Appendix D: Transport Direct Summary Paper and Data Appendices

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To: Corporate Leadership Team

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Subject: CLT "check and challenge" Transition 1 Transport Direct,

BGCBC Decarbonisation Plan

1.Purpose of this report

The purpose of this report is to update CLT on the progress on the readiness assessment work relating to the Transport Direct transition overseen by the Decarbonisation Board and to provide CLT with a "check and challenge" opportunity on the proposed high level actions agreed by the Board at its meeting on 1 July 2021.

2.The Assessment Process

The readiness assessment on Transport Direct was collaboratively produced in accordance with a methodology agreed by the Decarbonisation Board. Its aim is to identify the main steps BGCBC needs to take to achieve Net Zero in this transition and how ready the organisation is to take these actions. Transport Direct is one of nine transitions identified in our Decarbonisation Plan 2020-2030 and makes up 8% of our gross carbon emissions.

Transport Direct includes all emissions associated with our fleet (energy use and manufacture), and all energy use from other journeys undertaken by BGCBC staff in their own vehicles, both as part of their job role and travelling to work. It does not include travel by other organisations delivering services on our behalf, travel associated with deliveries to or from us, or transport services we commission others to provide on our behalf, e.g. buses.

The below schematic shows the relative carbon emissions produced by each transition (the other two transitions, Transition 3 Sequestration and Transition 9 Waste produce negative emissions).



Further assessments on the remaining transitions will follow. Planning is already underway to undertake assessments on transitions related to buildings: Electricity, Heating and Procurement (Works). These collectively make up approximately 22% of our gross carbon emissions. Subject to availability of stakeholders, it is hoped we will be able to report the findings of this work in September 2021.

3.Involvement

Key stakeholders from a range of Directorates were requested to be involved in the creation of this readiness assessment though online workshops facilitated by the Policy and Partnership Team. Without their involvement this assessment would not have been possible and they have brought valuable knowledge on what is currently happening and planned and important insight into how certain challenges might be overcome.

<u>4. Findings</u>

Participants in the workshops were provided with data about the main emissions sources within the Transport Direct transition (See Appendix 1). The assessment identified 12 key long-term transition actions that we will need to take to reach Net Zero. The difficult level of each of these actions was assessed as one of the three following difficulty levels:

Low Difficulty	Actions that are technically feasible and could be undertaken using existing, or limited additional, resources.
Medium Difficulty	Actions that are technically feasible but will require significant additional resources.
High Difficulty	Actions where best alternative is not yet known and/or not yet technically possible.

These difficulty levels were based on discussions of our organisational readiness across five categories: (i) technical, (ii) policy, (iii) financial, (iv) workforce and (v) delivery readiness. (See Appendix 2 for full details).

The diagram below summarises the findings of the Readiness Assessment. The blue boxes on the top line show the proportion of emissions that come from each of the four main emission sources in the transition. For most of these emission sources the next line shows a secondary breakdown of where these emissions come from. For example, 5% of the emissions in the transition come from business travel, of those business travel emissions 61% come from travel by social services staff. (The break down for staff commute should be available shortly)

The 12 key transition actions that we will need to take to achieve Net Zero are in the pink boxes, which also include the difficulty level identified for each action. The blue arrows indicate which emissions source the action addresses and the order in which the actions reduce these emissions. Yellow arrows show interrelationships between actions. Continuing the previous example, the first action to reduce emissions from business travel is grey fleet alternatives to the use of personal vehicles, where this in not a suitable solution, then promoting staff uptake of personal ULEV vehicles is the next action. Both of these actions will also rely on charging infrastructure for small vehicles being provided.



These actions provide a long-term view of what we need to do to reach Net Zero, the readiness assessment workshops also considered what actions we could take now to continue and accelerate this transition. The next section details these actions.

5. Refined high level actions

These recommended "high level actions" have been drawn from detailed work initiated and considered by the Board. Further more detailed information on this work is available from the policy and performance team and will be of value to leads expected to develop the detailed work plans that will sit under the below high level actions.

5.1 Fleet

- Develop a fleet plan and resource its implementation by building costs into Corporate Medium Term Financial Plan. (Lead: Community Services)
- Develop and resource a low carbon depot. (Lead: Community Services)
- Ensure procurement arrangements are in place to support the plan. This needs to recognise the inter-dependant work on the new depot and collaborative opportunities at a regional and national level. (Lead: Commercial Services)
- Replace small fleet ULEV in phased way in line with available space, grid capacity and infrastructure. (Lead: Community Services)

5.2 Travel

- Embed the new operating model and assess its impact in terms of decarbonisation. (Lead: Commercial Services)
- Consider how to further reduce commute / travel impact in wider areas of the business e.g. Schools and Social Services. (Lead: Commercial Services)
- Investigate and identify staff demand to travel more actively and consider business case to meet this demand e.g. showers at main sites, secure shower facilities, safe storage and e-charging for cycles. (Lead: Community Services – Active Travel)
- Develop a plan for non-depot charging infrastructure for fleet and personal ULEV vehicles at key staff sites in the new operating model. (Lead: Regeneration)
- Explore how staff can be encouraged to switch to ULEV. (Lead: Commercial Services)

6. Recommendations

- 1. Consider Check/Challenge the high level actions;
- 2. Confirm Lead Services and ensure actions are embedded into Business Plans and work programmes;

Appendix 1: Transition 1 – Transport Direct Data

There are four main sources of emissions in this transition identified in the plan:

Transitions Breakdown				
	16-17	17-18	18-19	19-20
Transition 1 - Transport Direct				
1. Fuel Use by Fleet Vehicles	1,057	1,105	1,039	987
2. Fuel Use in Employee Commute			2,200	2,005
3. Fuel Use in Employee Business Travel			294	279
4. Emissions from Manufacture of Fleet				
Vehicles			2,697	2,329
Transition 1 Total			6,230	5,600



1. Fuel Use by Fleet Vehicles

Refuse vehicles make up over half of fleet fuel emissions, and large fleet vehicles contribute 72% of these emissions.



Fleet	Fleet Size	Annual Mileage	CO2e footprint (tonnes)	Total energy kWh (gross)
RCV – Refuse	26	219,809	403.7	1,630,100
HCV - Other	15	63,617	82.3	332,200
Minibus	12	105,300	75.7	305,800
LCV Large	38	194,381	131.7	531,900
LCV Medium	12	77,198	30.8	124,400
Plant	5	27,442	47.3	191,100
Grey Fleet	959	1,202,402	319.1	1,324,600
Total	1,067	1,890,148	1,091	4,440,100

2. Fuel Use in Employee Commute

Nearly half of commuting mileage is associated with travel to education buildings, the potential for home working for education staff may well be lower.

Work Base (2019/20)	Estimate distance travelled per year - round trip to work miles	Yearly Carbon Footprint - metric tons of C02e
Non Educational	4,631,868	1,050
Educational	4,605,510	1,044

Travel to 11 work bases accounted for 62% of all commuting miles pre-Covid. These buildings may be priorities for EV and other transport infrastructure improvements. Closing the Civic Centre will have a large impact on these calculations. With this closure four of the top six commuting locations are secondary schools.

Work Base (2019/20)	Estimate distance travelled per year - round trip to work miles	Yearly Carbon Footprint - metric tons of C02e
Civic Centre	1,263,564	287
Anvil Court	1,110,802	252

Work Base (2019/20)	Estimate distance travelled per year - round trip to work miles	Yearly Carbon Footprint - metric tons of C02e
Ebbw Fawr Learning Community	665,929	151
Brynmawr Foundation School	452,088	103
Central Depot	435,792	99
Tredegar Comprehensive School	348,907	79
Abertillery Secondary Campus	328,720	75
Pen-y-Cwm Special School	301,781	68
Blaina ICC	299,632	68
The River Centre 3-16 Learning		
Community	291,195	66
Ebbw Vale Family Resource Centre	247,642	56

fearly Carbon Footprint - metric tons of CU2e by Work Base (2019/20)



3. Fuel Use in Employee Business Travel



Table 6-1: Departmental grey fleet mileage claims

Department	Mileage	%	Cost
Social Services	725,974	60.4%	£326,688
Regeneration & Community Services	262,571	21.8%	£117,568
Education	131,714	11.0%	£59,271
Corporate Services	82,012	6.8%	£36,905
Unknown	131	0.0%	£59
Total	1,202,402		£540,492

As is often the case in local authorities the department that is responsible for most of the mileage claimed is Social Services.

The three largest work bases account for 55% of all business miles claimed. These figures will also inform calculation of EV infrastructure demand. Again the closure of the Civic Centre will have a significant effect.

Location	Social Services	Regeneration & Community Sservice	Education	Corporate Services	Site total
Anvil Court	266.2		25.2	15.8	307.2
Civic Centre		204.9		50.7	255.6
EVFRC	104.9				104.9
Department Total	371.1	204.9	25.27	66.5	667.7

Table 6-3: Mileage at the top three sites by department (mileage in thousands)

4. Emissions from Manufacture of Fleet Vehicles

These figures are calculated on the basis of annual spend on vehicle purchase and hire. No further breakdown of these figures is currently available. In addition, information about the embodied emissions of specific types of vehicle is not widely available at the moment, so these figures have a wider margin for error than the other emissions sources. We also have less control over these types of procurement emissions.

Note on data. The data used in this section is drawn from a number of different sources and is for several recent years. For this reason, not all figures across different graphs match. It is the best available data, and is sufficient for assessing the relative importance of different elements of the transition.

Appendix 2 Transition 1 – Transport Direct Readiness

Readiness Categories

	Technical Readiness	Are the technologies/behaviours needed to reduce carbon emissions/energy use available and ready to deploy now?
	Policy Readiness	Are the policies/plans needed to support delivery in place now? Both within Blaenau Gwent Council and in the wider regional and national policy context?
£	Financial Readiness	Are the funds available, are there investable options with business models ready to be deployed? How do these fit with existing budgets and financial processes?
	Workforce Readiness	Do we have the support and buy-in of the workforce? Will they require support or skills development?
Þ	Delivery Readiness	Do we have the capacity, organisational structure and supply chains we need to deliver? How well do we understand where our emissions come from and can we measure reductions? Will changes be needed in how community uses our services?

Assessment of 12 Key Actions

1 Large Fleet Vehicles.

Technical Readiness	In many cases the low carbon alternatives are not available for many of the large vehicle types that we use to deliver services at moment. Even when vehicles are on the market there are issues about practical performance against actual performance; particularly in relation to (i) the use of auxiliary equipment that draws on power such as lifting and heating and (ii) the topography of BG, hill starts and climbs are a major power drain. There are examples of Local Authorities procuring vehicles that not been able to deliver service. Also need to consider when vehicles may become available. Some of the large fleet may need to be replaced before low carbon alternatives are on the market, or when costs are greater than available budget. Also rapid pace of change in market may mean that want to avoid being tied into purchasing fleet, when significantly better alternatives may be available within the vehicles working life time.

Financial Readiness	Large fleet models that are available are typically at least double the upfront costs. Even as ULEV prices drop, budgets will need to reflect that savings will come from lower running costs for fuel. Typically we have leased vehicles but WG funding has required purchase, leading to further up-front costs. Need to develop financial model for low carbon fleet.
Policy Readiness	Important to remember that vehicles only low carbon if power source is low carbon. This requires that charging infrastructure is supplied with green electricity, either generated by ourselves or via procurement. Will need to be changes to procurement policies to reflect new decarbonisation requirements (see 12 Procurement Fleet)
Delivery Readiness	ULEV vehicles will still need to provide departments with best vehicles to deliver services. Supporting infrastructure needs to be in place so new vehicles can deliver services. We need to learn from experience of other LAs who adopting ULEV large fleet. Need to understand vehicle charging needs and times so fleet can deliver services.
Workforce Readiness	Staff training required for use of alternative fuel vehicles.

2 Small Vehicles.

Difficultly Level: Medium

Technical Readiness	Greater availability of alternatives for small ULEV. Just begun with initial replacement of four small vans for highways inspections.
Financial Readiness	Welsh Government funding for initial vehicles only allow purchase which required departments to find additional budget. Even if purchase not always required and cost differentials not as great for larger vehicles, need to ensure that lower running costs are reflected in how set budgets and the balance between capital and revenue. Need to consider cradle to grave costs of vehicles, particularly if will be purchasing more vehicles and their potential resale value.
Policy Readiness	Decarbonisation need to be considered within tender process
Delivery Readiness	All LAs will have the same issues around fleet and work has been done at a Gwent level so we should work together to make the case for investment. Users need to understand the technology
Workforce Readiness	Training on vehicles for garage mechanics

3 Infrastructure for Large Vehicles. Fuelling (EV, hydrogen etc.) and other changes needed to Depot(s).

Difficultly Level: Medium (for BGCBC costs are high but technology exists), but High (for Grid Capacity that will be needed to supply energy which outside of our control)

Technical Readiness	Current Depot is restrictive, limited space, double parking etc. Will need to be space for all vehicles to park by charging points. New Depot would allow us to accommodate transition to fleet of EV's.
	New Depot will need to be a carbon neutral facility. In order to ensure that fleet running off renewable electricity will need both solar and storage battery capacity
	There is a wider issue of grid infrastructure that is needed - costs for installing could be an issue, also grid capacity is a significant issue. Heads of Valleys already running near capacity. This is larger issue than just BG, Western Power operates at larger scale covering number of other areas through same grid. Green Recovery Investment being explored for SE Wales including Rassau to address, available funding is £20million, but total costs could be £40-50 million.
	The space and cost implications of Hydrogen are even greater than electric . Hydrogen storage, production is difficult, costly and would need a lot of investment. Could BG achieve economically viable scale? Some investigation taking place for Hydrogen pipeline for Heads of Valleys.
Financial Readiness	New Depot is significant investment, additional upfront cost to ULEV fleet.
Policy Readiness	
Delivery Readiness	Current work ongoing to replace existing depot with new future proofed facility for all plant and equipment.
Workforce Readiness	

4. Infrastructure for Small Vehicles. Including for commuting and business travel as well as fleet, across all council estate including education.

Difficultly Level: Medium

Technical Readiness	There will be strain on local grid capacity from EV infrastructure at other council buildings. The local electric grid will need updating for all the demand, not just from BGCBC. Need to ensure that use of infrastructure is optimised, right type of connections, in right place, digital system/booking to ensure that charging points available when needed by users.
Financial Readiness	
Policy Readiness	Need to develop frameworks for procuring from companies who will be installing and running charging infrastructure.

	Where drawing on grid supply need to make sure that this is renewable electricity. This issue of additionality important link to Transition 7- Electricity
Delivery Readiness	Site-based assessments will need to be undertaken to consider potential demand (number of points required) and the implications of charging point installation upon access, parking availability etc. Parking on schools' sites is already limited.
	Unlike at Depot schools will not be able to generate all energy requirements via solar so more issues around ensuring that using renewable electricity. Accessible EV points around borough rather than at depot. Need to consider where and when vehicles will need to charge.
	EV Charge points have been installed throughout Gwent and Cardiff Capital Region are in the process of installing more charge points
	Large number of public bodies and other organisations in BG will be doing same transition. This will put additional strain on grid, but also opportunity to collaborate on procurement and share charging infrastructure.
Workforce Readiness	

5. Fleet Maintenance. New arrangements required for low carbon fleet.

Difficultly Level: Low

Technical Readiness	Adaptations needed to current workshop
Financial Readiness	
Policy Readiness	
Delivery Readiness	
Workforce Readiness	Upskill and train existing mechanics to maintain ULEV Fleet Collaboration with Coleg Gwent

6. Home and Agile Working. Identifying posts where possible and supporting.

Difficultly Level: Medium

Technical Readiness	Specialist skills and technology at community hubs to enable public access to services. Could have more video phone capacity with public facing services, including public accessing technology at community hub.
Financial Readiness	

Policy Readiness	Work currently on going in relation to role designations (Home / Agile / Service) further consultation required. Awaiting Approval of the Agile Working Policy due end of May. There are still a lot of unresolved questions about how different patterns of work in new model will work in practise, e.g. community roles. Reasonable adjustment is an important principle in considering the different forms of support and changes that may have to take place for individual staff members.
Delivery Readiness	 The ability to work from home or agilely varies significantly. The scoring of this action is based on realising home and agile working for those who this is identified as being a possibility for. A significant number of staff will not be able to save carbon in this way. The scale of emissions reduction from shift to home and agile working will not be clear until posts identified, and there will also still be variation from individual circumstances within role delegations. There are a large number of elements to this change. There may be other elements of service delivery that potentially conflict with these changes, e.g. Education Recovery Plan. Paper based systems in some areas like planning require office presence (Social services example of digital already being in place)
Workforce Readiness	There are substantial issues around wellbeing and health and safety that need to be worked through Not all people have the right equipment, chairs, tables, space reliable internet, extra heating and electric costs etc, and will be impacted differently by changes.

7. Technology Support for Home and Agile Working. Network capacity, hosting virtual meetings, support for specialist software and other service requirements.

Difficultly Level: Medium

Technical Readiness	Digital storage, switching to cloud instead of physical server. One system for council, could enhance file sharing.
	Key theme identified has been limitations of Pulse, looking to shift towards a VPN that will be more stable, secure and allow greater access.

	Looking at software and hardware needed at home for areas such as GIS, looking at this over all service areas. Currently a report going to DMT identifying where there are pinch points for users of specialist systems.
	Teams telephony to replace land lines, or corporate mobiles, headsets, use of personal device securely. Contact Centre to work with Teams telephony.
	Bring your own device policy. Could have significant carbon savings, but also issues around device performance and working hours.
	Mobile worker functionality, stop repeat visits to office, reduce printed instructions. Use of Always on VPN to improve accessibility of server on move. Could all reduce number of journeys into work base.
Financial Readiness	
Policy Readiness	Integrate carbon performance data into existing management/performance systems e.g. itrent.
Delivery Readiness	Home working will be extremely challenging for school staff. However, we can consider options as part of our Education recovery plan.
	What will be impact of community workbases? Can technology be used to provide greater digital access to range of services at community hubs? I.e. Members of public without digital access/skills at home can talk to range of services via tech at community hubs.
	The technology and infrastructure needed for home/agile working vary significantly with service needs. Is there programme to identify needs? Service and individual level?
Workforce Readiness	Need to recognise that there has been a significant element of making do in a crisis in the rapid transition to new digital arrangement for home working. Important that take time to make sure best arrangement are in place and upskill workforce. For example, Office 365 been rolled out largely during this period. Need to make sure that make full use of potential.

8. Promote Alternative forms of Travel. Encouraging shift to car sharing, public and active transport for commuting and business travel.

Technical Readiness	There has been significant shift in commute and work travel patterns, this reduced demand will effect availability of car shares and public transport more permanently.
	The specific topography of BG is relevant, especially to active travel, also issues around viability of public transport compared to other urban areas.

Financial Readiness	Cost associated with promotion of these alternatives are not part of current budgets
Policy Readiness	Need to consider incentives for staff who do choose active travel. For example, if want to cycle to work then should some of their changing time be part of paid work hours or rewarded in some other way?
	When providing facilities need to do assessments understand where demand is/will be. Educations/schools may be important given limited ability to homework.
	Currently very limited information about who this promotion might be targeted at, and how.
Delivery Readiness	The cycle to work scheme could assist here, however, we will need to be recognition of importance of infrastructure for active travel, such as security of bikes, most importantly showering facilities if going to travel into work this way. New Depot taking this into account for example.
	From a schools perspective, have traffic and travel assessments which we undertake when developing new sites to support engagement with staff around active travel, car sharing, parking and access requirements. These could be reviewed and adapted to capture the current context - but we will need to consider the timing of this, as currently, staff are discouraged from car sharing due to COVID-19
	Public transport could be a challenge for frontline staff that have specific start / end time of work. would need significantly improved public transport infrastructure.
Workforce Readiness	COVID has a significant impact on this transition. Not clear when and how be possible to make full use of public transport and lift shares.

9. Promoting Staff uptake of Personal ULEV vehicles.

Technical Readiness	Relatively short travel distances for BG staff mean that less issues with vehicle range limits, but also less potential for cost savings on energy use over time to offset initial purchase costs.
	Booking system optimisation to make charging available. Flags up availability, provide link to wider networks.
	Aware that housing stock in BG means that home charging may be more limited. We have started to see residential charging points installed, renewing charging points at Works, City Deal playing role. At early stage in terms of low total capacity, but are seeing good usage. However, charging costs will be higher than home charging.

	Also issue of additionality, i.e. whether staff using green energy to charge vehicle.
Financial Readiness	Electric vehicles are much more expensive to purchase than conventional, and limited second hand market at moment. Provide incentive scheme for staff to purchase EV, but any loans must not be too expensive to pay back.
Policy Readiness	Need to consider financial arrangements around staff charging. Commonly estimates of cost savings for running costs are often based on home charging price of electricity. Can BG offer similar rates at work for those without potential for home charging? This would be very different from current situations where don't provide petrol to staff, a completely new policy area. Trial rides/try before you buy something that might be offered to staff, as has been done elsewhere and for BG Taxi drivers.
Delivery Readiness	Infrastructure plans will need to be in place to support staff take up. Major sites where many staff travel to will be important, New Depot considering, also Anvil Court. Schools, particularly secondary schools have large numbers of potential users, but also have limited parking/charging capacity Many staff work out in the community so need access to charging points at home and in accessible public place as well as at work base.
Workforce Readiness	Cost will be a major factor for staff Need to support staff by providing infrastructure in workplace car parks

10. Grey Fleet Alternatives to Personal Vehicle Use for Business Travel. Pool vehicles, car hire, car clubs etc.

Difficultly Level: Low

Technical Readiness	Availability of Newer electric vehicles in this area should not be an issue
Financial Readiness	Car pool / vehicles – would need to be resourced i.e. staffing / vehicle costs – is this needed now with the new ways of working?
Policy Readiness	For larger schemes such as pool vehicles it is achievable, the bigger question is whether there is sufficient demand to make viable both financially and in terms of saving carbon. This would require further investigation. Social Care most likely area might be beneficial.
	Car hire is down historically, but still has place for long distance travel, would be relatively simple to ensure that using ULEV vehicles for this.

Delivery Readiness	Range of technical options that can reduce business travel: Mobile worker functionality, stop repeat visits to office, reduce printed instructions. Use of Always on VPN to improve accessibility of server on move Gwent are doing work around Grey Fleet - this is being supported by Welsh Government Energy Service this will help make the case to WG for funding to take things forward
	Will business use require charging points away from main workbase? Especially if vehicles in use throughout day
	Most crucial element in making work is the Digital booking system, route management system so meets service needs while not using vehicles inefficiently. Could route optimisation be used for grey fleet? Not area that been applied to yet
Workforce Readiness	

11. Fleet Size. Reducing number and size of vehicles in fleet, based on service needs.

Difficultly Level: Low (Medium corporate level)

Technical Readiness	Route Optimisation. Including live updates with road closures and not miss addresses
Financial Readiness	
Policy Readiness	Sharing vehicles across services, with system to manage.
	The number of minibuses have been reduced, historically was the case that some were underused, but most fleet reductions have been driven by austerity
	Where we have reduced the fleet within Community Options, potentially there is an increase in private cars on the road. as service users were accessing services via alternative means of transport in line with the Assisted Transport policy In some areas fleet is shared across several authorities with one serving as host hub.
	Schools do appear to be procuring more minibuses, these not hosted at council in same way as rest of fleet.
	More deliberate carbon led reduction of fleet size is more difficult, decisions have tended to be made on service by service, and case by case basis. More corporate oversight of service needs and fleet use would be needed to make this type of carbon led reduction.

Delivery Readiness	Fleet requirements are service dependant and rely on each service area to determine what their needs are.
	Route Optimisation. Including live updates with road closures and not miss addresses
	Expand route optimisation to smaller vehicles.
	Improved use of mycouncil services, mobile worker technology. Visit frequencies/service demand info inform fleet size. E.g. Green waste collection seasonal demand.
Workforce Readiness	

12. Procurement Fleet. Ownership or Rental? Use of Whole Life Costing

Technical Readiness	Market forever changing, not just vehicles but associated infrastructure requirements.
	There are real supply shortages of suitable vehicles in some areas as large number of organisations looking to purchase.
Financial Readiness	Corporate Investment needed
	Term of ownership of vehicles need to be considered including cost analysis between purchase / lease and Contract Hire. If vehicles are leased, then the cost of the vehicle can be spread over its useful life reducing the initial cost impact on the Revenue budgets. If owned/bought outright, potential for a Capital Receipt at the end of its useful life if sold on.
	Ability to procure vehicles in most financially effective way constrained in number of ways, including grant funding conditions, also the shift in balance of revenue and capital costs of vehicles not being reflected in budgets.
	Grant funding may become available at a point in time, but it is not guaranteed to be available when the fleet needs to be replaced
	Even when Funding is available can have Impacts on Revenue budgets of services as may not cover whole cost.
	spread the capital cost over a number of years.
	How long before there are better and more efficient vehicles are produced so leasing may be the best option to renew the fleet to better vehicles every few years?
Policy Readiness	Will need to be significant and ongoing change to existing procurement frameworks and specifications as market evolves.

	This also relevant to consideration of issues such as whole life cycle carbon impacts. Availability of information about scope 3 impacts of vehicles, whole life costs may be limited. If/when available need to be considered in procurement decisions. May also include need to consider replacement batteries in decision making in future? Including their use as power storage solutions
Delivery Readiness	
Workforce Readiness	