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**Submission of Taituarā**

**to the**

**Ministry for the Environment**

 **regarding**

***Te hau mārohi ki anamata: Transitioning to a low emissions and climate-resilient future***

**What is Taituarā?**

Taituarā thanks the Ministry for the Environment (the Ministry) for the opportunity to submit on Te hau mārohi ki animate: Transitioning to a low-emissions and climate-resilient future (the emissions plan).

Taituarā (formerly the NZ Society of Local Government Managers) is an incorporated society of approximately 930 members[[1]](#footnote-1) drawn from local government Chief Executives, senior managers, and council staff with significant policy or operational responsibilities. We are an apolitical organisation. Our contribution lies in our wealth of knowledge of the local government sector and of the technical, practical, and managerial implications of legislation.

Our vision is:

*Professional local government management, leading staff and enabling communities to shape their future.*

Our primary role is to help local authorities perform their roles and responsibilities as effectively and efficiently as possible. We have an interest in all aspects of the management of local authorities from the provision of advice to elected members, to the planning and delivery of services, to the less glamorous but equally important supporting activities such as election management and the collection of rates.

Climate change is a global issue, but the impacts are local.  Local authorities have an important role in readying communities for the impact of climate change, and helping the community adapt.  This goes beyond what might be termed the direct impacts (e.g. the need to move or protect the council’s own infrastructure) to the wider impacts on the community (for example the so-called managed retreat and conversations).

We are not experts in climate science so we will not enter the debate about the adequacy of the plan in meeting the emissions targets. We focus on the recommendations and their merits as public policy tools based our knowledge of the local government sector and local communities.

**Transport**

Taituarā generally agrees with the suite of recommendations that the Ministry has made. We have queries about the prioritisation afforded to each, and some questions about the importance of each in the overall suite.

***Road Pricing***

The draft recommends the *“enabling congestion pricing and investigate how we can use other pricing tools tp reduce transport emissions*”. We have long advocated for the use of road pricing. Done well road pricing can promote modal shift, either between high emission and lower emission vehicles and between the private car and other modes such as passenger transport. Of course, this is predicated on the availability of other options.

This recommendation is soundly based in the principles of orthodox economics which holds that when users of a service face the true costs of their demand, they demand only what they value. It is little different from the principles underpinning policy instruments such as the New Zealand Emissions Trading Scheme (NZETS).

The economist’s dream is 24/7 road pricing that uses transponder technology to set a price for road use that is based on time of day, type of vehicle, location (even down to the road traversed) and time of year. For example, a journey in Auckland at 8.30am during the so-called “March madness” period might cost more than a journey at 6am on Christmas Day. It is not just a case of transport emissions coming on/from the congested routes and at peak times – any vehicle is emitting GHGs at any time. This is the first best solution.

Taituarā considers that this recommendation lacks ambition, and should support enabling of pricing tools in general, not just further investigation. Road pricing and tolling have been on policy agendas since the original Land Transport Pricing Study undertaken a generation ago.[[2]](#footnote-2) We are aware of at least five published studies on road pricing in the last 20 years, not counting various consultations (such as *The Congestion Question*).

The technology to enable road pricing is available and has been tested and proven reliable for road pricing purposes (at least ion a city or regional basis) in overseas jurisdictions and as the basis for tolling on at least two of the three toll roads in this country. Research undertaken by D’Artagnan Consulting has concluded that “*Automatic Number Plate Recognition (ANPR) technology has lowered in cost and become much more reliable*”.[[3]](#footnote-3) Further, it notes that Global Navigation Satellite System (GNSS) technology has matured to the point where it is being trialled for use to administer time, location, and distance-based pricing in Singapore from 2020 and potentially in London soon after that.

We agree that the introduction of road pricing will raise very challenging policy questions. For example, at the present time it appears road pricing is only under serious consideration as a tool for managing demand in Auckland, but there is a case for introducing the tool elsewhere either on a limited basis or more generally.

We accept that true 24/7 road pricing will have and is intended to have a major impact on the microeconomy of road transport, and through that, impacts on modal choice and land use (both urban and rural).It is time to remove this policy ‘blockage’ and bring this work to a conclusion.

There are interim steps that can be taken.One is in road tolling. There are three toll roads in operation in New Zealand: the Northern Gateway Toll Road north of Auckland, and the Tauranga Eastern Link Toll Road and the Takitimu Drive Toll Road, both in Tauranga. Historic use of tolling has been confined almost exclusively for bridges and has been characterised by political interference.[[4]](#footnote-4)

Section 46 of the Land Transport Management Act 2003 provides for road-tolling schemes on issuance of an order-in-council by the Governor-General (on the recommendation of the Minister of Transport). This means that road-controlling authorities can only toll a road if central government agrees to the proposal to toll.

The Minister is expressly authorised to decline proposals, amend proposals, or place any condition on a proposal – as the Minister sees fit. Tolling is only permitted on new roads – and is expressly prohibited in most other circumstances.[[5]](#footnote-5) For example, a local authority could not toll to fund an increased level of service, such as a capacity extension, on an existing road. And last, but by no means least the Minister must be satisfied there is a feasible alternate route to the tolled road.

This is a stringent set of criteria to meet, coming on top of public consultation. It is no surprise that no local authority has ever managed to complete the process. Given that these schemes can easily become politicised even after operating for some years they can be a fiscal risk.

Tolling of new and existing roads could be a useful intermediate step to full road pricing as both a revenue raising tool and a demand management tool. The main barrier to tolling an existing road is public acceptance – concerns that the road user has “already paid for the road” do not recognise either the full-life cycle of the roading asset or the full economic costs of road use. A 2018 Review of International Road Pricing Schemes, Previous Reports and Technologies undertaken for the Ministry of Transport concluded that clarity on use of revenues is critical to public acceptance. [[6]](#footnote-6) A publicly accepted plan will overcome many of the public objections to tolling.

Even with road pricing some variants of tolling might be worth retaining. For example, cordon-tolling of the form used in cities such as London might be a better option in cities with only a limited number of access routes (such as Wellington).

The legislative amendments are not complicated (it appears to be an amendment to a small number of legislative provisions). As with road pricing, all that is required is the decision to proceed.

The soundest of economic theories can be undone in practice, and road pricing is no different. For road pricing to produce the modal shifts necessary to meet demand management objectives, viable alternatives to private motor vehicle must exist. This includes initiatives such as passenger transport (which need not only be passenger rail!), cycle and walking facilities, and more laterally such as teleworking (in the very long run distributed manufacturing such as 3-d printing/scanning of some items may add further to this).

We welcome the recent recommendations of the Climate Change Commission that the Government provides local government with greater support to reduce communities’ reliance on cars (including through legislation, removing regulatory barriers, and providing increased and targeted funding), and works with local government to set targets and implement plans to substantially increase walking, cycling, public transport and shared transport by the end of 2022.

The introduction of road pricing etc, raises potential issues regarding equality of access for the low income and the potential to exacerbate transport disadvantage. It also underscores the need to have alternative modes of transport in place to coincide with these measures. We therefore welcome the Climate Change Commission’s recent suggestions around the Government increasing its share of funding dedicated to active and public transport infrastructure and changing the cost recovery model for public transport (which currently requires 50 percent of costs to be recovered through fares) to allow public transport fares to be reduced.

We recently submitted to both the Climate Change Commission (on its draft advice) and the Infrastructure Commission in favour of a transition plan. That plan needs to set out the path to the implementation of road pricing, including a plan for developing or extending alternatives to roading. It also needs to take steps to ensure that the appropriate legislative and regulatory protections are in place (for example economic regulation or other consumer protection, and appropriate protection of privacy). And appropriate protections for transport-disadvantaged communities are a ‘must have’ from an early point in the process.

**Recommendations: Road Pricing**

1. **That New Zealand commence the move to road pricing as soon as practicable.**
2. **That the Land Transport Management Act be amended *as soon as practicable* to empower road-tolling on any road.**
3. **That any transition plan to road pricing include a specific ‘go-live’ date and plans for the provision of alternatives to private road use.**
4. **That the transition plan include explicit consideration of equity of access for the transport-disadvantaged.**

***The Clean Vehicle Discount***

Earlier in the year the Government announced it would introduce a substantial ‘feebate’ for electric and hybrid vehicles. We support this decision.

The Climate Change Commission has also recommended that the Government adopt a policy that supports EV leasing, purchasing, and sharing schemes to improve equitable access, particularly for Iwi/Māori, those with low incomes and vulnerable communities. We agree with these recommendations.

A there is also the potential for central government to extend the discount to other clean transport for example e-bikes. It appears the cheaper to mid range options cost between $800 - $1500, which is a significant outlay for someone on the minimum or living wage. Central government might include a feebate element or even consider some form of micro-finance scheme to cover loans for purchase of an e-bike and to be recovered from the tax system.

**Recommendation: Clean Vehicle Discounts**

1. **That a feebate or microloan scheme be developed to support take-up of electric bikes.**

***Tax Treatment of Low Emissions Vehicles***

The draft plan recommends that the Government investigate the potential for use of the tax system to avoid disadvantaging low emissions transport. We concur and have previously suggested there are four areas that could be further considered.

The first, and most obvious is the taxation of automotive energy (i.e. petrol and diesel at present). The economics behind this are simple and compelling, increase the cost of one form of road use, leads to modal shifts at the margin. Increases in passenger transport patronage during the last spike in petrol prices is a good example. This might also be a transitional ‘proxy’ for road pricing – although incentives may be blunted by improvements in fuel efficiency.

Of course, the primary barrier to implementing a further increase in fuel tax is a political one. The incumbent Prime Minister has ruled out increases in fuel tax in the tenure of the current government. That makes taxation of automotive energy an option for the medium term.

The second is the tariff. Our limited investigation suggests that tariffs apply to all motor vehicles whether driven by the combustion engine or not, and that any discrimination applies to the country of origin (that is countries with free trade agreements may be partially or wholly exempt). Our research suggests the main manufacturers of EVs are in Japan, the United States, Germany, and Italy, where as far as we know no such agreements are in place.

There is no local assembly industry to speak of, eliminating one of the main arguments for tariff protection. It appears that a review of tariff policy is one such opportunity with relatively little negative distortionary impacts on the wider economy.

A third option is to amend the rates of GST to provide a favourable differential for low emissions vehicles. GST is a tax that is (bluntly) set for revenue generation purposes alone. One of the big factors in the success of GST as a tax is its broad base. Reducing the rate of GST on low emissions vehicles (or zero rating) might offer a substantial reduction in the upfront cost, but raises equivalence or boundary issues (for example, could GST on bus/rail fares, bicycles, or even athletic shoes be reduced). It would also set a precedent for using differential rates of GST for other objectives e.g., removal of GST on fresh fruit and vegetables to support healthy eating. Our sense is that the implications of such a change would be too broad reaching for any government to pursue.

A fourth, but very much a second-best option, would be to amend the rates of fringe benefit tax to a lower rate of tax for EVs than say applies to that for those driven by the combustion engine. We say it is second best because the impact will be far smaller on an individual vehicle; only where firms are replacing vehicle fleets is a change likely to provide much of an incentive.

**Recommendations: Taxation of Low Emissions Vehicles**

**6. That the plan recommend an increase in the price of higher emissions forms of automotive energy.**

**7. That the plan recommend priority be given to further work on the removal of tariffs on low emissions vehicles.**

***Passenger Transport Fares***

The draft plan recommends “considering options that reduce passenger transport fares” citing a recent pilot that reducing passenger transport fares for community service card holders in Auckland as an example.

One of the key pieces of information that policy-makers have to consider when developing subsidy schemes with demand objectives is the likely responsiveness of demand to price (price elasticity of demand or ἐ). A low ἐ suggests that a change in fares would not stimulate much of a change in demand.

We have searched but have been unable any recent studies attempting to estimate ἐ in New Zealand. The last study we can find (by the former Transfund) cites evidence dating from 1990 suggesting elasticities of around -0.4 (that is a fare reduction of 10 percent would increase travel 4 percent).[[7]](#footnote-7) The last study we can find anywhere refers to the so-called *Simpson-Curtin* rule that is a 3 percent reduction in fares necessary to boost demand 1 percent. Also estimates based an average of -0.43 for off-peak fares and -0.23 for peak fares.[[8]](#footnote-8)

In short, use of public transport is not that responsive to price. This result is probably what readers would have expected. Price on its own is but one factor, the convenience of public and private transport (route design, service frequency, availability of early morning and night services etc) are also a factor.

A substantial shift in price would be needed to generate the modal shifts discussed in the draft plan. Set against that, we have no recent evidence to go on and what evidence there is suggests that fare reductions of perhaps 50 percent or more would be required.

Discussion of the Auckland pilot in the draft does not mention any evaluation having been done of the demand effect. That would seem to be critical to determining how far to take this recommendation (especially as Community Service Card holders may be overrepresented in off-peak travel).

In short, while some reduction in fares may help, the degree of impact needs to balanced against other initiatives such as improvements in the frequency of passenger transport services, and initiative that increase the cost of using private transport.

**Recommendations: Passenger Transport Fares**

**That the Ministry of Transport and NZTA:**

**8. complete an evaluation of the Auckland fare reduction pilot programme**

**9. commission research to fill the evidence gap regarding the price elasticity of demand for passenger transport services.**

***Hyper-Local Hubs***

We agree that support for teleworking is an option worthy of further pursuit in the policy context. Of course there is a tradeoff between the emissions ‘lost’ from reduced transport and higher emissions depending on forms of home heating (and over time these would be reduced as we transition to cleaner heat). Working from home is socially isolating.

There is an opportunity here for local authorities to create or encourage networks of community hubs and hyper-local micro hubs for shared and communal working. This would support changing away from current high emissions patterns of commuting from suburbs to city centres, build social connections and strengthen communities. Creating this infrastructure would ideally be supported by increased funding from central government.

**Recommendations: Hyper local hubs**

**10. That the Ministry and the Ministry of Transport conduct an analysis of the net benefit to emissions reduction form working from home including community hubs and hyper-local hubs for shared and communal working.**

**11. That contingent, on the results of recommendation 10, the Government develop a regime for assistance for establishing community and hyper-local hubs.**

***Behavioural Insights***

Behavioural insights can be used to help people make decisions that are in their long-term interests and that overcome the inertia of their habits. individuals with incentives to behave in the desired manner might involve finding incentives that are easy, attractive, and social; the literature often adds a fourth around timeliness.

The single largest insight out of this literature is something of a blinding flash of the obvious: the easier you make use of low-emissions transport (or the more barriers placed in the use of higher emission options), the more likely they are to be adopted. That points to the need to further develop passenger transport networks – increased frequency meaning increased convenience and take-up, likewise, paying more attention to route design etc.

A second high level insight is to work on making low-emission options attractive. This should start with communicating positive and descriptive visions of a low-carbon future and the role that the land transport system would play in getting us there. While decision drivers such as altruism are real, people tend to respond more when their choices support a wider goal than just being asked to make a sacrifice. To be honest we do not have a sense of an all of government vision of this nature – though we do consider the draft discussion of the transport sector role is helpful (though a little Ministry-focussed in places). The Climate Change Commission’s recommendations around a central and local government plan for the role of public transport, shared transport and active transport might help in this regard.

We are aware of several overseas initiatives that have a behavioural economics underpinning. For example:

* Singapore has ‘gamified’ public transport and off-peak travel through its so-called Travel Smart programme. Passengers earn points each time they travel on the train and can earn extra points if they travel off-peak. It seems analogous to the loyalty schemes retail, accommodation, and travel providers might use
* extend the EECA scheme where people were given the opportunity to test drive an EV both in terms of the number of ‘places’
* making parking harder in identified locations (such as central business districts) by, for example, introducing an app and requiring people to register and get permits by app (regardless of whether parking is free or not)
* supporting active transport (walking, jogging, cycling) by requiring all new office accommodation etc to provide shower facilities (that can accommodate all genders) and providing more facilities such as bike parks
* supporting collective consumption options (for example, some campuses in the Untied States have experimented with so-called ‘van pool’ options)
* making wider use of high occupancy vehicle lanes (and better enforcing them).

The draft could incorporate more recommendations, perhaps drawing on insights from the DPMC behavioural insights unit, its own internal capability, the public policy consultancies (both Martin Jenkins and Motu have published papers in the area), and (possibly) Auckland Council (which has its own capability).

**Recommendation: Behavioural Insights**

**12. That the Ministry of Transport expand its policy agenda on the use of behavioural insights.**

**Investment Decision-Making**

*“The first rule of government spending: don’t fund what you don’t want more of.”*

Richard Prebble

*I’ve Been Thinking*

Taituarā notes that the draft recommends no new policies regarding funding and financing. This was something of a surprise to us given the troika of Commissions (Climate Change, Infrastructure and the Productivity Commission) each note the importance of investment decision avoiding the ‘lock-in of future’ emissions. It was in that sprit, that Taituarā supported the Climate Change Commisision’s Time Critical Action 6: Align Investments to Climate Outcomes.

Recommendation 6a calls for the publication of long-term abatement cost values based its analysis of likely real carbon prices. We agree adding that the abatement values will need regular review if they are to send the right signals for investment. Local authorities are currently planning on a triennial cycle which suggests a minimum review frequency of once every three years (though once every year would be preferable)

Elsewhere we nave noted the Infrastructure Commission is also statutorily bound to consider climate change as it provides advice to the Government on infrastructure projects. Abatement values must be factored into the business cases developed by Crown and local government agencies that are making significant capital investments: the New Zealand Transport Agency, education, health, and most, but not all local government entities.

Having said that, Taituarā notes that this is a complex requirement and that the Infrastructure Commission could usefully publish a framework, approach etc setting out how it plans to incorporate climate change into its framework. That would be a useful exemplar for other investment agencies to follow. The Infrastructure Commission might also usefully consider how it could work with others to disseminate its approach – perhaps in partnership with agencies like Skills and the local government sector agencies.

We are not quite as pessimistic as the draft plan about opportunities to mobilise private finance. There are substantial pools of capital available in the New Zealand Superannuation Fund and the three ‘default’ Kiwisaver funds. While there are not venture capital funds in that the risk appetite of the investors is somewhat lower, there is a case to be that some climate investments could stack up. We think there is a case for strengthening financial disclosures introduced in 2020 to require entities to report on the investments they make to activities that support mitigation or adaptation (the 2020 Act is more on the other side.

**Recommendations: Investment and Decision-Making**

**13. That the Ministry cause the publication and regular review of long-term abatement values based on the price of carbon**

**14. That the Ministry and the Infrastructure Commission develop or procure training to support agencies with the incorporation of abatement values into their investment and decision-making frameworks.**

**15. That the Ministry investigate strengthening those aspects of the 2020 financial disclosures with the intent of requiring better reporting on investments in activity intended to mitigate or adapt to climate change, especially emission reduction.**

**Land Use Planning**

The draft plan notes “integrating land use, urban development and transport planning and investments to reduce transport emissions” as an item of additional policy (page 15). Of course, the integration of land use and transport planning is currently being pursued through the RMA reforms lead by – the Ministry, and in particular the development of the so-called regional spatial strategies.

The integration of transport and land use is a feature of the Auckland spatial plan first legislated for in 2009. Integration is also one of the objectives of infrastructure strategies under the Local Government Act 2002, as legislated in 2014.

This is not to say that we oppose the recommendation, quite the opposite in fact, but that integrated planning has been ‘on the drawing board’ for some time. We are participating in the development of the new Strategic Planning Act and have some concerns about the effectiveness of the plans in their current form at meeting the desired objectives – including emission reduction.

The first is that the scope of strategic plans should focus on building communities and therefore needs to bring in the widest range of partners. This includes iwi utility providers, NGOs and, yes, central government. Central government needs to bring social infrastructure into the planning process. For example, that spatial planning needs to bring in the planning and location of future state-funded educational institutions (particularly the school network) and healthcare (hospitals and other specialist care where applicable). This means communities can be designed with an eye on all of the needs that make for a successful community as housing etc is being built. This would better enable the design of transport systems (particularly) in ways that would better support emission reduction objectives (among others).

At this point its also unclear what degree of follow through into implementation and (especially) funding is likely. For example, we’re not aware just what the Government intends be the degree of ‘bind’ on other plans and strategies, only that its not likely to be much stronger than ‘have regard to’.

There is a degree of sector expectation that funding should follow strategies. That is to say that the partners involved in identifying the objectives and designing the strategic plans should be prepared to support the achievement of the plans beyond their adoption.

**Recommendations: Land use planning**

**16. That the scope of regional spatial strategies be extended to include social infrastructure provided by central government.**

**17. That the Ministry consider the intended degree of ‘bind’ that the strategies have on implementation and funding decisions.**

**Energy**

**Assistance for Energy Efficient Purchases**

We have one comment about the energy proposals. There is a case for targeted financial support to those disproportionately affected by the transition to low emissions energy to assist with the upfront costs of investing in energy efficient technologies.

Local authorities with assistance from Government agencies (particularly the Energy Efficiency and Conservation Authority) spent some time and energy developing a tool that has aided in the past.

The tool is known as a *voluntary targeted rate*, and essentially involves the local authority advancing the ratepayer a loan for a dedicated purpose and the ratepayer repays the principal and interest through the rating system. Variants of these schemes have been used be ratepayers wishing to install clean heating methods, energy efficient water heating, solar panels and the like. As an aside they also have potential applications as wide as supporting earthquake strengthening and providing incentives to detect and fix leaks.

However, there is a legislative barrier to local authorities providing or continuing to provide these schemes. A voluntary targeted rate is consumer credit for the purposes of the Consumer Credit and Customer Finance Act 2003 (CCCFA), placing local authorities under the same obligations as a financial institution, payday loan provider or pawnbroker.

Much of the Act is commonsense and not of concern e.g. requirements to disclose interest rates in advance etc. Some of the other requirements were obviously designed for models of corporate governance of a ‘for profit’ entity. For example, from 1 October this year, any entity providing consumer credit must get all directors of the entity (i.e. Mayor and all councillors) and key management certified as a fit and proper person. Elected members are chosen by the community, and not necessarily for skills as a director. And where 5-7 might be a normal board size for a corporate local authorities might need to certify, at a minimum 12 people and up to 30.

We understand this legislation exists to protect the public. But local government (and central government) are not for profit, which should reduce any concerns about unduly oppressive or usurious terms of credit. As a high profile public sector entity, a local authority’s practices or financial management are open to a level of public scrutiny not afforded to other bodies corporate. And let’s not forget that in many small-medium sized communities, local authority members and senior staff are resident, highly accessible and highly visible to the gene

We note many of the CCCFA provisions are sensible, and should apply to any credit provider But the Commission’s recommendations would be better supported by a regime that is fit for purpose for credit offered by central and local government providers. This could be as simple as exemptions from some requirements – indeed some already exist. We would be happy to elaborate on further requirements that make no sense in a public sector context.

**Recommendations: Consumer credit legislation**

**18. That the Ministry of Business, Innovation and Employment review the application of the Consumer Credit and Customer Finance Act 2003 to public sector entities.**

**Procurement**

**C**entral government agencies must adhere to the Government Procurement Charter including a requirement that agencies

*“UNDERTAKE INITIATIVES TO CONTRIBUTE TO A LOW EMISSIONS ECONOMY AND PROMOTE GREATER ENVIRONMENTAL RESPONSIBILITY ȓ Ensure that economic and social development can be implemented on a sustainable bas[[9]](#footnote-9)is with respect for the protection and preservation of the environment, reducing waste, carbon emissions and pollution.”*

Further, rule 20 of that same charter requires the Crown and its agencies to:

* support the procurement of low-waste and low-emissions goods and services and encourage innovation to significantly reduce emissions and waste impacts from goods and services
* have regard to guidance published by MBIE on the procurement of low-waste and low-emissions goods and services and
* conduct sufficient monitoring of designated contracts to ensure that commitments made in contracts are delivered and reported on.

There is no requirement on local authorities to meet these obligations, though they are encouraged to, and many do meet most of the requirements.

Our observation is that more could be done to assist public sector agencies to implement this obligation. We are advised that some of the so-called all of government contracts include recognition, and we are aware that the MBIE website also links to advice on measuring emissions. Beyond this we have been unable to locate much further.

Our (admittedly brief) scan of a limited sample of the overseas literature reveals some common themes around procuring for climate change/emissions reduction outcomes:

* moving from least cost on acquisition to whole of life costs – though there are strong aspects of this in the rules and in local government practice though guidance on emissions factors appears weak
* moving to more strategic approaches to budgeting
* establishing multidisciplinary teams to establish whether a particular market can meet climate change outcomes, assess proposals, develop an RFP etc
* examination of existing barriers such as regulatory standards.

**Recommendations: Procurement**

1. **That the plan recommend MBIE develop resources to assist public sector agencies implement rules supporting the low-waste, low emissions good and services.**

**Individual Choice**

We agree with discussion about the need for tools to enable firms andhouseholds to better identify ‘their’ contribution to New Zealand’s emissions profile. We are aware of at least one local authority that has developed a tool that better enables individuals to assess the impact of their choices.

Auckland Council entered this Future Fit tool in the 2021 Taituarā LGFA Local Government Excellence Awards. To quote from their entry:

*“[FutureFit](https://www.youtube.com/watch?v=AeUFlLaLFVg" \t "_blank) is Aotearoa’s first gamified carbon footprint tool. It guides New Zealanders to make choices that help lighten their impact on papatūānuku, while demonstrating the power of collective action. After answering a set lifestyle questions, individuals can view and understand their personal carbon footprint, helping them to take ownership of their personal contribution to climate change. They can compare their footprint to the New Zealand and world average, and see where we need to be. Individuals can then choose from a range of personalised actions, empowering them to reduce their footprint in a fun and compelling way by creating goals, setting reminders, joining teams, competing on leader boards, challenging friends and whānau, and earning badges.*

*FutureFit was developed in partnership with Wellington City Council, and is underpinned by scientific evidence-based research to determine the materially significant behaviours that are personally relevant to Aucklanders. Local expertise from national government agencies such as Statistics New Zealand consumption emissions data  and MOTU’s carbon calculation methodology, is combined with behavioural insights and personal data to recommend tailored actions and their associated carbon savings. FutureFit combines collective action, personal achievement, and friendly competition to make climate action a little easier and a lot more fun.”*

This is far from the only the tool, though it is fit for the New Zealand context and is being picked up by other local authorities.

**Skills**

Taituara concurs that two of the key steps towards an equitable transition include *“promoting business and job opportunities in low-emissions sectors*” and *“supporting workers, households and communities to understand, plan and manage the transition”* (page 14).

But a necessary condition for both is to ensure that there is an available supply of labour with the skills necessary to fill the needs of employers working in the so-called ‘green economy’. The plan seems light on this aspect of the transition – which may be the most important aspect of them all – as the Government noted in its response to the Productivity Commission response *Towards a Low Emissions Economy*. Without these skills the drive in investment in science and technology signalled throughout the plan is unlikely to materialise.

It’s important to focus on skills beyond the purely vocational skills to include what might be termed life and personal skills. In situations where people might face sudden employment or life change a heightened personal resilience is also likely (for example communications, problem-solving, the ability to make realistic plans etc). The focus should be on learning skills not only on workforce skills.

**Recommendation: Skills**

1. **That the Climate Change departments jointly develop a strategy for identifying and filling the needs of the green economy.**

1. As of 30 September 2021 [↑](#footnote-ref-1)
2. One of the four volumes in the study, *Environmental Externalities*, specifcially recognised and attempted to cost the environmental impacts of road use. The discussion showss that an analytical framework already exists to provide some basis for further debate. [↑](#footnote-ref-2)
3. D’Artganan Consulting (2018), page 99. [↑](#footnote-ref-3)
4. For example, the toll on Tauranga Harbour Bridge was removed as part of negotiations following the 2005 general election as the one of the conditions of a confidence and supply agreement . [↑](#footnote-ref-4)
5. Section 46 of the Land Transport Management Act allows tolling of an existing road only where the Minister is satisfied that the existing road or part is located near, and is physically or operationally integral to, the new road in respect of which the tolling revenue will be applied. [↑](#footnote-ref-5)
6. D’Artganan Consulting (2018), *Review of International Road Pricing Schemes, Previous Reports and Technologies – review undertaken for the Ministry of Transport,* page 131. [↑](#footnote-ref-6)
7. See <https://www.nzta.govt.nz/assets/resources/research/reports/248/248-Review-of-passenger-transport-demand-elasticities.pdf> [↑](#footnote-ref-7)
8. Litman (2020), Transit Price Elasticities and Cross-Elasticities report for the Victoria Transport Policy Institute available at <https://www.vtpi.org/tranelas.pdf> , last retrieved on 29 October 2021. [↑](#footnote-ref-8)
9. Ministry of Business, Innovation and Employment, Government Procurement rules, downloaded from <https://www.procurement.govt.nz/procurement/principles-charter-and-rules/government-procurement-charter/> on 22 February 2021. [↑](#footnote-ref-9)