Distance-based road user charging in Australasia

Roundtable on Vehicle Taxation Reform
12 – 13 September 2022

Rex Deighton-Smith
Project Manager, ITF Secretariat
Overview

► Both Australia & New Zealand have functioning distance-based charging systems in place
  ▶ In both countries, the charges apply to all km travelled
  ▶ But they apply to only a subset of the light vehicle market

► NZ’s is long established, while the Australian systems are all new.

► Few, if any, other distance based charges appear currently to exist

► Hence, a review of the operation of these schemes may offer insights to assist the future adoption of more ambitious variants.
New Zealand’s Road User Charge (RUC)

► In place since 1978

► Applies to all vehicles using fuels “not taxed at source”
  ► In practice, this means diesel vehicles.

► Originally designed to recover the cost of road damage by HGVs
  ► Few light vehicles used diesel at the time
  ► But 20% of now use diesel (12% in 2000). (Charge is no disincentive?)
  ► EVs are notionally included, but currently exempt until 2024, to avoid disincentives to EV adoption (currently at quite low levels).
New Zealand’s Road User Charge

- For HGVs, charging bands based on mass & axle numbers (thus, load)
- For light vehicles, a single, distance based charge
  - NZD 76 (€46.6) per 1,000km (temporarily reduced due to energy crisis)
  - Licences bought in 1,000km units, displayed on windscreens
- Charges set to achieve goal of recovering road infrastructure expenditure
- RUC, fuel tax, vehicle reg. & some other charges *all hypothecated* to NLTF
- RUC is set to achieve broad parity with fuel tax, avoid “fuel incentives”
Distance-based charging in Australia

► Applies only to ZLEVs (i.e. BEVs and PHEVs)
  ► Same rationale of taxing users of untaxed fuels
► A very recent policy
  ► Announced in South Australia & Victoria in mid-2020
  ► Adopted as policy in NSW in 2021 and WA in 2022
► Only Victoria has implemented the charge (from July 2021)
  ► 2027 implementation scheduled in the other jurisdictions
Programme design

- A high level of commonality between jurisdictions
- Undifferentiated charge: 2.5c/km (BEV), 2c/km (PHEV), in all states
- Low-tech implementation model, integrated with registration system
  - Send photo of odometer on registration renewal, vehicle purchase & sale
  - Invoice issued and paid through registration authority website
- Expected revenue approximately half of average fuel excise per km
  - But critics note BEVs may pay more than traditional hybrids
Implementation dynamics

► Strong initial opposition
  ▶ Industry groups, manufacturers, other govts ("world’s worst EV policy")
  ▶ But followed by the rapid adoption of similarly designed schemes

► Despite rapid take-up, significant shifts in policy in short periods
  ▶ NSW was strongly critical of Victorian policy in late 2020, but adopted a similar policy 10 months later
  ▶ SA initially proposed 2021 adoption, delayed to 2027 (or 30% ZLEV)
  ▶ SA subsequently announced repeal following a change of government
Acceptability issues

► Very low EV take up in Australia (< 2% of light vehicle sales)
  ► Opposition to the policy was expected to be limited as a result (few payers)
  ► Support expected from ICE drivers concerned at “free-riding” EVs?
► But significant opposition due to very limited incentives for EV take-up
  ► Seen as providing a strong disincentive for shift to EVs in this context
  ► Delayed commencement in 3 states promoted as minimising disincentive effect
Balancing the policy with new incentives?

- New incentives announced in parallel with distance charging policy
  - Purchase price rebates in all four states (AUD 3,000, limited numbers, price limits)
  - Co-funding of charging infrastructure (all states)
  - Purchase tax exemptions (NSW & some non-charging states only)
  - Registration fee discount (Victoria & South Australia)
- But the size of the incentives remains modest (e.g. Victoria AUD 100m total)
...Or a broader imperative to act on decarbonisation?

- Contemporaneous adoption of “EV Strategies” in all four states suggests a move to enhance acceptability
  - But non-charging states all adopted their own strategies around the same time
  - Overall, incentives seem to be no larger in states adopting the distance charge
  - Hence, wider political dynamics seem to be responsible
User responses

- Tax looms large in relation to effective “fuel” cost
  - Despite being set at a level well below average fuel tax/km
  - Partly due to unpriced charging

- State-based nature of charge has been an issue
  - Applies to all km travelled, regardless of jurisdiction
  - Perceived fairness issue

- Legal challenge may mean the issue is ultimately addressed by the Federal government
Strategic considerations

► Simple, low tech design enabled immediate implementation
  ► Also reduced risk of implementation failure, avoided privacy concerns
► Revenue equivalent to fuel excise in NZ (room to increase in Aust?)
► Possible efficiency improvements within this design?
  ► Mass-linked charging bands (to address accident & road damage cost differences)?
  ► Urban vs rural differentiation of charging rates (accident, noise, air pollution diffs)?
► Congestion element can’t be added without changing charging mechanism
Strategic considerations (2)

► Implications for ability to adopt a differentiated charging system
  ► Does embedding the principle of distance charging smooth the way?
  ► Or does existence of a scheme encourage stasis & makes reform difficult?

► Implications for congestion charging
  ► Will the existence of an explicit road-user charge help acceptability?
  ► Is a stand-alone scheme more, or less, acceptable?
    ► Implications of Stef Proost’s argument that the revenue cannot be used as a replacement for fuel taxation?
Thank you