



Performance Based Standards

ARTSA – Global Leaders Summit

Les Bruzsa

8 May 2018 | Melbourne



PBS History

- An alternative, performance driven approach to prescriptive regulation, developed by NTC/Austrroads
- 4 infrastructure and 16 safety standards, including stability and swept path, pavement and bridge impacts
- Scheme introduced in 2007, incorporated into the Heavy Vehicle National Law (HVNL) in 2014
- Managed by NHVR since 2013
- Matching the right vehicles to the right roads, vehicle performance determines access level (PBS Level 1-4)
- PBS vehicles are designed under a more rigorous system than prescriptive vehicles



Source: Byford

PBS Combinations

2009-11, 719

2012, 450

2013, 575

2014, 928

2015, 929

2016, 1397

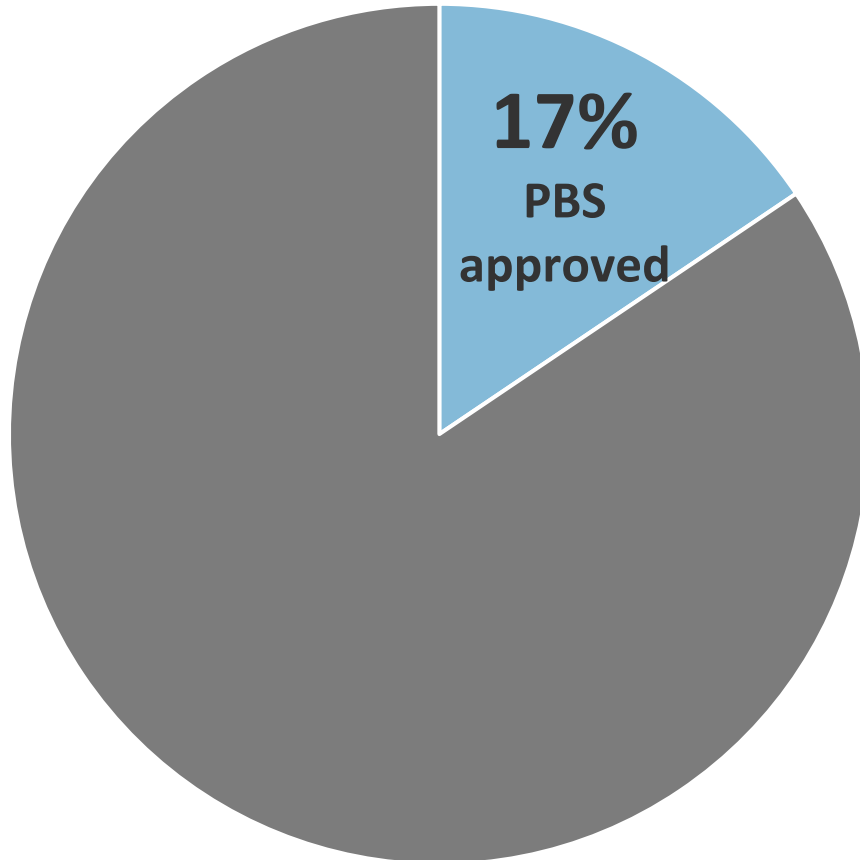
2017, 1416

2018, 577 (January to April)

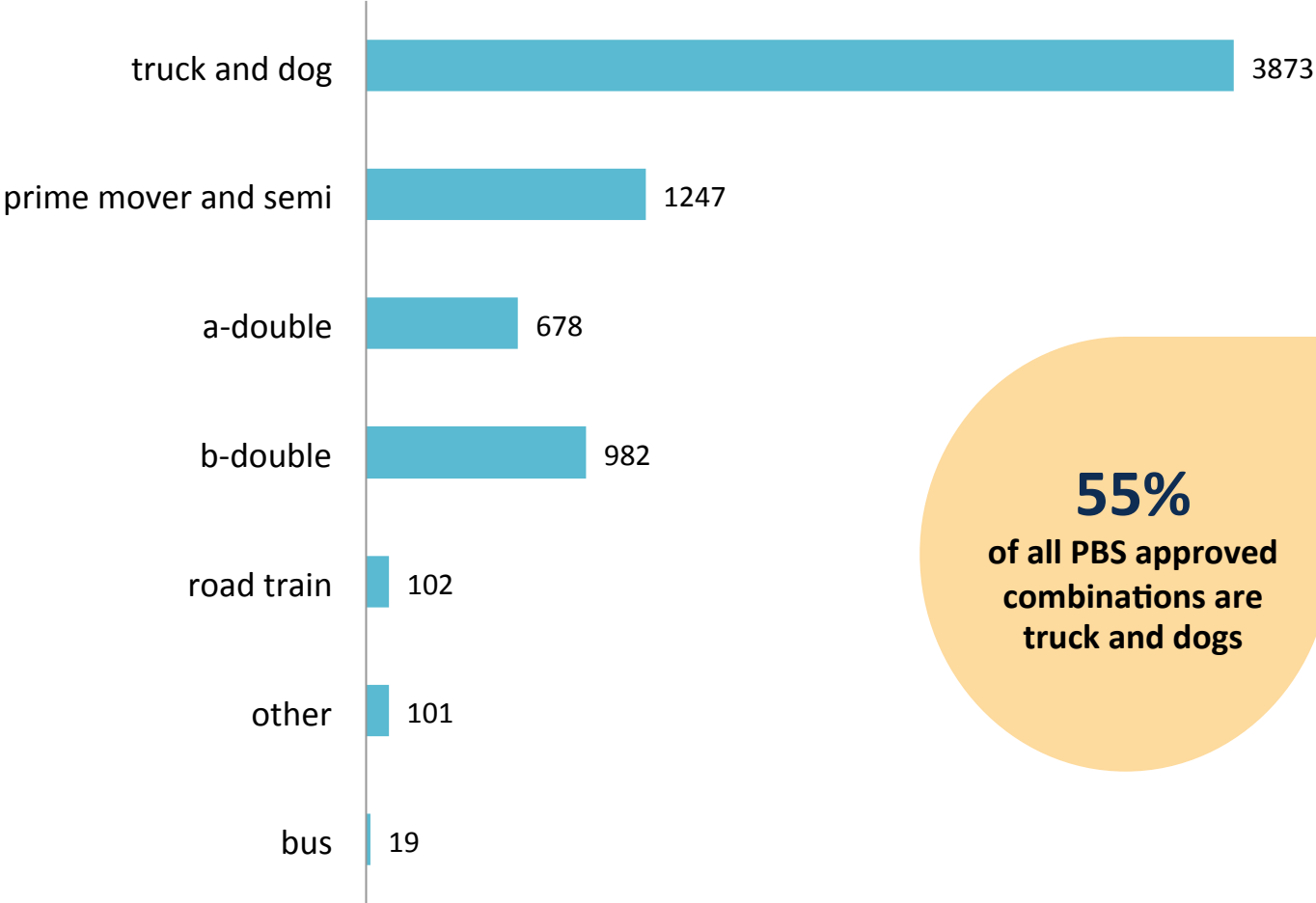
7000
PBS approved
combinations on
register

More than **60**
trailer
manufacturers
22 truck
manufacturers

Vehicles Manufactured 2017

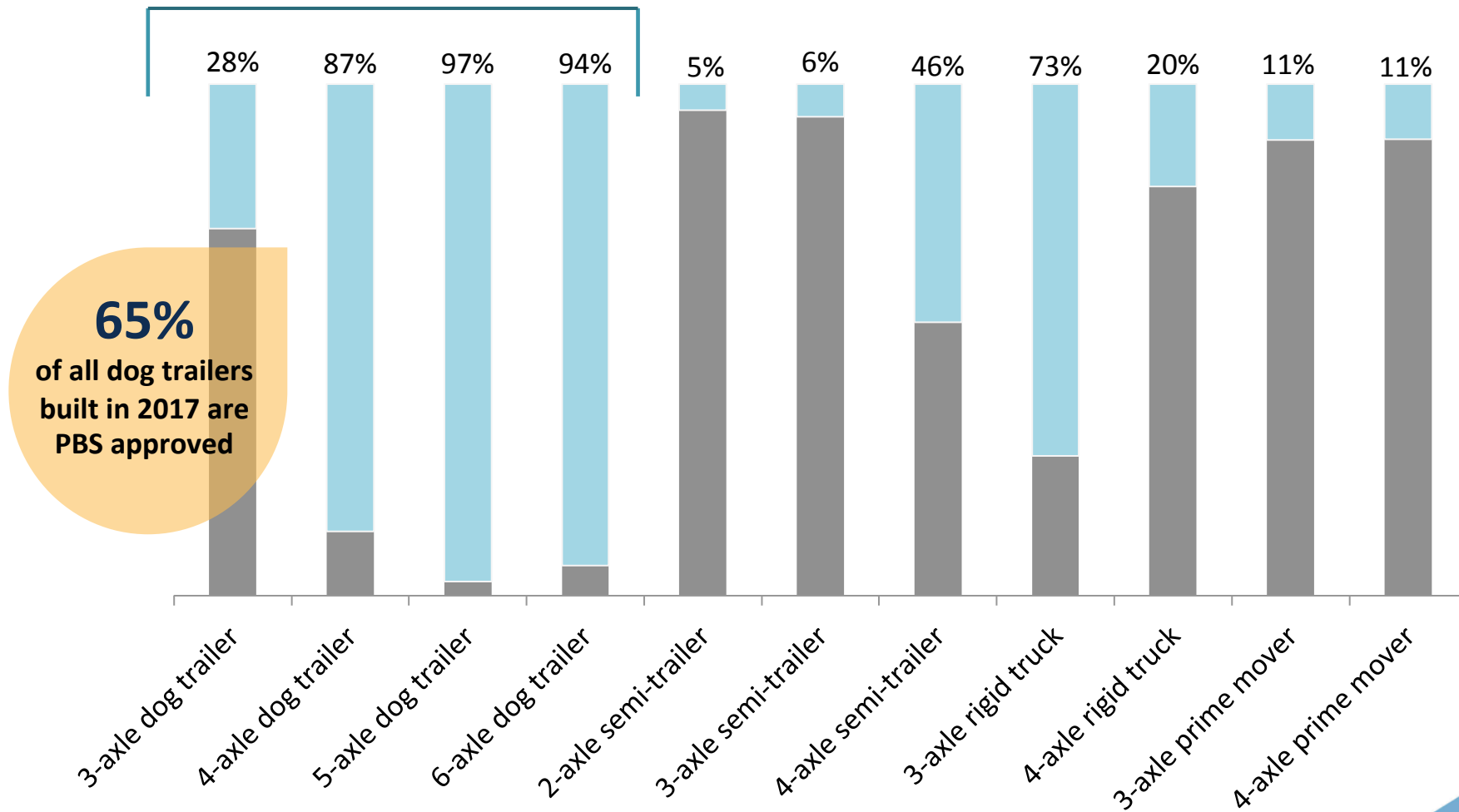


Australian PBS Fleet

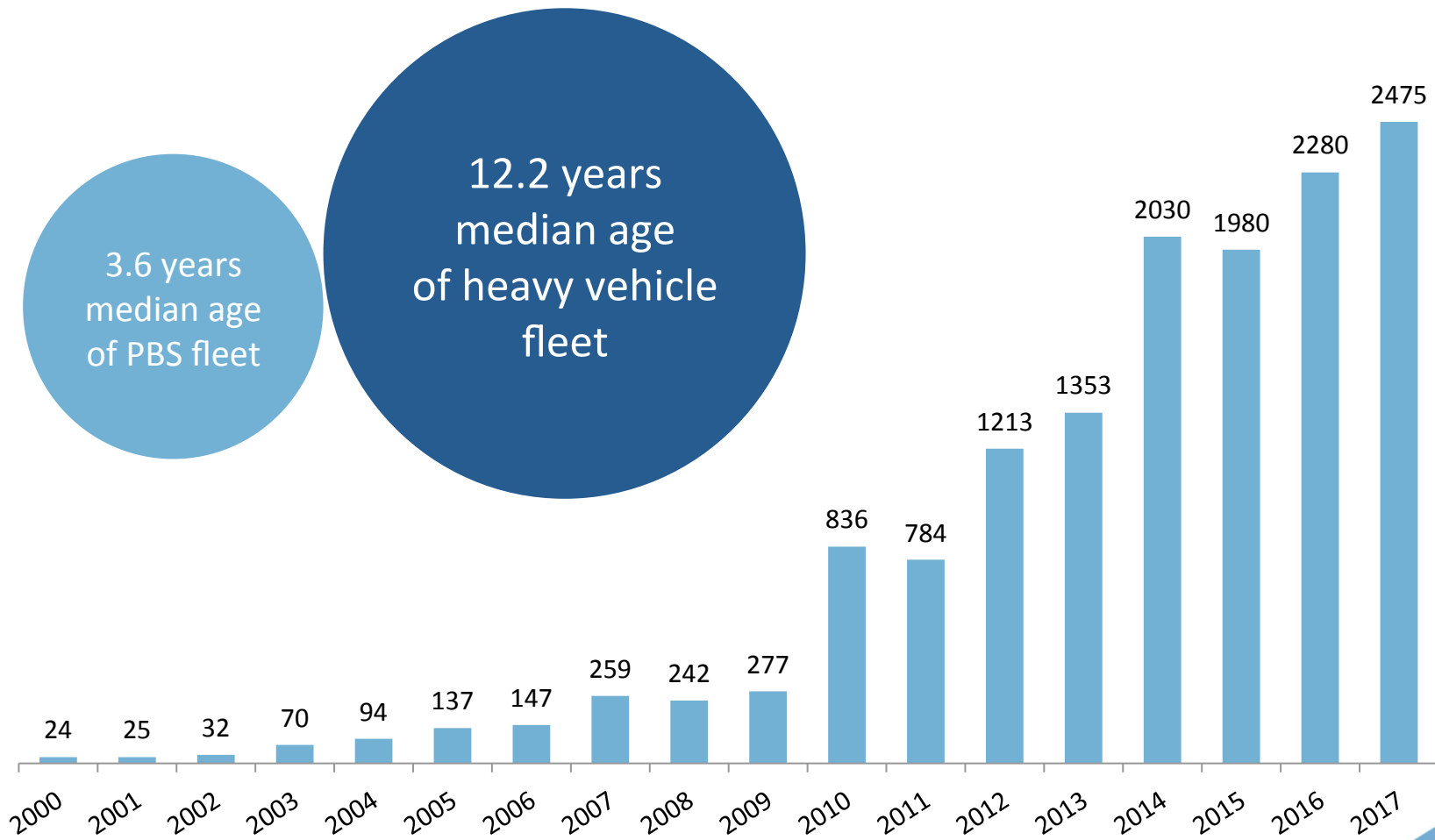


55%
of all PBS approved
combinations are
truck and dogs

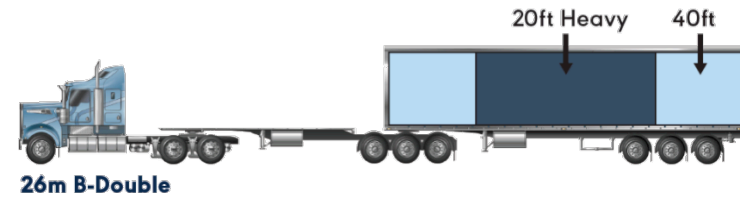
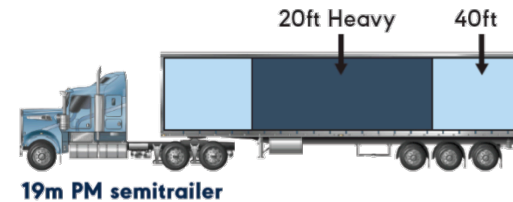
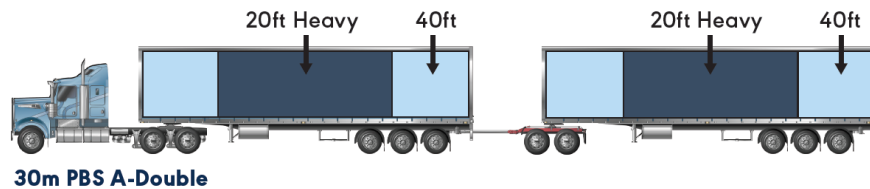
PBS Vehicles Manufactured 2017



Year of Manufacture PBS fleet



Case study: 30m PBS A-double (Toowoomba to PoB)



100% productivity improvement for specific freight tasks

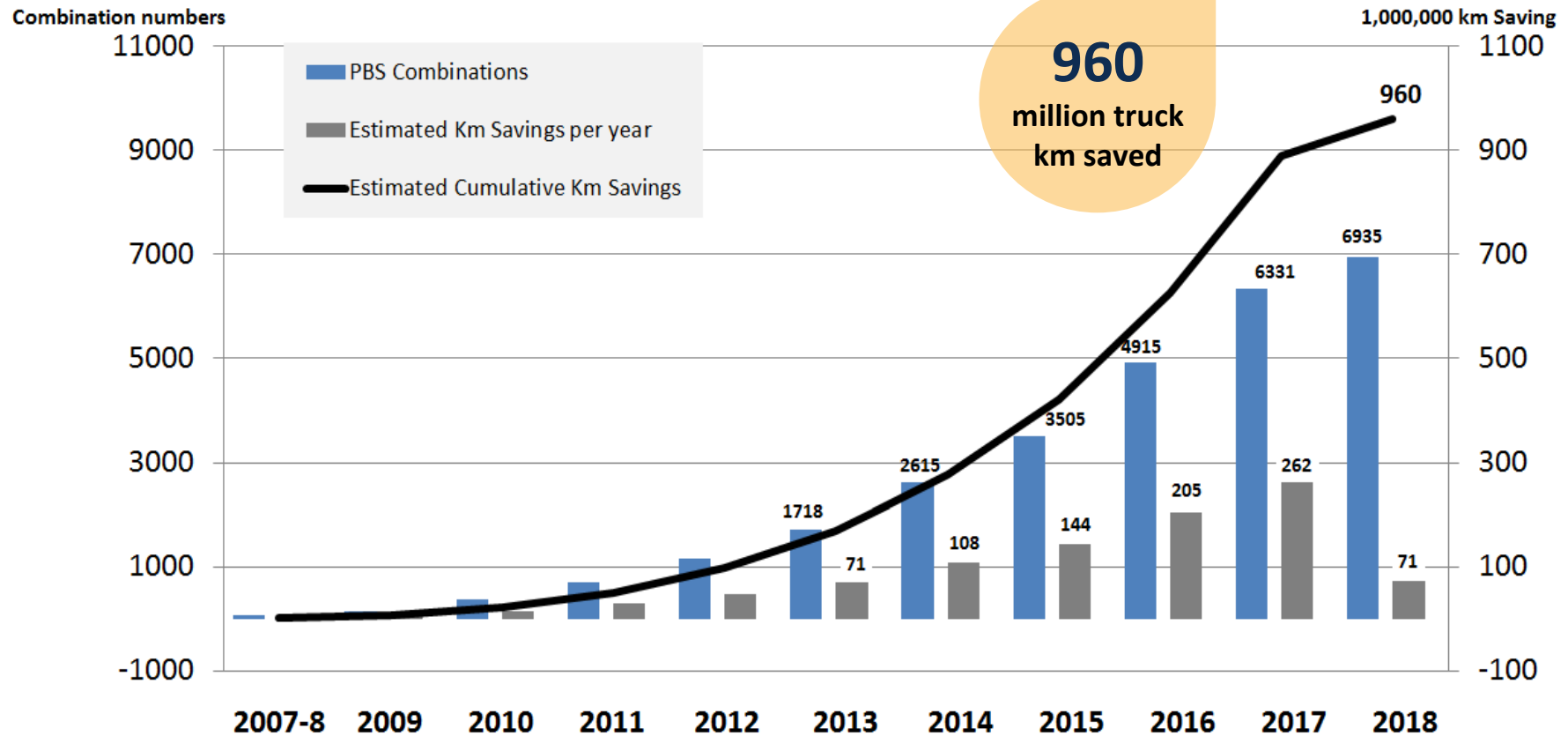


- 30% average growth/year for A-doubles
- 27% increase in freight movements in Port of Brisbane
- 16% increase in truck numbers
- Overall decrease in truck trips per TEU container

PBS productivity benefits

Productivity Benefits of PBS Combinations Approved 2007 to April 2018

4 May 2018



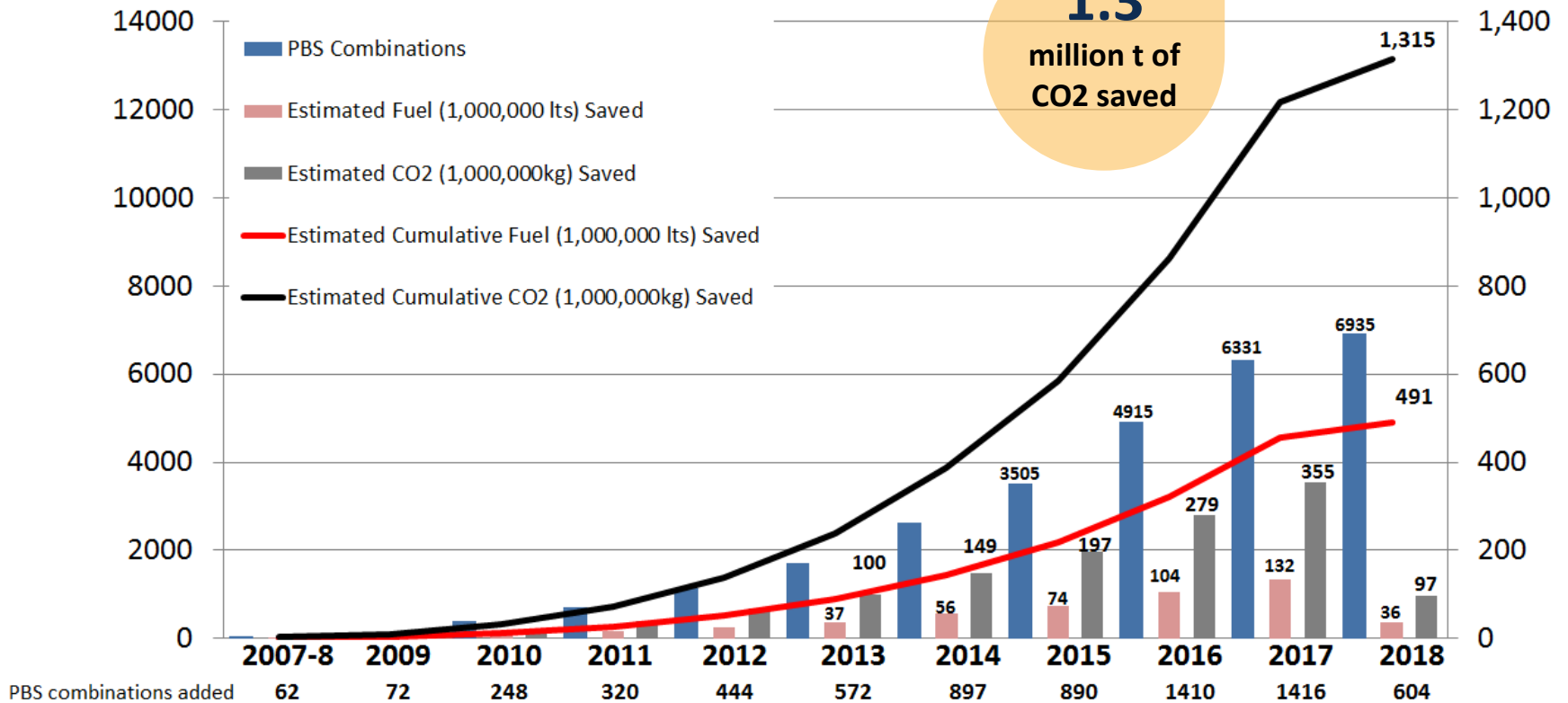
The factor and methodology from the Austroads Research Report AP-R465-14 (Quantifying the Benefits of High Productivity Vehicles) has been used with the number for approved PBS combination to quantify the benefits achieved from PBS.

PBS environmental benefits

Environmental Benefits of PBS Combinations Approved 2007 to April 2018

4 May 2018

Combination numbers



1. The factor and methodology from the Austroads Research Report AP-R465-14 (Quantifying the Benefits of High Productivity Vehicles) has been used with the number for approved PBS combination to quantify the benefits achieved from PBS.
2. Rated fuel burn used from ATA - TAPs - Truck Impact Chart September 2016.
3. Diesel to CO₂ conversion rate of 2.68 kg per lt used.

Challenges

- Access – network certainty
- Lack of PBS knowledge
- Technical complexity
- Review of standards, rules, guidelines

