4. Buildings and Infrastructure

Action Plan: Appendix C, 4.1 to 4.8

Air Quality Neutral and Positive The Newham Local Plan 2025 ensures that all major developments meet or exceed air quality benchmarks for both building and transport emissions and this must be evidenced in detailed quality assessments. Many combustion based heat and power sources and backup generators will not be compliant unless there operation is for 'life safety' reasons. Where emission breaches are unavoidable, the plan will require offsetting elsewhere.

Development with Environmental Impact Assessments (EIA) must adopt an Air Quality Positive approach, which includes designs that promote active travel like walking and cycling.

Green Spaces and Infrastructure Currently, only 13% of Newham is green space, with just 7% accessible to the public. The plan aims to tackle this deficiency by expanding and protecting green spaces and infrastructure with new parks, community gardens, and public green areas, especially in high-pollution zones. It also supports developing green corridors to connect natural areas, increasing tree cover, and integrating green infrastructure into roads and new developments to encourage active travel. Sustainable urban drainage systems (SUDS) and green walls in pollution hotspots are also part of the plan. Community engagement and education on green space benefits are key, along with leveraging these spaces for climate resilience.

Indoor Air Quality The plan promotes efficient ventilation systems in homes and public buildings, especially those with existing air quality issues. Retrofitting older homes with better ventilation and insulation is also a focus, targeting low-income and high-risk households. A Damp and Mould Management Plan for social housing and council-owned buildings is proposed, along with public awareness campaigns on preventing and managing damp and mould. Monitoring indoor air quality in key public buildings and offering air quality monitors to residents are also part of the plan.

Smoke Control Areas A borough wide SCA will be designated, making it illegal to emit smoke from chimneys unless using authorized fuels or appliances. A public awareness campaign will educate residents about SCAs and the health impacts of smoke pollution. Compliance monitoring and enforcement actions will be strengthened, with clear channels for reporting violations and penalties for repeat offenders.

Energy efficiency and retrofitting projects Improving energy efficiency in buildings reduces emissions and enhances indoor air quality. Retrofitting projects will focus on upgrading insulation, installing energy-efficient windows and doors, and integrating renewable energy sources. These measures will help reduce the environmental impact of buildings and contribute to Newham's broader climate and sustainability goals.

External sources of information:

- The Local Plan 2025 (Planning Policy CE2, CE6);
- GLA Air Quality Neutral Guidance;
- The Just Transition Plan (2023);
- Newham Green and Water Infrastructure Strategy;
- Sustainable Transport Strategy;
- Highways Local Implementation Plan (LIP);
- Highway's Emerging Design Guide;
- Draft Smoke Control Order;
- Climate Emergency Action Plan;

	Action	Outcome	Emissions Benefits	Cost	GLA	Responsibility
Buildings and Infrastructure	**4.1 Reduce Emissions from Construction Through Air Quality Neutral and Air Quality Positive Planning Policies**	**A.** All relevant developments in Newham will have a planning requirement to meet the Air Quality Neutral benchmark for building and transport emissions. Applicants will be required to include backup generators in Air Quality Neutral calculations unless they are solely used for life safety. **B.** Large-scale developments (subject to an EIA) will be required to meet the Air Quality Positive requirements. **C.** Publish an Air Quality Supplementary Planning Guidance, which will include further details for air quality obligations required from new developments.	A significant mixed-use development with CHP and gas-fired boilers can produce 17.3 tonnes of NOx emissions yearly. Air quality neutral benchmarks allow for onsite or off-setting measures.	£	5	Planning and Development, Environmental Control
	4.2 Reduce Emissions and Exposure Through Green Spaces	**A.** Identify and increase the number of coverage or trees and green spaces across the borough by creating new parks, community gardens, and public green areas, particularly in areas with high pollution levels, climate risks (overheating and flooding) and limited access to green spaces. **B.** Create green corridors that connect parks, woodlands, and other natural areas to facilitate airflow and reduce the concentration of pollutants. **C.** Engage resident and community groups in the identification, co-creation, and development of community gardens, food growing, and urban farming initiatives that foster community engagement and hands-on learning about the sustainability of local food production, reduced transportation, and cleaner air. **D.** Support the delivery of 'pocket forests' in schools across the borough and alongside transport routes with heightened pollution levels by planting a biodiverse network of native species to foster important ecosystems and create a green buffer. **E.** Promote the removal of Astroturf and paving over front and rear gardens, contributing to increased surface temperatures, runoff, and reduced biodiversity. **F.** Ensure that green space initiatives contribute to carbon sequestration and align with Newham's broader climate and environmental sustainability goals.	Introducing large open green spaces in new development can have an impact in reducing concentrations if the net result is a reduction in new roads and parking spaces. It can also help reduce exposure by extending the distance between pollution sources.	££££*	6	Community Wealth Building, Public Health, Sustainable Transport and Highways, Parks, Climate Action, Planning and Development, Environmental Control

	Action	Outcome	Emissions Benefits	Cost	GLA	Responsibility
Buildings and Infrastructure		G. Implement a 50-Year Green Infrastructure Strategy, focusing on long-term planning to increase and sustain green coverage in Newham. The evidence base will include a Green Spaces Plan, a Local Nature Recovery Plan and a Local Urban Forest Plan.				
	4.3 Reduce Exposure and Emissions Through Improved Ventilation, Mould and Damp Assessments	A. Create and implement a Damp and Mould Management Plan for Newham's social housing stock and council-owned buildings.	Does not directly reduce concentrations. However, indoor air pollution is a significant concern and risk to human health.	££££		Housing Needs, Climate Action, Public Health, Environmental Health
		B. Ensure that damp and mould risks are regularly assessed and managed as part of property maintenance schedules.				
		C. Provide resources and guidance on best practices to educate residents on preventing and managing dampness and mould in their homes, including the importance of ventilation, proper heating, and avoiding moisture build-up.				
		D. Pilot a program offering indoor air quality monitors to residents, especially in homes with vulnerable individuals.				
		E. Collaborate with public health agencies to link indoor air quality assessments with broader housing and health interventions, especially for residents suffering from respiratory conditions like asthma.				
		F. Retrofit homes with better ventilation and insulation to reduce air leaks and improve overall building health. Retrofit projects should prioritise low-income and high-risk households to tackle inequities in poor indoor air quality exposure.				

	Action	Outcome	Emissions Benefits	Cost	GLA	Responsibility
Buildings and Infrastructure	**4.4 Reduce Emissions and Exposure Through Green Infrastructure**	**A.** Drawing from the Highways emerging design guide, GI will be incorporated into the scope of all new highway schemes using native, pollution-absorbing species to serve as a natural buffer against pollution. **B.** We will establish the Green and Water Infrastructure Implementation Group. **C.** Expand tree-planting initiatives, particularly in high-traffic areas, along roadsides, and near schools and public buildings, to reduce exposure to air pollution. **D.** Use planning controls in Chapter GWS Local Plan and a Sustainable Transport Design Guide to integrate green infrastructure in all redevelopment and regeneration projects.	Green infrastructure does not directly reduce concentrations. However, it has many co-benefits, from health to well-being to reducing reliance on private car use and making active travel more attractive.	££££*	6,18	Sustainable Transport and Highways
	4.5 Reduce Emissions Through Promotion and Enforcement of Smoke Control Areas and Solid Fuel Burning	**A.** Aim to strengthen the legal standing of existing Smoke Control Areas by introducing a new provision that removes exemptions for domestic burning on vessels. **B.** Develop targeted campaigns to educate residents and traders about the importance of SCAs and the regulations surrounding them. Provide clear information about the types of permitted fuels and the health impacts of smoke pollution. **C.** Establish clear channels for residents to report smoke violations and develop a framework for enforcing smoke control regulations, including penalties for repeat offenders.	King's College London estimates that between 23% and 31% of the $PM_{2.5}$ originating in London comes from wood burning. Reducing this would clearly have a significant impact on $PM_{2.5}$ emissions.	££	7	Environmental Control

	Action	Outcome	Emissions Benefits	Cost	GLA	Responsibility
Buildings and Infrastructure	4.6 Reduce Emissions and Exposure Through Promotion and Delivery of Energy Efficiency and Retrofitting Projects	A. Develop an Energy Management Plan to upgrade the energy efficiency of social, administrative and community property portfolios and plan the transition to renewable energy. B. Initiate pilot programs for innovative retrofit schemes, such as Net Zero Neighbourhoods, with the goal of retrofitting the entire social housing portfolio managed by the Council. C. Continue to maintain compliance to improve Energy Efficiency Standards for privately rented properties by issuing enforcement notices to address sub-standard properties. D. Offer free or subsidised energy audits for schools and small businesses to identify areas where energy efficiency can be improved. Provide tailored recommendations for retrofitting based on individual needs. E. Create a directory of certified contractors specialising in energy efficiency upgrades and retrofitting, helping residents connect with qualified professionals in their area. F. Support community-led renewable energy initiatives that empower residents to collectively invest in energy-efficient technologies. G. Launch campaigns to educate residents about the benefits of energy efficiency and retrofitting, highlighting potential savings on energy bills, environmental impacts, and health benefits.	Upgrading homes while simultaneously improving indoor air quality can reduce energy consumption by 50-80%. This is achieved through improved ventilation systems, tighter construction to minimise air leaks, and the use of healthier building materials. By lowering energy demand and transitioning to cleaner heating alternatives, retrofits can contribute to broader improvements in outdoor air quality.	££££	8	Housing Needs, Climate Action, Community, Wealth Building, Public Health
	4.7 Reduce Emissions from Commercial Cooking	A. Undertake consultancy to inform supplementary planning guidance and to help raise awareness within the restaurant, café, catering, and takeaway food industries about the impact of their activities on air quality and public health. B. Promote cleaner technologies and transition from gas to electric or induction cooking appliances.	Commercial cooking is predicted to contribute to 8% of $PM_{2.5}$ emissions in Newham. Promoting cleaner technologies, such as electric or induction cooking,	££		Planning and Development, Public Health, Environmental Control

	Action	Outcome	Emissions Benefits	Cost	GLA	Responsibility
Buildings and Infrastructure		C. Ensure new food premises are correctly equipped with the correct extraction and odour control level within its kitchen extract ventilation systems and in line with best practice guidance.	helps reduce emissions. Ensuring new food premises use well maintained extraction and odour control systems ensures optimal pollutant capture.			
		D. Raise awareness to ensure commercial kitchen operators are aware of the importance of maintaining plants for optimal pollutant capture efficiency.				
		E. Utilise planning controls to ensure that all new restaurant and takeaway applications, including kitchen extract ventilation systems, are equipped with appropriate extraction and odour control measures and comply with best practice guidance.				
	4.8 Reduce Emissions from Diesel Generators, CHP and Biomass	A. Discourage the installation of diesel generators. Encourage the use of cleaner technologies to provide backup power. Where new diesel generators are unavoidable, they should be to the highest environmental standard.	Even with abatement combustion CHP can produce 5 to 170 times the NOX emissions per kw/hr unit of heat generated. Therefore, stricter planning policies limiting diesel generators, CHP, and Biomass can significantly reduce emissions.	£	4	Planning and Development, Environmental Control
		B. Limit the number of hours new diesel generators can be used for routine testing and maintenance. Encourage testing to be conducted during times of lower air pollution levels to minimise public exposure.				
		C. Development proposals for carbon-based CHPs or connections that increase the capacity of existing CHPs will not be supported as it is unlikely that district heating will meet the latest carbon net zero requirements.				
		D. Collaborate with local universities and research institutions to explore innovative technologies and practices, such as alternative fuels or hybrid systems, that can reduce emissions from backup generators.				