



GREEN CITY CHARTER PERFORMANCE TRACKER

Guide for all 5 themes
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Produced by
Energy Climate Change Division / Sustainable Energy Research Group
University of Southampton
energy.soton.ac.uk

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 Table 1: Breakdown of GCC Performance Tracker Matrix.

Criteria	Wgt	Action plan	Wgt	Indicator	Final Score	Мах	Measurement	Part Score	Max
	i	Carbon Reduction Planning	i	Carbon management plan			Carbon management plan	i i	5
	& Delivery		32%	Carbon management plan & sustainable officer(s)		8	Delivery team		2
	i	d Delivery	i	& sustamable officer(s)			Publishing/engagement strategy	i i	1
	!						Low carbon heating system		2
Sustainable	i		i				LED lighting	i i	2
Energy and	35%	Energy efficiency measures	3.40/	Building measures to		11	Heat and ventilation systems		2
Carbon	33/0	Energy enriciency measures	3470	reduce energy consumption		11	Building fabric	i i	3
Reduction	!		!				Insulation of building portfolio		1
	i		i				Natural lighting	i i	1
	!	Reduction in fossil fuel		Renewable energy		10	PV on/in buildings		5
	i	consumption	34%	Kenewabie energy		10	Energy provision from renewables	i i	5
		consumption		Carbon emissions		5	Carbon emissions from energy consumption		5
	i		i	Electrical charge points		2	Ratio of electrical vehicle (EV) charge points	i	2
Delivering Clean	!			Schemes to incentivise &	 		Incentivised EV charging and parking		2
Air and	240/	Supporting low and zero	1000/			4.5	Disincentivizing schemes	i i	2
Improving	21%	emission vehicles	100%	disincentivise			Eco-safe driver training		0.5
Quality of Life	i		ŀ	Encourage low emission vehicles		_	Ultra-low emission concentration (commuting fleet)	i	1
	!		!			5	Ultra-low emission concentration (goods & services fleet)	! !	4
			100%	Support & management of green infrastructure		3	Quality of biodiverse external environments	i	2
	!					3	Green infrastructure management	! !	1
Natural Environment	12%	Enhancing biodiversity		Establishing green infrastructure			Tree planting policies	i	1
Environment	!					3	Green wall/roof projects	! !	1
			i				Connectivity with green corridor	i	1
			42%	Waste policies			Waste segregation		3
		Adoption of sustainable waste models			l	8	Waste stream auditing & reporting	i	3
Resources,	!	waste models	!				Waste management training	! !	2
Waste and		Plastic management &	450/				Elimination of single-use plastic	i	1
Water	12%	procurement	16%	16% Procurement policies		4	Sustainable procurement strategy	! !	3
Management	i		i				Deployment of water-saving measures	i	2
	!	Water consumption	42%	Monitoring water		6	Water consumption and leakage monitoring		3
	i	controls	:	consumption			Water efficiency training	i	1
							Ratio of employees walking, cycling & working from home		5
		Enhance adoption of active		Sustainable travel to work			Ratio of employees using public transport	i	3
		and public modes of travel	61%	schemes		11	Low emission transport infrastructure		2
Sustainable			i				Lift sharing scheme	i	1
Travel	19%						Travel plan		2
			39%	Sustainable business-use transportation planning &		_	Method of transport for business trips	1	2
		Supporting smart travel				7	Flight offsetting/avoidance strategy		1
	!			delivery			Journey optimisation for ingoings and outgoings		2

GCC Rating System

Introduction

The Green City Charter (GCC) was created by Southampton City Council to assist in its transition towards a zero carbon, cleaner, greener and healthier city [1]. The Performance Tracker has five main components as set by the GCC; Sustainable Energy & Carbon Reduction, Delivering Clean Air & Quality of Life, Natural Environment, Resource, Waste & Water Management and Sustainable Travel.

This document provides a full breakdown and explanation on the scoring for all five themes, please note there are smaller document for each specific theme. The rating system document provides the scores, intent and requirements for each item. It is to be used alongside the *GCC survey* with the results from the surveys feeding into an overall organisation score provided as a *GCC ranking report* which can be used as a tool in prioritising sustainable action and investment across the five GCC components.

Please note that this is an evolving document whereby all criteria and weights are under review and may change after consultation. Certain criteria may not be considered stringent enough to meet the targets of the GCC but are being utilised as a starting point for sustainability strategies in the early stages of the GCC. It is for this reason also that assumptions are initially allowed and not penalised within the rating system, a decision which will be under periodic review.

When asked about employees, this refers to staff working directly for the organisation of which you would be able to monitor their energy usage, car type, etc.. You should only count those that you, as an organisation, can influence, with the same logic applying for everything being considered, whereby you should only record data on people, buildings, etc. that you have responsibility for and a certain level of control over. Additionally all data will relate to the specific financial year period, the Tracker only considers current status, with yearly results presented to show progress over time.

EXAMPLE

Tables are often used to convey the required metrics for points, such as Table x taken from the Energy Rating System document concerning LED lighting.

Table x: Points for percentage of lighting from LEDs

Points	Percentage of lighting from LEDs
0	No LEDs
0.5	40%
1	80%

For this example Table x shows that if an organisation has 40% of their lighting from LEDs they will be awarded 0.5 points and if they have 80% they receive 1 point. If an organisation were to have 60% of their lighting supplied by LEDs they would be allocated a score of 0.75 and if they had 20% it would be 0.25.

Carbon Reduction Planning & Delivery

Carbon management plan

1-5 points

Intent

To have a carbon management plan (CMP) which proposes ways to move towards a zero emissions organisation, reducing environmental and economic harms associated with excessive energy use.

Requirements

A CMP is a documented strategy and set of actions to help an organisation meet their carbon reduction objectives. It should include the following three key criteria [4];

- Summary of any previous carbon footprint assessments,
- List of identified carbon reduction targets
- Required actions to achieve the goals set by the organisation.

The CMP can be drawn up internally or through a third party but should be signed off by a senior member of the management board to demonstrate the importance of the carbon management programme. See Table 2 below for an outline of scoring for an organisation's CMP status.

Table 2: Points for carbon management plan.

Points	Carbon management plan status
0	Organisation has no past or current CMP.
1	Organisation has a CMP, but it is more than a year out-of-date.
2	Organisation has an annually updated CMP.
3	Organisation has an annually updated CMP, with regular (at least once a quarter) monitoring/reporting of execution/performance of the CMP.
5	Organisation has completed the requirements for 3 points and has a set target and plan to become a carbon neutral organisation*.
5	If organisation had only reached 2 points, for example, but has a carbon neutrality target, they will receive 4 points

- * Carbon neutrality can be achieved through calculating the organisations carbon footprint and through a combination of internal and external measures and projects reducing it to zero. An organisation will need to follow these five parameters [2];
 - Define: whether the whole organisation or a specific department will aim for carbon neutrality and what emissions will be included.
 - Target: Set a milestone for the organisation to achieve net zero emissions.
 - Measure: Identify data requirements to accurately measure and report annual progress.
 - Reduce: Identify methods to deliver internal and external emissions reductions.
 - Report: Have a reporting method to deliver updates and progress towards target.

Delivery team

1-2 points

Intent

To have a dedicated team to record and measure how an organisation performs in relation to their carbon management plan in order to better inform future endeavours.

Requirements

An organisation should have a full or part-time person or persons whose role it is to report on the delivery of their carbon management plan.

Each signatory will be scored on a case-by-case basis where an organisations size will be considered in relation to the size of the delivery team. For example, if the organisation is a micro enterprise (under 10 people) then as long as one person has been given a part-time role to report on and manage their carbon delivery team they will receive 2 points. For larger organisations they should have multiple individuals managing specific teams such as sustainability, transport, energy, waste management.

With regards to part-time roles, this allows for organisations which incorporate flexible cross-departmental teams, the key requirement being that an organisation designates a key point of contact for each area and has staff available to monitor/work on the specific area when required.

See Table 3 below for an outline of size of organisation and expected size of delivery team.

Table 3: Points for delivery team

Points	Micro enterprise (<10 employees)	Small enterprise (10-49 employees)	Medium-sized enterprise (50-249 employees)	Large enterprise (250+ employees)
1	-	1 part-time employee	2+ part-time employees managing separate areas with an identifiable manager/point of contact in charge of each team	1 full-time employee AND/OR 4+ part-time employees managing separate teams with an identifiable manager/point of contact in charge of each team
2	1 part-time employee	1 full-time employee AND/OR 2+ part-time employees	1 full-time employee AND/OR 4+ part-time employees managing separate teams with an identifiable manager/point of contact in charge of each team	2+ full-time employees managing separate teams AND/OR 8+ part-time employees managing separate teams with an identifiable manager/point of contact in charge of each team

For the full **2 points** it is requirement that organisations with 50 or more employees have a sustainability champion, if they do not the maximum they can score will be **1.5 points**.

Publishing/engagement strategy

1 point

Intent

To emphasise the importance of organisations promoting and endorsing a sustainable work culture and inviting additional scrutiny by openly advertising their efforts.

have a carbon management plan (CMP) which proposes ways to move towards a zero emissions organisation, reducing environmental and economic harms associated with excessive energy use.

Requirements

Points are provided over two areas; organisations making sustainable aspirations/efforts publicly available (0.5 points) and embedding a sustainable work culture (0.5 points)

Making sustainable aspirations/efforts publicly available (0.5 points)

To obtain the full **0.5 points** an organisation must make some aspect of their sustainable aspirations/efforts publicly available.

At this time we do not specify which aspects of their aspirations/efforts are made available just that it has been updated within the past 2 years, to show that they are engaging with the public and inviting scrutiny with the hope such actions invite similar actions amongst their peers. If the document has not been updated within the past two years they will be awarded 0.25 points.

Embedding a sustainable work culture (0.5 points)

To obtain the full **0.5 points** an organisation will have to provide sufficient examples that they attempt to embed sustainability into existing policies and procedures through encouraging good sustainable practice across an organisation.

The size of the organisation will be considered when marking as shown in **Table 4**. For a practice/scheme to be considered it must be applicable for all employees and not just a subset.

Table 4: Point allocation for embedding a sustainable work culture

Points	Micro enterprise (<10 employees)	Small enterprise (10-49 employees)	Medium-sized enterprise (50-249 employees)	Large enterprise (250+ employees)
0.25	-		1 practice/scheme to embed culture	a sustainable work
0.5	1 or more practice/scheme to embed a sustainable work culture		2 or more practices/sche sustainable work	

Energy Efficiency Measures

Low carbon heating system

1-2 points

Intent

To progress towards a low carbon future by employing low carbon heating systems.

Requirements

Low carbon heating systems include heat pumps (air source/ground sources), biomass heating, Combined Heat and Power (CHP), solar thermal and hybrid systems (Photovoltaic Thermal systems (PVT), solar pre-heated heat pumps, hybrid heat pumps, solar water heating).

See Table 5 below for an outline of points awarded for the percentage of annual heating demand supplied by low carbon heating systems where this can be from either a single source or multiple sources combined.

Table 5: Points for low carbon heating systems

Points	Percentage of annual heating demand supplied by low carbon heating systems
0	0
0.5	25%
1	50%
1.5	75%
2	100%

LED lighting

1-2 points

Intent

To reduce the environmental impact from halogen bulbs and reducing the energy wastage from leaving lights on, while also promoting occupants' productivity, comfort and well-being by providing high-quality lighting.

Requirements

Points are provided over two areas; percentage of lighting from LEDs (1 point) and coverage of lighting with timed switch off sensors (1 point). See Table 6 and Table 7 below for an outline of scoring for each item.

Table 6: Points for percentage of lighting from LEDs

Points	Percentage of lighting from LEDs		
0	No LEDs		
0.5	40%		
1	80%		

Table 7: Points for timed lighting switch-off sensors

Points	Percentage of lighting within an organisation that has switch off sensors
0	<10%
0.5	30%
1	70%

For Table 6 and Table 7 where possible we wish to score based on lighting load, however if this data is not easily available to an organisation we will score based on the percentage of lighting bulbs. Please note that this will change over time, whereby the measuring of lighting load will become a requirement.

Heat and ventilation systems

1-2 points

Intent

To optimise indoor air quality and reduce energy consumption through natural ventilation or controlled heating and ventilation.

Requirements

In an ideal solution a building will have a natural ventilation solution without the need for mechanical (forced) ventilation, however this is not always possible if the building is particularly deep, has poor local air quality/noise levels or has privacy/security reasons for not allowing open windows to name a few.

For cases where natural ventilation is not viable they should aim to apply a controlled heat and ventilation system which will regulate the operation of a heating and/or ventilation where traditionally a sensing device is used to compare the actual state (e.g. temperature) with a target state. This may include having a mixed mode or hybrid system where natural ventilation is supplemented by mechanical ventilation.

See Table 8 below for the required coverage of an organisation's building/buildings that use either natural ventilation or a controlled heat and ventilation system.

Table 8: Points for percentage of controlled heat and ventilation system.

Points Percentage of an organisations building portfolio to have either a naturally ventilation system or a controlled heat & ventilation system	
0	10%
0.5	20%
1	50%
1.5	80%
2	100%

Building fabric

1-3 point

Intent

To encourage the design and construction of energy-efficient buildings that reduce environmental damage from energy production and consumption.

Requirements

Any form of double glazing (tilt and turn, casement, vertical sliding and Georgian bar) will qualify with points awarded as outlined in Table 9.

Draught-proofing aims to block up unwanted gaps that let cold air in and warm air out through adopting draught excluders, strips over windows and blocking any holes to the outside. Please note that if a building has bene recently built (within the past 10 years) this should be considered as having sufficient draught-proofing measures. Points provided are as outlined in Table 10.

Table 9: Points for percentage of double glazing

Points	Percentage of facades that are double glazed
0	0
0.5	25%
1	50%
1.5	75%
2	100%

Table 10: Points for level of draught-proofing within an organisation

Points	Percentage of draught-proofing
0	0
0.3	At least 20% of the building or buildings have been treated for draught proofing measures
0.6	At least 40% of the building or buildings have been treated for draught proofing measures
1	At least 80% of the building or buildings have been treated for draught proofing measures

Insulation of building portfolio

1 point

Intent

To encourage the design and construction of energy-efficient buildings that reduce adverse environmental effects from energy production and consumption.

Requirements

See Table 11 below for an outline of points awarded for the ratio of an organisations building stock to have been recently (within the past 10 years) refurbished with efficient insulation. Please note that if a building has bene recently built (within the past 10 years) this should be considered as having sufficient insulation.

Table 11: Points for insulation of building portfolio

Points	Percentage of building stock to have been recently refurbished with efficient insulation
0	0
0.5	50%
1	100%

Natural lighting

1 point

Intent

To connect building occupants with the outdoors, reinforcing circadian rhythms and reducing the use of electrical lighting through the introduction of natural lighting.

Requirements

Points are provided over two areas; percentage of occupant with access to natural lighting (0.5 points) and natural light offsetting artificial light (0.5 points).

Percentage of occupant with access to natural lighting (0.5 points)

For an occupant to be considered as having access to natural light they should have a direct line of sight to the outdoors and daylight with at least two of the following four kinds of views [3];

- Multiple lines of sight to vision glazing in different directions at least 90 degrees apart
- Views that include at least two of the following: (1) flora, fauna, or sky; (2) movement; and (3) objects at least 25 feet (7.5 meters) from the exterior of the glazing
- Unobstructed views located within the distance of three times the head height of the vision glazing
- Views with a view factor of 3 or greater, as defined in "Windows and Offices; A Study of Office Worker Performance and the Indoor Environment."

See Table 12 below for an outline of scoring for an organisation's natural lighting based on the percentage of buildings occupants with access (as described above) to natural light.

 Table 12: Points for occupants with access to natural lighting

Points	Percentage of building occupants with access to natural lighting
0	20%
0.25	40%
0.5	60%

Natural light offsetting artificial light (0.5 points)

Points awarded as shown in Table 13 for organisations that have measures in place to ensure, when possible, natural lighting is used to offset artificial lighting including the use of switching and dimming photocells.

 Table 13: Points for coverage of artificial lighting offset by natural lighting when possible

Points	Percentage of lighting offset by natural lighting
0.25	20%
0.5	50%

Reduction in Fossil Fuel Consumption

PV on/in buildings

1-5 points

Intent

To encourage the adoption of solar photovoltaic (PV) systems to reduce the environmental and economic harms associated with fossil fuel energy and reduce greenhouse gas emissions.

Requirements

Points are provided over two areas; percentage of roof space assessed for PV coverage (2 points) and an organisation's PV coverage (3 points).

Percentage of roof space assessed for PV coverage (2 points)

Points awarded as shown in Table 14 for organisations that have had roof space assessment for potential PV installation.

Table 14: Percentage of roof space assessed for PV coverage.

Points	Percentage of suitable roof area covered by PV
0	No roof space assessed for PV coverage
0.5	10%
1	40%
2	90%

Organisation's PV coverage (3 points)

For automated assessment an organisations PV coverage will be scored as a percentage of their total roof area with points awarded as shown in Table 15.

Table 15: Percentage of suitable roof area covered by PV.

Points	Percentage of suitable roof area covered by PV
0	No PV coverage
1	10%
2	20%
3	40%

Energy provision from renewables

1-5 points

Intent

To reduce the environmental and economic harms associated with fossil fuel energy and reduce greenhouse gas emissions by increasing energy provision from renewable energy.

Requirements

An organisation or organisation's energy supplier may choose one or more strategies for procuring renewable energy such as solar PV, wind, geothermal, micro or small-scale hydro, or biomass.

Points are based on percentage of total energy consumption, excluding transport as shown in Table 16.

Table 16: Points for energy provision from renewable energy

Points	Percentage of total energy consumption (excluding transport) provided from renewable energy
1	10%
2	20%
3	30%
4	40%
5	50%

Carbon emissions from energy consumption

1-5 points

Intent

To reduce the environmental and economic harms associated with carbon emissions by either utilising clean energy sources or supporting carbon offsetting projects.

Requirements

See Table 17 below for an outline on the scores based on the percentage of energy consumption with net zero carbon emissions. This can include renewable, zero-emission energy as well as carbon offsetting projects such as tree planting, supply of clean water and wind farms [4].

Table 17: Points for carbon emissions from energy consumption.

Points	Percentage of energy consumption (excluding transport) with net zero carbon emissions
1	20%
2	40%
3	60%
4	80%
5	100%

Delivering Clean Air & Quality of Life

Electrical charge points

Ratio of electrical vehicle (EV) charge points

1-2 points

Intent

To reduce pollution by promoting alternatives to fossil fuel vehicles through the installation of electrical vehicle supply equipment (EVSE) countering the impact of emissions associated with employee commutes.

Requirements

EV charging facilities must be clearly identifiable and be reserved for the sole use of plug-in electrical vehicles. They must provide a charging capacity of 208-240 volts or greater [5] [10].

Charging facilities should be distributed proportionally among various parking sections (e.g. between short and long-term).

To be awarded **1 point** the organisation should install EV charging facilities for at least 5% of all parking spaces.

To be awarded **2 points** the organisation should install EV charging facilities for at least 10% of all parking spaces.

Schemes to incentivise & disincentivise

Incentives for low emission vehicles

1-2 points

Intent

To reduce pollution by promoting EV charging and parking through incentivisation schemes.

Requirements

1 point will be awarded if an organisation has implemented one scheme and 2 points will be awarded for those that offer two or more schemes.

Schemes include but are not limited to

- Reduction in parking charges for electric vehicles to staff
 - An organisation needs to offer a minimum annual saving of 25% to be awarded a point.
- Reduction in charging prices for electric vehicles to staff
 - o This can include a discounted rate or free charging for an introductory period.
- Reduction in parking charges for electric vehicles to visitors
- Reduction in charging prices for electric vehicles to visitors
- Other site-specific incentives can apply such as toll exemption for particular routes with each considered on a case-by-case basis.

Any scheme needs to be publicly posted at the entrance of parking areas or easily identifiable online and made permanently available to every qualifying vehicle [10].

Disincentivising schemes

1-2 points

Intent

To discourage the use of highly polluting vehicles and non-essential vehicular travel thereby reducing greenhouse gas emissions, air pollution, and other environmental and public health harms associated with high emission vehicles.

Requirements

There are 2 criteria to meet to obtain the full **2 points** which are detailed below.

If however an organisation provides free parking for all members of staff, any points gained will be halved.

Disincentive schemes for high emission vehicles (1 point)

The full **1 point** will be awarded for any organisation that charges an entrance rate and/or additional parking charges ($\geq 50\%$) for vehicles with CO₂ emissions greater than 120 g/km [4].

Disincentive schemes for non-essential travel (1 point)

The full **1 point** will be awarded for any organisation that has a disincentive scheme for non-essential travel/parking which include, but are not limited to

- Anti-idling policy for drivers and site visitors
- Refusal to award parking permits for those within a set geography
- Refusal to award parking permits for those without dependants

Eco-safe driver training

0.5 points

Intent

To reduce the environmental damage, in particular air pollution as a result of driving while also improving road safety through enhancing travel planning and vehicle control.

Requirements

Organisation should requires any employees that drive undergo eco-safe driver training which should cover how to avoid wasting fuel through the following [13][14];

- Acceleration
- Braking
- Starting and moving away
- Gear usage
- Driving at reasonable speeds

To obtain points an organisation must have provided eco-safe driver training with points awarded based on the ratio of employees to have completed the training as shown in Table 18.

Organisations are not required to enforce employees pass a test (although for eco-safe driving this is recommended), but they must have some form of monitoring and reporting on completion.

Table 18: Points for eco-safe driver training.

Points	Percentage of employees that drive to have undergone eco-safe driver training
0	No eco safe driver training for staff
0.25	40% of employees
0.5	90% of employees

Encourage Low Emission Vehicles

Ultra-Low emission concentration of commuting fleet

1 point

Intent

To reduce pollution and promote health and wellness in the city by promoting alternatives to conventionally fuelled vehicles for commuting to and from work.

Requirements

The commuting fleet is the total number of vehicles used by employees commuting to and from work. This may include personal vehicles and business fleet vehicles that are used for the purposes of commuting, regardless of whether the vehicle is also used for the transportation of goods and services. Please note that vehicles used solely for the transportation of goods and services should not be included within this item but within the following item on page 8.

The ultra-low emissions standards are as follows [12]

- Euro 3 for motorcycles, mopeds, motorised tricycles and quadricycles (L category)
- Euro 4 (NOx) for petrol cars, vans, minibuses and other specialist vehicles
- Euro 6 (NOx and PM) for diesel cars, vans and minibuses and other specialist vehicles
- Euro VI (NOx and PM) for lorries, buses and coaches and other specialist heavy vehicles (NOx and PM)

Vehicle age is not a guarantee on emissions however:

- Euro VI (NOx and PM) engines are generally those first registered with the DVLA after 1 January 2014
- Euro IV (PM) engines are generally those first registered with the DVLA as new after 1 October 2006
- Euro 3 (PM) engines in vans or specialist diesel vehicles (over 1.205 tonnes unladen weight up to 3.5 tonnes gross vehicle weight) and minibuses (up to 5 tonnes gross vehicle weight) will generally meet this standard if registered with the DVLA as new on or after 1 January 2002

See Table 19 below for an outline of scoring for an the ratio of ultra-low emission vehicles in an organisations commuting fleet, this is a lower requirement than for goods and services as it takes into account the reduced level of control an organisation has on its commuting fleet.

Table 19: Percentage of ultra-low emission vehicles in an organisations commuting fleet.

Points	Percentage of ultra-low emission vehicles used by employees commuting to work
0	0
0.5	25%
1	50%

Ultra-Low emission concentration (goods and services fleet)

1-4 points

Intent

To reduce pollution and promote health and wellness in the city by promoting alternatives to conventionally fuelled automobiles for the transportation of goods and services.

Requirements

The goods and services fleet is the total number of vehicles used by an organisation to deliver goods and services, and may include personal and company owned vehicles. It also includes specialist vehicles such as mobile cranes, road and building construction machinery and agricultural and farm machinery such as tractors and mowing machines.

The ultra-low emissions standards are as follows [12]

- Euro 3 for motorcycles, mopeds, motorised tricycles and quadricycles (L category)
- Euro 4 (NOx) for petrol cars, vans, minibuses and other specialist vehicles
- Euro 6 (NOx and PM) for diesel cars, vans and minibuses and other specialist vehicles
- Euro VI (NOx and PM) for lorries, buses and coaches and other specialist heavy vehicles (NOx and PM)

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See Table 20 below for an outline of scoring for the ratio of ultra-low emission vehicles in an organisations business fleet.

Table 20: Percentage of ultra-low emission vehicles in an organisations goods and services fleet.

Points	Percentage of ultra-low emission vehicles used for the transportation of goods and services
0	0
1	25%
2	50%
3	75%
4	90%

Our Natural Environment

Support & Management of Green Infrastructure

Quality of biodiverse external environments

1-2 points

Intent

To assess the conservation and restorative impact of existing ecosystem conditions and services provided by outdoor environments. Where environments should aim to preserve imperilled species, ecological communities through the conservation and creation of biodiverse environments, protecting any existing green infrastructure from development. Additionally, areas should provide access to biodiverse environments promoting the environmental and health benefits of green areas [5].

Requirements

Biodiverse environments are permanent, viable growing space or related facilities (such as greenhouses) within the organisation (exclusive of existing buildings, car parks and paved pedestrian pathways) which are covered with natural or semi-natural green (trees, shrubs, grass) and blue (water covered spaces) spaces providing vegetation and habitation for native plants and wildlife to maintain and enhance ecosystem services [5][7][8].

Examples of green infrastructure (Figure 1) which can be incorporated include, but are not limited to [6][8][9]; green/brown roofs, green walls, habitat creation, large species trees, grassland, plantings/vegetation, sustainable drainage, planting beds, balcony planters, food planting, woodland, green network/corridor, wetland and shared surfaces.



Figure 1: Examples of city based green and blue infrastructure

Points will be awarded based on whether an organisation has or has not got responsibility for any external green infrastructure. Please note that all signatories will be scored in relation to the size of their organisation and the relevant size of outdoor environment as shown in the following tables. Whereby outdoor environment will relate to the area that is dedicated to green space and not covered by roads and parking.

For an organisation to be considered to not have access to external biodiverse environments they must have 90% or more of their footprint covered by buildings. For those with less than 90% building coverage they are expected to have some level of existing green infrastructure which will be scored based upon its size. They will however be able to score up to 0.5 points based upon the score for those without access (where the score in Table 24 will be quartered).

For those with access to external biodiverse environments

Points are awarded based on the five key aspects that influence effectiveness of green spaces; volume, shape, location, dispersion and maintenance [8]. With the latter aspect being considered in the following management item. As a result the score is broken down into four key areas; volume, shape/range of vegetation, location/dispersion and habitat creation each of which are worth 0.5 points.

Please note to achieve full points, more than 50% of the external biodiverse environment must be accessible to employees. If this is not the case then the points awarded will be halved.

<u>Volume of vegetation (0.5 points)</u> Scores to be based on Table 21.

Table 21: Points for volume of vegetation.

	Table 21: Points for volume of vegetation.				
	Outdoor environment equal to or less than 1 acre (4,000m²)				
Points	• • • • • • • • • • • • • • • • • • •		Large enterprise (250+ employees)		
0		Ba	are land		
0.25	-	- Low level of vegetation		Low level of vegetation.	
0.5	Low to high level of vegetation.	Moderate to high level of vegetation.	Moderate to high level of vegetation.	Moderate to high level of vegetation.	
	Outdoor environment greater than 1 acre (4,000m²)				
Points	Micro enterprise (<10 employees)			Large enterprise (250+ employees)	
0	Bare land				
0.25	Low level of vegetation.	Low level of vegetation.	Moderate level of vegetation.	Moderate level of vegetation.	
0.5	Moderate to high level of vegetation.	Moderate to high level of vegetation.	High level of vegetation	High level of vegetation.	

Shape/range of vegetation (0.5 points)

Scores to be based on Table 22.

Table 22: Points for range of vegetation.

Table 22. I onto for range of vegetation.					
	Outdoor environment equal to or less than 1 acre (4,000m²)				
Points	Micro enterprise (<10 employees)	Small enterprise (10- 49 employees)	Medium-sized enterprise (50-249 employees)	Large enterprise (250+ employees)	
0		No v	regetation		
0.25	-	Low range of vegetation.	Low range of vegetation.	Low range of vegetation.	
0.5	Low to high range of vegetation.	Moderate to high range of vegetation.	Moderate to high range of vegetation.	Moderate to high range of vegetation.	
	Outdoor environment greater than 1 acre (4,000m²)				
Points	Micro enterprise (<10 employees)	Small enterprise (10- 49 employees)	Medium-sized enterprise (50-249 employees)	Large enterprise (250+ employees)	

0	No vegetation			
0.25	Low range of vegetation.	Low range of vegetation.	Moderate range of vegetation.	Moderate range of vegetation.
0.5	Moderate to range of vegetation.	Moderate to high range of vegetation.	High range of vegetation	High range of vegetation.

Location/dispersion of vegetation (0.5 points)

Scores to be based on Table 23, whereby scores take into account the dispersion of vegetation and whether they use vegetation for noise reduction purposes with points given equally regardless of size of the organisation or external environment.

Table 23: Points for location/dispersion of vegetation.

Points	Requirements for location/dispersion of vegetation		
0	Vegetation focused in one area and no usage for noise		
U	reduction		
	Dispersed across a few areas		
0.25	OR		
0.25	Vegetation focused in one area & uses vegetation for noise		
	purposes		
	Dispersed across the entire area		
0.5	OR		
0.5	Dispersed across a few areas and uses vegetation for noise		
	purposes		

Habitat creation (0.5 points)

For points to be awarded an organisation must implement habitat creation measures (0.25 points) and have existing habitat management measures (0.25 points).

Organisations with less than 1 acre (4,000m²) will only be required to have a single measure in both cases while those with more than 1 acre should have a minimum of 2 for either case.

For those without access to external biodiverse environments

See Table 24 below for an outline of scoring for an organisation that has no responsibility for external biodiverse environments.

Table 24: Points for internal green investment.

Points	Micro enterprise (<10 employees)	Small enterprise (10-49 employees)	Medium to large enterprise (50+ employees)
0		No internal green infrastructure n	neasures
0.5	1 ornamental planting	1 ornamental planting	Up to a single plant per 50 employees OR 1 edible plants
1	2 ornamental plantings	2-5 ornamental plantings	Up to a single plant per 20 employees OR 3-4 edible plants
1.5	5 ornamental plantings	5-10 ornamental plants OR 1 edible plants	More than a single plant per 10 employees OR 5 or more edible plants
2	10 ornamental plantings OR 1 or more edible plants	More than 10 ornamental plants OR 2 or more edible plants	More than a single plant per 10 employees OR 5 or more edible plants

Green infrastructure management

1 point

Intent

To preserve and continually manage the conservation and restorative impact of existing ecosystem conditions and services provided by green infrastructure.

Requirements

Points will be awarded based on whether an organisation has or has not got responsibility for any external green infrastructure.

If herbicides are used on site and there is no policy to manage their impacts, any points scored will be halved.

For those with access to external biodiverse environments

See **Table 25** for points allocation for green management where an organisations staff and outdoor environment size will be considered in relation to the size of the management team. With regards to part-time roles, this allows for organisations which incorporate flexible cross-departmental teams, the key requirement being that an organisation designates a key point of contact for each area and has staff available to monitor/work on the specific area when required.

 Table 25: Points for green infrastructure management

Outdoor environment equal to or less than 1 acre (4,000m²)				
Points	nts Micro enterprise Small enterprise (10- (<10 employees) 49 employees)		Medium-sized enterprise (50-249 employees)	Large enterprise (250+ employees)
0.5	1 part-time employee	1 part-time employee	1 part-time employee	1 part-time employee
1	1 part-time employee & Has a record of the quality of green infrastructure	1 part-time employee & Has a record of the quality of green infrastructure	1 part-time employee & Has a record of the quality of green infrastructure	1 part-time employee & Has a record of the quality of green infrastructure
	Out	tdoor environment great	ter than 1 acre (4,000m²)	
Points	Micro enterprise (<10 employees)	Small enterprise (10- 49 employees)	Medium-sized enterprise (50-249 employees)	Large enterprise (250+ employees)
0.5	1 part-time employee	1 part-time employee	1 part-time employee	1 part-time employee
1	1 part-time employee & Has a record of the quality of green infrastructure	1 part-time employee & Has a record of the quality of green infrastructure	2 part-time employees/1 full time-employee & Has a record of the quality of green infrastructure	2 part-time employees/1 full time-employee & Has a record of the quality of green infrastructure

For those without access to external biodiverse environments

Points will be awarded if the organisation can provide sufficient evidence that they have somebody in charge of manging internal plantings. For companies with over 50 employees this needs to be an individual while for smaller companies it will be sufficient for them to assign individual responsibility for individual plantings.

Establishing & Supporting Green Infrastructure

Tree Planting Policies

1 point

Intent

To reduce the level of storm water runoff, provide habitation and nutrients for multiple species of wildlife, enhance air quality, improve the urban heat island effect and act as a 'carbon sink'.

Requirements

Organisation will be awarded up to **1 point** for having tree planting projects, with points awarded based upon the ratio of tree plantings per employee as part of an offset strategy. Strategies should be appropriately sized in relation to the organisation where each signatory will be scored on a case-by-case basis as shown in Table 26. If an organisation commits to planting mature trees in high impact areas such as a highway they will be awarded the full 1 point regardless of their score according to Table 26, taking into account the higher cost and more importantly impact of said planting.

As with the entire survey, this only refers to the specified financial year.

Table 26: Points for tree planting policies.

	Table 20. Forms for tree planting poneres.					
	Outdoor environment equal to or less than 1 acre (4,000m²)					
Points			Medium-sized enterprise (50-249 employees)	Large enterprise (250+ employees)		
0	No policy to plant new trees					
0.5		one tree per year for tree per year for tree per year for every 200 one tree per year for		Policy to plant at least one tree per year for every 200 building occupants.		
1	Policy to plant at least one tree per year for every 10 building occupants.	Policy to plant at least one tree per year for every 20 building occupants.	Policy to plant at least one tree per year for every 50 building occupants.	Policy to plant at least one tree per year for every 100 building occupants.		
	Outdo	oor environment grea	ter than 1 acre (4,000m²)			
		Large enterprise (250+ employees)				
0		No polic	cy to plant new trees			
0.5	Policy to plant at least one tree per year for every 10 building occupants.	Policy to plant at least two trees per year for every 50 building occupants.	Policy to plant at least two trees per year for every 200 building occupants.	Policy to plant at least tone tree per year for every 200 building occupants.		
1	Policy to plant at least two trees per year for every 10 building occupants.	Policy to plant at least two trees per year for every 10 building occupants.	Policy to plant at least two trees per year for every 50 building occupants.	Policy to plant at least two trees per year for every 100 building occupants.		

It must be noted that this criteria is not stringent enough to meet the targets of the GCC however it is being utilised as the starting point for carbon displacement strategies and will be periodically reviewed.

Green wall/roof projects

1 point

Intent

To promote the implementation of green wall/roof projects to positively impact air quality, environmental quality and mental and psychological well-being of the organisation's employees and local community

Requirements

See Table 27 below for an outline of scoring for an organisation's planning and completion of green wall/roof projects.

Table 27: Points for green wall/roof projects.

Points	Micro-Medium enterprise (<250 employees)	Large enterprise (250+ employees)	
0	No plans or projects		
0.5	Organisation has a policy/plan to build a green wall/roof project (which can be evidenced with a planned completion within 2 years)	One completed green wall/roof project within the organisation	
1	At least one completed green wall/roof project within the organisation	Either More than one completed green wall/roof project Or One completed green wall/roof project with more planned to be completed within 2 years.	

Connectivity with green corridor

1 point

Intent

To promote biodiversity through the creation of a green corridor connecting wildlife populations in order to combat habitat fragmentation due to interference from human development.

Requirements

The green corridor is defined as land that is partly or completely covered with trees, shrubs, grass or other vegetation which will run (uninterrupted) through the site including man-made linkages such as wildlife underpasses and overpasses (often referred to as wildlife crossings).

Points will be awarded based on whether an organisation has or has not got green environments on any of the borders of their site. Please note to achieve the full 1 point, more than 50% of the external biodiverse environment must be accessible to employees. If this is not the case then the points awarded will be halved.

If an organisation has recommend employee travel paths to maximise connection with green corridors then they will be awarded at least **0.5 points**, regardless of their point allocation for a green network as detailed below.

Organisation has green environments on the border of their site

The full **1 point** will be scored if the organisation has at least one green path that crosses through their footprint, passing through the centre or equivalent of the site.

Organisation does not have any green environments on the border of their site

The full **1 point** will be scored if the organisation has established a mini green corridor within the boundaries of their own site.

Resource, Waste & Water Management

Adoption of Sustainable Waste Models

Waste segregation

1-3 points

Intent

To move toward a zero-waste city and reduce environmental and economic harm associated with the generation of waste.

Requirements

Segregated waste collection services must include, but are not limited to recycling, organics and solid waste for municipal solid waste.

See Table 28 for the points allocation for coverage of waste segregation within an organisation.

 Table 28: Points for waste segregation.

Points	Coverage of waste segregation within an
	organisation
0	0
	10% of waste services
	e.g 1 segregated waste collection service in the main foyer of each building
	50% of waste services
2	e.g at least 1 segregated waste collection service per floor.
	90% of waste services
3	e.g across the majority of the organisation with easy access for all occupiers.

Waste stream auditing and reporting

1-3 points

Intent

To encourage diversion of waste from landfill moving towards recycling and reuse of waste and towards 100% diversion from landfill to reduce environmental and economic harm associated with the generation and disposal of waste.

Requirements

Audit reports will measure the total waste generated and diverted from special waste streams for the organisation on an annual, or shorter, period and should include the following [2];

- Waste generation
 - o Projected waste generation for each department within the organisation.
 - Waste generation classification, including organic waste, such as food or kitchen waste and recyclables such as paper, corrugated cardboard, glass, plastic and metal
 - Projected waste savings for each department based upon a baseline (industry standard practice, existing codes, published data or other organisation with a similar size and scope.
 - Waste generation based on population
- Waste diversion
 - Waste diversion (total waste diverted from landfill as a percentage of total waste generated)
 - Classification of diverted waste including recycled, salvaged, reused materials or waste to energy (demonstrating that reuse and recycling strategies were exhausted before sending waste material)
- Waste disposal
 - o Document method ensuring it meets safe disposal requirements

To obtain points an organisation must have produced a waste audit and report, with points awarded based on the recorded recycling rate as shown in Table 29.

Table 29: Points for waste auditing reporting.

Points	Reported recycling rate
0	No waste auditing
0.5	10% correct recycling rate and annual waste audit.
1	30% correct recycling rate and annual waste audit.
2	60% correct recycling rate and annual waste audit.
3	90% correct recycling rate and annual waste audit.

If audits are not annually prepared then points will be reduced by 50%, however if the audit reports are prepared every 5 years or more then there will be no score.

If there is no reporting of the waste audit then points will be capped at 1 point regardless of the recorded recycling rate.

For organisations with more than 50 employees to achieve the full three points, they are required to have someone officially in charge of managing waste management. If they do not they will only obtain half the awarded points.



Waste management training

1 point

Intent

To reduce waste, encourage recycling and reduce environmental impact from waste.

Requirements

Organisations should require employees undergo mandatory waste management training which covers the following topics [15] [16];

- Global environmental issues
- Waste concepts and definitions
- Waste legislation
- Waste management options, landfill, incineration and composting
- Duty of care and transfer of waste
- Dealing with packaging waste
- Behavioural methods to reduce waste
- Mechanical interventions to reduce waste

To obtain points an organisation must have provided waste management training with points awarded based on the ratio of employees to have completed the waste management training as shown below in Table 30.

Organisations are not required to enforce employees pass a test, but they must have some form of monitoring and reporting on completion.

Table 30: Points for waste management training.

Points	Percentage of employees to have undergone waste management training
0	No waste management training for staff
0.5	40% of employees
1	90% of employees

Plastic Management & Procurement

Elimination of single-use plastic

2 points

Intent

Eliminate the use of single-use plastic to reduce the environmental, health and economic damage of non-biodegradable plastics.

Requirements

Points are provided over two areas; single-use plastic elimination strategies (2 points) and single-use plastic usage (1 point).

Elimination strategy (1 point)

Organisations should implement strategies to curb single-use plastic waste including but not limited to [24]

- Introducing bans and charges on single-use plastics across the organisation including the use of disposable cups and cutlery
- Raise awareness of plastic products and alternatives
- Promote/gift reusables food and drink containers
- Provide unlimited filtered tap water
- Provide reusables in kitchens and canteens
- Enforcement strategy

Any elimination strategy must be conducted across the entirety of the organisation, with points awarded as detailed in Table 31.

Table 31: Points awarded for single-use plastic elimination

Points	Micro to small enterprise (1-49 employees)	Medium to large sized enterprise (50 + employees)
0.5	-	1 elimination strategy
1	1 elimination strategy	2+ elimination strategies

Single-use plastic usage (1 point)

Organisations will estimate the number of items of plastic cutlery, plates and cups used in a typical working week with the number of weekly items divided by the number of employees with points provided as detailed in Table 32.

Table 32: Points awarded for single-use plastic elimination

Points	Number of items of single-use plastic cutlery, plates and cups used by each employee per week
0	5 items
0.5	2 items
1	0 items

Sustainable procurement strategy

1-3 points

Intent

Encourage sustainable procurement practices where an organisation understand and manages both environmental and social impacts of goods and services procurement.

Requirements

Points are provided over three areas; organisations compliance with the UK public procurement policy (1 point) organisations own sustainable procurement policy (1 point) and public availability of an organisations sustainable procurement policy/pledge (1 point).

UK public procurement policy (1 point)

The maximum **1 point** will be awarded if the organisation adheres to the UK public procurement policy.

Organisation's sustainable procurement policy (1.5 point)

An organisation will obtain points for the following criteria

0.5 points for having an organisational sustainable procurement policy with the content including

- Prioritise supplier selection based upon
 - o Their environmental footprint
 - Conservation of resources (energy, water & materials), waste minimisation (within operation & via reduced packaging), delivery impact minimisation, maximising local sourcing and considering the life-cycle costs of products
 - o Capacity to deliver benefits to society
 - Comply with the relevant employment rights in respect to human rights and conditions of employment and ensure slavery and human trafficking does not take place within any part of the supply chain.
 - o Support job creation and opportunities for SMEs and social enterprises.
- Identify areas of high risk and influence within the organisations supply chain
- Promote/favour local products and services
 - o Creating job opportunities & training for local people and businesses
- Reduce carbon emissions and mitigate impacts of Climate Change
- Increase usage of energy efficient products
- Increase % of reused, recycled and sustainably or ethically sources materials/products.
- Reduce percentage of waste landfill and reduced water usage

0.5 points for it being annually reviewed

0.5 points for having a system/systems in place to monitor/ensure compliance with the policy.

Public availability of organisational sustainable procurement policy (0.5 points)

Organisation will be awarded the full **0.5 points** if there policy/strategy is made publicly available, if only a portion or high level summary is made available they will score **0.25 points**.

Water Consumption Controls

Deployment of water-saving measures

1-2 points

Intent

To manage water efficiently by reducing water consumption and wastage through the deployment of water-efficient devices and technology such as sensor taps and flushes.

Requirements

Water saving measures include efficient flush toilets, automatic/sensor/timer fittings to taps and flushes and tap aerators. Points will be awarded for the percentage coverage of taps (1 **point**) and the percentage coverage of toilets and urinals (1 **point**) with both following the points ratio as depicted in Table 33.

Table 33: Points for percentage of taps or toilets and urinals fitted with water saving measures

Points	Percentage coverage of fixture fitted with water saving measure within an organisations building portfolio
0	0%
0.5	45%
1	90%

Water consumption and leakage monitoring

1-3 points

Intent

To support water management by reporting on water consumption and tracking losses and leakages, reducing wastage of water, supporting the move towards a net zero water city [10].

Requirements

Points are provided over two areas; water consumption reporting (2 points) and leakage monitoring (1 point).

Water consumption reporting (2 points)

To obtain the full **2 points** an organisation must have produced a water consumption report within the past three years with points awarded based on the frequency of reporting and whether it has aims/targets for reduced levels of water consumption. With points awarded as shown in Table 34.

Table 34: Points for water consumption reporting.

Points	Points allocation for water consumption reporting			
0	No water consumption report			
1	Organisation has a water consumption report which is not updated annually and does not contain aims/targets for reducing water consumption			
1.5	Organisation has a water consumption report which is either Updated annually but does not contain targets for reducing water consumption or Not updated annually but does contain aims/targets for reducing water consumption			
2	Organisation prepares an annual (or more regular) water consumption report that contains aims/targets for reducing water consumption			

Leakage monitoring (1 point)

To obtain the full **1 point** the organisation should provide evidence that they have developed an integrated water management process to report on and review their water balance in order to quickly and efficiently identify water leakages in their organisations system. They should be able to document how they have monitored and repaired water leakages during the previous year.

Water efficiency training

1 point

Intent

To reduce water wastage, encourage water reuse and reduce stress on water resources.

Requirements

Organisations should require employees undergo mandatory water efficiency training which covers the following topics [18];

- Global environmental and climate issues
- Water scarcity concepts and definitions
- Water management/efficiency legislation
- Behavioural methods to reduce waste
- Mechanical interventions to reduce waste

To obtain points an organisation must have provided water efficiency training, with points awarded based on the ratio of employees to have completed the water efficiency training as shown below in Table 35.

Organisations are not required to enforce that employees pass a test, but they must have some form of monitoring and reporting on completion.

Table 35: Points for water efficiency training.

Points	Percentage of employees to have undergone water efficiency training			
0	No water efficiency training for staff			
0.5	40% of employees			
1	90% of employees			

Sustainable Travel

Sustainable Travel to Work Schemes & Adoption

Ratio of employees walking, cycling & working from home

1-5 points

Intent

To reduce energy consumption, pollution and harm to human health from motor vehicles by encouraging walking and cycling or working from home. To reduce the incidence of obesity, heart disease and hypertension by encouraging daily physical activity associated with walking and cycling [5]. Added to this with the advancements in home computing and network speeds the modal shift to home work also supports reduced energy consumption, specifically for those unable to walk or cycle to work.

Requirements

For an employee to be considered to be working from home, they should across the financial year be working from home for more than 50% of their billed hours.

For an employee to be considered to regularly commute via walking or cycling they should cycle or walk more than 50% of the time. This will include an employee that walks and/or cycles during Spring to Autumn but takes the bus or some other form of transport during winter or at other times when there is poor weather/lighting conditions. Additionally the journey should only consist of walking or cycling. If for example a person walks for ten minutes and then takes a bus they will be counted as taking public transport (see the following item).

See Table 36 below for an outline of scoring for the ratio of building occupants that either work from home or walk and/or cycle to work.

Table 36: Points for ratio of employees that work from home or walk and/or cycle to work

Points	Percentage of employees that work from home or walk and/or cycle to work
0	0%
1	10%
2	20%
3	30%
4	40%
5	60%

Ratio of employees using public transport

1-3 points

Intent

To reduce energy consumption, pollution and harm to human health from personal vehicles by encouraging the use of public transport.

Requirements

The ratio of employees is from the pool of building occupants that do not (a) walk and/or cycle to work and (b) work from home.

Public transport includes buses, trams, trains and ferries. Taxis, carpooling and hired buses are not considered public transport.

For an employee to be considered as regularly commuting via public transport they should commute via this method for more than 50% of the time.

See Table 37 below for an outline of scoring for the ratio of building occupants that commute via public transport.

Table 37: Points for ratio of employees commuting via public transport

Points	Percentage of employees that commute via public transport
0	0%
1	10%
2	30%
2.5	50%
3	80%

Low emission transport facilities

1-2 points

Intent

To encourage low emission travel (e.g. cycling and walking), reduce the distance travelled in vehicular transport and improve public health by encouraging physical activity by providing facilities such as bike sheds, showers, changing rooms, lockers and drying areas [10].

Requirements

Bike shelters must be covered, at least partially enclosed, to buffer wind and rain.

Bicycle storage should be within 100 meters walking distance of a functional entrance and must be easily accessible to all building users. If bicycle storage more than 100 metres then points earned for bicycle storage will be halved.

Shower and changing facility requirements may be met by providing the equivalent of free access to on-site health club shower facilities.

See Table 38 below for an outline of points for the provision of low emission travel facilities

Table 38: Points for provision of low emission transport facilities [3].

Points	Provision of low emission transport facilities			
0	Provide bicycle storage for at least 20% of all building occupants, but no fewer than four storage spaces per building.			
1	Provide bicycle storage for at least 20% of all building occupants, but no fewer than four storage spaces per building.			
1.5	Provide bicycle storage for at least 50% of all building occupants, but no fewer than four storage spaces per building.			
2	Organisation has completed the requirements for 1.5 points and has provided at least one on-site shower with changing facility for the first 100 regular building occupants and one additional shower for every 150 regular building occupants thereafter.			
	(if organisation had only reached 1 point but has provided sufficient showers, they will receive 1.5 points)			

Car sharing scheme

1 point

Intent

To encourage and promote car sharing (also called car-pooling or ride/lift sharing) whereby two or more people share a car and travel together reducing the costs and number of one-persons cars on the road, helping reduce pollution and congestion, while also facilitating social networking.

Requirements

See Table 39 below for an outline of points for an organisations adoption and implementation of car sharing schemes.

Table 39: Points for car sharing scheme

Points	Organisational car sharing scheme			
0	No car sharing schemes			
0.5	Organisation promotes car sharing, offering parking discount for employees or other such incentives			
1	Organisation has completed the requirements for 0.5 points and can provide evidence that the scheme has been adopted by more than 1% of the workforce that do not work from home or walk, cycle or take public transport to work.			

Sustainable Business-Use Transportation Planning & Delivery

Travel plan

1-2 points

Intent

To reduce energy consumption, pollution and harm to human health from motor vehicles by developing and reporting on a travel plan which will advise and monitor ways an organisation can reduce the distance travelled by high emission transportation.

Requirements

Points are provided over two areas; enabling flexible working hours (0.5 points) and for having a travel plan (1.5 points).

Flexible working hours (0.5 points)

To be awarded points (**Table 40**) an organisation must allow flexible working hours to a set proportion of their workforce, the limit is not set at 100% in order to allow for site specific roles such as those in security, manufacturing etc.

Table 40: Points for flexible working hours

	Percentage of workforce able to apply for flexible hours			
0	No flexible hours			
0.25	25% of workforce allowed to apply for flexible hours			
0.5	50% of workforce allowed to apply for flexible hours			

Travel Plan (1.5 points)

To be awarded points an organisation must have a travel plan (written within the last 2 years) which covers the following sections [22];

- Changing travel behaviour
- Reducing the need to travel through smarter working
- Encouraging walking and cycling
- Encouraging public transport
- Responsible car use
- Business travel and optimisation of supplier deliveries
- Management measures
- Delivery plan
- Targets and objectives

If the travel plan was not prepared within the last two year then points will be reduced by 50%, however if the plan was prepared/updated over 5 years ago then there will be no score.

See Table 41 below for an outline of points for an organisations travel plan, dependent upon the relevant coverage of the fore mentioned sections.

Table 41: Points for an organisation's travel plan

Points	Number of sections covered within travel plan		
0	No travel plan		
0.5	Travel plan covers 3 sections		
1	Travel plan covers 6 sections		
1.5	Travel plan covers all 9 sections		

Travel plans will need to be submitted to the University of Southampton where they will be assessed with researchers recording how many sections are covered within the plan, allowing for multiple sections to be covered within one chapter or section of the organisations report.

For organisations with more than 50 employees to achieve the full two points, they are required to have someone officially in charge of managing transportation planning and delivery. If they do not they will only obtain half the awarded points.

Methods of transport for business trips

1-2 points

Intent

To reduce energy consumption, pollution, and harm to human health from motor vehicles by encouraging non private vehicle travel for business trips.

Requirements

In order to obtain points the organisation needs to monitor the methods of transport used for work related trips and have a ratio of sustainable travel as documented in Table 42.

Table 42: Points for methods of transport for business trips

Points	Work related trips completed by public transport or other sustainable modes of transport (walking, cycling)		
0	0%		
1	25%		
2	50%		

For organisations with more than 50 employees to achieve the full two points, they are required to monitor/record methods of transportation for work related trips. If they do not they will only be able to achieve a maximum score of 1.5.

If an organisation is able to provide evidence of having an active policy/policies to reduce/control business trips they may be awarded up to **0.5 points** helping increase their score to a maximum of 1.5. If an organisation had 0% of work related trips completed by sustainable modes of transport but had an active policy to reduce business trips their score would be increased from 0 to 0.5 points. Whereas if the organisation had 33% of work related trips conducted by sustainable measures they would have their score increased from 1.25 to 1.5 points.

Additionally if the governing factor set by the organisation when selecting a mode of transport is carbon then they may be awarded up to **0.5 points**.

Flight offsetting/avoidance strategy

1 point

Intent

To reduce energy consumption, pollution and harm to human health from air travel by encouraging alternative modes of transports or meetings (virtual) where an organisation will have an evaluation process in order to determine whether flight travel is necessary.

Requirements

No points will be awarded if the organisation has no offsetting/avoidance strategy but up to **1 point** will be earned if an organisation can show they have offset expected travel through displacement strategies, such as tree planting, conducting remote virtual meetings (Skype/Zoom instead of face-to-face meetings) or other such measures including having a flight evaluation process to determine whether flights are necessary/required.

Signatories will not be required to provide evidence of the impact of said processes but they will be required to describe the processes in order to be validated as a suitable offsetting/avoidance strategy. If an organisation is unable to describe a process it will not be considered for assessment.

Each signatory will be scored on a case-by-case basis where an organisations size will be considered in relation to the implemented flight offsetting/avoidance strategies.

See **Table 43** below for the offsetting/avoidance strategy requirements based upon an organisations size an outline of size of organisation and expected size of delivery team.

Table 43: Points for flight offsetting/avoidance strategy

Points	Micro enterprise (<10 employees)	Small enterprise (10-49 employees)	Medium-sized enterprise (50-249 employees)	Large enterprise (250+ employees)
0.5	-		Have a flight offsetting/avoidance strategy	Have a flight offsetting/avoidance strategy OR
			Flight evaluation process	Flight evaluation process
1	Have a flight offsetting/avoidance strategy	Have a flight offsetting/avoidance strategy	Have a flight offsetting/avoidance strategy	Have a flight offsetting/avoidance strategy
	AND/OR	AND/OR	AND	AND
	Flight evaluation process	Flight evaluation process	Flight evaluation process	Flight evaluation process

Journey optimisation for ingoings' and outgoings

1-2 points

Intent

To reduce the impact of courier businesses on greenhouse gas emissions, urban air pollution, noise and congestion through the use of AI.

Requirements

Points are provided over two areas; city centre avoidance (0.5 points) and journey optimisation (1.5 points) with the points for the latter area awarded as documented in Table 44.

City Centre Avoidance (0.5 points)

To achieve the points for city centre avoidance the organisation will have to provide evidence that they instruct and enforce a city centre avoidance policy. The city centre refers to the central part or main business and commercial area of a city as defined by the National Planning Policy Framework (NPPF) [23].

Journey Optimisation (1.5 points)

Journey optimisation systems can include using satellite navigation systems for non-courier systems but should either have a system in pace to ensure adherence to the policy or a method of measuring/tracking adherence.

For courier businesses they will be required to be more in-depth, such as employing a last mile system.

Last mile systems refer to deployed computer algorithms for;

- Delivery route optimization
- Fuel saving
- Anticipatory shipping (type and number of products)
- Collection points (brick-and-mortar stores and parcel lockers)

Algorithms should use real time data from a variety of sources including traffic patterns, GPS data and weather. Organisations should implement machine learning and predictive analytics to cleanse and enrich datasets.

Table 44: Points for deliveries completed by journey optimisation systems

Points	Percentage of deliveries completed by the last mile system		
0	0%		
0.75	30%		
1.5	60%		

Rating system for organisations that rent their premises

Intent

An organisation that rents their premises with have limited control in terms of implementing changes to the building (internal & façade), furnishings and external environment have certain items omitted from the assessment due to their inability to enforce change.

Requirements

For an organisation to qualify for the reduced assessment criteria they need to rent their premises. For those with multiple buildings within their building portfolio the vast majority of building assets (covering over 50% of the portfolio total building area) will need to be rented in order to qualify. For an organisation to be considered as renting for the purposes of this assessment they need to have little to no control of their premises

The following items will be evaluated for organisations classified as rental

- Carbon management plan (Q1)
- Delivery team (Q2)
- Publishing/engagement strategy (Q3)
- Low carbon heating system (Q4)
- LED lighting (Q5)
- Energy provision from renewables (Q11)
- Carbon emissions from energy consumption (Q12)
- Incentives for low emission vehicles (Q14)
- Disincentivising schemes (Q15)
- Eco-safe driver training (Q16)
- Ultra-Low emission concentration of commuting fleet (Q17)
- Ultra-Low emission concentration of goods & services fleet (Q18)
- Quality of biodiverse external environments (Q19)
- Green infrastructure management (Q20)
- Tree Planting Policies (Q21)
- Connectivity with green corridor (Q23)

- Waste segregation (Q24)
- Waste stream auditing and reporting (Q25)
- Waste management training (Q26)
- Elimination of single-use plastic (Q27)
- Sustainable procurement strategy (Q28)
- Water consumption and leakage monitoring (Q30)
- Water efficiency training (Q31)
- Ratio of employees walking, cycling & working from home (Q32)
- Ratio of employees using public transport (Q33)
- Car sharing scheme (Q35)
- Travel plan (Q36)
- Methods of transport for business trips (Q37)
- Flight offsetting/avoidance strategy (Q38)
- Journey optimisation for ingoings' and outgoings (Q39)

References

- [1] Southampton City Council, "Green City Charter" [Online] Available: https://www.southampton.gov.uk/ environmental-issues/pollution/green-city/green-citycharter.aspx [Accessed 10-Mar-2020]
- Carbon Neutral, "The Carbon Neutral Protocol" [Online] https://carbonneutral.com/how [2] [Accessed 16-Mar-2020]
- [3] USGBC, "LEED v4 for Building Operations and Maintenance – Rating System", 2018
- Carbon Footprtint, "Carbon Footprint" [Online] Available: https://www.carbonfootprint.com [4] [Accessed 15-Mar-2020]
- [5] USGBC, "LEED v4 for Neighbourhood Development – Rating System", 2018
- Southampton University "University of Southampton Biodiversity Report 2017" [Online] [6] Available: https://www.southampton.ac.uk/~assets/doc/estates-andfacilities/Sustainability/Biodiversity%20Report%20November%202017%20.pdf [Accessed 10-Mar-2020]
- UK Green Building Council "Demystifying Green Infrastructure", 2015
- [7] [8] Gehrels, H., Meulen, S., Schasfoort, F. et al. "Designing green and blue infrastructure to support healthy urban living", 2016
- [9] Arup "Cities Alive, Rethinking Green Infrastructure" 2009
- [10] USGBC, "LEED v4.1 Cities and Communities: Existing – Rating System", 2019
- [11] Southampton University "Annual Staff Parking Permits" [Online] Available: https://store.southampton.ac.uk/product-catalogue/parking-services/staff-car-parking-permits [Accessed 10-Mar-2020]
- [12] Transport for London, "ULEZ standards" [Online] Available: https://tfl.gov.uk/modes/driving/ultra-low-emission-zone/ways-to-meet-the-standard [Accessed 15-Mar-2020]
- [13] Learner Driver Centre, "Eco Safe Driving" [Online] Available: https://www.learnerdriving.com/driving-test/marking/eco-safe-driving [Accessed 15-Jul-
- Northern Ireland Direct, "Eco safe driving for cars, lorries and buses" [Online] Available: [14] https://www.nidirect.gov.uk/articles/eco-safe-driving-cars-lorries-and-buses [Accessed 15-Jul-2020]
- City Guilds, "Sustainable Waste Management (0746)" [Online] Available: [15] https://www.cityandguilds.com/qualifications-and-apprenticeships/built-environmentservices/environmental-services/0746-sustainable-waste-management#tab=information [Accessed 16-Mar-2020]
- [16] CIWM, "Resource and waste management courses" [Online] Available: https://www.ciwm.co.uk/ciwm/training/waste-management-courses.aspx?hkey=95e241b6a82d-4a99-aae0-a0f49b65d10b [Accessed 16-Mar-2020]
- [17] Waterwise, "Waterwise Training" [Online] Available: https://waterwise.org.uk/training/ [Accessed 16-Mar-2020]
- [18] EY "Reducing plastics in offices" [Online] Available: https://www.ey.com/en_uk/corporateresponsibility/reducing-plastics-in-our-offices [Accessed 15-Mar-2020]
- Natural England, "Natural England Sustainable Procurement Policy", 2019 [19]
- [20] Southampton City Council, "Sustainable Procurement Policy", 2019 [Online] Available https://www.southampton.gov.uk/business-licensing/supply-council/supply-portal.aspx [Accessed 10-Jul-2020]
- [21] Deloitte, "Deloitte LLP: Sustainable Procurement Policy", 2019
- University of Southampton, "Our Travel Plan" [Online] Available: [22] https://www.southampton.ac.uk/transport/our-travel-plan.page [Accessed 16-Mar-2020]
- [23] Ministry of Housing, Communities & Local Government, "National Planning Policy Framework", 2019
- Less Plastic, "Less Plastic for Businesses" [Online] Available: https://www.lessplastic.org.uk [24] [Accessed 20-Mar-2020]