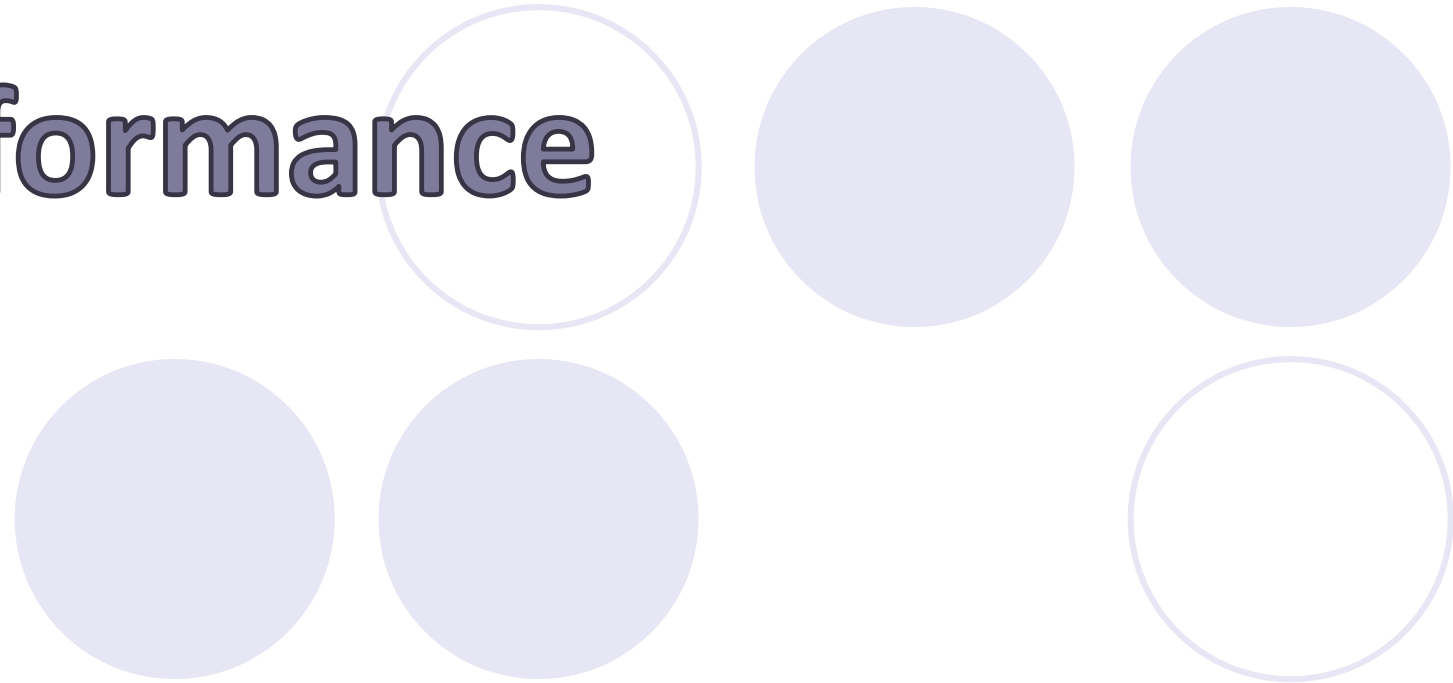


Fleet Performance



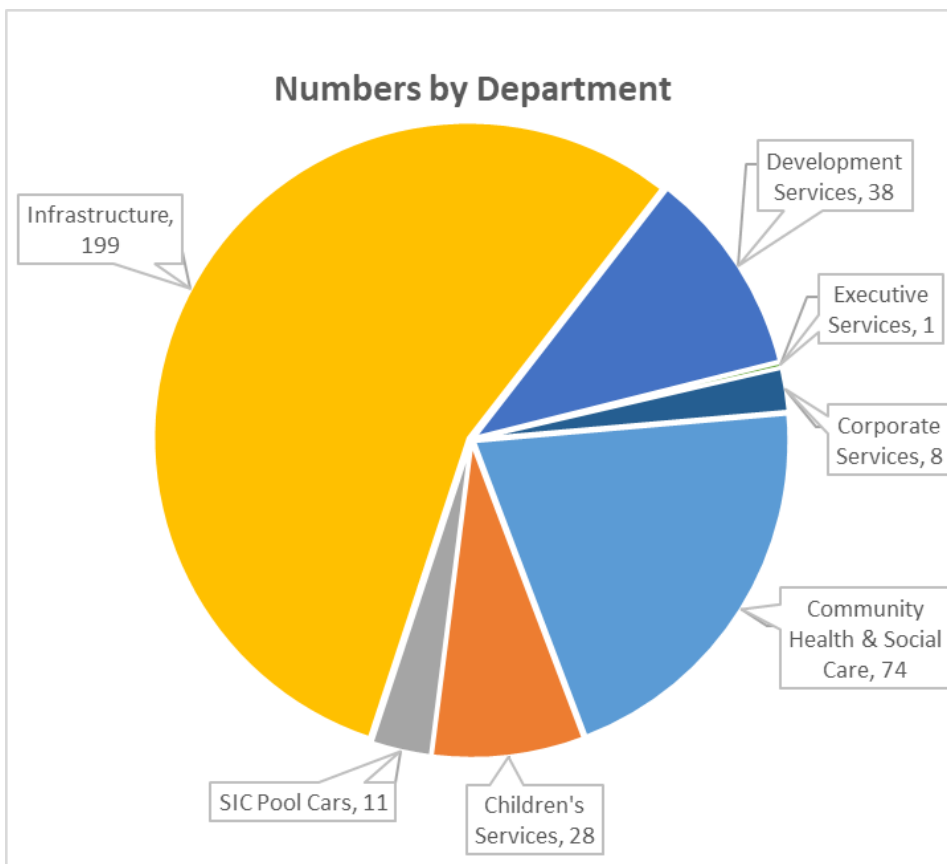
APSE - Most Improved Fleet Service 2023
Overview & Direction of Travel



**Shetland
Islands
Council**

Shetland Islands Council

Vehicle Fleet



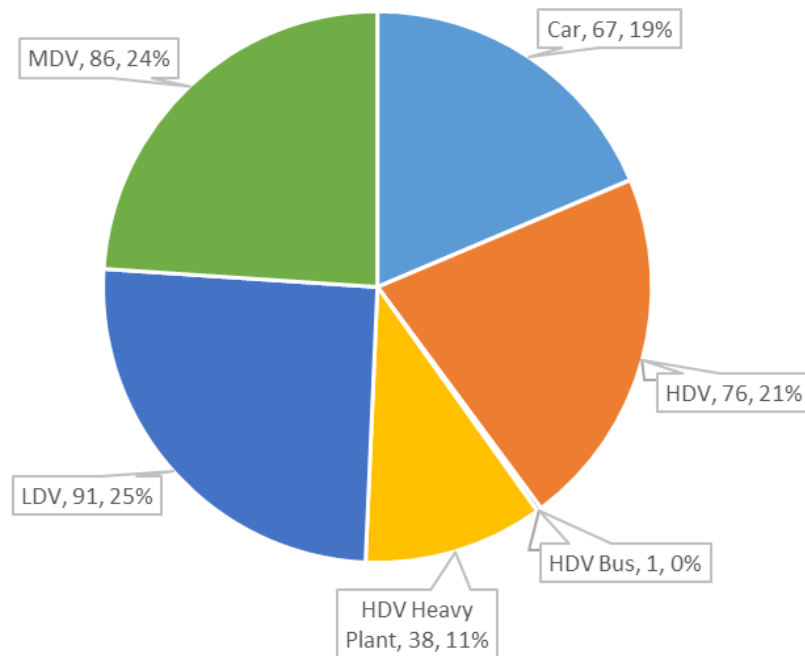
The Council operates a mixed fleet of 359 vehicles and heavy plant delivering a range of services across Shetland.

The Council's vehicle fleet underpins frontline service delivery for a range of statutory services such as roads maintenance, winter gritting, refuse collection, burial services and many other maintenance services.

We own the vast majority of our fleet with little use of vehicle leasing. We operate a mix of direct services and external contracts for service provision.

Shetland Islands Council Vehicle Fleet

Fleet Numbers by Vehicle Type



Since 2019, there has been a rapid expansion of the local-authority-delivered “care@home service” operating from Care Homes across Shetland and in central Lerwick. This has seen some 68 cars added to the fleet to support this.

This also saw an increase in poor driving behaviours.

Hence, significant training has been put in place to plan journeys and slow people down. We’ve transitioned to automatics to assist with the transition to BEV’s but also to avoid excessive clutch renewals.



Shetland Islands Council

Fleet Investment Objectives

- To provide the right mix of **appropriately specified** vehicles that are required to support service delivery across Shetland. This often means downsizing expectations!
- To minimise maintenance, fuel and logistical costs of vehicles by providing newer, **more reliable** vehicles and to minimise vehicle downtime for servicing and maintenance.
- To reduce our **environmental impact** through innovation and evolving electric and alternative fuel technologies. The Council will have a higher proportion of alternative fuel vehicles within its fleet.
- To increase the scope and coverage of the Care @ Home service through the use of **innovation and evolving technology**.



Shetland Islands Council

Logistics and Support

Supply Chains

- We are at the end of a very long supply chain – we build in local maintainability, support and resilience (including stock control of spares) as a matter of course.
- Wherever possible, the ability to locally service, maintain and support vehicles forms a key consideration during procurement exercises.
- Procurement lead times have been very challenging.

Shetland Islands Council Active Management

TELETRAC NAVMAN DIRECTOR

Home Messaging Reports Dashboard Safety Analytics Administration Resources Shetland Islands...

Vehicles: 328

Group By: Group Hide closed groups

Ignition	Type	Name	Group	Time	Duration	Speed	Loca
Sports and Leisure - CAT D1 (2)							
⊗	🚗	SR68 LPZ	Sports and Leisure - CAT D1	25/01/2024 11:1...	5h 32m		[Gre]
⊗	🚗	SR68 LRA	Sports and Leisure - CAT D1	25/01/2024 08:2...	8h 24m		[Gre]
Tingwall Airport (1)							
⊗	🚗	SV67 XFO	Tingwall Airport	25/01/2024 13:0...	3h 40m		[Tin]
Transport Planning - CAT D1 (7)							
⊗	🚗	YJ70 ESU	Transport Planning - CAT D1	25/01/2024 16:2...	3h 40m	26.7 mi/h	0.08
⊗	🚗	YJ65 ERU	Transport Planning - CAT D1	25/01/2024 12:4...	1.0.4h:17m		[Gre]
⊗	🚗	ST20 CTU	Transport Planning - CAT D1	25/01/2024 16:1...	45m		[Unn]
⊗	🚗	YJ70 ESV	Transport Planning - CAT D1	25/01/2024 16:4...	1h 23m		0.08
⊗	🚗	YJ68 FTN	Transport Planning - CAT D1	25/01/2024 16:3...	10m		[Gre]
⊗	🚗	YJ69 CLY	Transport Planning - CAT D1	25/01/2024 16:2...	19m		[Gre]
⊗	🚗	YJ69 CLX	Transport Planning - CAT D1	25/01/2024 15:4...	1h 4m		[Ne]

YJ70 ESU (As at Thu, 25 Jan 2024)

Event	Event Descript...	Priority	Driver	Time	Ignition	Speed	Trip	HDOP
+	Harsh Acceler...	Low	No Driver	25/01/2024 16:28:49		26.7 mi/h	27.2 mi	0.7
+	Harsh Acceler...	Low	No Driver	25/01/2024 16:14:26		22.4 mi/h	23.7 mi	0.8
+	Harsh Acceler...	Low	No Driver	25/01/2024 16:09:58		38.5 mi/h	21.4 mi	0.8
+	Harsh Acceler...	Low	No Driver	25/01/2024 16:07:02		35.4 mi/h	19.9 mi	0.8
+	Harsh Acceler...	Low	No Driver	25/01/2024 16:06:36		32.3 mi/h	19.8 mi	0.8
+	Harsh Acceler...	Low	No Driver	25/01/2024 15:53:20		43.5 mi/h	15.5 mi	0.8
+	Harsh Acceler...	Low	No Driver	25/01/2024 15:52:57		36.7 mi/h	15.3 mi	0.8
+	Harsh Acceler...	Low	No Driver	25/01/2024 15:51:31		0.0 mi/h	14.5 mi	0.8
+	Harsh Acceler...	Low	No Driver	25/01/2024 15:51:03		35.4 mi/h	14.4 mi	0.8

Vehicle Telematics

We make extensive use of telematics in our day-to-day management of the vehicle fleet and our Approved Drivers.

Shetland Islands Council Active Management

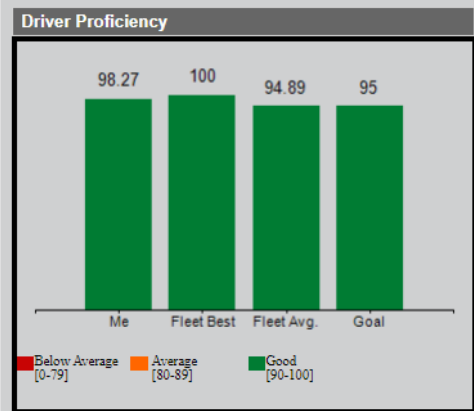
1 of 1 Find | Next Print

Individual Driver Report Card For the Month Starting 01/01/2024

TELETRAC NAVMAN DIRECTOR

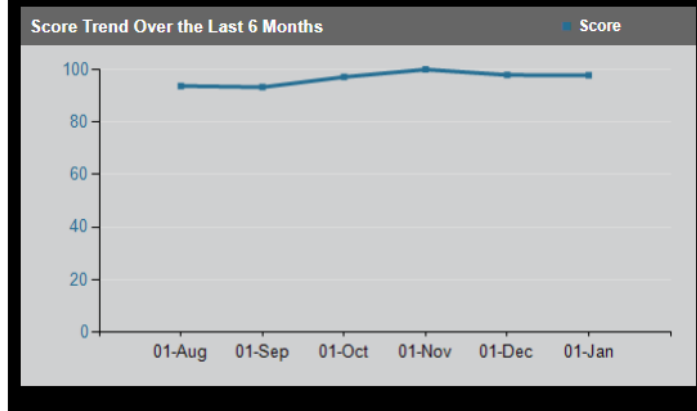
Printed for: Carl Symons Printed on: 25/01/2024

	Current	Previous
Score	98.27	97.92
Driver:	Raymond George William Murchison	
Active Days:	14	
Distance:	75.93 mi	
Ignition Duration:	14:17:45	



Individual Metric Scores My Score

Score Metrics	My Score	0	25	50	75	100
Speeding Events Count:	100					●
Speeding Time:	100					●
Over RPM Events Count:	92.08					●
Over RPM Time:	94.11					●
Harsh Braking Events Count:	100					●
Harsh Acceleration Events Count:	100					●
Harsh Cornering Events Count:	100					●
Sign Violation Events Count:	100					●



Vehicle Telematics - Driver Scorecard

The Individual Driver Report Scorecard provides feedback to drivers on how they performed on a monthly basis. It also shows the overall score and the metric score per driver.

It also includes the driver's score trend which gives a quick view of the driver's behavioral trends and progress against the SIC's 95% driver performance target.

To understand and feedback on driver performance, the Council measures:

- Speed, Harsh braking, Idling time , Over revving and driver behaviours

Shetland Islands Council

Active Management

1 of 1 Find | Next Print

Progressive Scorecard Report By Driver For 01/01/2023 To 31/12/2023

Printed for: Carl Symons

Printed on: 25/01/2024

TELETRAC NAVMAN
DIRECTOR

Driver	Distance (mi)	Ignition Duration	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Driver Average
Average			98.06	96.25	95.01	88.84	96.68	93.70	91.82	95.14	94.95	97.21	100.00	97.50	95.43
Raymond George William Murchison	990.02	62:15:58	98.06	96.25	95.01	88.84	96.68	93.70	91.82	95.14	94.95	97.21	100.00	97.50	95.43

■ Below Average
 ■ Average
 ■ Good

Time duration is displayed as hours:minutes:seconds.

We also provide Managers with a “Progressive Scorecard”. Our policy states that *“a continued (two or more consecutive reports) and/or a persistent failure to achieve the Council’s desired driver performance scores will be investigated.”*

This means that poor performance will be flagged and highlighted to drivers, while Line Managers have a duty to act and explore what actions can to be taken to improve driving style and performance.



Shetland Islands Council

Training & Staff Retention

Just Transition – Upskilling and Retraining

- We invest heavily in our primary resource – **our staff**.
- In support of the principles of a ‘just transition’ for our existing workforce we have upskilled the existing garage mechanics to support the operation of BEV/Hybrid vehicles.
- Onsite training to IMI Level 3 Award in Electric/Hybrid vehicle System and Repair and Replacement has been provided by a specialist trainer.
- We hope that the quality of training and overall diversification into new technologies will help with staff retention going forward, while also attracting new entrants via apprenticeships.



Shetland Islands Council

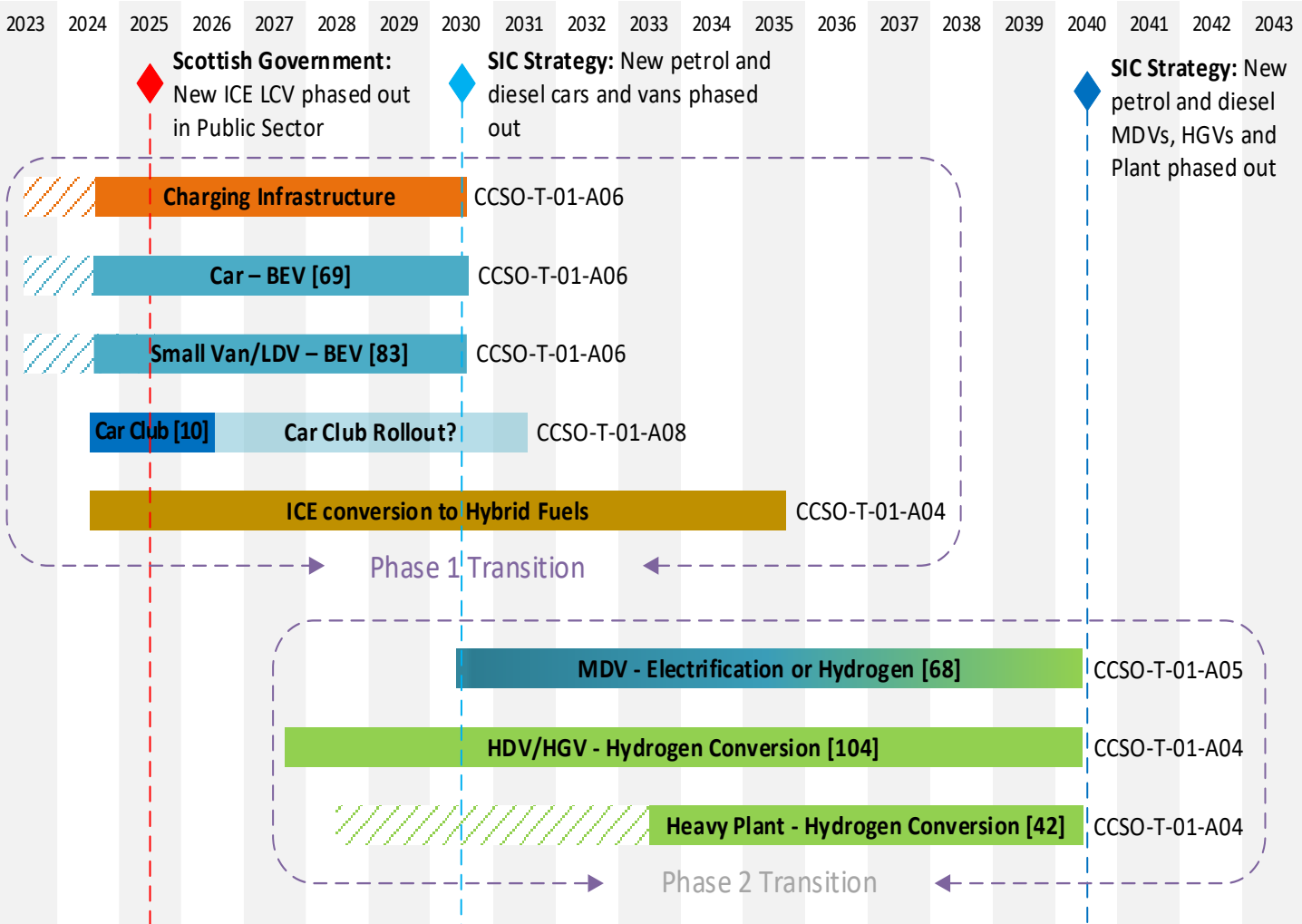
Dispersed Fleet Distribution - Communities

Dispersed Fleet Distribution - Community Based Workforce

- We are in the process of rolling out “community based handypersons” roles across local communities. These people (with maintenance trades background) are located within the communities they serve. They are cross-skilled into other areas i.e. social care, IT
- This means that travel miles are significantly reduced, saving time, money and reducing our carbon footprint.
- This is also the case for our pool car Care@Home fleet.

Shetland Islands Council

The Way Forward - Transition Plans



It's clear that there's a great deal of work to be done in making the switch to BEV's or hybrid fuels, including extensive research, careful planning and training.

The real key in mitigating the obstacles of fleet electrification is timing.

The electric or hydrogen future of the fleet industry is undoubtedly a net positive – not only will it drastically help to reduce the fleet's environmental impact, but it will also bring benefits such as savings on fuel costs, improved resilience to global events and a reduced need for maintenance.

For the SIC the 2025 deadline is deemed unachievable with current resources. The 2030 deadline is still challenging and it's evident that taking the time to prepare and make gradual changes will be the better option for service users.

There are a lot of practical decisions to be made that will have far-reaching implications for the Council and its operating environment – whether it's choosing the right EV models, upgrading on-site facilities, or upskilling or training our existing workforce.

The best solution (at present) is to operate EVs, ICE and Hydrogen vehicles alongside one another during a carefully phased transition.

Shetland Islands Council Transition Plan Phasing

Vehicle Type	Fuel			When?	Number in Fleet
	Current	Intermediate	Future		
Car, BEV	BEV	None	BEV		10
Car, Diesel	Diesel	HVO	BEV	<2030	10
Car, Hybrid	Petrol/Electric	None	BEV	<2030	4
Car, Petrol	Petrol	None	BEV	<2030	43
HDV, Bus, Diesel	Diesel	HVO	BEV/Hydrogen	<2040	1
HDV, Heavy Plant, Diesel	Diesel	HVO	Hydrogen	<2040	38
HDV, HGV, Diesel	Diesel	HVO	Hydrogen	<2040	49
HDV, Pickup, Diesel	Diesel	HVO	Hydrogen	<2040	12
HDV, Van, Diesel	Diesel	HVO	Hydrogen	<2040	16
LDV, MPV, Diesel	Diesel	HVO	BEV/Hydrogen	<2030	11
LDV, Van, BEV	Diesel	HVO	BEV/Hydrogen		13
LDV, Van, Diesel	Diesel	HVO	BEV/Hydrogen	<2030	67
MDV, 4x4 Utility, Diesel	Diesel	HVO	BEV/Hydrogen	<2035	9
MDV, Mini-Bus, Diesel	Diesel	HVO	BEV/Hydrogen	<2035	11
MDV, Van, Diesel	Diesel	HVO	BEV/Hydrogen	<2035	65
					359

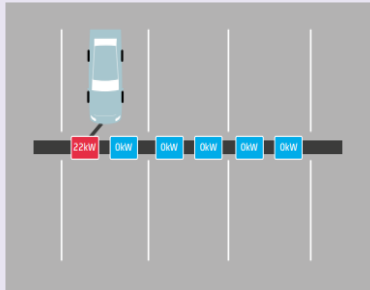
Shetland Islands Council

Precursor Works - Chargepoint Infrastructure

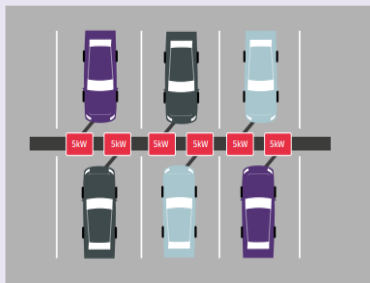
The principle of load management

A bank of six chargepoints, with a maximum power rating of 22kW, on a site with 32kW of spare electrical capacity.

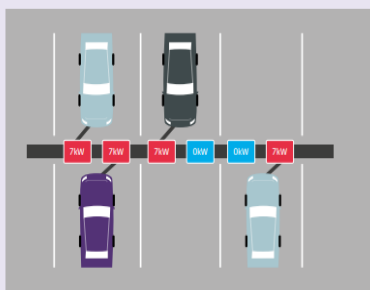
Total spare electrical capacity: 32kW



When all six chargepoints are being used, the load management equipment limits the amount of power at each chargepoint, to avoid exceeding the spare capacity.



With any number between one and six vehicles, the load management equipment will ensure the maximum charge possible is delivered, whilst not exceeding spare capacity.



The supporting infrastructure for BEV's, particularly for any charging infrastructure and their locations, is a considerable and ongoing overhead. The actual roll out of charging infrastructure is carried out on a location-by-location basis with the scale of installation dictated by the level of demand, site constraints and our available options at any given point in time.

The best balance between cost and benefit is deemed to be smart charging and dynamic load management. This will see a phased rollout to care homes, junior high schools and Council depots, utilising a mix of 22kW double outlet, smart, 3 phase fast chargers and 7.4kW double outlet, smart, standard chargers.

This option will require some infrastructure development or adaption and will be subject to detailed site surveys before the full range of installation options can be ascertained. However, where sites are suitable for a more comprehensive installation and/or service demand dictates more availability, larger installations will be looked at on a case-by-case basis.

Operational efficiency will be improved due to the inclusion of fast chargers in primary facilities, with the caveat that charging rates will be dictated by spare electrical capacity. Scheduled site rotas for recharging vehicles will be essential.