

The Draft Royal Borough of Greenwich Green Finance Framework

Introduction to the Council

The Royal Borough of Greenwich is based in South-East London and lies along the south bank of the River Thames between Deptford and Thamesmead. The borough covers approximately 18.28 square miles and is made up of areas including Woolwich, Greenwich, Blackheath, Charlton, Kidbrooke, Plumstead, Abbey wood and Eltham.

The borough gained royal status in 2012 to mark the Diamond Jubilee of Queen Elizabeth II.

Royal Greenwich is home to a host of historic and cultural landmarks including Eltham Palace, The Royal Observatory, The Queens House, The Old Royal Naval College, National Maritime Museum the O2 arena, the Cutty Sark and Severndroog Castle. The borough is also home to Charlton Athletic Football Club.

Greenwich is known as the home of time and marks the point of Greenwich Mean Time which has been recognised as the standard for the world's time zones since 1884. Maritime Greenwich, which is situated within central Greenwich and Greenwich Park was designated a UNESCO world heritage site in 1997.

It boasts great transport links, from the Woolwich Ferry which has been in service since 1308, to the Elizabeth Line which opened in 2022.

The borough is home to 289,100 residents across over 120,000 households. 70.2% of the borough is aged between 15 and 64, with 10.4% of residents being aged 65 and over and the remaining 19.4% of residents being under 15.

There are a total of 9,990 businesses in the borough, 93.8% of which are classified as 'micro businesses'.

The Council owns and manages approximately 554 hectares of parks and green spaces. The Borough currently has 13 parks with Green Flags and 4 sites with the Green Flag Community.

Introduction to Climate Change in Greenwich

The Royal Borough of Greenwich declared a climate emergency in June 2019, setting out a commitment to be carbon neutral by 2030.

In winter and spring 2021, the Council carried out an online consultation on its draft Carbon Neutral Plan and hosted online events with residents, selected businesses and other organisations, to gather feedback, comments and suggestions on the Council's Climate Change agenda.

This Council formally adopted its Carbon neutral Plan in the spring of 2021. The plan outlines the Borough's path to become carbon neutral in line with the specific target necessary to limit a global temperature rise to 1.50C. The plan sets out the actions the Council will take under 7 key themes:

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RBG Climate Theme	Theme Descriptor
Buildings	Retrofitting existing buildings to consume less energy, save carbon and money
New Development	Ensure newly constructed buildings are low carbon and are of quality environmental and social design
Transport	Reduce transport emissions
Energy Supply	Renewable energy generation and consumption
The Circular Economy	Reduce waste sent to landfill and reduce consumption of natural resources
The Natural Environment	Natural and regenerative solutions to climatic stresses, preserving our beautiful green spaces
Empowering Wider Change	Develop partnerships and empowering our communities to develop new projects, initiatives and actions that reduce carbon emissions

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Council Track Record on Climate

In November 2019 Element Energy, on behalf of the Council produced an Evidence Base to support the development of a pathway to carbon neutrality by 2030. The Evidence Base set out 3 pathways, of which the Maximum Ambition pathway is used by the Council.

The Council reports on both its own operational emissions and the borough's emissions. For operational emissions the Council has data up to the financial year 2022/23 which is the most up to date data recorded. For the borough, we report the 2021 calendar year emissions data. 2021 data is the most nationally recent available data as there is a reporting time lag of about 18-24 months as emissions are verified.

The Greenhouse Gas Protocol (GHG Protocol) provides a standard methodology for businesses and cities to report their emissions. This approach categorises emissions into "scope 1" (emissions released on-site from energy use, usually gas or transport fuel) "scope 2" (emissions released off-site from energy use, typically from generating electricity) and "scope 3" (indirect emissions from everything else an organisation uses, purchases or sells).

Although not technically considered a part of the Council's operational emissions; we have included Council-owned homes and its maintained schools as sectors in which we can lever influence over. This goes beyond our reporting requirements but demonstrates our strategic commitment to reducing emissions in all possible areas.

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Operational Emissions

The Councils operational emissions in 2022/23 had decreased 15% - 3.0 kilotonnes of carbon dioxide equivalent (ktco2e) compared to the previous 2021/2022. Our current 22.9 ktco2e operational emissions are 8.1 ktco2e (26%) lower than 2019/20, which is the first reporting year with full data and, for practical purposes, can be considered the proper CNP baseline.

	CNP Operational Emissions Progress							
	Previous Reporting Periods				Current Reporting Period			
	16/17 Baseline Year Emissions (ktCO ₂ e/yr)	2019/20 Emissions (ktCO ₂ e/yr)	2020/21 Emissions (ktCO ₂ e/yr)	2021/22 Emissions (ktCO ₂ e/yr)	2022/23 Emissions (ktCO ₂ e/yr)	Annual ktco2e Change	Annual Percentage change	% of total emissions
Corporate	6	8.4	6.2	6.5	5.8	-0.7	-11%	25.2%
Temporary Accommodation		8.5	8	8	7.3	-0.6	-8%	32.0%
Schools	0.14	6.7	5.2	6.13	5.7	-0.5	-8%	24.7%
Unmetered Supply (Street lighting etc.)	4.8	4	2.7	2.6	1.1	-1.5	-57%	4.9%
Fleet		3.5	2.4	2.7	2.4	-0.3	-10%	10.5%
Plant Machinery			0.074	0.06	0.01	-0.049	-84%	0.0%
Office Paper Use				0.01	0.01	-0.003	-22%	0.0%
Transmission and Distribution Losses				0.86	0.57	-0.3		2.5%
Total (tCO₂e/yr) excl. Council Owned Homes	11	31	25	26.9	22.9	-3.9	-15%	100%
Council Owned Homes	Not Recorded	65	63	61	61	-0.003	-3.6%	
Total (tCO₂e/yr) incl. Council Owned Homes	11	96	88	88	84	-3.95	0.0%	

Borough Emissions

The table below shows the borough emissions by sector. Homes continue to make up the largest emissions sector across the borough. The increase in overall borough emissions in 2021 resulted from the economy opening up after the several national lockdowns due to Covid-19 in 2020 – of which Workplace emissions rose most significantly. This experience aligns with the majority of local authorities as emissions increased in 358 out of the 374 councils in the UK (96%). The only region to reduce its emissions since 2020 was the North East, down 1.4%, mainly due to a fall in industrial emissions. This is also consistent with the increase in overall UK emissions in 2021, which increased by 5% - again largely due to COVID-19 restrictions easing and colder temperatures increasing the use of heating in buildings.

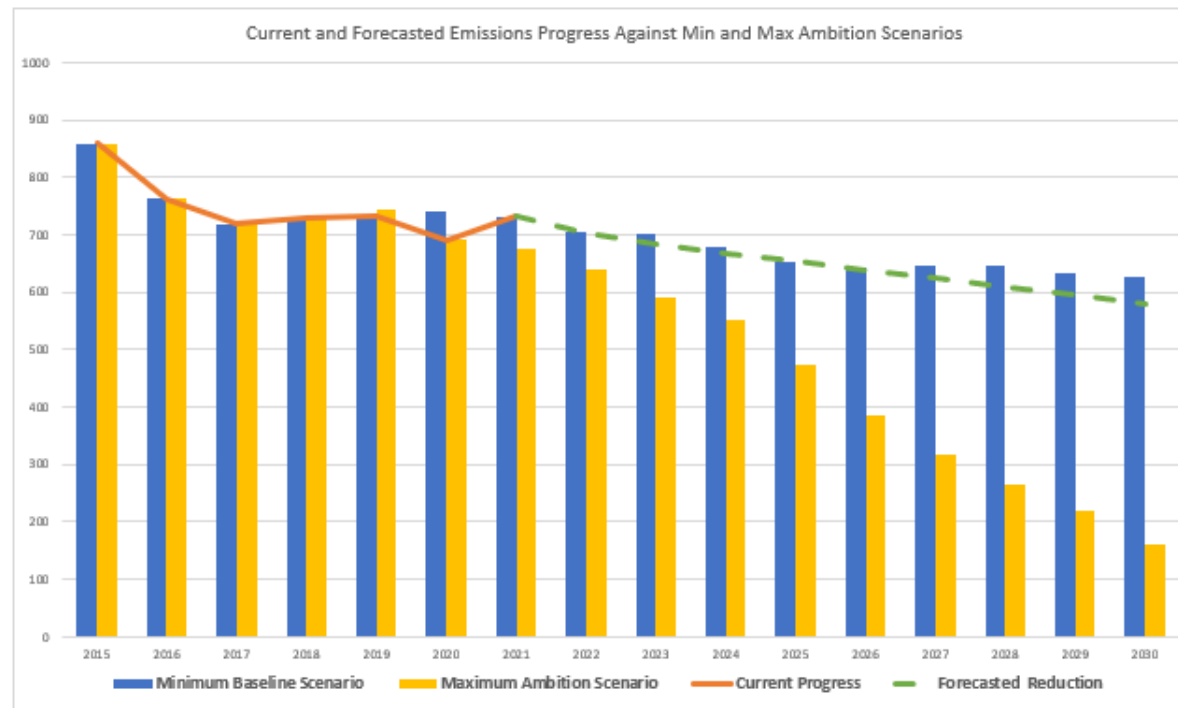
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Regionally, the largest overall increase in emissions since 2020 was seen in London (up 9.0%), this was largely due to an increase in transport emissions following the rise in road traffic. The rate of increase also differs between outer-London and inner-London Boroughs, with outer-London boroughs seeing larger emissions increases in areas such as transport than their inner-London counterparts. Greenwich has seen a lower increase in emissions (6%) than the regional average (9%).

	Baseline - 2015	2019	1 st Year - 2020	2 nd Year - 2021		
	kt CO2eq	kt CO2eq	kt CO2eq	kt CO2eq	% of total	% change from previous year
Homes	349	291	288	297	41%	3%
Workplaces	266	213	194	216	29%	11%
Transport	244	257	210	220	30%	5%
Total	859	761	691	734	100%	6%

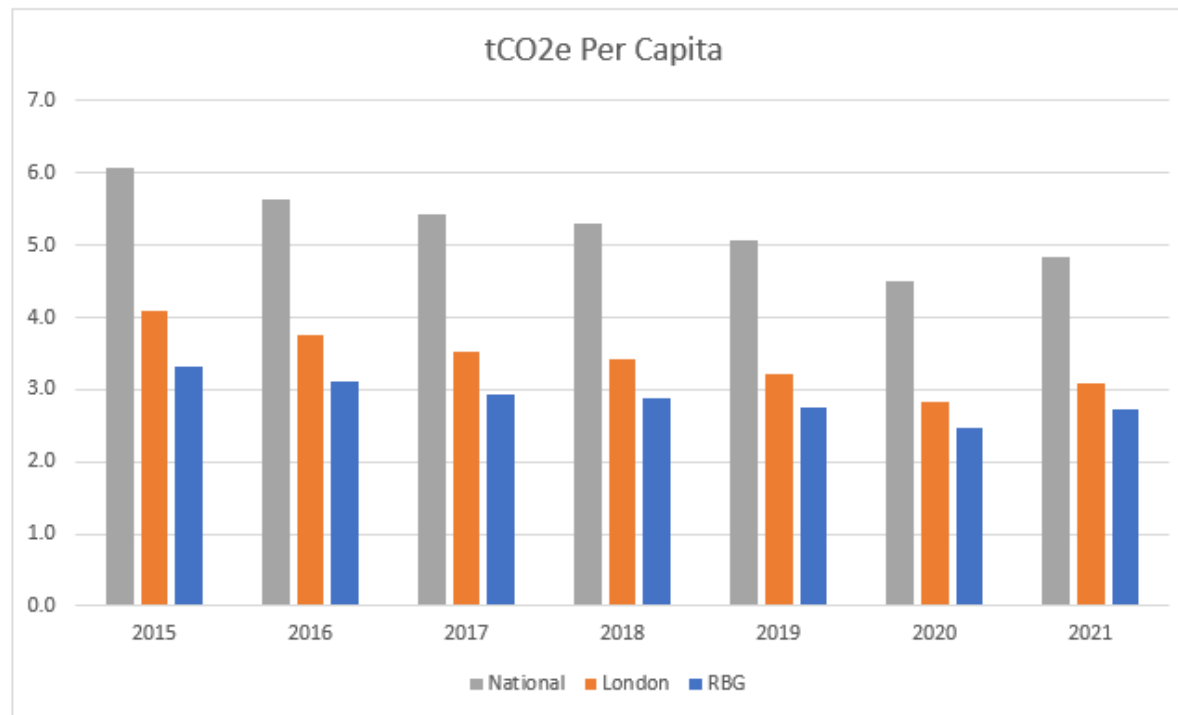
Trajectory Forwards

The table below shows the estimated borough emissions trajectories based on our current and historic progress. This trajectory is compared to the emissions pathways outlined in the Evidence Base (2030 Baseline and the Maximum Ambition Scenarios). The borough is therefore on track to outperform the baseline scenario but currently falls short of the maximum ambition scenario. We are therefore mindful that whilst we continue to make progress, we are dependent upon the national policy such as the acceleration of grid decarbonisation and further government funding for retrofit schemes if we are to meet our targets. Readers should also note that the emissions decrease from 2019-2020 and the increase from 2019-2020 are not considered “business as usual” years and it will require further annual reporting to fully assess the performance due to such disruptions over the past few years.



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The borough's population has also grown by approximately 4000 (1.3%) meaning total borough emissions figures are not fully reflective of the borough's performance. In this regard, it is better to show progress on an emissions per capita basis, which is summarised in Figure 7. RBG has lower per capita emissions - 2.7 tons of carbon dioxide equivalent (tCO₂e) than the London average (3.1 tCO₂e) and significantly below the national average (4.8 tCO₂e). When taking the *per capita* emissions metric, RBG has returned to the pre-pandemic (2019) figures.



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Green Finance Framework

The Council has prepared this Green Finance Framework (the framework) with the intention of raising capital via the issuance of:

- Green Municipal Investments (GMI) in the form of bonds and P2P Loan Agreements to (re)finance Eligible Green Projects).

The framework provides overarching criteria and guidelines as to how the Council will issue the above products and manage them on an ongoing basis. The Council has developed the framework in line with various applicable market standards as below:

- GMI align to the International Capital Market Association (ICMA) 2021 Green Bond Principles (GBP¹) and Loan Market Association (LMA) 2020 Green Loan Principles (GLP²) or as these principles may be subsequently amended.

The principles referenced within the framework are voluntary process guidelines and, at the date of this publication, are globally accepted as the standard guidelines. They also follow the principles underpinning the UK Government's Green Gilt and Green N&SI saving bond products.

Abundance Investment Ltd will provide assurance that the projects funded by Use of Proceeds are Eligible Green Projects and that all the Use of Proceeds are spent on Eligible Green Projects.

The Council's Section 151 Officer, will hold responsibility and accountability for the framework, including all compliance, throughout the life the green bonds and loans.

The Council is committed to following best practice and appreciates any feedback from market participants on the approaches set out in this framework.

This framework may be updated from time to time to ensure continued alignment with voluntary market best practices and emerging standards. For instance, these documents may be amended to align with the UK Government Green Taxonomy when it is published. Any updated version of this framework will either maintain or improve the current levels of transparency and reporting disclosures, including the corresponding external review.

Considering the Social Co-Benefits of Green Investment

A just transition seeks to ensure that the substantial benefits of a green economy transition are shared widely, while also supporting those who stand to lose economically – be they, industries, communities, workers or consumers.

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A rapid increase in the speed and scale of actions required to reduce the risks of climate change will create new economic opportunities, but at the same time it may move economic activity away from damaging industries and can carry costs for consumers.

We aim to identify where the challenges will occur and plan the transition, so it minimises the costs to more vulnerable sections of the community. In our reporting we will communicate mitigants that we have put in place when delivering individual eligible green projects to support a just transition.

CMI: Green bonds and green loans

This section of the framework sets out how the council proposes to issue and manage its CMI on an ongoing basis. Green bonds and loans are defined in this framework as bonds and loans established to finance Eligible Green Projects. These are projects or assets that deliver positive environmental outcomes.

The council developed the framework in line with the GBP and GLP and therefore the methodology includes the following four key components:

- Use of proceeds
- Process for evaluation and selection
- Management of proceeds
- Reporting.

Use of Funds

The Use of Funds is defined in the legal documentation for each CMI issued. It is an amount equivalent to the net proceeds (funding raised after costs) of green bonds and loans issued under the framework and can only be allocated to the financing of Eligible Green Projects. These are projects with positive environmental outcomes, which contributed to a low carbon and climate resilient future.

Each CMI will detail which specific projects, asset, or project themes the CMI is funding. Where eligible projects and assets are jointly funded between the council and another party (e.g. central government), funding will be applied only to the council's share of the eligible scheme.

Eligible Green Projects

The following tables outline the categories of Eligible Green Projects. The Eligible Green Projects are derived from the categories laid out in the ICMA Green Bond Principles, but for consistency follow the framework established by the UK Government for the countries Green Gilt and Green NS&I savings product scheme as well as the UK Taxonomy objectives.

Renewable Energy	
The Royal Borough of Greenwich Climate Theme: Energy Supply	Schemes generating energy from renewable sources such as wind, solar, geothermal, hydropower (provided

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<p>UK Taxonomy Objective: Climate Change Mitigation</p>	<p>environmental and social impact assessments are undertaken and no significant controversies are identified) and bioenergy with lifecycle emissions of less than 100g grams of carbon dioxide equivalent per kilowatt-hour of electricity generated (CO₂e/kWh), declining to 0g CO₂e/kWh by 2050 and only second generation biofuels are used.</p> <p>Energy storage facilities</p> <p>Schemes for renewable heat such as district heating and heat pumps where energy is derived from renewable sources</p>
<p>Energy Efficiency</p>	
<p>The Royal Borough of Greenwich Climate Theme: Buildings</p> <p>UK Taxonomy Objective: Climate Change Mitigation</p>	<p>Schemes that support the reduction of on-site energy consumption. This includes installing more energy efficient assets such as LED (light emitting diode) lighting and improving the building envelope with double glazing and insulation.</p>
<p>Transport</p>	
<p>The Royal Borough of Greenwich Climate Theme: Transport</p> <p>UK Taxonomy Objective: Climate Change Mitigation</p>	<p>Schemes that support low and zero emission mobility, including EV charging infrastructure, EV (electric vehicle) fleet conversion, cycle way improvement, car reduction schemes and other schemes that encourage cleaner transportation.</p>
<p>Pollution Prevention and Control</p>	
<p>The Royal Borough of Climate Theme: The Circular Economy</p> <p>UK Taxonomy Objectives:</p> <ul style="list-style-type: none"> • Climate Change Mitigation • Pollution Prevention and Control • Transition to a Circular Economy 	<p>Schemes that support waste prevention, waste reduction, waste recycling and energy/emission-efficient waste to energy</p> <p>Reduction of air and water emissions and greenhouse gas control</p> <p>Schemes that support the circular economy</p>
<p>Climate Change Adaptation</p>	

<p>The Royal Borough of Greenwich Climate Theme: Empowering Wider Change</p> <p>UK Taxonomy Objective: Climate Change Adaptation</p>	<p>Schemes that deliver flood protection, resilience and other risk mitigation programmes</p> <p>Schemes that deliver heat protection, resilience and other risk mitigation programmes</p> <p>Engineering activities and technical consultancy dedicated to adaptation to climate change</p>
<p>Living and Natural Resources</p>	
<p>The Royal Borough of Greenwich Climate Themes: The Natural Environment & Empowering Wide Change</p> <p>UK Taxonomy Objectives:</p> <ul style="list-style-type: none"> • The Protection and Restoration of Biodiversity and Ecosystems • Sustainable use and Protection of Water and Marine Resources • Climate Change Mitigation • Climate Change Adaptation 	<p>Schemes that protect and enhance terrestrial and marine biodiversity, ecosystems and natural capital</p> <p>Schemes that support sustainable land use and protection, including environmentally sustainable agriculture</p> <p>Schemes that support environmentally sustainable clean water, water storage and wastewater management initiatives</p> <p>Funding for environmental activities of third sector partners.</p>

Process for evaluation and selection

For new and existing CMI, the council will manage the eligible scheme selection process by applying professional judgement, discretion, sustainability knowledge and by considering the following objectives, features, and benefits:

- Conformance with the relevant principles
- Conformance with the eligible criteria set
- Alignment with the Council’s Carbon Neutral Plan
- Broader environmental and/or social risks associated with the project.

The resultant list of eligible assets and their budgets will be provided in the Use of Funds details associated with an individual CMI.

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Before a CMI is launched Abundance will validate that the Use of Proceeds only includes Eligible Green Projects. In cases where Abundance and the council do not agree on the classification of a project as green, a third-party opinion may be sort.

Management of proceeds

To manage the risk of holding unallocated proceeds from the CMI, the combined value of the CMI will be less than the total value of the eligible assets and any balance of funding will be met through existing funding sources.

Tracking of proceeds

The council tracks the receipt and use of proceeds via its internal reporting systems, ensuring Eligible Green Projects (re)financed are appropriately identified.

In addition, to ensure appropriate earmarking for the purpose of internal monitoring and external reporting of proceeds, the council has established a register that contains details (including value) of all Eligible Green Projects.

The council will service its debt obligations under CMIs and loans out of general cash flows and not specifically from revenues generated by eligible projects alone. This will also help in minimising risks to the investors. The overall financing cost of CMIs will be met from the same central budget as Public Works Loan Board (PWLB) debt.

Unallocated proceeds:

To the extent that green bond and loans proceeds have not been allocated to eligible assets at issuance, or if during the life of the green bond and loans proceeds become unallocated (“Unallocated Proceeds”) (for example, because an eligible asset has been sold), the amount of unallocated proceeds shall be:

- held in temporary investment instruments that are cash, or cash equivalent instruments, within a treasury function; or
- held in temporary investment instruments that do not include greenhouse gas intensive projects which are inconsistent with the delivery of a low carbon and climate resilient economy; or
- applied to temporarily reduce indebtedness of a revolving nature before being redrawn for investments or disbursements to eligible assets.

Should unallocated proceeds arise for any outstanding green bond or loan:

- The council will disclose this information within the annual use of proceeds reporting.
- No contractual right of review or repayment will arise, and no loss of green classification will occur.

The council expects there to be adequate headroom of eligible assets and will endeavour to ensure that funds are disbursed to eligible assets within 36 months of the issuance of the green bonds and loans.

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Reporting

The council will publish information on the Use of Proceeds as follows:

- Details of the schemes (re)financed and amount of money spent on each project
- A summary of the environmental outcomes that have been delivered by the projects

The information will be published as follows:

- Investor Update, this is the digital communication emailed to all investors in a specific GMI
- Abundance Project Page, the same information will be published on the Council GMI webpage so that any member of the public can view the information.
- Council Website, the same information will be published on the Council Website, or a link provided to the Council page on the Abundance website.

Governance

The council is committed to pursuing the highest standards of integrity relating to its GMI programme. By providing an independent and third-party check Abundance Investment provide confidence that the programme is being delivered in line with the GBP and GLP and that the schemes selected are Eligible Green Projects.

The projects selected to be financed by the Use of Proceeds will be reviewed by Abundance to ensure they qualify as Eligible Green Projects. Where the green credentials of a project are not clear, Abundance might recommend the recruitment of a technical expert to provide an expert opinion on the qualification of a project.

Abundance from time to time will spot check the council's programme to ensure that the updates provided are accurate and the internal systems and controls remain in place to ensure that ongoing compliance with the framework is assured.