

**FACT SHEET:**

# FAST TRACKING RAIL INNOVATION

Australia is on the cusp of a new wave of rail investment, with \$155 billion expected to be injected into the industry over the next 15 years. But the industry is also at a crossroads. We must urgently build a culture of rail innovation to make the most of the growth ahead and harness new opportunities in the global rail technology market.

**This global market opportunity is growing, with a rise in rail innovation in recent years.**



**\$362 billion**  
PER YEAR GENERATED BY THE  
RAIL TECHNOLOGY MARKET



**Increasing innovation**  
WITH THE RATE OF NEW  
PATENTS RISING



**Greater cost recovery**  
IN MARKETS WITH STRONG  
INNOVATION CULTURES

**Australia is lagging behind its global counterparts, and are paying the price because of it.**

**NO GOVERNMENT FUNDING**

for rail cooperative research centres or research programs



**LOWER PRIVATE INVESTMENT**

due to lack of R&D funding certainty



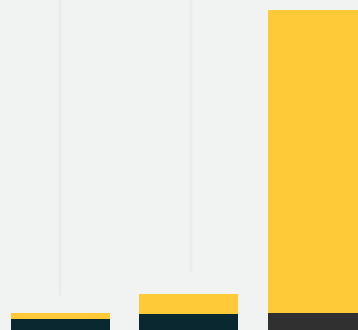
**HIGHER SPEND PER KM**

and lower rate of cost recovery exacerbated by lack of rail innovation

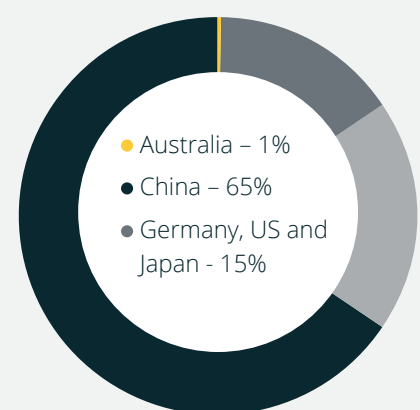


**PRIVATE INVESTMENT FOR EVERY DOLLAR OF PUBLIC FUNDING**

Australia	UK	JAPAN
63 cents	\$2	\$20



**GLOBAL RAIL PATENTS IN 2019 BY GEOGRAPHY**





## What's holding us back from rail innovation in Australia?

**A fragmented market** resulting from many different national state rail systems

**Lack of funding certainty** for R&D and commercialisation

**Limited cooperation** between innovators and industry operators, reducing the likelihood of innovations being commercialised

**State local content requirements** reducing the economies of scale that can be achieved by rail manufacturers

**Risk averse culture** that avoids experimentation

**Government procurement** processes that do not consider whole of lifecycle costs

**To make the most of the next wave of rail investment, we must act now to create a culture of innovation in rail. A three point plan will help achieve this.**

1.



### MAKE INNOVATION A NATIONAL PRIORITY

Sustained leadership and investment is needed to ensure a national focus on rail technology and innovation.

- A national peak body for rail innovation in Australia
- Invest in R&D so more research can be started and commercialised
- A national strategy to ensure innovation is at the heart of capability and skills development in the rail industry
- An exports strategy to promote Australian rail innovation in the global market

2.



### DEVELOP A SINGLE MARKET FOR RAIL TECHNOLOGY

A single, national market with common standards for rail technology would give the rail industry the scale it needs to support innovation and commercialisation.

- Common standards and common type approval processes, linked to nationally accredited testing
- A national local content policy that replaces state-based policies and reduces fragmentation
- Standardised training to support a new national focus

3.



### BUILD A CULTURE OF RAIL INNOVATION

A culture of rail innovation must be supported at every level of the industry.

- Best practice procurement and contracting by the public sector to accelerate technology adoption
- Smart rail strategies to build the planning pipeline for digital technology
- Build the Australian rail brand to showcase our innovators at global trade shows

## WANT TO KNOW MORE?

For further information, please contact ARA General Manager Supply Chain **Natalie Currey** at [ncurrey@ara.net.au](mailto:ncurrey@ara.net.au)