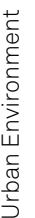


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# **URBAN ENVIRONMENT**

Environmental issues have become central to urban change and urban politics. Environmental policy is a rapidly growing area within the UK planning system, particularly given the pressure raised by public concern, scientific research, UN reports such as that of Brundtland Commission and a range of binding EU regulations. A critical challenge in urban environments is to translate these often high-level debates and directives into effective action at local level.

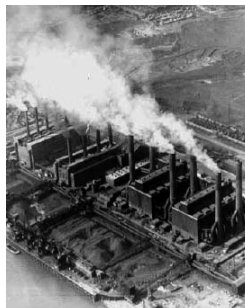
## 1 Urban Metabolism



This section analyses current environmental policies within the outer city context of Barking and Dagenham's complex urban environment in order to understand the local implication of environmental processes that by definition cannot be locally bounded. Barking and Dagenham has a legacy of industrial pollution; the existing poor environmental conditions continue to pose a challenge for the local authority. The Council, in its environmental policy statement asserts that it is 'committed to the broader goal of sustainable development and an environmentally sustainable Borough'; the harder part is to link this broad commitment to feasible goals and specific strategies. The local authority's environmental policy aims to 'establish "local quality of life" indicators for the local environment and everyone who lives and works in the Borough': while current new developments in Barking and Dagenham aim to create sustainable social, physical and economically viable urban environments, they tend to lack connections to established local communities and can be disconnected from existing environmental and socio-economic conditions. It is not clear, in this context, that governmental and developer objectives overlap with the immediate needs of the local residents.

This chapter thus argues that while environmental policies, evaluation and assessment methods are tangible, measurable, rational and accountable tools (Rydin 1998) they do not easily incorporate or account for the non-tangible, complex and rapidly transforming realities of local contexts. Our research methodology was based on the analysis of policy documents, surveys and information from official websites. Further data were collected employing social research methods such as field observations, questionnaire surveys, and participation in local community group meetings. Interviews were conducted with local residents, LBB Council's Waste Policy Officer, a private waste utility company and its Community and Liaison Officer. Analysis of key documents, existing and proposed policies relating to three specific fields of investigation – health, water and waste – identified critical issues for analysis and for intervention. Different scales of discussion were established, eliciting views from individuals, officials and community groups, so as to investigate how different actors respond and react to official policies and to highlight the potential shortcomings as well as the potential benefits of formulated policies.

**2** Old Barking power station at future Barking Riverside development site (source: London Borough of Barking and Dagenham)



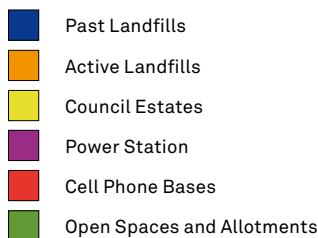
**3** Future Barking Riverside development: pylon locations (source: Maxwan)



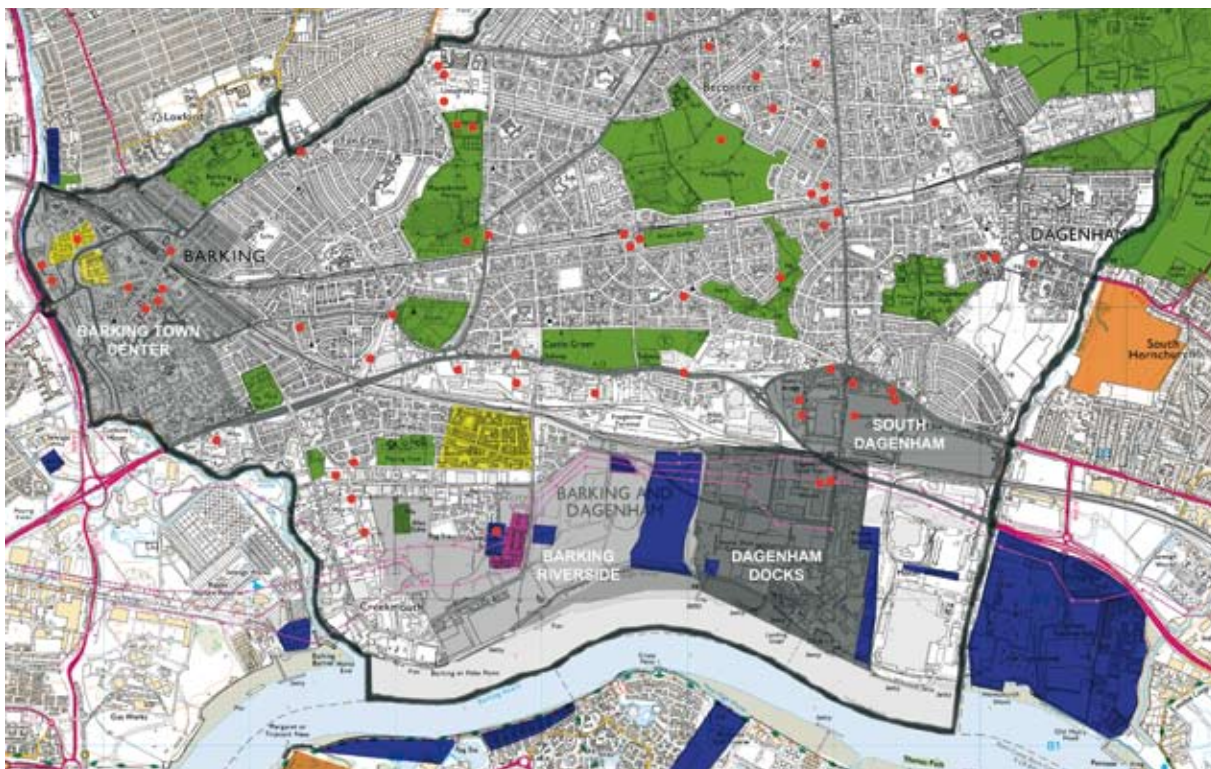
### Context: Urban environmental landscape

Barking and Dagenham's urban environmental landscape is dominated by its industrial past, and its legacy of contamination. From the early twentieth century, hazardous industries such as asbestos and motor manufacturing factories, radioactive materials processing and chemical plants were established in the area, in addition to increasingly toxic landfills. The closure of the docks and local factories may have marked the decline of industrial processes, but these have left behind a polluted and contaminated local environment that the residents continue to suffer from today. The closure of the docks also led to high levels of unemployment and related socio-economic deprivation within the Borough, which ranks as the 9th most deprived borough in London in the most recent, 2001 Census. The legacy of industrial asbestos has rendered the Borough the worst in the country for the number of women dying from mesothelioma – a form of asbestos cancer – and the fifth worst for the number of men dying from cancer in the UK in 2000 (Sharkey 2004). Figure 4 locates these past and present sources of pollutants, mapping the 'contaminated landscape'.

The area is undergoing major changes and transformations with the range of regeneration projects currently underway and in the pipeline (See Chapter 5 on The Economics of Development). This will result in a significant growth in population and increased pressure on current environmental resources, some of which are already reaching a critical point – the water shortages associated with the 2006 drought were the worst in 80 years. The influx of new populations will intensify the demographic shifts within the area, posing an increasing challenge to the current environmental awareness programme underway within the Borough. Moreover, the increased population will also result in an increased level of household waste generated within the borough. This will impact on Council initiatives, particularly when the Borough is struggling to reach the national recycling target of 25% in order to reduce its expenditure on landfill tax.



4 Mapping the 'contaminated landscape'



### **Barking as a metabolic system**

Further layers of complexities can be added to our understanding of this urban environment through the concept of the metabolic system, understood as an 'assemblage of material flows' and 'web of movements' (Gandy 2004) that are necessary for localities to work efficiently. Barking and Dagenham is a complex system of flows of natural resources, water, energy and waste, as highlighted by Figure 1. It has a population of 164,000 that consumes 28 million litres of water every day and generates approximately 105,900 tonnes of municipal waste every year. While the input includes raw materials and water from nature, the output constitutes sewerage, grey water and waste. Poor health also becomes part of this flow due to the high levels of contamination within the local environment. Consumption of food from gardens has been identified as a risk factor for cancer in the Borough due to soil contamination from asbestos.

### **Fragmented Urban Governance**

'Demunicipalisation' has resulted in local states assuming largely managerial responsibilities. As Gandy articulates it, 'states have become redistributed among a panoply of different private or non-governmental agencies ranging from corporate giants in the field of municipal service provisions to new types of grassroots organizations' (2004: 369). One implication of such fragmented urban governance is the challenge involved when national government requires standardised environmental policies from local municipalities where functions of service delivery, regulation and ownership may be carried out by different public, semi-public, and private actors, and without consideration of the environmental conditions specific to each locality. Key discussions from our three areas of investigation – waste, water and health – explore the consequences, tensions and challenges of such a system for the local authority, community groups and individual residents. The evidence also highlights national government's lack of legislation to control a growing waste stream, limited response to the problem of asbestos-related diseases, and issues regarding the privatisation of water supply.

An interview with the Waste Policy Officer on recycling policies and awareness programmes pointed to the local authority's limited power to formalise and implement policies oriented towards household waste reduction, due to increasing use of packaging materials. Packaging has become the major constituent of household waste stream, at approximately 35% in the UK. Policies formulated at the national level would be binding on this issue, however none exist at this time, leaving some local authorities to implement packaging bans (usually on plastic bags) in a piecemeal fashion. In order to meet recycling targets and to cut down on landfill tax expenditure (established by the national government), Barking and Dagenham Council is considering the introduction of a 'polluter pays principle.' This initiative aims to limit the volume of waste collected per household, with penalties for volume generated over a certain level. This raises two critical issues: the public resources being mobilised by the council on 'recycling' to meet the national 25% recycling objective; and the introduction of direct taxation policies in contexts where households are not responsible for a large part of its waste owing to increasing packaging. In effect, these expenditures and taxation will lead to further deprivation in an already low-income area especially for households suffering from specific socio-economic and environmental conditions.

A similar dependency on national government was observed in the case of medical relief for the victims of asbestos cancer. While both the local government and the local residents suffered due to rising numbers affected by this debilitating disease, the national government failed to support medical coverage because of what they deemed a lack of 'significant' number of cases – even though Barking and Dagenham contributes a large proportion of cancer statistics relative to the national average. Consequently, the local council's absence of initiative on this matter reflects its lack of power to deal with such social conditions produced by the local environment.

Urban Environmental Landscape Map

Sources:

Past Landfills: Environment Agency

Active Landfills: Environment Agency

Council Estates: London Borough of

Barking & Dagenham

Active Power Station: London Borough of

Barking & Dagenham

Mobile Phone Bases: National mobile phone  
base station database

Open Spaces & Allotments: London

Borough of Barking & Dagenham Local

Development Framework



The impact of water privatisation in Barking and Dagenham and the fragmented system of water supply (by Essex and Suffolk) and water disposal (by Thames Water) was found to have two major consequences. First, it leaves the consumer in a confused state in terms of accountability. Our questionnaire survey on water behaviour provided evidence of residents' uncertainty as to the appropriate agency to contact for their water problems – instead, they always contacted the Council in case of an emergency, even though it was not the body responsible for such matters. Further, the lack of a 'hosepipe ban' by the water utility company during the 2006 drought resulted in non-conservative water behaviour. The absence of such behaviour is vocalised by local tenants who thought that there was no shortage of water within the area. This was supported and reiterated by the chairman of one Tenants Association we interviewed who stated: 'We rarely have any water problems, they simply don't exist.' Lack of awareness that such problems exist and subsequent non-responsive behaviours could be seen to contribute to higher consumption rates in LBBDD. A typical resident in LBBDD consumes 165 litres of water per day, higher than the average UK level of 150 litres in 2005 (OFWAT 2005). This is an obstacle to the Council's commitment to environmental policy goals towards sustainable environments within the Borough. Finally, the fragmented system of power and responsibility results in fragmented approaches to awareness programmes; while the Council's focus is on recycling, the responsibility for water conservation awareness lies with the private water companies.

This fragmented system of service delivery and regulation lacks the built-in flexibility to effectively respond to issues arising out of local environmental conditions, particularly under the standard targets set for local authorities by central governments.

## Individual Environmental Behaviour

Current local sustainable development strategies and environmental policies are focussed around individual actions on sustainability and post-consumer behaviour. Barr and Gilg's (2006) study of sustainable lifestyles highlights the way that current environmental policies are based on the assumption that environmental behaviour can change through information and awareness programmes about environmental problems. Our study of individual behaviour with respect to waste recycling, water conservation, and awareness of environmental problems and education programmes run by Barking and Dagenham council reinforced this implicit assumption in environmental policy.

Research based on our questionnaire survey revealed complexities in understanding and in individual behavioural patterns. 70% of respondents agreed that they separated waste, recycled and were aware of its implication for their immediate environment. Policies such as fixed-rate water metering systems, however, were found to be one of the factors behind a lack of motivation for water-efficient behaviour. The chair of the Tenants Association stated: 'It's a good idea to separate your rubbish. I use three orange bags and one black per week, because I know if I don't do it now, then we'll suffer in the future. My idea is to get started and get used to it.' His motivated environmental behaviour was informed by his position as a point of liaison with the council. He did not show the same motivation for water conservation even though he admitted: 'last year was a dry year, but we didn't have a hosepipe ban.' The lack of visibility of water as an environmental issue, given 'no hose-pipe bans' and the economics of fixed metering systems, were factors that affected behaviour. Socio-economic conditions, age, class, ethnicity, health, education and employment status were also factors which had a direct relationship to individual behaviour.

## 5 Creekmouth Environmental Surrounding



For example, households suffering from the contaminated local environment attributed to asbestos had a greater focus on their specific socio-economic conditions, because of poor health and higher expenditure, than other environmental concerns. Of all respondents, only one resident was found to be an active recycler, had ever logged onto the Council's website for information, and had attended environmental education programmes run by the Council. It might be noted that this respondent had a relatively high economic status, owning his own home and car, and was employed as a director in his workplace. In addition to these socio-economic factors, proximity to a recycling facility also appeared as a factor shaping individual behaviour, with higher usage linked to convenience and awareness. Generally, lack of awareness created a barrier to individual environmental behaviour. This includes the knowledge required for the sorting of waste for recycling, the use of hippo bags in flush tanks for water conservation, and the understanding of the process of waste disposal. The Residents and Tenants Association, Waste Policy Officer and Community and Liaison Officer all stated the need for the community to see this process of waste disposal firsthand in an effort to encourage environmental behaviour.

Individual responses and perceptions of sustainability are, however, shaped by geographical location and socio-economic conditions. Policies focused on the behaviour of individuals do not account for the disparities arising from specific urban environmental landscapes and social conditions.

#### **Government intentions and local needs**

Our interviews with the Waste Policy Officer and a waste utility company's Community Officer reflected the view that the government 'actively involves itself with different communities and utilises social networking for awareness.' This approach is being adopted in Barking and Dagenham for greater effectiveness and coverage of its environmental education programmes. The Council is proactively responding to community feedback on its awareness programmes. The approach is restricted to awareness programmes on encouraging waste recycling and do not extend to other areas of immediate environmental concern. This could be attributed to the Council's urgent need to meet its recycling targets and reduce its landfill tax expenditure as its priority area of environmental concern.

In the course of the research, we came across three community organisations struggling to have their voices heard in relation to their specific agenda involving local environmental needs. The Creekmouth Preservation Society struggled for their 'sense of place,' the Asbestos Victims Support Group contended for compensation and medical relief, and the Residents and Tenants Association strived to secure social housing and jobs for the local community in part of the new regeneration developments underway.



Creekmouth Preservation Society is working towards preserving the Creekmouth area, situated near Barking Riverside, a small community before floods washed it away in 1953. Today it is surrounded by waste management infrastructures such as recycling and waste sorting centres, as well as sewage plants. The group is advocating the transformation of Creekmouth into an open green space, reclaiming its 'sense of place' in order to keep its history and memory preserved. The Environment Agency provided the community with such a space; however, the quality of the granted land was degraded with a polluted surrounding environment that was not accessible through public transportation (Figure 5). This reflects an inconsistency with the Council policy of 'engaging and consulting the local community about their aspirations for a better environment.' Secondly, a group of asbestos victims suffering injustices from the contaminated urban environment established the Asbestos Victims Support group, a registered charity independent of any government assistance. It offers emotional and practical support, advice on compensation and runs educational campaigns about the dangers of asbestos. As discussed, they suffer from the lack of any effective measures at a local level that could influence and strengthen their case to receive medical compensation at the national level. Finally, the Tenants and Residents Association, represented by the Chairman, is constantly working and struggling with the Council for a share of social housing and an increased number of jobs in the new regeneration projects in Barking Riverside. The chairman stated, 'we know better, because we live here. We know what people will like. They [government] want to talk to us, they want to know what people want.' However, he further expressed the difficulties of such negotiation, 'for example, when people want something, they [Council] don't do it as they promised you. It simply just doesn't happen and you lose faith. People lose faith.'

## Challenges and Propositions

Our analysis highlighted current tensions and challenges that face environmental policy makers in local urban areas, and with particular reference to LBBD. It established the interrelationships and implications of these policies with and for the individual resident, local groups, the local authority, and the larger urban environment. The challenge is to find strategies, principles and recommendations to overcome the established gaps between levels of government, between fragmented public and private authorities, between levels of awareness and individual behaviour – and to provide a foundation for future context-specific and responsive environmental policies.

The fragmental governance system has proven to be inefficient when it neglects the needs of the local economy, local geography and the range of people who make up the diverse and changing demographics of an outer city area such as Barking and Dagenham, thus creating boundaries and contradictions between policies and its realities on the ground. Consequently, it has become apparent that the segmented system is in need of reform in order to create stable and sustainable urban environments.

In tandem with the shortcomings, it is imperative to also present the successful models that could provide a framework for effective policy formulation. The nature of public-private partnership between the Council's waste department and the private waste utility company through the appointment of a dedicated community liaison officer has helped the Borough rise from a low to medium performing recycling status. Their close coordination with the community resulted in community responsive adjustments in their awareness programmes. For example, to respond to language barriers for certain sections of the population, they have moved from text heavy education material towards more pictorial and simple English expression. Such response to societal changes and its incorporation into environmental policy that responds to local needs is crucial if sustainable behaviour is to be achieved. The active results from these partnerships provide a further effective mechanism to help counteract the effects of a fragmented governance system.



An interview with the chairman of the Tenants Association emphasised his role as a mediator to help bridge the gap between the community and local authority. Connecting local community groups provides a collaborative dialogue of citizen involvement, and empowers them to be involved and have an active voice. It not only builds social capital, but also assists in integrated policy development by directly responding to local processes and demographics. The positive outcomes of the Chairman's role support a communitarian approach to strengthen and connect community networks with local governments.

In addition to the successful models highlighted above as existent within the current system, the following principles are recommendations for sustainable development strategies with greater emphasis on communities and individuals.

### **Environmental Justice**

Local groups in Barking and Dagenham have suffered from a politics of environmental injustice and social inequalities as a working-class population. This in turn has a direct implication for their socio-economic status and further links to the industrial past and polluted environmental landscape. How can environmental policies motivate lower-income communities who are fighting to survive, and be heard? How can they expect these same citizens to contribute responsibly to an environment that is contaminated and creating poor health conditions? Sustainable development strategies with greater emphasis on individual and community participation have to be responsive to such injustices due to specific socio-environmental conditions.

### **Metabolism**

The understanding of an urban environment as a system of flows makes environmental issues a complex domain for intervention. To date, much environmental policy has adopted a segmented approach to dealing with environmental problems in specific domains, such as waste recycling and water behaviour. In LBBD, for example, why is asbestos not considered a form of waste? Why are intensive awareness programmes not being implemented for asbestos cancer within the area? Why is water conservation not integrated within the waste recycling awareness programmes? The interconnectivity between the socio-economic, the physical and the environmental landscape as a principle therefore needs to translate into policy-making for integrated and responsive local environment strategies. The focus of environmental policies must shift from a general, segmented and bureaucratic approach to one that is context-specific, and addresses the complexities of the urban environment, empowering local councils and communities to take effective action. Creating sustainable and just urban environments requires not only specific policies, but a larger commitment to environmental *politics*.

6 Pylons as part of urban environmental landscape



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