

# Flicking the switch on Electric Trucks

*Driving the path to net zero*

*In the freight supply chain*

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## WHY

Road freight emissions are rising strongly, not on track for net zero



## HOW

Reducing emissions in freight requires electric trucks AND low carbon energy AND energy productivity

# OTHER MARKETS ARE MANDATING ZERO EMISSION TRUCKS (ZET)

Cost parity & rapid uptake by 2030 → mandated targets in US, EU

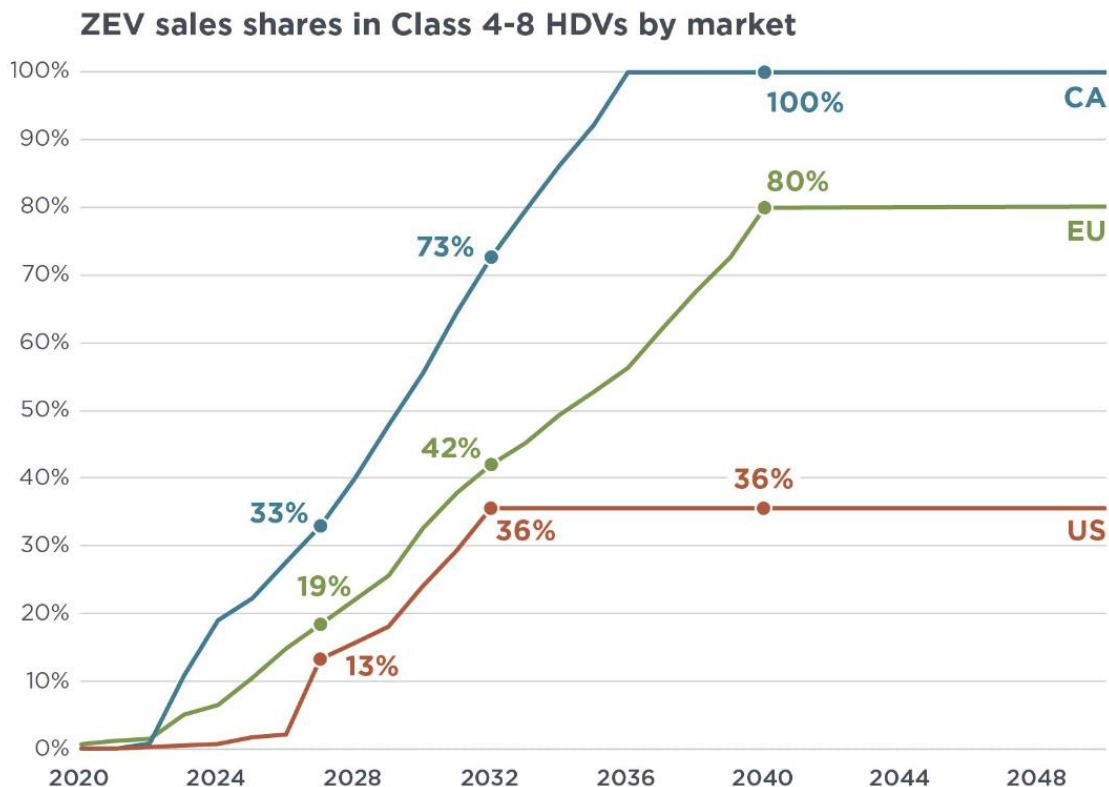


Figure: Estimated sales share of ZETs based on regulatory proposals ([ICCT 2023](#))

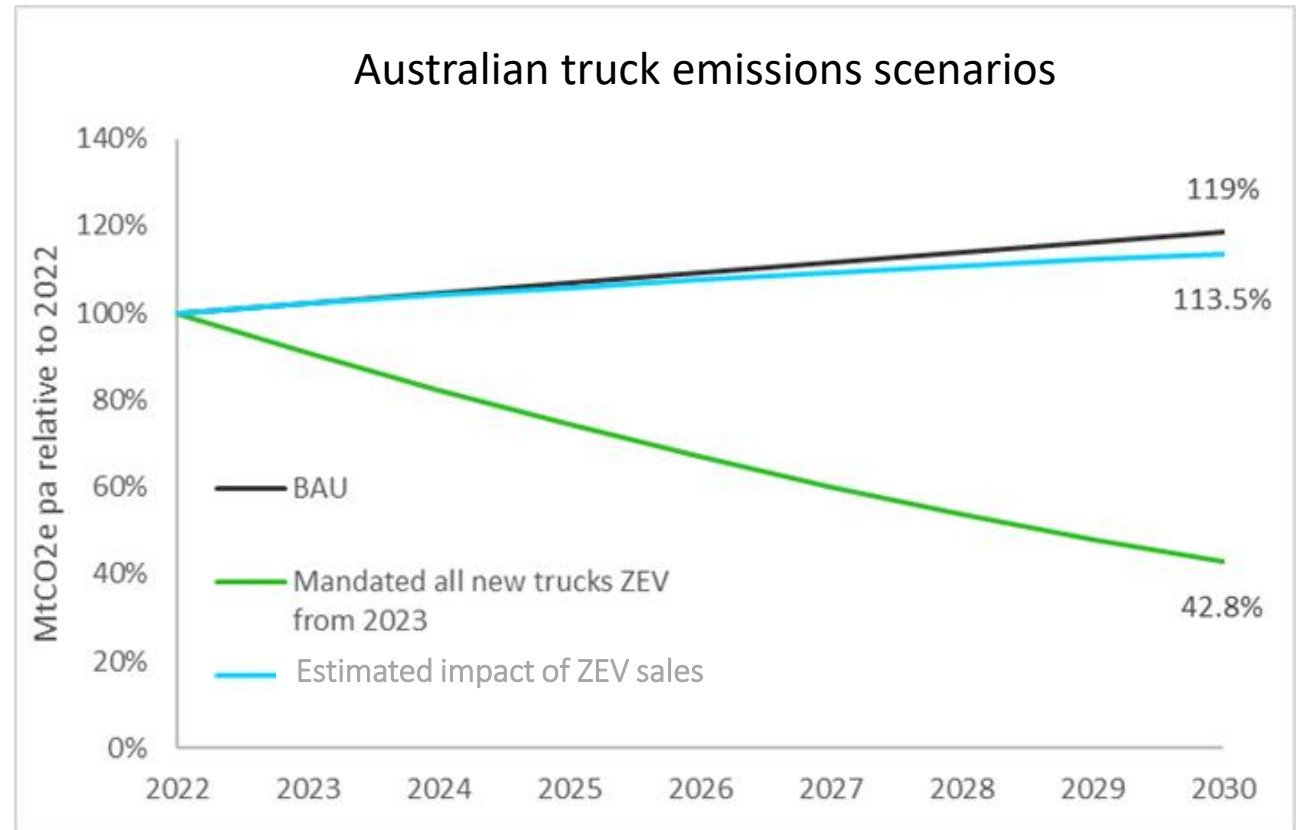
But our trucks, regulations & policies are different





# ZETs ARE ESSENTIAL, BUT DON'T CONFUSE SALES & EMISSIONS

*We need more than just ZETs  
to decarbonize freight*



- Freight task growth will add emissions
- ‘Natural’ (unsupported) ZET adoption will be low to 2030
- Mandate would be needed to achieve Paris goal (too late!)
- **Source of energy is critical**

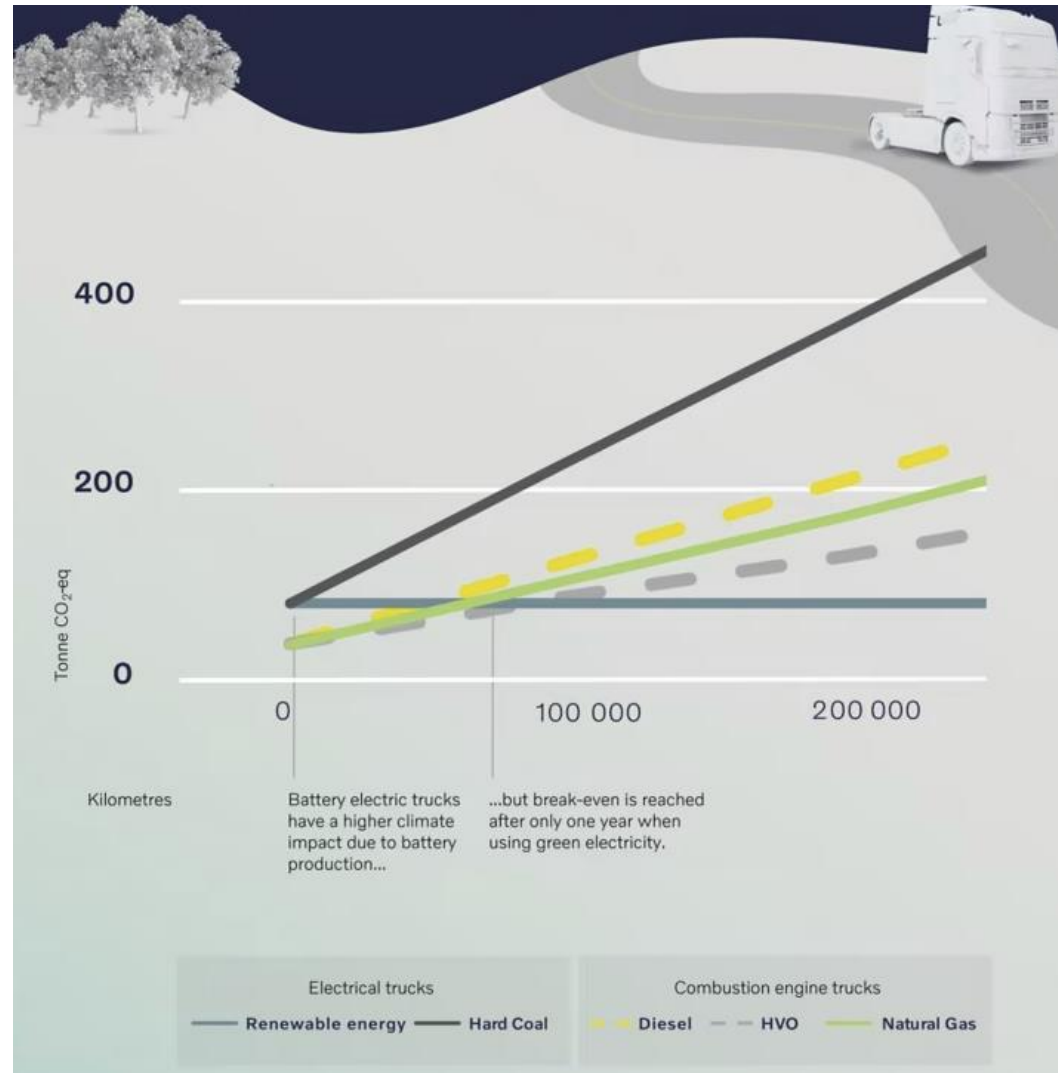
# ZET TECHNOLOGY IS JUST THE CATALYST FOR CO<sub>2</sub> REDUCTION

Renewable energy

is the key



Emissions break-even for different energy sources (Volvo Trucks 2022)

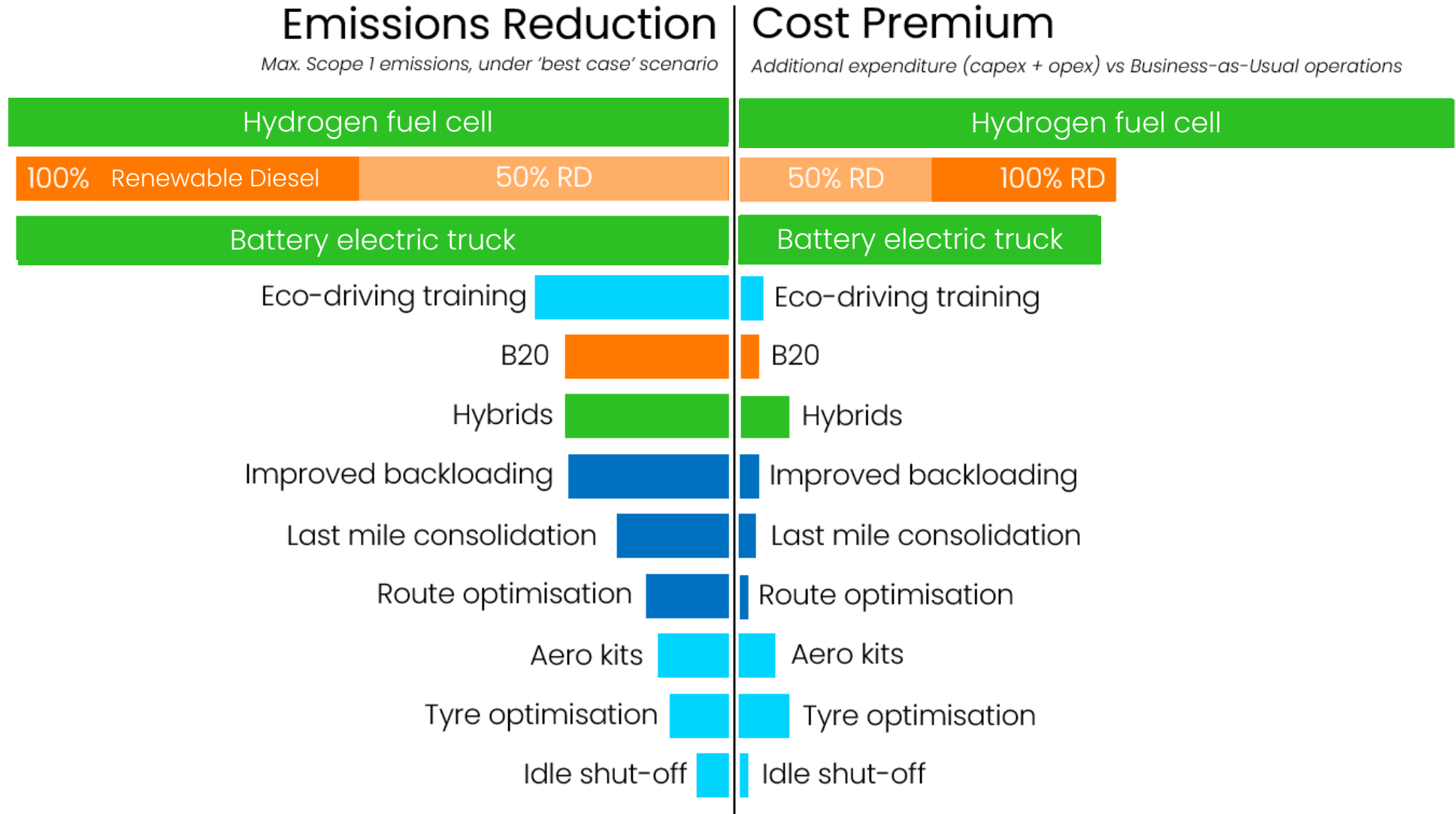


*“In 2019, life-cycle emissions for electric trucks (both battery electric and hydrogen fuel cells) were higher than for diesel trucks.”*

([UTS](#) 2024)

→ So if you go electric, then also go renewable !

# THERE ARE OTHER (CHEAPER, SIMPLER?) DECARB PATHS

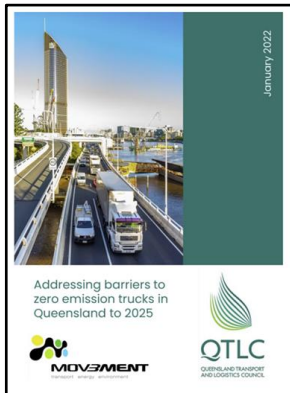
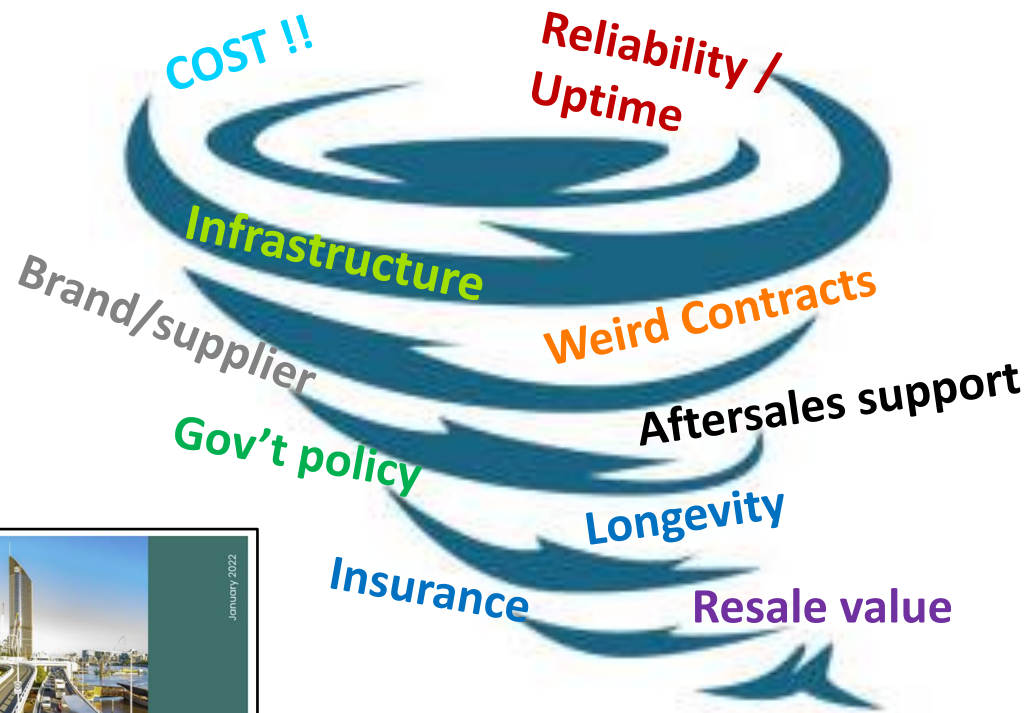


→ Complementary: We need these **and** ZETs to have the impact required



# FLEETS NEED HELP GETTING COMFY WITH UNCERTAINTY

ZETs bring many areas of uncertainty  
- need to address these barriers



What can freight customers & government do?

## SEND A CLEAR SIGNAL

- Preferred purchasing
- Contract requirements
- Preferred access rights
- Co-develop targets / KPIs
- Financial incentives
- Co-fund trials and pilots
- Concessions / exemptions
- Value co-benefits

## ADAPT/OPTIMISE TASKS

- Shorter hauls for BETs
- Route via charging
- Reduce trip urgency
- Build in dwell time
- Night deliveries
- Change depot layouts
- Be realistic about loads

## ENERGY, ENERGY, ENERGY

- Provide charging/refuelling at origin/destination
- Specify renewables/green energy
- Shared-use recharging
- Group purchasing and PPA
- Use end-of-life batteries onsite
- Share data and learnings



# QUESTIONS ?

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*Use the Q&A or Chat function*

*Pick a speaker or the whole panel*

*Clarify, add value, bring insight*

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