

Meridian Water

Environmental Sustainability Strategy

Appendix B

Implementation Programme

This shows the implementation programme following the Environmental Sustainability Strategy. The intention is that this programme is dynamic and is updated with each project.

Note:

Implementation – achieving the vision

This follows on from Appendix A of the strategy that focusses on the vision, objectives and requirements.

Appendix B and C of the strategy focusses on the implementation and process to achieve Appendix A. This is in progress, but here we set out the steps needed, and the format of the implementation programme.

Environmental sustainability implementation programme and summary - template only

Vision	Objective	Category	2020		2025		2030		2035		2040															
			2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
<p>Projects</p> <p>Legend: Launch / Strategy / Feasibility (light blue), Design / create (medium blue), Implement / construct (dark blue), Occupy / use / maintain (darkest blue)</p> <p>Alignment: Aligned (green), Most measures aligned (light green), some measures aligned (yellow), a few measures aligned (orange), No alignment yet (red), Interface not started (dark red)</p> <p>Project monitoring and support: Briefing all projects at first stages, stage reviews and gateways, feeding into environmental passports into federated model, inputting into strategic reporting and project wide KPIs</p>			<p>The Environmental Sustainability Strategy Metric dates are set when the project is 'launched'</p>																							
<p>Carbon positive</p> <p>NB. Only selection of issues listed here - for full picture - see Environmental Sustainability Strategy</p> <p>Low energy use: Fabric first design, incorporated regulated and unregulated energy, integrating smart tech and grid</p> <p>Low carbon energy supply: Flexible low carbon heat sources, onsite renewable energy, with smart</p> <p>Low embodied carbon: Reduce whole life embodied carbon by using natural materials and adopting circular design principles</p> <p>Whole life carbon: Reducing whole life carbon</p> <p>High impact carbon offset: Local PV energy offset scheme</p> <p>Low carbon, shared and active transport: Minimise transport related emissions through design, logistics, public transport, sharing platforms and electric vehicles</p> <p>Positive carbon consumption: Enabling residents to lead low carbon lifestyles</p> <p>Climate resilience: Provide a desirable internal and external environment that is resilient to climate change</p>			<p>reduction in regulated operational CO2 emissions</p> <p>Space heating demand (kWh/m2/yr)</p> <p>Regulated loads (non - resi) total operational energy (kWh/m2/yr)</p> <p>Heat network</p> <p>Fossil fuel connections</p> <p>Renewable electrical network</p> <p>Embodied carbon of resi buildings</p> <p>Embodied carbon of non-resi buildings</p> <p>Embodied carbon of concrete</p> <p>Embodied carbon of structural steel</p> <p>RICS whole life carbon assessment (A-C)</p> <p>Operational and embodied emissions.</p> <p>Urban design implications</p> <p>Network provision</p> <p>Logistics</p> <p>Transport mode implications</p> <p>Parking implications</p> <p>Architectural implications</p> <p>Transport carbon emissions</p> <p>Transport mode shift</p> <p>Sustainable businesses on site</p> <p>Campaigns and community</p> <p>As building regs, understand performance</p> <p>OPA requirements</p> <p>As planning req.</p> <p>As building regs</p> <p>Skills centre</p>																							
<p>Environment Positive</p> <p>Resilient, high quality: Provide a desirable internal and external environment that is resilient to climate change</p> <p>Continuous green and blue: Create spaces for nature, play, food</p> <p>Radical increase in biodiversity: Nature restoration to support a net gain in biodiversity</p> <p>Water sensitive design: Demonstrate resilience to flooding and minimise water use</p> <p>Low Pollution: Minimise air, noise, light and water pollution as part of creating a high-quality environment</p>			<p>Microclimate and daylight / sunlight modelled to inform urban layout, street widths, heights and massing</p> <p>>90% all dwellings dual aspect, no single aspect north or 3-bed dwellings</p> <p>All buildings designed for natural ventilation and to meet overheating standards</p> <p>Standards for public space access to daylight, sunlight and low wind comfort conditions</p> <p>Achieve excellent daylight and sunlight levels, control windspeed and mitigate urban heat island effect</p> <p>Minimum of 30% open space, within 100m of everyone's doorstep. Green flag status for all green spaces. Multi functional with improved access to Lee Valley</p> <p>Roof gardens and courtyards should be well designed with adequate sunlight access</p> <p>Provide well distributed inclusive play space within 400m of all homes with good sunlight. Schools to have outdoor classrooms, wildlife areas.</p> <p>Provide enough community growing space, allotments and micro growing sites with enough sunlight.</p> <p>Maximise incorporation of elements such as landscaped, green roofs/walls, rain gardens and green space and work with the community on training and upkeep</p> <p>10% 20% 50%</p> <p>Commission a Preliminary Ecological Appraisal to establish baseline condition. Protect and enhance areas of biodiversity and clean up water systems.</p> <p>100% buildings protected against 1:100+35% climate change flooding. 1:1000 year extreme event flooding to be considered for all buildings</p> <p>Integrate the sustainable drainage and flood control strategies with enhancement of the waterways, landscape and biodiversity</p> <p><110 l/p/day resi, <16 non-resi <95 l/p/day resi, <13 non-resi <75 l/p/day resi, <10 non-resi</p> <p>Integrate rainwater and grey water recycling.</p> <p>Achieve air quality positive and WHO air quality targets</p> <p>Mitigate acoustic issues with urban form, provide tranquil quiet external areas.</p> <p>Minimise glare and light pollution, identify dark sky areas for wildlife</p> <p>Control pollution to the water environment and improve water quality</p>																							
<p>Zero waste and circular</p> <p>Use fewer resources: Avoid waste, use less, use natural, secondary, ethical and sustainable</p> <p>Use Local resources: Local manufacture and supply</p> <p>Designing out waste: Minimise waste throughout construction and operation</p> <p>Value waste: Treat waste as a resource, creating new systems and business to support the circular economy</p> <p>Increase resource utilisation: Extend the life and utilisation of resources.</p> <p>Circular economy hub: An evolving business strategy</p>			<p>Increasing proportion of circular materials</p> <p>Regenerative or secondary construction</p> <p>Regenerative or secondary construction</p> <p>Increase local materials and capabilities</p> <p>minimise waste m2/E100k of project value</p> <p>maximise % of non-haz material reuse</p> <p>Reduce household waste</p> <p>Increasing recycling collection</p> <p>Increasing percentage recycled</p> <p>Reducing WTE and landfill</p> <p>Materials passports for disassembly</p> <p>Tools for the sharing economy</p> <p>Kickstarting a new sector - outline in dev</p> <p>Skills centre</p> <p>New innovation hub, repair café, library of things and local co-working spaces</p>																							
<p>Initiatives</p> <p>Short and long-term masterplan and urban design</p> <p>Sustainable economics</p> <p>Carbon and Energy modelling</p> <p>Engagement, education, behaviours programme</p> <p>Renewable energy in-borough supplier</p> <p>Industry wide innovation forums</p> <p>Circular Economy projects</p> <p>Inclusive digital strategy</p> <p>Sustainable delivery</p> <p>Social sustainability co-benefits</p> <p>Biodiversity, landscape and water</p> <p>Sustainable transport</p> <p>Holistic building design</p> <p>Monitoring and KPIs</p> <p>Environmental Strategy workstream management</p>			<p>Graph showing cumulative carbon emissions from 2020 to 2040. Values range from 5 to 87.</p>																							
<p>Context assumptions</p> <p>Regulation assumption</p> <p>Heat Network assumption</p> <p>Industry assumption</p> <p>Cost assumption</p>			<p>Regulatory minimum from late 2020 as per currently proposed (i.e. published Draft New London Plan (DNLP), Building Regulation Part L/F update proposals, emerging Enfield Local Plan).</p> <p>Further uplifts in 2025 and 2030 as per published proposals by regulators (e.g. Part L uplift to Future Homes Standard in 2025) e.g. line with pathway towards zero carbon in 2040.</p> <p>Energetic Heat Network to 100% of MW new homes, Gas CHP to 2025</p> <p>EFW CHP from 2025.</p> <p>Industry responds to challenges resulting from regulatory evolution</p> <p>Costs normalise in line with new regulation</p> <p>Complete decarbonisation of the borough by 2040</p>																							
<p>Overall outcomes</p> <p>High level KPIs</p> <p>Total Cumulative Carbon emissions (indicative - not real data or forecast)</p> <p>Graph is indicative only for this template</p>			<p>Each project does a pilot project of 10% to 2025 level. Each project does a pilot project of 10% to 2030 level. Each project does a pilot project of 10% to 2035 level.</p>																							
<p>Additional Input</p> <p>Innovation and pilot projects</p> <p>Pilot projects</p>			<p>Each project does a pilot project of 10% to 2025 level. Each project does a pilot project of 10% to 2030 level. Each project does a pilot project of 10% to 2035 level.</p>																							