.19	19°C	Bridgestone	385/65R22.5	1 hour ago	Normal
6	8.48	20°C	Bridgestone	385/65R22.5	1 hour ago	Normal

Horse Details
License plate: H2041
Vehicle Type: Horse 6x4
Device Identifier: 86463606026333
Location: -31.485168, 23.738145
Last Seen: 12 seconds ago
Ignition: On

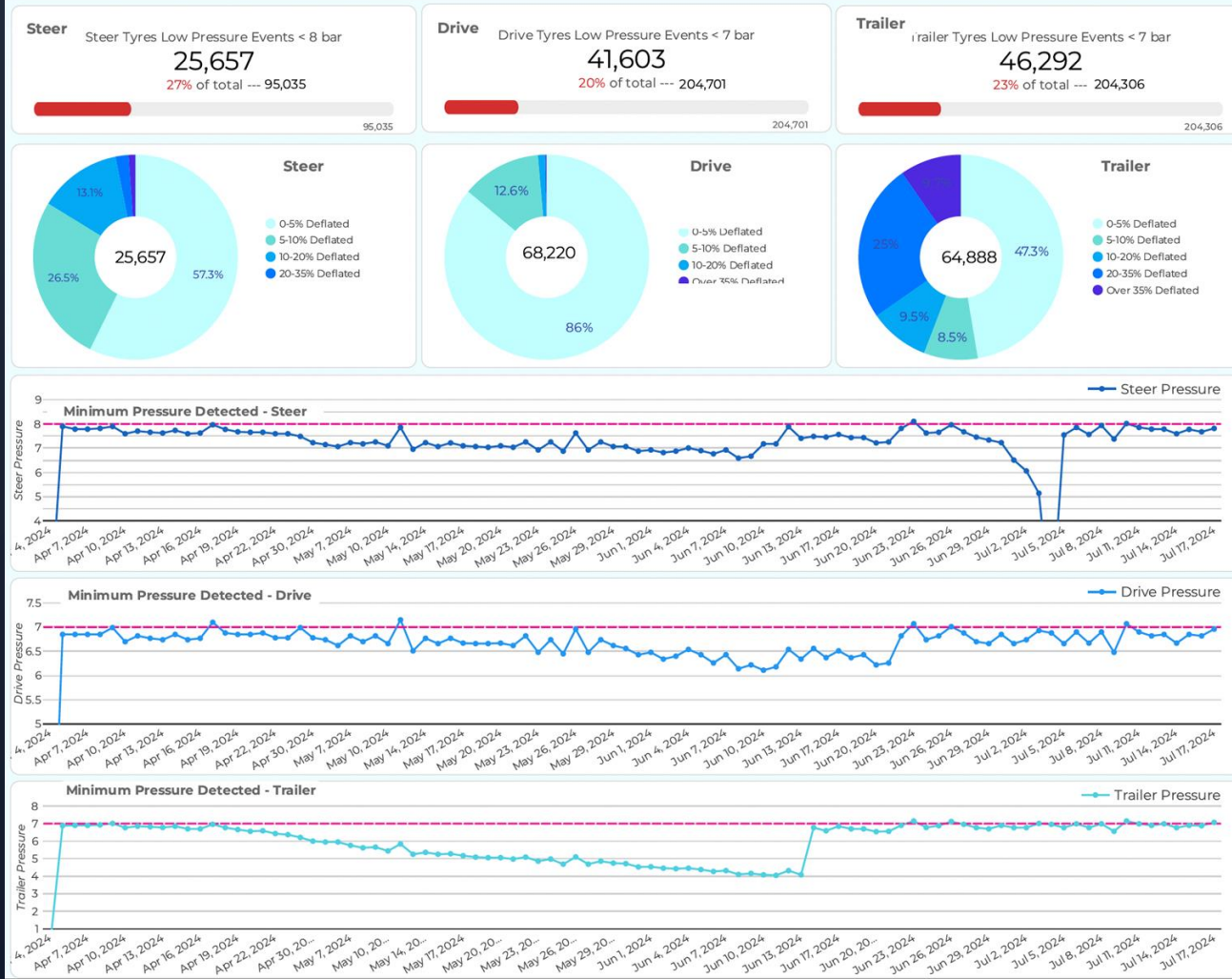
Trailer 1 Details
License plate: TE1979
Vehicle Type: Trailer Tri-axe SS

Truck 3 (15503): % time under-inflated per tyre category

Steer Tyres: critical low pressure identified, notified and corrected (possible blow-out avoided)

Drive Tyres: slow degradation of pressure, notified and corrected

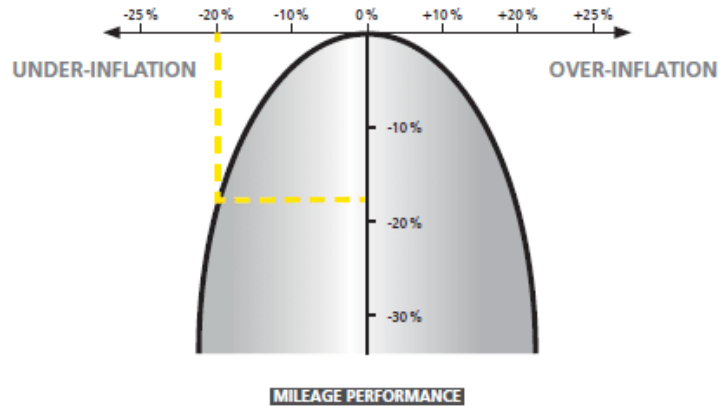
Trailer Tyres: slow leak (possible valve issue), notified and corrected



Not just a safety issue...

Tyre mileage loss

A tyre under-inflated by 1.5 bar (22 PSI) may lead up to a 10% mileage loss.

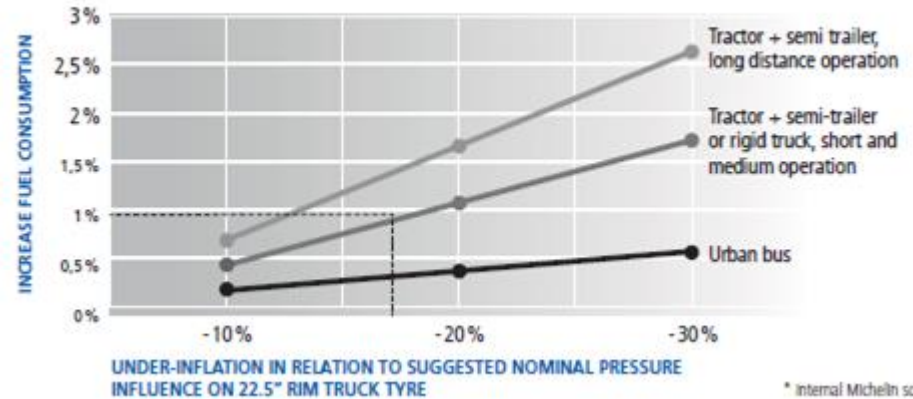


**20% under pressure
= 20% mileage drop**

Increased fuel consumption

Under-inflation of 1.5 bar = 1% increased fuel consumption*

Increased fuel consumption of tyre at 7.5 bar for recommendation of 9 bar or 17% under-inflated



**20% under pressure = 1.7%
fuel consumption increase**

* internal Michelin source

Final thoughts

- ✓ The EVs are coming!
- ✓ Data is key to unlocking an affordable and scalable EV transition
- ✓ There is plenty of scope to improve underlying mechanical efficiency and safety issues
 - Tyre pressure monitoring
 - PBS / RTMS
 - Low rolling resistance tyres
 - Driver training
- ✓ But: **“You can’t efficiency your way to zero!”** *



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