

Appendix A. Options Appraisal Summary (Element Energy, 2019, “The development of the Carbon Neutral Plan – The Evidence Base”)

Key:

1. **Costs:** Total costs estimated to be less than **£100,000** over the full time period of policy implementation were considered ‘low’. Costs to the council between £100,000 and **£20 million** are considered ‘medium’ where significant external funding is not available, as are capital investments greater than this which can be expected to be recovered through revenue generation for the council, or which provide valuable assets (e.g. new LA owed homes). Outright costs to the council greater than £20 million without clear potential for revenue generation or a valuable resulting asset for the council are considered ‘high’.
2. **Deliverability:** Deliverability was primarily determined by the level of council control, according to the following categories:
 - Areas RBG directly controls – **High deliverability**
 - Areas RBG can mandate or strongly influence through policy – **Medium deliverability**
 - Areas RBG can enable through funding – **Medium deliverability**
 - Areas RBG can influence locally (and via key stakeholders) – **Low deliverability**
 - Areas RBG can influence or ask for nationally (and via key stakeholders) – **Low deliverability**
3. **Co-benefits:** The strength of co-benefits associated with each policy was assessed, with particular emphasis placed on those co-benefits which align with the council’s high-level priorities as set out in the Corporate Plan¹. Consideration is given both to the type of co-benefit and to the likely scale of benefit associated with a successful delivery of each policy.
4. **Risks:** Overall risk ratings were assigned by consideration of: the risk of a policy not achieving its goal, the risk of negative effects on other council objectives regardless of whether a policy achieves its goal, and risks to capital associated with large investments. For actions primarily involving lobbying, the primary risk considered is the risk and likelihood of the action not achieving the policy outcome, rather than the inherent risk to the council of lobbying itself (which is low).
5. **CO₂ impact:** We have assigned a high level CO₂ impact score based on the estimated effect of each policy. This score cannot be precisely defined since, while measures have associated modelled CO₂ savings, several policies contribute to a single measure and the contribution of each policy towards the total savings of the relevant measure is uncertain. In order to draw a distinction between policies, we have broadly estimated the scale of the contribution: any policy we feel contributes savings in the order of 10kt CO₂ per year or above is labelled ‘high’; and those we feel contribute savings in the order of

¹ Royal Borough of Greenwich, corporate plan 2018-2022, available at (accessed 13/11/2019)
https://www.royalgreenwich.gov.uk/info/200222/policies_and_plans/748/corporate_plan_-_our_vision_and_priorities

less than 3kt CO₂ per year are labelled as 'low' emissions savings. Policies are assigned an 'enabling' CO₂ impact when they do not in themselves create an emissions saving but are required for the completion of a separate action which does create such savings.

Table 1. Buildings options appraisal summary

No	Policy option	Cost & resource	Deliverability	Risks	Co-benefits	CO ₂ impact	Priority action
1	Set up a 'One-stop shop' for energy efficiency and low carbon heating	Medium	High	Low	High	Enabling	Yes
2	Liaise with the GLA's Energy for Londoners team and in particular the Energy for Londoners Supply Company (EfLSCo) during its setup and operation, such that with help from the boroughs it might take on part of the 'One-stop Shop' role described above	Low	High	Medium	Medium	Enabling	Yes
3	Run a major publicity campaign covering all aspects of the net zero plan	Medium	High	Low	Medium	Enabling	Yes
4	Explore opportunities to raise new build non-domestic carbon emissions standards above the NPPF	Low	Medium	Low	High	Low	Yes
5	Initiate exemplar new build projects of LA owned or partially LA owned housing at a very high standard of energy efficiency	Medium	High	Medium	High	Enabling	Yes
6	Initiate 10 whole house net zero energy retrofits on existing social housing as a pilot project, following the 'Energiesprong' approach	Medium	High	Medium	High	Enabling	Yes
7	Retrofit all existing local authority owned homes and public buildings to EPC C+ energy efficiency standard.	Medium	High	Low	High	Medium	Yes
8	Lobby national government to increase the landlord Minimum Energy Efficiency Standard (MEES) obligation and consider reformulating it as a carbon standard	Low	Medium	High	Low	Low	Yes
9	Mandate carbon emissions standards for privately rented homes and provide associated financial aid for landlords in the form of grants.	High	Low	Medium	Low	Medium	No

No	Policy option	Cost & resource	Deliverability	Risks	Co-benefits	CO ₂ impact	Priority action
10	Offer concessionary low interest loans by partnering through banks and/or building societies, to support domestic and non-domestic energy efficiency retrofits and heat pump installations	High	High	Low	Medium	High	No
11	Directly fund 50% grants for energy efficiency retrofits for owner occupied homes.	High	Medium	Medium	Low	High	No
12	Initiate low carbon heat network schemes in cost effective and heat density appropriate locations, acting alone or in a public-private partnership	High	Medium	Medium	Medium	Enabling	Yes
13	Update the Local Plan to state that no new gas CHP used to supply heat networks can be built in Greenwich from 2021.	Low	Medium	Medium	High	Medium	Yes
14	Work towards a mandatory connection policy where a heat network is available, via the Local Plan, through 'heat zoning'	Low	Medium	Medium	Medium	Medium	Yes
15	Promote industrial heat recovery by encouraging and supporting applications from local industries to the government's 'Industrial Heat Recovery Support Programme'	Low	High	Medium	Medium	Low	No
16	Lobby national government for highly tightened CO ₂ standards for new builds	Low	Low	High	High	Medium	No
17	Lobby national government for significantly tightened CO ₂ emissions standards for heating system replacements in existing buildings	Low	Low	High	High	High	No
18	Heat pump installer training and quality assurance scheme, operating through the 'One-stop Shop'	Low	High	Low	Low	Medium	Yes
19	Lobby the national government to design a more ambitious successor scheme for the Renewable Heat Incentive from 2021	Low	Medium	Medium	Medium	Medium	No
20	Install low carbon heating systems in all LA owned homes and public buildings where not assigned to a heat network	High	High	Low	Medium	High	Yes
21	Offer "top-up" funding to the Renewable Heat Incentive and any national successor scheme (from 2021) for Greenwich residents and businesses	High	Medium	Medium	Medium	High	No

No	Policy option	Cost & resource	Deliverability	Risks	Co-benefits	CO ₂ impact	Priority action
22	Phased program to replace all gas boilers with low carbon heating systems, including strong funding incentives	High	Medium	High	Medium	High	No

Table 2. Transport policy options appraisal summary

No	Policy option	Cost & resource	Deliverability	Risk	Co-benefits	CO ₂ impact	Priority action
1	Introduce banded resident parking permits in proportion to emissions impact	Low	High	Medium	Medium	Low	Yes
2	Introduce new and extended controlled parking zones	Medium	High	Low	Low	Medium	Yes
3	Explore introduction of workplace parking levy	Low	High	Medium	Low	Low	Yes
4	Reduce/remove on-street parking spaces in new developments, immediately	Low	High	Low	Low	Medium	Yes
5	Reallocate existing parking spaces to car clubs (extent depends on car club model)	Low	High	Low	Low	Medium	Yes
6	Reduce speed limits to 20mph on all residential roads and appropriate major roads	Medium	High	Low	Low	Low	Yes
7	Create ZE-only access to town centres for deliveries during peak hours	Medium	Medium	Medium	High	High	Feasibility
8	Extend planned Liveable Neighbourhoods to town centre ZEZs	Medium	Medium	Medium	High	High	Feasibility
9	Create borough-wide ZEZ for cars, LGVs and buses, ZE capable for HGVs	High	Low	High	High	High	No
10	Strategic closing of local roads to motorised vehicles	Medium	High	Medium	High	Medium	No
11	Increase provision of both public access and business EV charge points	Medium	Medium	Low	Medium	High	Yes
12	Expand use of Permitted Development rights for installing charge points to rapid charge points and hubs	Low	High	Low	Low	Medium	Yes
13	Create new strategic river crossings for pedestrians and cyclists	High	Low	Medium	Medium	Medium	Feasibility
14	Create new and improved cycle network through the borough	High	Medium	Medium	High	Medium	Yes

No	Policy option	Cost & resource	Deliverability	Risk	Co-benefits	CO ₂ impact	Priority action
15	Improvement of walking routes in town centres	Medium	High	Low	High	Low	Yes
16	Increase provision of bike hangars for residents and high quality long-stay cycle parking at key transport hubs	Medium	High	Low	Medium	Low	Yes
17	Provide grants for ULEV purchase among residents and local businesses	High	Medium	Medium	Medium	High	No
18	Provide interest-free loans for ULEV purchases among residents	High	High	Medium	High	High	No
19	Provide public transport mobility credit and scrappage scheme for low income residents	Medium	Medium	Medium	Medium	High	No
20	Provide grants for residents for purchase of ebikes	Medium	Medium	Medium	Medium	Low	No
21	Provide cargobike hire for residents and SMEs	Low	Medium	Low	High	Low	No
22	Provide subsidised telematics service for local van users	Low	High	Low	Low	Medium	Yes
23	Build on personalised travel planning experience to create behaviour change campaign	Medium	High	Low	Medium	Low	No
24	Fund community schemes that promote active travel	Medium	High	Low	Medium	Low	No
25	Support pick-up and drop-off points for parcel delivery	Low	Medium	Low	Medium	Low	No
26	Support/encourage formation of one or more Business Improvement Districts	Low	Medium	Medium	Low	Enabling	Yes
27	Investigate feasibility of establishing consolidation and microconsolidation centres in existing areas of high delivery activity and within new developments/opportunity areas, including combining rail/river freight with last-mile delivery where appropriate.	Low	Medium	Medium	Low	Medium	Yes
28	Work with car clubs to increase shared van offering for SMEs	Low	Medium	Medium	Low	Low	No
29	Require car clubs to only offer EVs	Low	High	Medium	Low	Medium	No
30	Encourage employers to conduct travel surveys and review transport policies, working towards part or fully funded public transport where modal shift can be achieved	Low	High	Low	Low	Enabling	Yes
31	Convert RBG fleet to fully ZEV	Medium	Medium	Medium	Low	Medium	Start
32	Shift council deliveries to cycle freight where possible	Low	Medium	Low	Medium	Low	No

No	Policy option	Cost & resource	Deliverability	Risk	Co-benefits	CO ₂ impact	Priority action
33	Implement large scale and/or joint procurement with other boroughs, councils and HGV fleets for ZE HGVs and vans to drive supply	Low	Medium	Medium	Low	High	No
34	Require ULEV transport in council service tenders	Low	Medium	Medium	Low	Medium	No
35	Lobby for ULEZ to be ZEZ for cars and vans	Low	Low	Medium	Low	High	No
36	Lobby for ULEZ to extend to portion of South circular within borough boundaries	Low	Low	Medium	Low	High	No
37	Engage with TfL and fleets to support the transition of emergency vehicles to ULEVs by 2030	Low	Low	Low	Low	Low	Yes
38	Work with TfL and GLA to expand public transport network	Low	Medium	Low	Low	High	Yes
39	Lobby TfL to provide ULEV-only access for Silvertown and Blackwall tunnels	Low	Medium	Low	Low	High	Yes
40	Lobby TfL to allow for high quality cycle access at key river crossings, such as Silvertown tunnel	Low	Low	Medium	Low	Medium	Yes
41	Lobby City airport to convert to zero emissions technologies	Low	Low	Low	Low	Low	Yes
42	Work with TfL and GLA to accelerate switch to ZE buses	Low	Low	Low	Low	High	Yes

Table 3 'Energy generation, industry, waste & other' options appraisal summary

No	Policy option	Cost & resource	Deliverability	Risks	Co-benefits	CO ₂ impact	Priority action
1	Invest in large-scale renewable energy generation projects	High	Medium	Medium	Low	High	No
2	Consider opportunities for the promotion of demand side response, energy storage and smart/flexible technologies	Low	Medium	Low	Low	Enabling	Yes
3	Offset remaining emissions	High	Medium	High	Medium	High	No
4	Set strict quantitative targets for waste reduction and increased recycling	Low	High	Low	Medium	Low	Yes
5	Consider instituting separate food waste collection and anaerobic digestion	Medium	High	Medium	Low	Low	Yes
6	Undertake baselining of RBGs direct emissions and organise/improve data on energy procurement	Low	High	Low	Medium	Enabling	Yes

No	Policy option	Cost & resource	Deliverability	Risks	Co-benefits	CO ₂ impact	Priority action
7	Require infrastructure for shore-side power to be installed at wharves	Low	Medium	Medium	Medium	Low	No
8	Encourage ships to turn engines off or use anti-pollution technology while in berth	Low	Medium	Medium	High	Low	Feasibility