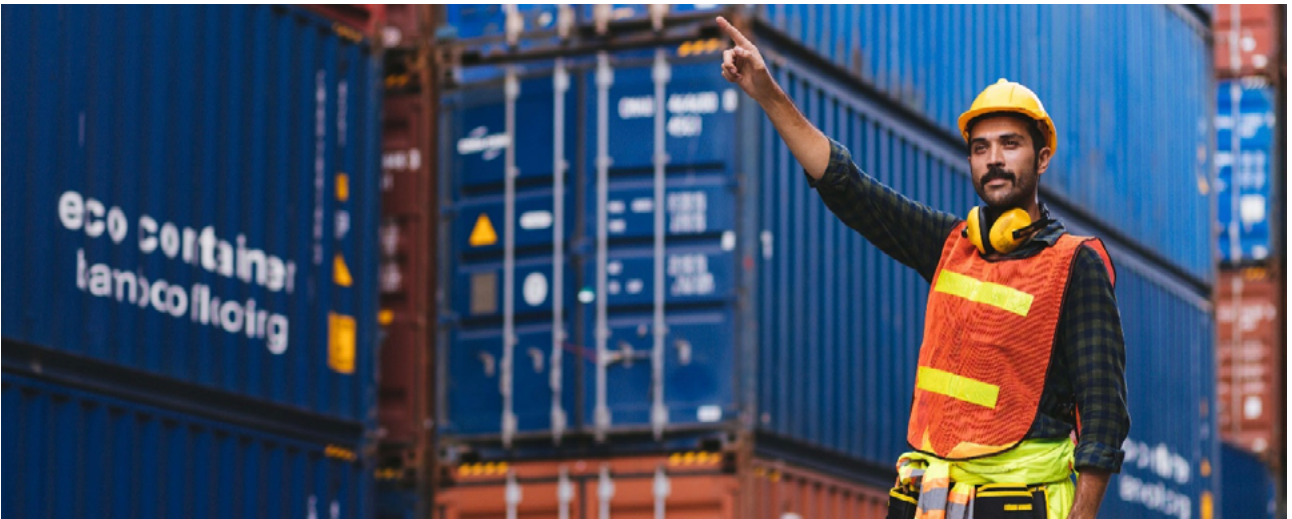




## **CHALLENGE 3** **ROAD FREIGHT ALTERNATIVES**



### **CHALLENGE STATEMENT**

Design or produce systems or sub-systems enabling alternatives to traditional road freight, including using existing infrastructure, facilitating, multi-modal freight transportation and exploring shared transport solutions.

### **CHALLENGE DESCRIPTION**

Clean Futures aims to reduce road-based freight movements which are some of the largest sources of emissions today. To do this, we wish to develop alternative, cleaner modes of freight.

This can be achieved through leveraging existing infrastructure such as rail, as well as leveraging multi-modal transportation. Finally, we aim to optimise capacity utilisation of infrastructure and assets through shared transport solutions combining freight and passenger transport.

### **SOLUTION EXAMPLES**

Solutions that address this challenge could include:

- Innovations contributing to rail-based freight planning to improve the planning infrastructure of heavy rail to encourage the use of freight, without negatively impacting passengers.
- Solutions to use people transportation for freight, especially when capacity is available.
- End-to-end tracking of freight across multi-modal transportation.
- Enablers of multi-modal transportation by connecting the modes for freight, such as parcel transfers from a train to a tram or a bus.
- Micro-mobility for last-mile freight deliveries.