



Michael Bushby
RA Board



Håkon Volldal
Q-Free



Mandi Mees
National Transport
Commission



Jonathan Spear
Infrastructure Victoria

Policy Webinar - Shifting Gears Modernising the way we use, manage & pay for roads

WEDNESDAY 22 SEPTEMBER



ABOUT ROADS AUSTRALIA

[Roads Australia](#) (RA) is the peak body for roads within an integrated transport system, representing an industry that contributes \$207 billion annually to the economy and supports 1.3 million jobs.

RA brings industry, government and communities together to lead the evolution of Australia's roads, integrated transport and mobility.

Roads Australia's 160+ members include all of Australia's transport agencies, road owners, major contractors and consultants, material suppliers, service and technology providers, and other relevant industry groups. RA's current policy focus extends across five activity streams: Safety; Capacity; Transport Reform; Customer Experience; and Sustainability, with Diversity and Inclusion an underlying commitment across each stream.

[Register for upcoming policy events](#) to contribute to the debate.

BACKGROUND

Improving fuel efficiency and encouraging the shift toward zero emissions vehicles (ZEVs) powered by clean fuel technology is undoubtedly a desirable policy objective. At the same time, it has profound implications for the way in which transport infrastructure in Australia is paid for, as revenues from traditional sources such as fuel taxes and vehicle registration decline.

As more Australians make the switch to ZEVs and embrace alternative forms of transport – including rideshare and on-demand services – policy makers are confronted with the challenge of sustaining a

revenue base sufficient to maintain and build the transport infrastructure on which our communities rely.

EVENT SUMMARY

RA's Policy Webinar, [Shifting Gears: Modernising the way we use, manage & pay for roads](#) considered how to address the challenge of hastening EV uptake, while also ensuring access to a revenue base that will support the construction and maintenance of high quality road infrastructure.

Webinar speakers discussed internationally successful measures which have been pursued to drive EV take up, and how the technological transition in vehicle drive trains may alter the way we pay for - and travel around - our integrated transport network.

The speakers were:

[Håkon Volldal](#) - President and Chief Executive Officer, Q-Free ASA

[Jonathan Spear](#) - Deputy Chief Executive and Chief Operating Officer, Infrastructure Victoria; and

[Mandi Mees](#) - Head of Program and Partnerships at the National Transport Commission and Deputy Chair, RA Transport Reform Policy Stream.

The discussion was hosted by RA President [Michael Bushby](#).



POLICY INSIGHTS

RA President, Michael Bushby, opened the Webinar by observing that this was the first in a series of RA policy webinars conducted by RA's Transport Reform Policy Stream, aimed at recognising the need for transformational regulatory and technological reform to continue to drive value from Australia's roads and the integrated transport network.

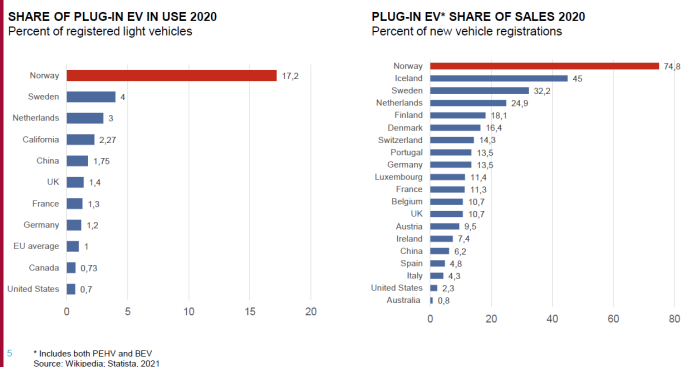
He noted that the organisations represented by the speakers all play a role in assisting the transport industry to understand and address the challenges of EV take-up.

Supporting EV take-up

Norway is seen as a global leader in EV acceptance, as the government has provided financial and other incentives for its citizens to purchase electric vehicles for decades. In 2020, EVs made up 17.2% of Norway's entire light vehicle fleet and comprised 74.8% of new vehicle sales.

Håkon Volldal, President and CEO of Q-Free, joined us from Norway to outline the significant financial incentives that have driven the high uptake of EVs. These included an exemption from paying Norway's 25% VAT on EV purchases, no registration fees and reduced tolls, parking and insurance.

NORWAY HAS THE HIGHEST EV UPTAKE IN THE WORLD...

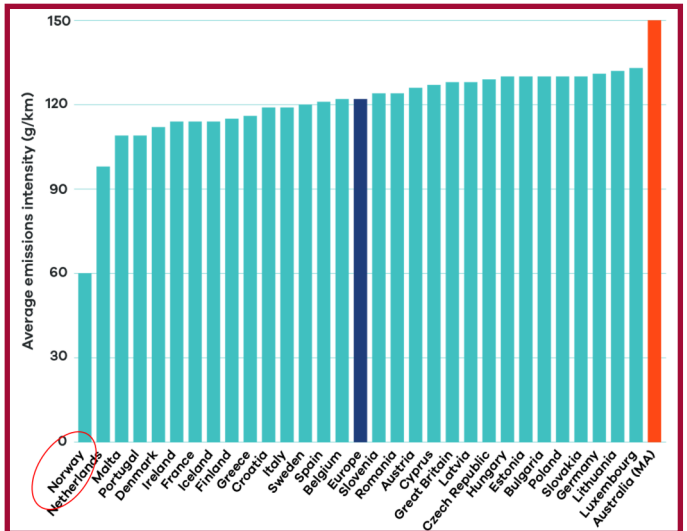


Håkon also touched on some of the issues arising from Norway's actions that Australia will need to address.

These include falling annual state income from motorists – and government attempts to recoup these losses, via increases to tolls and taxes, generating protests and outrage among some Norwegian citizens.

Data produced by the [National Transport Commission](#) and presented by **Mandi Mees**, showed that in Australia, the average emissions intensity of passenger vehicles in 2020 was 150 g/km.

In 2019, Europe's was 122 g/km and Norway's was 60 g/km. This report again highlights Norway's success in transitioning to a lower carbon passenger vehicle fleet.



Average emissions intensity of passenger vehicles, 2020 (Australia) and 2019 (Europe)

Infrastructure Victoria (IV) put forward a series of recommendations in their recently released [30-year infrastructure strategy](#). **Jonathan Spear** outlined recommendations 1 and 2 of the IV strategy recommending steps to accelerate the take-up of zero emission vehicles through measures such as government fleet purchases, support for a charging network strategy and committing to no longer register new petrol and diesel vehicles after 2035 at the latest. This is on top of [existing financial incentives](#) already in place in Victoria.

Is now the time to change the way we pay for our roads?

In Australia, revenue to support road infrastructure is raised through registration fees and stamp duty on vehicle sales (generally raised through state and territories), as well as fuel taxes, including the road user charge for heavy vehicles. The NTC is responsible for advising ministers on heavy vehicle registration fees and road user charges, with the funds raised provided to state and territory governments to maintain and improve roads for heavy vehicles.



With the transition to zero emission vehicles, a new collection system, not attached to fuel usage, will be required.

Håkon outlined some of the concepts to deliver this transition that are being considered in Europe. Ideally, the new system should not simply attempt to meet the revenue gap, but allow policy makers to address other issues associated with vehicles in our society such as congestion, road crashes and noise - as well as wear and tear on our roads. As he put it, *“A new system has to find a proper balance between math and political goals.”*



Infrastructure Victoria has previously released reports on [transport network pricing](#). Jonathan outlined the positives that a different way to pay for roads, public transport and parking can deliver, including reduced congestion on our roads and public transport, greater mode choice for Victorians and reducing the need to build new infrastructure by enabling better transport network management.

With IV recommending trials of congestion charging in Melbourne and the introduction of user pays charging, Håkon also said that trials and adjustments are needed along with collaboration between governments, operators, users and technology providers to design and implement a new and fairer system.

Prices can be set to manage the “where” and “when” you drive, rather than the “what” as research shows the highest external costs of vehicle use is in congested urban environments during peak hours, rather than suburban and regional areas or outside of peak periods.

To better understand the issues, Q-Free is working with the [Norwegian Public Roads Administration](#) (NPRA) on a trial in Trondheim, Norway. Volunteers will install an on-board unit that will allow a comparison between their costs under the current system versus any new system.

PLANNED PILOT WITH NPRA IN NORWAY



- 200 volunteers in Trondheim, Norway, will install a new on-board unit from QFR in their vehicle
- Vehicle tracking makes it possible to compare the cost for users in the new system with the old system
- Parameters can be tweaked to ensure sufficient fee collection and simultaneously meet political goals



The parameters of the new system can easily be changed to ensure the collection of sufficient funds, but also to meet policy goals.

The technology required to deliver a road pricing system that can collect sufficient revenue while also delivering policy goals is already available. While one approach is designed around live information on location being used to calculate in a central system (a so-called “thin” system), there are also systems that can make all the calculations on board (a “fat” system) for the more privacy conscious driver.

To help modify travel behaviour and ensure users are paying the relative cost of their travel, IV also made a series of recommendations around congestion based and off-peak tolls on metropolitan freeways and parking fees.

Additionally, they recommended reduced fares for on-road public transport options (tram and bus) as well as discounted off-peak fares for metro public transport (noting that much of regional public transport in Victoria already has reduced off-peak fares).

TRANSPORT NETWORK PRICING

Paying differently for roads, public transport and parking can:

- ✓ reduce road congestion and public transport crowding
- ✓ improve average speeds of up to about 25 per cent in inner Melbourne during the morning peak
- ✓ offer Victorians more choice in how they travel
- ✓ help get the most out of our transport network
- ✓ motivate people to change travel patterns.



Released March 2020

INFRASTRUCTURE
VICTORIA



Automated vehicle regulation in Australia.

Mandi also set out how the NTC is leading work in Australia on the [regulation of automated vehicles](#), with a safety assurance system to support the safe commercial deployment and operation of automated vehicles at all levels of automation already developed.

This program of work will ensure that Australia will be AV ready by 2026 with an end-to-end regulatory system that will assure safe operation of commercially available automated vehicles.

An [Automated Vehicle Readiness Review](#) is an immediate priority for the NTC, looking at the terms of community acceptance and all aspects of infrastructure, with the NTC working to develop road enforcement guidelines. A review of enforcement powers is underway across each of the state and territory jurisdictions, establishing how these would apply in an automated vehicle scenario.



Parting thoughts

Silje Troseth, Vice President of Asia Pacific and General Manager for Q-Free, concluded the webinar by noting that while a lot of the technology might already be available, conducting large scale trials will still be significant in ultimately determining success.

She said this was especially so when it comes to road user charging given the scope of the change and emphasised the importance of involving all stakeholders - including government, operators and technology providers.



EVENT OUTPUTS & NEXT STEPS

This Webinar is the first of a series that will set the scene for the transport reform discussion at the 2022 RA Transport Summit in Melbourne in May 2022.

An overview of the event and the broad themes addressed by each speaker was circulated via [RA's LinkedIn feed](#).

Anyone interested in more detail on the work that RA is undertaking in this area can contact



us via email: policy@roads.org.au.

