Working together to reduce land transport safety risk in the CSG sector

- can we ever do enough?

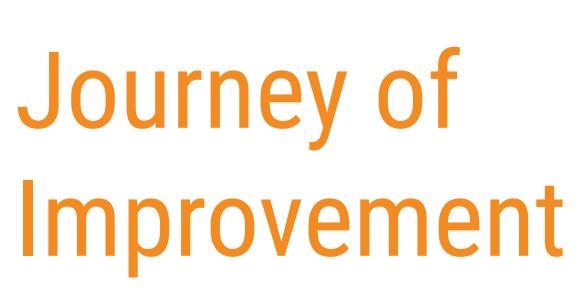
## The Journey Continues

This strategic approach has improved Arrow's safety record, not completely eliminated the risk posed by land transport.

We are on a constant journey of improvement to bring our business risk to 'As Low as Reasonably Practicable' (ALARP).

We are collaborating across industry to develop future opportunities to drive safety risk to even lower levels. Ideas for this include:

- encouraging drivers to consciously consider driving to conditions every time they drive with Arrow's new 'Driving to Conditions Conversation Program'
- 'Voice Technology' to advise drivers about upcoming road hazards and speed limit changes
- Detailed Road Base Map' GIS road map with geographically linked road hazards, which may eventually allow electronic driverless vehicles
- engineering of production infrastructure to require less regular maintenance
- industry model for driver training and competence
- more effective sharing of learnings
- targeting safety culture and driving behaviour through transport safety education, industry focus group participation (SAFER Together), better vehicle technical standards and having supplier relationships to drive outcomes.



Since 2011 Arrow Energy has implemented several strategies that have reduced the number of Heavy and Light vehicle incidents.

It is an industry expectation that all companies operating land transport vehicles have in place a management system that is based on a full assessment of the risks, and measures to address such risks.

Over the past few years Arrow has implemented an integrated Seven Pillar Strategy which applies equally to light and heavy vehicles, professional and non-professional drivers. This strategy relies on key parts of the organisation working together, notably:

- Contracts and Procurement
- Transport and Logistics, and
- Health, Safety and Environment.



Pillar 2



Pillar 3



Safe Roads

Safe Vehicles Pillar 5

Safe Drivers Safe Speeds

Arrow Assurance Program

Pillar 6

Industry Collaboration

Pillar 7

Contracting Strategy

## The Risk

Land transport related incidents are historically the main cause of fatalities in this sector.

In 2015, almost half (47%) of worker fatalities occurred within the transport, postal and warehousing, and agriculture, forestry and fishing industry.

September 2016 to September 2017, 216 people were fatally injured in Australia as a result of 197 fatal Heavy Vehicle crashes.

Given the significant amount of reliance on inland freight movements, land transport-related incidents are the single largest cause of fatalities in CSG company operations.

