

B&D Greener Together A summary of our plans for the Environment in Barking & Dagenham





The Corporate Plan 2020-22 identifies Inclusive Growth as a key strategic priority for the Council and its partners. This document summarises our plans for the Environment over the next two years and beyond.

Environment: Becoming the green capital of the capital

The Borough Manifesto sets out a clear commitment to the creation of a **clean**, green, and sustainable Borough. This commitment has been reinforced by the Council's recent declaration of a climate change emergency. We recognise that everyone needs to play their part in driving down polluting carbon emissions and therefore preventing and mitigating the dangers of climate change, from flooding and heatwaves to water stress and food insecurity, and not just in Barking & Dagenham but the world over. We will play ours by aiming to become the Green Capital of the Capital, without waiting for government to take the lead. A carbon neutral Council by 2030. And a carbon neutral Borough by 2050.

Building on the Borough Manifesto, our goal in relation to the ENVIRONMENT is:

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To play our part in addressing the climate crisis by transitioning to net zero carbon, in relation to the Council itself and the Borough as a whole. This means leading and facilitating major changes in energy, waste, and the wider local environment; affecting our homes, our work and how we get around. Our aim to generate far more low or zero carbon energy locally; dramatically reduce energy usage (especially in our housing stock and transport system); progressively decrease the production of waste and increase the level of reuse and recycling; and enhance the quality and sustainability of the natural environment in a Borough blighted by a history of heavy industry and dirty vehicles. This transition will take time and will not be painless, but we see huge opportunities to generate new sources of jobs and prosperity, alongside improvements in the quality of life.

Achieving these goals means delivering game changing innovations in energy production, distribution, and efficiency. These innovations will lay the foundation for the wider roll out of green infrastructure in future, demonstrating what's possible and making the case to government and third-party investors. It means creating new institutions that are focused on helping the Borough transition to clean and green energy systems. It means making strategic use of our Borough's industrial land to promote sustainable industries. And it means using our planning and our enforcement powers to ensure the highest possible green standards on all new development.

In what follows we highlight the action we are taking up to 2022, focused on three key areas of activity:

- A decarbonised local energy system
- **Energy efficient homes and buildings**
- A green local environment

But first, to make any of this happen, we need to know how much carbon we produce at the moment, and what it will take to achieve our goals.

That's why we will start by:

Producing a Zero Carbon Roadmap setting out a pathway and activities to get the Council, its housing and its wider assets to carbon neutral by 2030 and the wider Borough by 2050; based on assessing current levels of carbon and greenhouse gas emissions and a trajectory for reductions.

A decarbonised, local energy system

Local energy infrastructure. Developing decentralised energy networks.

Decentralised energy refers to energy generated off the main grid and closer to where it is consumed. It is typically more efficient, as less energy is lost in transmission, and therefore delivers more stable, fairer pricing. Decentralised energy systems are typically powered by combined heat and power units (small scale energy generators) which themselves can be fed by locally produced renewables or waste heat from local industry. The result is a localised, highly efficient, and low or zero carbon energy system providing affordable and clean energy to those who are connected to it.

Recognising the opportunity to deliver Decentralised Energy Networks (DENs) in Barking & Dagenham we created our own energy infrastructure and services company, B&D Energy, in July 2016. B&D Energy has since brought two DENs into operation, one at Becontree Heath, serving the existing leisure centre and 170 new homes. And the second, at Gascoigne serving 381 properties. Heat is currently generated using highly efficient gas fired combined heat and power units (CHPs) with back up boilers. However, the infrastructure being installed has the capacity to switch to alternative sources of heat, for example, excess heat generated at waste plants and water source heat pumps fed from the Thames. We are creating an energy system ready for a zero-carbon future.

In particular, over the next couple of years the Council and its partners will be focused on:

Ensuring that B&D Energy delivers the Barking Town Centre heat network, ready to supply c.8,000 new homes in the area over the next few years and transitions to low-carbon energy sources.

Supporting B&D Energy to undertake feasibility studies and develop business cases for future strategically significant heat networks in other key regeneration areas across the Borough (starting with Dagenham Dock and Dagenham East).

Utilising communal heat, private wire, solar panels, EV chargepoints and battery storage at Padnall Lake, potentially with smart technology innovations which support the balancing of the grid.

Local energy production. Generating our own renewable energy and smart energy systems.

The potential for local energy production stretches beyond our investment in district heating. There is wider potential in the Borough for the deployment of solar PV supported by battery storage, as well as communal and individual ground and air source heat pumps. Solar panels have been fitted to 355 of our buildings already and we have mapped out and identified every single viable rooftop in the Borough so that we can start the planning for a revolution in PV roll-out. Our challenge is to find a business model that makes our investment in these technologies viable, in the absence of public subsidy. But ultimately the more energy we generate here in Barking & Dagenham, the more resilient we are in the face of fluctuations in the global energy price, and the greater our contribution will be in the fight against climate change.

In particular, over the next two years the Council and its partners will be focused on:

Determining the strength of the investment and climate case for the installation of solar panels across Council owned buildings, drawing on available subsidies and incentives.

Determining the feasibility and viability of a commercial route to market for solar PV deployment among owner-occupiers and businesses across the Borough, based on the mapping of rooftop potential in the Borough; with the aim of bringing forward, with stakeholders, a competitive offer for installation.

Producing a business case for the deployment of a communal ground heat pump loop system, utilising the free heat found in our local surroundings to cut tenants and leaseholder fuel bills and provide renewable, low carbon heating (and, subject to that work, trial this model on one block of flats).



Energy efficient homes and buildings

Efficiency. Transforming the energy efficiency of our homes and buildings.

We know that we have at least 15,000 cold and draughty homes across all tenures in the Borough. Our residents are wasting money on heating poorly insulated properties, leading to cold-related illnesses including the growth of COPD. We also know that the energy efficiency of homes and buildings in the UK is the missing piece of the low carbon transition jigsaw. Approximately 19 per cent of the UK's total emissions come from heating our buildings: Homes comprise 77 per cent, commercial buildings 14 per cent, and public buildings 10 per cent. And improvements in energy efficiency have been much harder to realise than improvements in other areas of the economy, including energy production.

Cutting harmful carbon emissions requires vast improvements to the thermal comfort and energy efficiency of our domestic housing stock. There is an expectation that local authorities will have lifted the energy rating of all fuel poor households to C by 2030 and all stock by 2035. The Savills Council stock condition survey of 2010 suggested LBBD had an average rating of D. More recent analysis of general EPC data also suggests that 1,300 homes are rated the least warm at E, F and G. Another 4,000 properties in the PRS could be eligible for heating and insulation works and in excess of 10,000 owner-occupied homes have solid wall requiring insulation. To ensure that all residents can play their part in the fight against climate change whilst benefiting from a well ventilated, energy efficient home with lower fuel bills, we are committed to an on-going programme of retrofit.

In particular, over the next couple of years the Council and its partners will be focused on:

Working with our appointed partner Eon to roll-out our "Cosy Homes" programme of heating and energy efficiency measures up to mid-2022, targeting gualifying households who can access ECO3 funding and developing attractive funding and installation packages for private landlords and owner-occupiers, as well as utilising Green Homes Grant.

Delivering a deep retrofitting pilot on at least ten homes on the Becontree estate to coincide with the centenary (involving the installation of external wall insulation, solar arrays, battery storage, air source heat pumps and EV-charging points to create zero carbon homes).

Ensuring that our corporate buildings, workspaces, and schools receive retrofitting measures through the Mayor of London's Retrofit Accelerator programmes, helping the Council lead the Borough in meeting its zero carbon targets.

Undertaking a high-level investment appraisal and feasibility study for deep retrofitting across the Council's housing stock consistent with achieving full decarbonisation by 2050 (informing decisions about the HRA stock investment strategy and options for stimulating the able-to-pay market).

Agreeing a new carbon offset policy to incentivise developers to achieve the highest levels of carbon reduction on new-build developments and refurbishments, with a requirement for them to pay into an offset fund for carbon-neutral projects where doing so renders schemes unviable.





A green local environment

Clean air. Improving the Borough's air quality.

A focus on reducing carbon emissions must sit alongside a clear commitment to improving the Borough's air guality. While the Great Smogs of the 1950s and 1960s are thankfully a thing of the past, there is still much to be done to improve London's toxic air. High concentrations of particulate matter and nitrogen dioxide can have a big impact on health at all life stages, from development in the womb to the end of life. There is strong evidence linking poor air quality to lower life expectancy, poor lung development among children, and higher rates of dementia.

As an outer London Borough, with a more dispersed population and less intensive economic activity, air quality in Barking & Dagenham is better than in many other London Borough's. But there are still significant issues that need to be addressed. The main source of pollution in the Borough is from road transport, although there are important industrial sources in the south of the Borough and close to its boundaries. Like other London Borough's we also have a problem with high concentrations of pollutants outside school gates as parents drop off and pick up their children.

Improving air quality in Barking & Dagenham must include a reduction of car use, and particularly around our schools, in line with the Mayor's Transportation Strategy and our Local Implementation Plan. That's why we are taking steps to make walking and cycling in the Borough much easier, including through the introduction of cycle hire and micromobility schemes. It's also why we have been rolling out Controlled Parking Zones, exploring the introduction of our very own ultra-low emissions zones in (ULEZs) in known air pollution hotspots as well as issuing fixed penalty notices on residents who leave their cars idling outside local schools.

In particular, over the next couple of years the Council and its partners will be focused on:

Producing an air quality action plan that sets out the Council's policy, approach, and commitments to key issues affecting air quality in the Borough, including clean transport, parking enforcement, green spaces, and tree planting.

Fully electrifying 25% of the Council's own vehicle fleet by 2025.

Seeking a partner(s) to invest in and deliver a large-scale installation of standard and rapid public electric vehicle charge points across the Borough, plus an offer of a private, off-street charge point for interested households.

Delivering the parking action plan which aims to improve safety, congestion, and air quality across the Borough, as well as providing a safer, fairer, consistent and a more transparent parking service. Green spaces and trees. Protecting and enhancing our parks and open spaces.

Tackling air quality isn't just about the car. It must also involve protecting, preserving, and investing in the Borough's first and best line of defence: our trees, our parks, and our green spaces. Barking & Dagenham has a great collection of parks and open spaces, including 8 District Parks, 11 Local Parks, and 9 small open spaces; that's 28 parks and open spaces covering 463 hectares of land (13% of the Borough), 4 of which have Green Flag awards: Abbey Green, Barking Park, Mayesbrook Park and Valence Park. Whether associated with historic houses or created at a time of rapid housing development in the 1920's, these spaces are a vital part of the fabric of the Borough.

As was the case in the 1920's, new public open space will be at the centre of many of the new developments planned in the Borough, including Barking Riverside, the areas around Castle Green and the next phase of the Gascoigne redevelopment. But we also want to be sure that all the Borough's existing parks and green spaces are benefitting local communities as much as they can; we know that there is work to do. Satisfaction among local people with the guality of our parks has fallen since the last survey in 2003, from 42% to 36%. 60% of residents say that the Parks are either good or average, compared with 75% across London.

To address these issues, we must make sure that our parks and open spaces are properly maintained, and that the facilities they provide are up to modern standards. That's why we have masterplans for the ten most important parks in the Borough, alongside plans that govern the organisation of events, play and physical activity. In addition, we have committed to accelerating our tree planting programme in parks and open spaces, creating summer and skylight meadows and community orchards; designating enhanced 'cool spots' for periods of extreme warmth and nurturing biodiversity with potentially new sites of natural interest which protect our local endangered species such as water voles, great crested newts and bats.

In relation to trees specifically, the Council's planting programme has delivered over 1,000 new trees in the last five years including:

- 350 replacement trees in streets, parks, cemeteries, and highways.
- Around 400 trees on new developments.
- 30 trees planted with faith groups across . various parks across the Borough.
- 70 new orchard trees across three parks.
- 100 additional trees planted on public realm • on Council-owned land.
- 40 replacement trees in Mayesbrook Park.
- 64 new apple trees in Eastbrookend Country Park, creating a community orchard.

We have recently been officially recognised as a Tree City of the World and are planning for:

- 800 new plantings in Old Dagenham Park by 2021.
- 400 new plantings in Parsloes Park by 2021.
- 37 cherry trees to be planted courtesy of the Japanese Embassy by December 2020.
- Bidding for 250 new plantings on highways land owned by the GLA.
- Up to 2,000 trees across the Borough through developer contributions via the planning system by 2022.

In addition, we will look for any further opportunities to expand tree planting across the Borough, including fruit trees that can support healthy eating and community life.

In particular, over the next couple of years the Council and its partners will be focused on:

Implementing the parks and open spaces action plan, including short-term improvements and delivery of agreed masterplans for the Borough's ten most important parks, including:

- A programme of playground upgrades and repairs:
- An improvement project for Abbey Green and Abbey Ruins;
- A programme of installing habitat enhancements, such as bird and bat boxes, across parks and upgrading a number of local sites of conservation interest
- Planting at least 800 new saplings, maximising tree canopy cover against urban warming, pollution, soil protection, flood risk and bio-diversity enhancement;
- Identifying at least two officially designated 'Cool Spots', providing shade and protection for residents and visitors to the Borough from days of extreme and intensive heat.



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