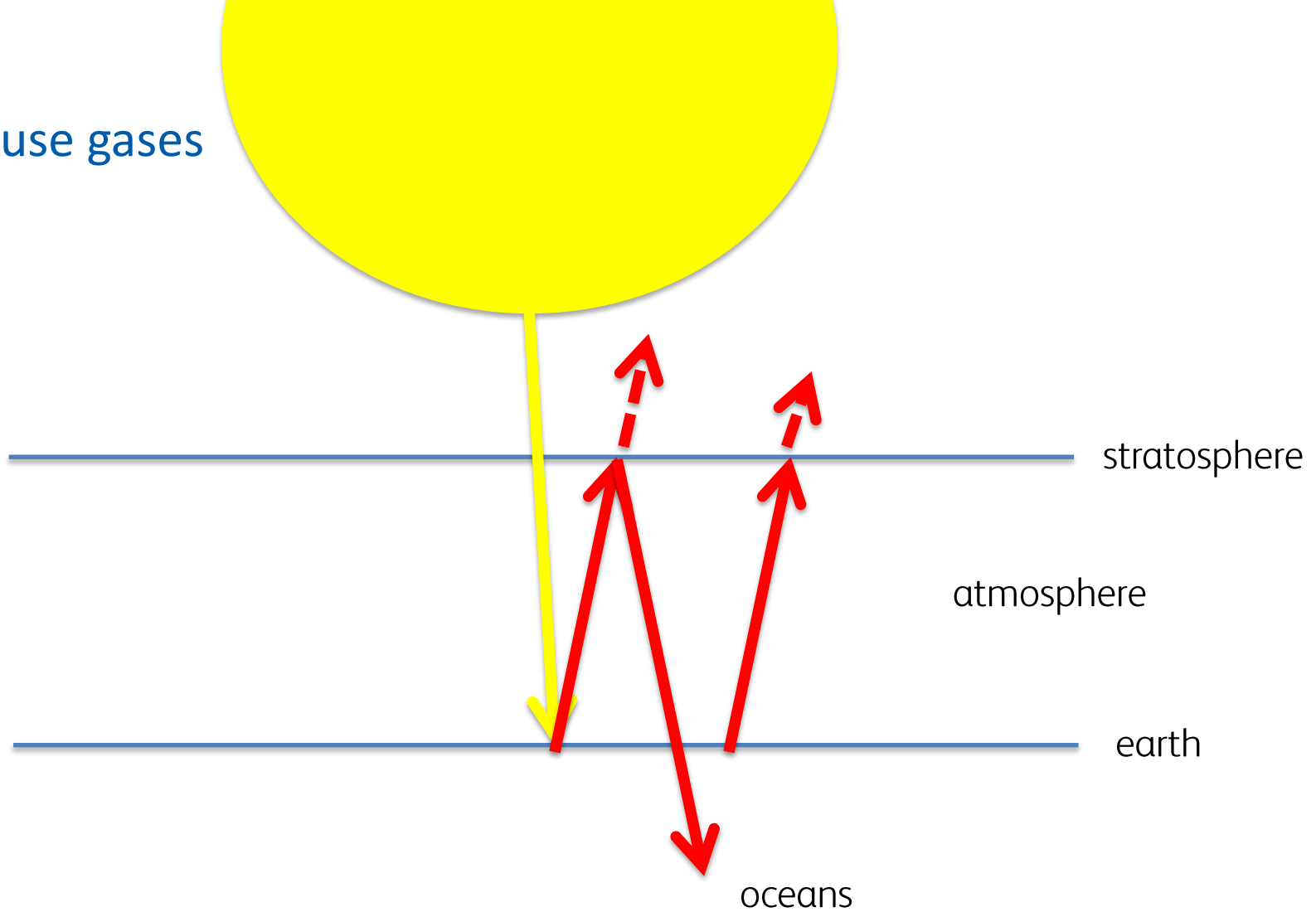




# The Future of Transport

Bede Doherty, M.Eng – Business Development & e-Mobility Manager, Alphabet Australia, BMW Financial Services

Greenhouse gases



## Effects of climate change



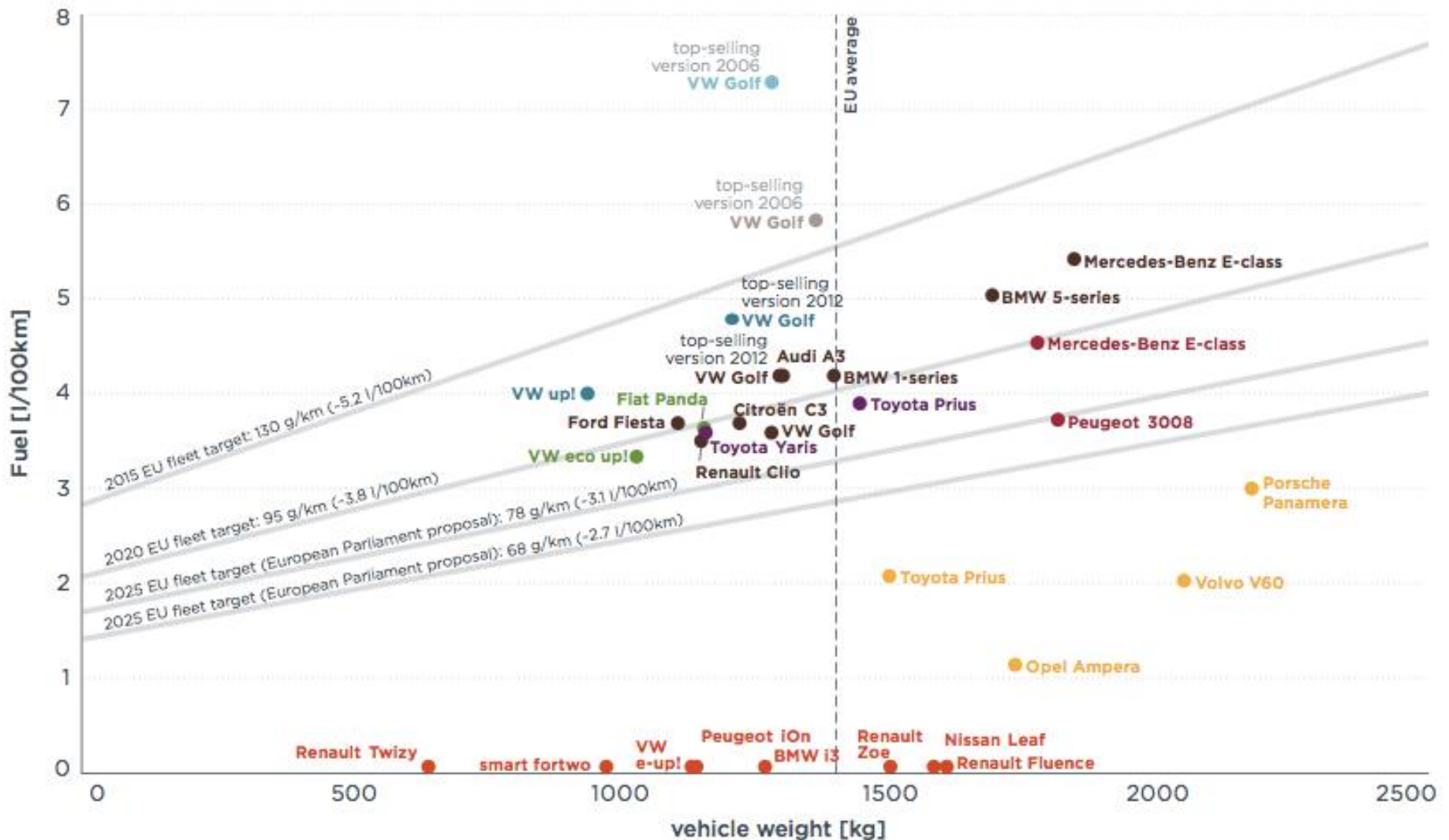
<http://seng.org.au/sites/default/files/chapteradmin/vicfiles/20141028.pdf>

# Climate Change *can* be stopped

1. Avoid
2. Reduce
3. Remove



# Why EVs are needed – CO<sub>2</sub>



## Why EVs are needed – Pollution



<http://www.bbc.com/news/world-asia-china-35141188>

# EVs in Australia







# LCV EVs



Autoblog.com



UK Fleetworld

# Benchmarks

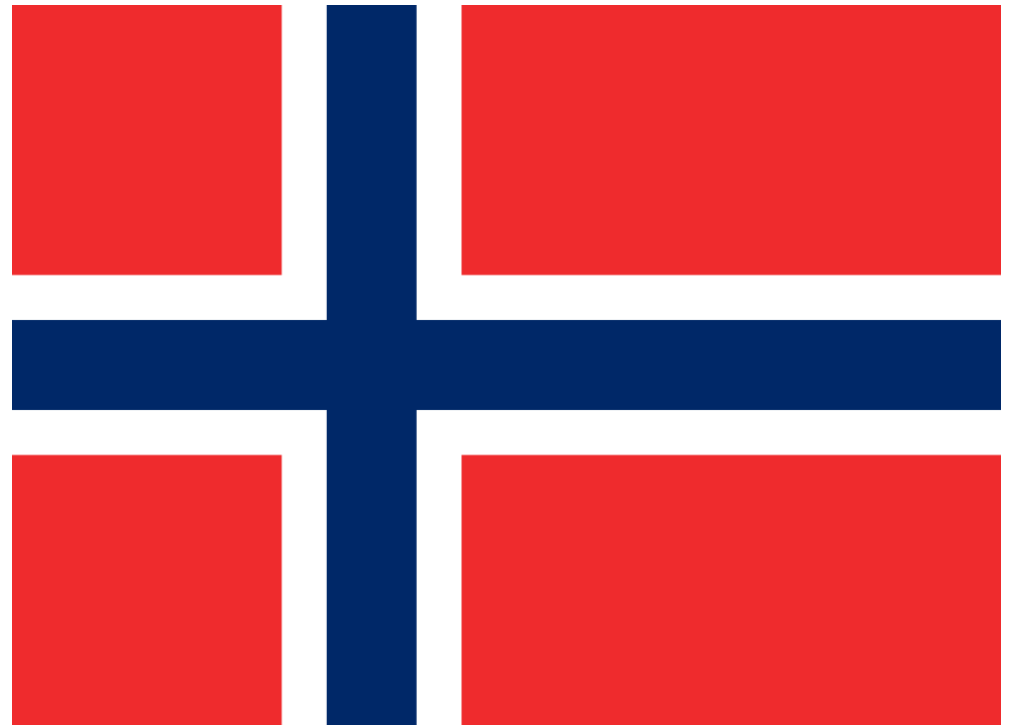
## Norway

61%

%EV of new cars sold in March 2016

100%

% EV of City of Oslo fleet

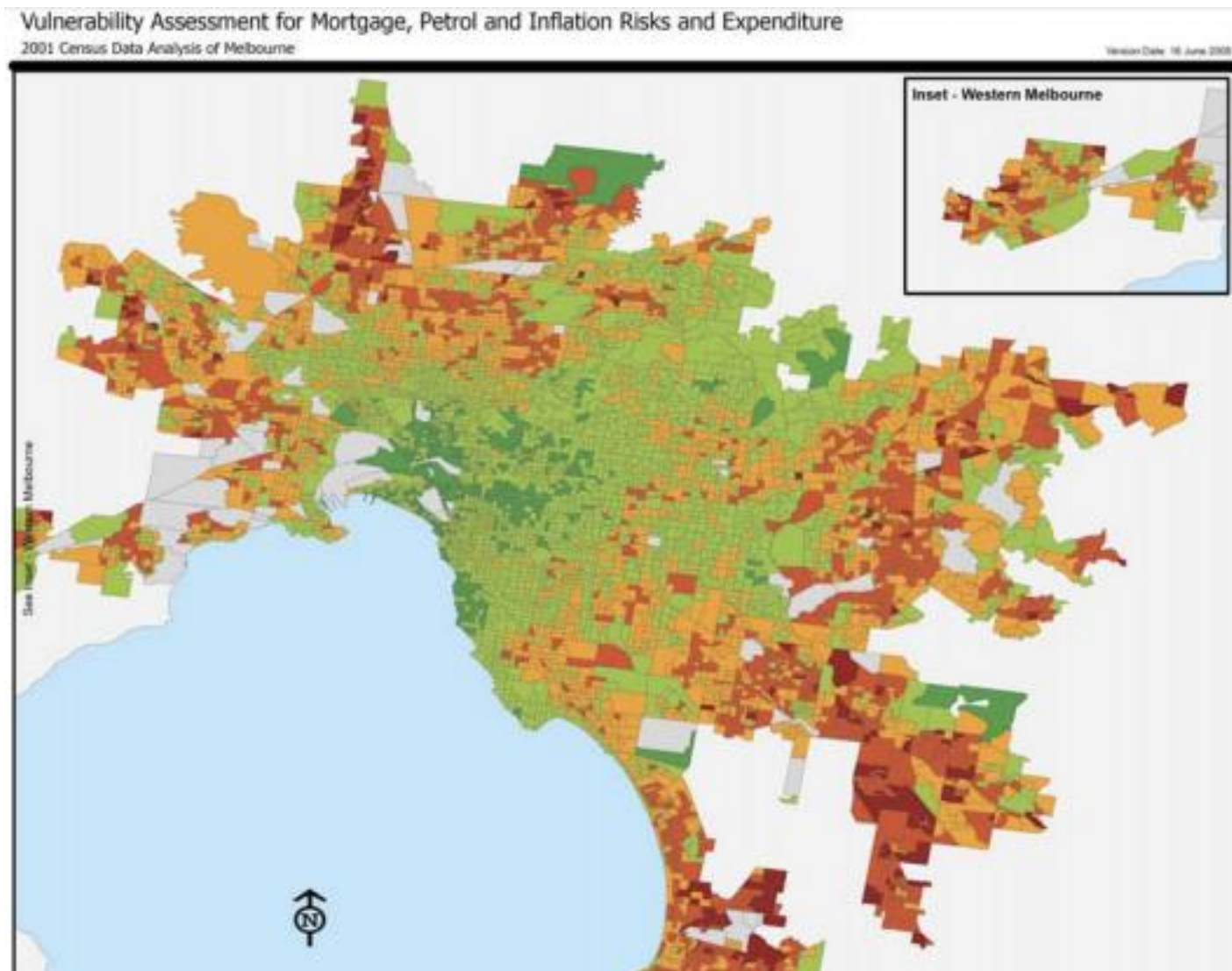


ChargedEV, April 2016

# Netherlands 2025



# Urban planning





# Urban intensification



*Maribyrnong Road, Maribyrnong study area, currently*



*Possible future*

# Urban rail & congestion



# Reducing congestion

[https://youtu.be/41\\_P6n36-io](https://youtu.be/41_P6n36-io)



## Inter-urban travel – high-speed rail



[http://media.bze.org.au/hsr/HSR\\_web\\_01\\_medium.pdf](http://media.bze.org.au/hsr/HSR_web_01_medium.pdf)



# Inter-urban travel - hyperloops

<https://youtu.be/7A7GsAPR3J0>

# Autonomous vehicles

- Policy & regulation
  - parking, revenue, offsetting/originating
- Effects
  - safety
  - utilisation
  - density
  - parking
  - V2G
  - motorhomes
- Cost per km
- Disruption of the ownership model



<http://blogs-images.forbes.com/brookecrothers/files/2015/11/google-self-driving-car-repaint-1200x615.jpg>

# Effects of autonomy & electrification



<http://blogs-images.forbes.com/brookecrothers/files/2015/11/google-self-driving-car-repaint-1200x615.jpg>

Thank you