The London Borough of Barking & Dagenham

DAGENHAM DOCK
INTERIM PLANNING GUIDANCE FOR A SUSTAINABLE INDUSTRIAL PARK (SIP)

Contents

"With ever increasing environmental targets and legislation, Dagenham Dock offers the opportunity to be a trail blazing example of how addressing environmental problems can provide new investment, employment and physical regeneration within London's largest area of opportunity."

"The increased rates of recycling and reuse of waste sought in the Mayor's Municipal Waste Management Strategy will require locations to be found for such green industries." **Draft London Plan**

1. INTRODUCTION

The Dagenham Dock site comprises 133 hectares (329 acres) of largely under-utilised brownfield land bounded to the south by the River Thames and to the north by the London-Tilbury-Southend railway line and, by 2007, the Channel Tunnel Rail Link. To the west lies the London's largest housing opportunity site, Barking Reach whilst to the east is the high profile, Ford Motor Company Plant, the largest single employer in the Borough.

Dagenham Dock is located in a major development corridor between the A13 dual carriageway and the River Thames in the Heart of the Thames Gateway Single Regeneration Budget area. Dagenham Dock lies within the Dagenham Riverside 'Opportunity area' within the East London sub-region in the Mayor of London's draft London Plan. It also lies in the 'London Riverside' Zone of Change as defined by the Thames Gateway Strategic Executive. This zone contains some of London's largest vacant sites offering considerable new housing, employment and mixed-use development opportunities. See Plans 1 and 2 showing the location of, and sites within, London Riverside.

Dagenham Dock has long been characterised by poor access, fragmented ownership, poor quality infrastructure, contaminated land, limited public transport and open storage of scrap metal, containers and aggregates. The site has excellent visibility, due to the recently completed elevated section of the A13. As part of advanced works for the Channel Tunnel Rail Link, and with funding from the East Thamesside Partnership, a new link road between Dagenham Dock and the Goresbrook Interchange (A13) has been built (Choats Manor Way). This new access has raised development interest in Dagenham Dock and removed longstanding barriers to investment.

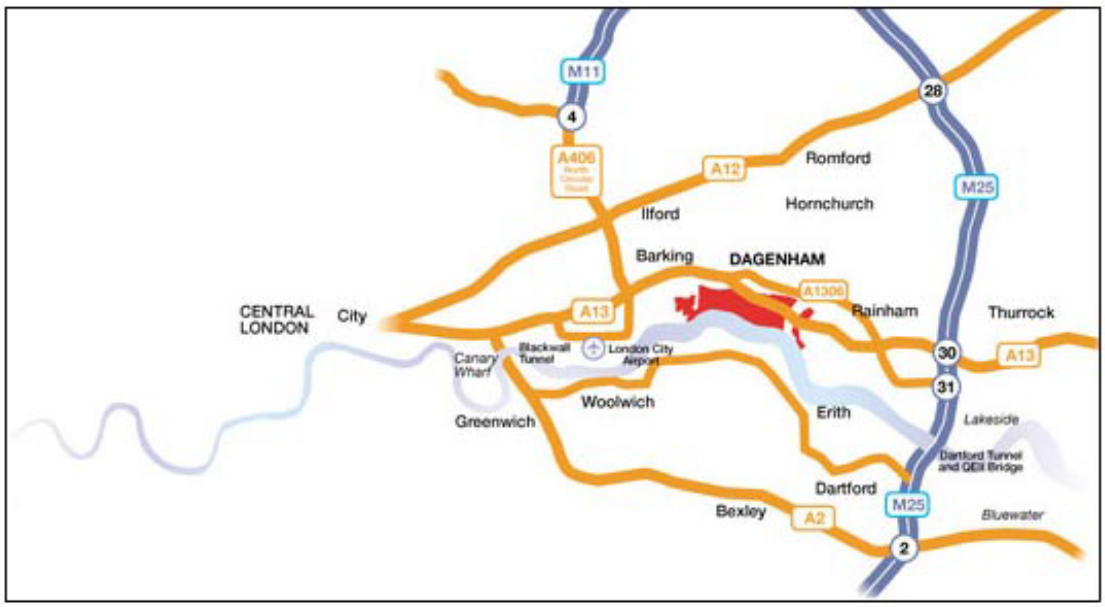
In this exciting new context, Barking and Dagenham Council commissioned the consultancy Scott Wilson to develop a Vision Implementation Strategy to capitalise on the development opportunities and to deliver a series of regeneration objectives. The Strategy proposes that Dagenham Dock is developed as a Sustainable Industrial Park, a "new generation" manufacturing centre catering to contemporary needs for new environmental industries, reuse and recycling. This acknowledges the profile of existing industries on the site but also recognises the huge growth potential of this sector and its employment generating potential across a range of skills.

This Interim Policy Guidance has been prepared to ensure that detailed planning guidance is available to landowners, prospective developers, investors and other stakeholders, and to support implementation of the vision for the site's regeneration. Developers are advised that this Guidance will be given weight as a material consideration in planning decisions[1], and applicants will be required to submit a statement on how the application complies with this guidance. This guidance will form an important supplementary document in relation to the development of the Planning

[1] In line with PPG12 : Development Plans and Regional Planning Guidance. Feb 1992

Framework for the Dagenham Riverside Opportunity Area envisaged in Policy 2A.2 of the draft London Plan.
It is important to emphasise that the purpose of the Interim Planning Guidance is not to rewrite or introduce new planning policies but to provide guidance, supplementing, elucidating and exemplifying the policies and proposals of existing UDP policies. In particular, the Interim Planning Guidance is intended to clarify Policies BR4 and E1 of the adopted UDP to emphasise the form of the higher standard of development sought within the Dagenham Dock Employment Area in accordance with recent central Government policy statements and the emerging London Plan. This document does highlight some numbered policies of particular development control importance however it should be noted that once approved the whole document will be a material consideration in determining planning applications. This document also includes draft interim policy proposed for incorporation into the review of the UDP at the earliest opportunity. The Borough's UDP was adopted in 1995 and is currently under review with First Deposit draft due early 2003.

The process of producing Interim Planning Guidance/supplementary planning guidance is in accordance with guidance set out in Planning Policy Guidance Note No 12 (Development Plans). This states that "[Supplementary Planning Guidance] should be prepared in consultation with the general public, businesses, and other interested parties and their views should be taken into account before it is finalised. It should then be the subject of a council resolution to adopt it as supplementary guidance." Public consultation ran from the 20th December 2002 to the 7th February 2003 with a revised version adopted by Members on the 8th April 2003.

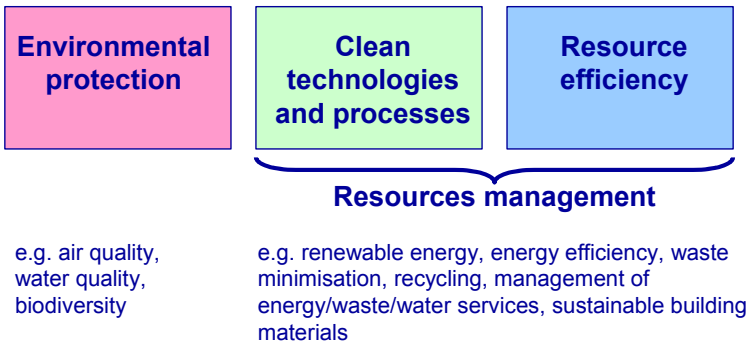


LOCATION MAP

Plan 1 : Location of London Riverside (Also refer to Plan 3)

2. CONTEXT AND RATIONALE

The Draft London Plan recognises that the environmental goods and services sector is worth over £230 billion worldwide and is forecast to double by 2010. It identifies environmental pressures (and the subsequent regulation applied to tackle them) as the drivers for this sector. It is increasingly being recognised that solving environmental problems can result in job creation at a range of skills levels and have significant business start-up potential. Appendix B of this document goes into more details about the drivers for change. Many of the London Plan's policies are strongly related to this guidance and therefore have been highlighted throughout this document and laid out in Appendix A. The DTI's Joint Environmental Markets Unit (JEMU) (see appendix C for further details) gives the following definition of the 'environment sector':



The London Development Agency (LDA) is working closely with the Council in delivering the vision. The LDA's Economic Development Strategy has recommended:

- the development of an environmental business sector and the promotion of 'Green Business' practices
- engagement with key partners to promote and support waste reclamation and sustainable waste treatment initiatives
- the promotion of efficient energy use and encourage renewable energy production
- the promotion of new businesses using environmentally friendly technologies
- the promotion of opportunities for the attraction, development and growth of environmental industries
- the initiation of demonstration projects with business organisations to raise business awareness of green management practices.

The London Borough of Barking and Dagenham has prepared a Vision 2020 document which sets out the Council's priorities - key amongst these are 'regenerating the local economy' and 'making Barking & Dagenham Cleaner, Greener and Safer'. The decline in manufacturing employment in the Borough, associated particularly with the changes at Fords, creates the need for new manufacturing employment. Barking & Dagenham still has the highest proportion of manufacturing employment for any London Borough however there is a need to move towards new types of manufacturing. It is apparent that the greatest potential for manufacturing development in the UK

relates to technological and scientific innovation[2]. Traditional manufacturing, requiring large labour inputs, has increasingly relocated outside the UK to cheaper labour market areas as a consequence of globalisation. Next year the Centre of Engineering and Manufacturing Excellence (CEME) opens putting Dagenham on the map for 'new generation' manufacturing focussing on design/technology-led value-added manufacturing. The Draft London Plan states "High value added activities such as… green industries are projected to be important in those areas of London where manufacturing has restructured and remains vibrant"[3].

Manufacturing as a whole faces a radical new challenge, to move towards a more sustainable system whereby waste is minimised and products are recycled. This desirable objective and the overriding issue of sustainability are increasingly being pursued through legislation and policy development at the European, national and local level. Thus the Greater London Authority (GLA) has recently adopted policies requiring much higher levels of recycling and reuse of waste. The draft London Plan states "it is essential that London plans to take advantage of the new growth opportunities, which have economic, social and environmental benefits, including new opportunities for business start ups and growth and employment at a range of skills levels". The quest for enhanced environmental performance is also part of a wider recognition by industry and Government of the need for corporate social responsibility.

The environmental imperative is increasingly being recognised. It is acknowledged that London needs to tackle its own waste problem and not export it elsewhere causing greater detrimental environmental impact - hence the acceptance of the 'proximity principle'[4]. In addition there is a growing public awareness of environmental issues and the desire to purchase more environmental friendly products and services whilst green procurement practices are increasingly being used by central and local government and numerous organisations and companies.

Dr Nick Tucker of the Warwick Manufacturing Group identifies three key advantages of this growth sector of manufacturing. Firstly the jobs are unexportable – the proximity principle requires waste to be dealt with as near as possible to its source. Secondly with the raw material being waste it is difficult to undercut products with imports. And thirdly it is 'good for us': everyone benefits from businesses addressing the triple bottom line – financial, social and environmental performance. The Vision Implementation Strategy and this guidance have been produced to facilitate the development of the Dagenham Dock site and to create a facility relevant to the changing nature of manufacturing, the needs of London and the needs of Barking and Dagenham.

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[2] The Ancer Spa report 'Potential for Manufacturing and Wider Employment Development' lays out the substantial potential for manufacturing employment in the London Riverside area. This report formed part of LB Havering's submission to the SDS EIP.

[3] Paragraph 1A.33 Page 28 Draft London Plan

[4] Defined in the draft London Plan as "Dealing with waste as near as practicable to its place of production" Page 296.

3. THE CONCEPT

The Vision

The vision for Dagenham Dock is the creation of a modern, sustainable industrial park. It will embrace research and development, sustainable industrial and business accommodation[5], recycling operations, energy efficiency, 'green links' between businesses (see footnote 28), sustainable transportation, environmental technology and waste minimisation. The Park will offer substantial new employment opportunities in a growth sector and a dramatically improved appearance. The vision incorporates the retention of existing businesses which have appropriate planning consents and the retention and use of the riverside wharves.

Many other European countries are substantially advanced of the UK in utilising secondary materials and the development of an SIP at Dagenham Dock offers the potential to be a trail blazing example of how addressing environmental problems can also have positive benefits in terms of job creation and physical regeneration of brownfield sites. The SIP proposes to put Dagenham Dock on the map for environmental/recycling technologies and development of the environmental business sector[6] to complement Dagenham's forward looking manufacturing focus with new developments such as CEME.

Aims

The aims of the Vision Implementation Strategy include:

- The creation of a clear identity for Dagenham Dock as an SIP.
- Physical regeneration of the site and its infrastructure to secure thousands of new jobs across a range of skills in a dramatically improved working environment.
- To promote the development of new technologies and skills required to meet the environmental challenges of the 21st century particularly those facing London.
- Promotion of sustainable transport and regeneration, environmental management, energy efficiency and higher environmental standards.

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[5] Premises which have a reduced environmental footprint through design (more details of such measures are included throughout the guidance with additional sources of information provided in the appendices).

[6] This guidance uses as number of interchangeable terms including the environmental business sector, green collar and green industry. The OECD Environmental Goods and Services Manual 1999 provides a classification for the environmental sector broadsly similar to the JEMU definition:

1) Pollution Management a) Environmental Goods b) Environmental Services c) Construction
2) Cleaner Technologies and products – Any activity which continuously improves, reduces or eliminates the environmental impact of technologies, processes or products.
3) Resources management – Eg. Recycled materials.

- To bring the site's existing recycling, waste transfer and aggregate companies into the vision.
- To provide a local community resource by providing employment and education/training opportunities.

Components

Dagenham Dock Sustainable Industrial Park is intended to accommodate:

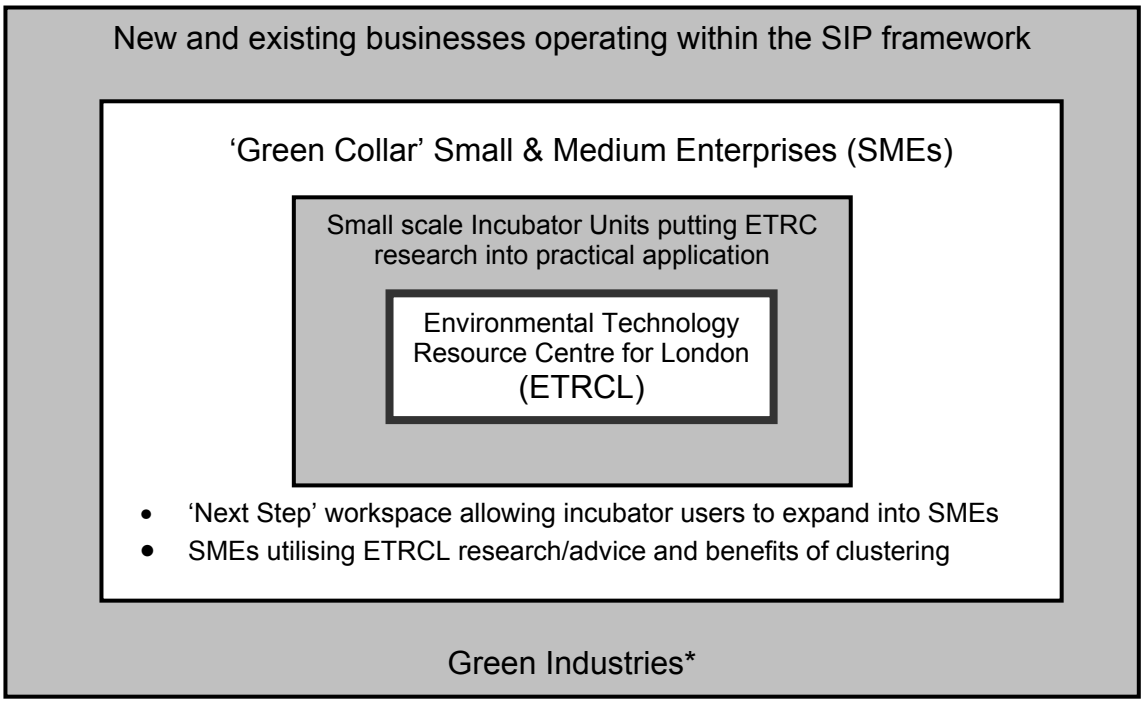
- Research and development related to recycling, re-use and waste minimisation, etc
- Environmental service and recycling industries (at a range of scales)
- Manufacturing industries with a "green focus" willing and able to demonstrate commitment to sustainable operation
- "Green chain" industries where the waste products of one industry are used as the resource inputs for a second industry
- Educational facilities related to sustainable manufacturing

The Environmental Technology Resource Centre (ETRCL) for London will form the centrepiece of the Park. It is envisaged the Centre would:

- Carry out 'ground truthing'[7] R&D on re-use, recycling and waste minimisation.
- Research/implementation of new legislation/directives (the economic drivers).
- Educational and training facilities linked to the above.
- Provide advice and guidance to businesses at Dagenham Dock
- Through IT links and web based trading mechanism operate a wider "virtual" sustainable industrial park
- Potentially act as a sister to the CEME development putting Dagenham firmly on the map as a centre for modern manufacturing.

One of the biggest challenges the environmental business sector faces in developing markets for secondary materials is meeting the same or better quality standards than raw materials. This requires the type of R&D the ETRCL can develop. The diagram overleaf illustrates the general economic development concept behind the Sustainable Industrial Park proposals with the ETRCL forming the centre although not necessarily being the first element delivered.

[7] R&D which brings commercial viability and practical business application to academic research.



* See Draft London Plan definition in Appendix A.

4. CURRENT PLANNING POLICIES

This section highlights other planning policy and related documents to be taken account of in determining planning applications in addition to this guidance.

National Guidance including:

- Planning Policy Guidance Notes
- Green Papers including, Our Towns and Cities: The future - Delivering and Urban Renaissance

Regional

- Mayor of London – Draft London Plan

The Mayor of London published his draft London Plan (Draft Spatial Development Strategy for Greater London) in June 2002. This supersedes Regional Planning Guidance in London i.e. RPG3 and RPG9a. Borough UDPs must be in broad conformity with the London Plan, and it sets the policy framework for the Mayor's involvement in major planning decisions in London. Many of the policies have particular relevance to Dagenham Dock and strongly support the development of an SIP. For example Policy 3B.12 requires boroughs to identify and safeguard land & premises in appropriate locations, at appropriate river & rail locations, to secure capacity for appropriate environmental industries and facilities for recycling and processing of waste. It describes the environmental sector as spanning a wide spectrum of activities from renewable energy generation, energy management and air pollution control to waste management and materials reprocessing. Policy 3B.12 states that "the Mayor, LDA, other agencies and sub regional partnerships should support the establishment of green industries and green practices in business through funding, training, business support, market development, promotion initiatives and land use policies" whilst Policy BR31 welcomes the use of waterside sites, especially those within Preferred Industrial Locations [which Dagenham Dock is] for green industries.

Dagenham Dock lies within the 'Dagenham Riverside' Opportunity Area as defined in the Draft London Plan. Policy 2A.2 of the plan requires planning frameworks for these areas to seek to exceed the minimum guidelines for employment numbers. The draft SDS provides a figure of 4,000 new jobs by 2016 for Dagenham Riverside. Dagenham Riverside offers the potential to far exceed this figure with Dagenham Dock alone expected to reach it. A number of pieces of research are currently being carried out into employment potential both in the area and related to environmental industries which the Council are keen to utilise prior to presenting a detailed figure/target for job numbers.

The policy section of this guidance makes strong reference to policies in the draft plan with Appendix A containing the key policies of relevance for ease of reference.

- Mayor of London - Biodiversity Strategy 'Connecting with London's Nature' (July 2002)
- Mayor of London - Air Quality Strategy 'Cleaning London's Air' (September 2002)
- Mayor of London - Transport Strategy (July 2001)

- Mayor of London – Economic Development Strategy 'Success through Diversity' (July 2001)
- Mayor of London – Draft Municipal Waste Management Strategy (September 2002)
- Mayor of London – Draft Energy Strategy 'Green Light to Clean Power' (January 2003)
- London Biodiversity Partnership – London Biodiversity Action Plan
- London Rivers Association – River Calling
- London Sustainable Development Commission – London Sustainable Development Framework (forthcoming)

Sub- Regional Partnerships

- Thames Gateway London Partnership – Heroic Change
- Mayor of London/Thames Gateway London Partnership – Sub-Regional Framework for East London (forthcoming)
- Thames Estuary Partnership – Thames Strategy East (forthcoming)

Cross Borough

An Urban Strategy for London Riverside

Building on from the draft London Plan, an Urban Strategy for London Riverside has been produced and adopted by the Members of the London Riverside Action Group[8]. It was formally launched on the 13th November 2002 followed by a period of public consultation. The strategy has 5 key objectives for London Riverside with the second one being to "provide an accessible and sustainable home for industries that serve London and for the growth sector of environmental technology." For Dagenham Dock the strategy states "it will become a sustainable industrial area, with a special focus on green industries and a new environmental technology research centre, to capitialise on its position on the river and the forecast growth in this sector."

Borough

The Unitary Development Plan

The current Unitary Development Plan (UDP) for Barking & Dagenham was adopted in October 1995 and is now under review. As indicated in the introduction, it is intended that the First Deposit draft UDP will be issued in early 2003 and that policy guidance in section 5 will be incorporated into the UDP review at the earliest opportunity.

The consultation responses to this interim policy document will help shape the policy direction within the emerging UDP review. Once the First Deposit Draft is formally placed on deposit for consultation purposes the policies contained within it will supersede the equivalent interim policy guidance contained in this document.

[8] London Riverside Action Group members: Heart of Thames Gateway, LB Barking & Dagenham, LB Havering, London Development Agency, Thames Gateway London Partnership, TfL, Thames Gateway Strategic Partnership, GLA and Thurrock Borough Council with LB Newham as an observer.

Area Based
The Dagenham Dock Masterplan

The Dagenham Dock Masterplan was prepared and adopted as Supplementary Planning Guidance in 1999 after extensive consultation. It set out a series of physical layout and planning principles that remain broadly relevant. The main aims of the Masterplan were:

- **Economic Development and Employment Generation** – to stimulate and encourage the growth of Dagenham Dock's industrial base and to promote and create employment opportunities for local people.
- **Sustainable Transport Strategy** – to reflect transport's contribution to sustainable development by reducing the amount of travel, restraining traffic and improving public transport.
- **Road and Drainage Infrastructure Improvements** – to improve Dagenham Dock's competitiveness by upgrading and creating a comprehensive and efficient road and drainage infrastructure network whilst minimising environmental detriment.
- **High Quality Design Standards** – to improve the image of Dagenham Dock by encouraging high quality design, layout and appearance in the overall built environment, and to create an attractive landscaped commercial environment so as to complement and enhance inward investment.

These objectives remain valid but have been developed and refined in the Vision Implementation Strategy and this guidance. Once this guidance is adopted it will supercede the Dagenham Dock Masterplan.

The Dagenham Dock Vision Implementation Strategy (DDVIS)
The Strategy was prepared by Scott Wilson for Barking and Dagenham Council and the London Development Agency in 2001. The Executive Summary was formally approved by the Council in January 2002 with the document published on the Council's web site. The Strategy and its Action plans are not planning guidance however they provide the basis on which this guidance has been produced and remains a blueprint for the Council and its partners to work towards the delivery of an SIP.

Following on from the production of the Strategy, an extensive programme of stakeholder consultation was held in early 2002 to gauge support for the project, to elicit interest and to seek views on the form and content of this guidance.

CTRL Safeguarding Directions
Part of Dagenham Dock is within the limits of the land safeguarded under the Direction for Channel Tunnel Rail Link (CTRL) which came in force 9th February 1996. Where applications for planning permission are made for land within the limits Union Railways (North) Limited will be consulted with the Council giving effect to any recommendations. See Appendix C for further details and contacts.

5. INTERIM POLICY GUIDANCE

In order to deliver the vision for Dagenham Dock as a Sustainable Industrial Park it is essential that the planning framework supports and encourages planning applications which contribute to the vision whilst resisting applications which run counter to it. The 1999 Dagenham Dock Masterplan needed revising in light of the new vision and the changed context of the area which requires policies to be updated to reflect the London Riverside agenda. In addition the 1995 UDP is under review and this guidance will form part of that process.

DD1: Dagenham Dock Sustainable Industrial Park (SIP)

THE COUNCIL IS COMMITTED TO THE DEVELOPMENT OF A SUSTAINABLE INDUSTRIAL PARK AT DAGENHAM DOCK. PLANNING PROPOSALS THAT DO NOT ACCORD WITH THE SIP OBJECTIVES WILL BE RESISTED.

DEVELOPERS SHOULD SUBMIT A STATEMENT WHEN APPLYING FOR PLANNING PERMISSION AT DAGENHAM DOCK INDICATING HOW THE PROPOSAL COMPLIES WITH THIS GUIDANCE.

The Council will seek to encourage and facilitate planning proposals which contribute to the overall concept of a Sustainable Industrial Park. It will use a 'toolkit' of measures to deliver the regeneration of Dagenham Dock in line with the Dagenham Dock Vision Implementation Strategy and with the support of a range of partner organisations most notably the London Development Agency. The toolkit includes the planning system, various types of enforcement action, applying for various regeneration funding and implementing the approved schemes, support services and, if required, the use of Compulsory Purchase Powers (refer to Site Infrastructure and Management section).

Land Use

The development of a Sustainable Industrial park will require an increased emphasis on manufacturing/processing industries (B2 and to a lesser extent B1b/c)[9] and a consequent control over the development of warehouse and

[9] Town and Country Planning (Use Classes Order) 1987 defines land uses into different classes. These include:
Class B1: Business
b: for research and development of products or processes
c: for any industrial process
Class B2: General Industrial
Use for carrying on of an industrial process other than one falling within Class B1.
Class B8 : Storage or Distribution
Use for Storage or as a distribution centre.
Uses in a 'class of their own' are described as **Sui generis** uses.

distribution uses (B8)[10]. It will also require a substantial upgrading to the appearance of the site.

Accordingly the Council will pursue these overarching SIP objectives:

- encourage management improvements to existing permitted uses which will improve their visual appearance and enhance their business efficiency and environmental footprint.

- where expedient take enforcement action against uses which do not have planning permission in order to improve the appearance of the area and facilitate development.

- strongly encourage manufacturing industries in the environmental business sector.

- support proposals to establish recycling and reprocessing activities but will expect new developments to provide high standards of design and environmental management.

- seek a mix of unit sizes in order to provide incubator space, starter units and larger manufacturing spaces in order to accommodate innovation, and enable businesses to grow in Dagenham Dock. This accords with Policy 3B.7 of the draft London Plan.

- Encourage the development of an Environmental Technology Resource Centre with associated facilities.

- limit any retail, or food/drink outlets to those necessary to serve the needs of workers on the Sustainable Industrial Park. Some of these facilities should be located within the ETRCL zone but also spread across the site so that workers can easily walk to them. Dagenham Dock already has a number of café type facilities and the Council would seek to integrate such facilities within the SiP.

In terms of Sui generis[11] uses, they will be considered on their merits in relation to the SiP proposals.

[10] See footnote 9.
[11] See footnote 9.

'Green Collar' Zone

DD2 : GREEN COLLAR ZONE

WITHIN THE GREEN COLLAR ZONE IDENTIFIED ON THE DAGENHAM DOCK PROPOSALS PLAN ONLY THE FOLLOWING USES WILL BE PERMITTED:

1) GENERAL INDUSTRIAL USES (CLASS B2)
2) LIGHT INDUSTRY AND RESEARCH & DEVELOPMENT OF PRODUCTS OR PROCESSES (CLASS B1 B AND C)
3) SUI GENERIS USES IN LINE WITH THE SIP PROPOSALS.

BUSINESSES WITHIN THE ENVIRONMENTAL BUSINESS SECTOR WHICH MEET OTHER REQUIREMENTS IN THIS GUIDANCE WILL BE STRONGLY ENCOURAGED.

STORAGE AND DISTRIBUTION DEVELOPMENT (USE CLASS B8) WILL BE RESISTED. IN ADDITION, OFFICE DEVELOPMENT (USE CLASS B1A) WILL BE RESISTED UNLESS ANCILLARY IN NATURE TO THE MAIN BUSINESS USE.

This zone provides land for the green business park as envisaged in the Vision Implementation Strategy where Small/Medium Enterprises with a 'green' focus could benefit from clustering and the proximity to ETRCL. The Draft London plan describes the environmental sector as spanning "a wide spectrum of activities from renewable energy generation, energy management and air pollution control to waste management and materials reprocessing"[12]. Dagenham Dock is more likely to focus on businesses in the latter two fields utilising ETRC research on reduction, re-use and recycling and latest legislation and directives. For further information on this see the 'Drivers for Change' appendix.

This zone will be for manufacturing/processing and associated R&D. Whilst the Use Classes Order[13] does not distinguish between industrial sectors, the Council will encourage businesses within the environmental business sector ('Green collar jobs'). This accords with draft London Plan policy 3B.12 which states Boroughs "should identify and safeguard land and premises in appropriate locations…at appropriate river and rail locations, to secure capacity for appropriate environmental industries and facilities for recycling and reprocessing of waste".

Potentially some larger environmental business sector uses could be acceptable in the zone however a range of unit sizes will need to be required in line with draft London Plan policy 3B.7. This designation should include well-designed, high quality, development which presents the public face of the SIP.

With significant storage and distribution (B8) uses already approved, the Council will resist proposals for additional such uses in Dagenham Dock. It

[12] Draft London Plan Paragraph 3B.47
[13] See footnote 9 for definitions within the Use Classes Order.

will also resist any proposals for expansion of existing haulage, distribution or logistics depots and yards and any applications for the change of use of manufacturing premises (B2) to warehousing or storage (B8). Such uses could easily 'crowd out' other employment uses in line with the vision. The resistance to B8 uses arises due to the following:

1) There is already a large amount of B8 floorspace in operation or with recent planning approval in the area. This includes the substantial Hays site adjacent to Goresbrook Interchange, the newly developed British Bakeries site and TDG[14]. The London Riverside Business Survey[15] identifies 52% of companies in the area being 'transport, storage and communication' or 'wholesale and retail trade'.[16] UDP and Dagenham Dock Masterplan policies refer to an undue concentration of warehousing and/or transport uses within an employment area normally being refused. This policy has been difficulty to define and implement in practice resulting in significant B8 development. In order to achieve a mix of employment uses across the Borough it is essential that some restrictions should be placed on B8 uses and this guidance highlights the positive reasons why Dagenham Dock should focus on other employment uses.
2) B8 uses by their nature tend to have significantly more non-staff vehicle movements than B1 or B2 uses. Over dominance of high traffic generating uses could push Goresbrook Interchange junction capacity to its limit thereby hindering future intensification of B2 uses. Whilst higher staff numbers are encouraged and could result in more traffic, there is a greater opportunity for modal shift (people using public transport) for staff travel than for business/commercial travel.
3) Although by no means a straightforward relationship, it is generally accepted that employment densities for storage and distribution uses are less than for B1/B2 uses. SERPLAN in 1997 gave job density ratios of 1 worker per 30 sq.m for B1b&c/B2 uses and 1 per 40 sq.m for B8[17]. A more recent national study by Arup for English Partnerships[18] gave a general industry figure of 1 per 34 sq.m, a small business figure of 1 per 32 sq.m, a high tech/R&D figure of 1 per sq.m whilst general warehousing/distribution was 1 per 50 sq.m and 1 per 80 sq.m for large scale/high bay warehousing
4) The main justification however is the clear vision for a SIP (and indeed the wider London Riverside area)[19] which focuses on the positive promotion of B1 and B2 employment uses. It is believed that a restriction on further

[14] In addition to this there are major B8 developments along the A13 corridor and River/Thames Road including an application for over 1/2m sq ft on a former timber merchants. An application for 1m sq ft of employment space in Dagenham Dock has recently been approved subject to a S106 agreement which offers the prospect of half a million Sq ft of B8 space.
[15] London Riverside Business Survey (28 March 2002) Ancer Spa for the East Thamesside Partnership
[16] Table 2.1 London Riverside Business Survey
[17] SERPLAN, The Use of Business Space, Roger Tym & Partners, March 1997
[18] Arup Economics and Planning 'Employment Densities : Report for English Partnerships and the RDAs' July 2001.
[19] The Ancer Spa report 'Potential for Manufacturing and Wider Employment Development' lays out the case for the London Riverside Manufacturing focus.

storage and distribution uses in Dagenham Dock is vital to enable the Vision to be fully achieved

To address concerns raised during the public consultation that restricting the further development of B8 could result in land not coming forward for redevelopment, the Council will take on board the Mayor of London's recommendation to monitor the situation. If the outcome of various demand studies[20], the market situation and in particular the impact of the ETRCL development result in lack of regeneration over the coming years due to poor demand then a review will consider whether some further B8 development can be permitted. Developers and landowners would also have show clear evidence that sites have been marketed for B1/B2 uses at appropriate rental levels. This conforms to Planning Policy Guidance Note 12 [para. 4.12] which stresses that local authorities should aim to ensure that proposals for economic development, and the allocation of land for that purpose, are realistic. The monitoring will also take account of public transport improvements to ensure TfL's concerns over density increases are included.

The power station and liquid storage sites are covered by the Green Collar designation however it recognised they are unlikely to be redeveloped within the plan period. The following comments are made about these uses:

Power Station
Barking Power Station is a significant occupier in Dagenham Dock with around 100 staff. The gas-fired power station supplies around a third of London's electricity. The station operates very efficiently however discussions will continue over any means by which the power station could contribute towards the aims of the SIP. In addition as the appearance of Dagenham Dock as a whole improves environmental improvements to the appearance of the power station site will be encouraged.

Liquid Storage Sites
It is recognised that the liquid and other fixed silo based storage sites are unlikely to face redevelopment pressures in the medium term due to the level of investment already made and the relative immobility of plant. The occupiers make use of the riverside wharves and this will continue to be encouraged. Any other means by which operations could fulfil the aims of the SiP will be encouraged including improving the appearance of sites.

Mass Burn Incineration
The public consultation process revealed some concern that the draft version made no mention of waste incineration. Mass burn waste incineration would work against the whole vision of a Sustainable Industrial Park as well as perpetuating the historically negative environmental image of the area. Therefore the Council would resist any proposals for such a facility. This is in line with the Draft London Plan Policy 4A.1 which presumes against mass

[20] The 'Drivers of Change' appendix highlights the growth potential for the environmental sector and lays out some of the available and forthcoming research.

burn incineration with the focus on waste minimisation, recycling and new and emerging conversion technologies.

Recycling Industries Zone

DD3 : RECYCLING INDUSTRIES ZONE

THE RECYCLING INDUSTRIES ZONE IDENTIFIED ON THE DAGENHAM DOCK PROPOSALS PLAN IS RESERVED FOR APPROPRIATE ENVIRONMENTAL INDUSTRIES AND FACILITIES FOR THE RECYCLING AND REPROCESSING OF WASTE.

SOME ANCILLARY OPEN STORAGE MAY BE PERMITTED SUBJECT TO SATISFYING THE FOLLOWING CRITERIA:

i) IT IS NOT VISABLE FROM THE HIGHWAY.
ii) IT IS CONTAINED WITHIN SOLID RETAINING WALLS.
iii) IT IS ONLY STORED FOR OPERATIONAL REASONS AND IS NOT STOCKPILED FOR EXCESSIVE PERIODS.

The Dagenham Dock Masterplan identified the objective of setting up a Low Technology Park recognising the important role recycling operations play. This designation recognises the existing character of occupiers and the fact the area is a significant distance from any residential units. Currently some of existing operators have a very poor appearance with low technology and poor environmental practices. Significant enforcement action has and will be taken in this area by the Council and other agencies to bring operational standards and site appearance to an acceptable level. Whilst applications for new recycling operations will be considered favourably they will need to show clearly how the site will be run and how the appearance of the area will be improved and maintained. This designation promotes re-use/recycling industries and waste transfer stations with particular encouragement of value-added operations.

The need for some open storage for such uses is accepted however whilst this area has a different designation than the ‘Green Collar’ zone it does not diminish the overarching objective of improving the appearance of the site. The Council encourages the imaginative use of screening and will consider earth bunds, gabion walls, ‘green walls’, planting screens etc. All development fronting the highway should present a public face which makes an attractive pedestrian environment.

Like the Green collar zone this designation accords with policy 3B.12 of the Draft London Plan.

Environmental Technology Resource Centre for London Zone

DD4: ETRCL ZONE
WITHIN THE ETRCL ZONE AS DEFINED ON THE DAGENHAM DOCK PROPOSALS PLAN THE FOLLOWING USES WILL BE PERMITTED IN ADDITION TO GREEN COLLAR ZONE USES:
i) AN ENVIRONMENTAL TECHNOLOGY RESOURCE CENTRE AND ASSOCIATED INCUBATOR UNITS.
ii) RETAIL (USE CLASS A1) AND FOOD AND DRINK (USE CLASS A3) WHICH SERVE THE NEEDS OF WORKERS WITHIN DAGENHAM DOCK.

The Vision Implementation Strategy recognised that as the centre piece of the SIP it is essential that the Environmental Technology Resource Centre for London occupies a prominent site within Dagenham Dock. The location identified is the gateway site between Dagenham Dock and Barking Reach. It would offer views over a potential Barking Reach Country Park and link in with the 'Eastern Quarter' of Barking Reach with its focus on employment and training. This site offers opportunities for expansion and links to the wider 'green collar zone'. Additional benefits of this location include the ability to have an East London Transit stop by the Centre and proximity to a potential DLR station serving the west of Barking Reach.

The Centre will need to be of a high quality landmark design utilising the latest energy efficiency technology. It is possible an International Competition will be held to design the building. The precise elements within the ETRC will be defined over the coming months however it is envisaged to be an approximately 30,000 sq.ft building over at least two storeys with the following components:
R&D facilities, information centre, labs and workshops, conference facility, training facilities, meeting rooms and office accommodation (including site management).

The ETRCL zone would also contain a second block/terrace of buildings for 'incubator' units putting research from the ETRCL into practice and giving new businesses the opportunity to develop in a supported environment. This block could also be approximately 30,000 sq.ft. These 'incubator units' follow the 'supporting innovation' policy (3B.7) in the draft London Plan. Support services such as a shop/restaurant to serve Dagenham Dock as a whole could be aligned to either of the above two elements of the ETRCL zone.

Aggregates/Riverside Zone

DD5: AGGREGATES/RIVERSIDE ZONE

THE COUNCIL WILL NOT NORMALLY GRANT APPLICATIONS FOR DEVELOPMENT OF OPERATIONS OTHER THAN FOR THE MANUFACTURE, PROCESSING, RECYCLING AND ASSOCIATED STORAGE OF AGGREGATES/SECONDARY MATERIALS/MINERALSIN THE AGGREGATES/RIVERSIDE ZONE IDENTIFIED ON THE DAGENHAM DOCK PROPOSALS PLAN

SUCH DEVELOPMENT WILL ONLY BE PERMITTED WHERE:

i) THE APPLICANT CAN DEMONSTRATE THAT THE AMOUNT OF MATERIALS TRANSPORTED BY RIVER AND/OR RAIL WILL BE MAXIMISED.

ii) THE APPLICANT CAN DEMONSTRATE THAT ANY MOVEMENTS BY ROAD CAN BE ACCOMMODATED WITHIN THE EXISTING ROAD NETWORK WITHOUT RESTRICTING OPPORTUNITIES FOR HIGHER DENSITY DEVELOPMENT IN THE FUTURE.

iii) MATERIALS ARE ENCLOSED WITHIN BUILDINGS OR SOLID WALLS WHEREVER POSSIBLE PARTICULARLY BY SITE BOUNDARIES.

iv) MEASURES ARE TAKEN TO REDUCE NOISE, DUST AND VISUAL INTRUSION

v) THE VISUAL IMPACT OF PLANT AND EQUIPMENT IS MINIMISED THROUGH CAREFUL SITING, DESIGN AND LANDSCAPING.

Aggregates like other materials are, and will be, subject to increasing legislative requirements whereby materials increasingly need to be recycled to minimise use of virgin material and encourage materials to be reused rather than landfilled. Occupiers within the riverside sites will be encouraged to utilise new technologies and adopt value-added processes and move away from simple storage/transportation operations. In addition occupiers will be encouraged to improve the appearance of their sites and wherever possible store materials within buildings. This designation also accords with policies 4A.4/4A.5 of the draft London Plan (see appendix A). As the image of Dagenham Dock improves it will increasingly be important that aggregate vehicle movements through Dagenham Dock should not result in materials and dust coming off vehicles as is currently the case. Therefore appropriate conditions on vehicle washing etc will be increasingly applied and enforced.

With the elevated A13, Choats Manor Way and new development at Barking Reach, the aggregates area is more visable. The Council encourages the imaginative use of screening and will consider earth bunds, gabion walls, ‘green walls’ and planting screens.

Any extensions of aggregate uses outside this zone would be discouraged although any enclosed operations in line with the ‘Green Collar zone’ designation and SIP objectives would be considered on their merits.

DD6 : SUSTAINABLE FREIGHT MOVEMENT

ANY DEVELOPMENT PROPOSALS WHICH RESTRICT THE FREIGHT CAPACITY OF EITHER RIVERSIDE WHARVES OR RAILHEADS WILL BE RESISTED.

APPROPRIATE DEVELOPMENT PROPOSALS ON LAND WITH ACCESS TO A WHARF OR RAIL SIDINGS SHOULD SEEK TO MAXIMISE THE PROPORTION OF FREIGHT USING SUCH MODES.

Wharves in Barking and Dagenham handled more cargo than any other London Borough with over 3 000 000 tonnes in 2001 - an increase of 8.6% from the previous year. Within Dagenham Dock there are 6 terminals of which 5 are currently operational. The DDVIS and the draft London Plan recognise the important role that riverside wharves and rail sidings play in decreasing the amount of road vehicle movements and this policy guidance seeks to reinforce the desire to maximise river and rail freight movements and resist any development which would hinder such opportunities. It is likely that most of the wharves in Dagenham Dock will be recommended for safeguarding by the Mayor of London. The Council will also work with organisations, particularly the Port of London Authority, to attract funding/grants in support of greater river/rail freight movements in line with the guidance.

Interchange Gateway Site

DD7 : INTERCHANGE GATEWAY SITE

EMPLOYMENT DENSITY FOR THE INTERCHANGE GATEWAY SITE AS IDENTIFIED IN THE DAGENHAM DOCK PROPOSALS PLAN SHOULD BE BETWEEN 20 AND 35 SQ.M/WORKER.

APPLICATIONS FOR DEVELOPMENT OF THE SITE SHOULD ADDRESS THE FOLLOWING:

i) CONTRIBUTE TOWARDS THE IMPROVEMENT OF THE DAGENHAM DOCK STATION INTERCHANGE.

ii) PROVIDE LAND FOR PEDESTRIAN/CYCLIST ACCESS ALONG THE NORTHERN BOUNDARY.

This site falls within the 'Green collar' zone designation and therefore that policy applies however it is also the site nearest to the Dagenham Dock transport interchange. Dagenham Dock station offers substantial opportunities to be the area's main transport interchange with greater integration between modes of transport. The site therefore offers particular opportunities for more intensive land use and the chance to contribute towards the improvement and development of the Interchange and connections to it. The requirements for proposals within a certain job density ratio relate to the acceptable land uses to and are in line with draft London plan policies and national guidance which encourages higher density development around transport interchanges. The Council recognise there may be some practical issues regarding the employment density and would take these into account in determining planning applications.

Habitat Corridor

DD8: HABITAT CORRIDORS
ANY DEVELOPMENT ADJACENT TO THE HABITAT CORRIDORS IDENTIFIED ON THE DAGENHAM DOCK PROPOSALS PLAN WILL BE REQUIRED TO PROVIDE A LANDSCAPING BUFFER ADJACENT TO IT.

The Goresbrook is an ecologically sensitive area. In order to both preserve the sensitive habitat and (on the western side) act as a buffer/screen between the employment area of Dagenham Dock and the predominantly new residential development of Barking Reach it is necessary for adjacent development to provide a landscaping buffer which complements and enhances the habitat corridor. It is possible that if DLR is extended from Beckton through to Dagenham Dock that the route could cross a habitat corridor. In this event, the Council would work with DLR to ensure any disruption to the corridor is kept to a minimum and that any suitable mitigation measures are undertaken.

Potential Green/Infrastructure Corridor

This designation consists of former railway sidings which offer a number of possibilities as identified in the DDVIS Action plans. These include a green cycle/pedestrian route, an additional habitat corridor, a new bus route (to help with bus circulation on the site and avoid the difficulties of 'dead ends') or even new rail sidings. The corridor could also be utilised for new infrastructure including drainage, IT connections or even a future CHP system.
Land adjacent to Choats Manor Way is also identified in this designation as there is potential for infrastructure (drainage, IT etc), pedestrian/cyclist route and/or a wildlife corridor.

SUSTRANS Route

In line with sustainable transport objectives, the Council is supporting the development of the North Thames foot/cycle path through all relevant Masterplans/regeneration projects. In the short/medium term two routes will be pursued. Firstly, a segregated foot/cycle path following Choats Road/Chequers Lane – this would have the added benefit of serving the development sites and making them more accessible by foot/cycle. The second route to be explored in more detail is to have a path which follows the diverted Goresbrook through the northern habitat corridor. Such a route could not be operational until after the CTRL site compound is cleared however the feasibility of such a route will be studied over the coming year. Planning applications in the interim should not hinder such future opportunities. Once operational this route would become the Sustrans path whilst the Chequers Lane/Choats Road route would become part of the standard cycle path network

A longer term objective is the creation of a riverside walk/cycle path. This guidance (with strong support from the Port of London Authority) is seeking to retain riverside wharves for freight movements - this could create a significant

safety conflicts with pedestrian/cyclist access. In addition there would be substantial difficulties in gaining land for such a route. Horseshoe Road covers part of the riverside frontage however this road is privately owned and has no footpaths whilst the remaining riverside area is all in private ownership and actively used for freight movements. Another difficulty is the flood protection wall which at over 10 feet high prevents people seeing the river from the riparian land. Nevertheless in the longer term, redevelopment proposals could enable a riverside path and as such any planning applications involving the river frontage will need to address this possibility. In the short term the possibility of creating a riverside access point with a viewing platform will be pursued.

Design and Landscape

As the Draft London Plan states "The Thames Gateway requires huge environmental upgrade and improvement in image"[21]. Dagenham Dock is a prime example of where a major transformation needs to occur with the London Plan stating that "the environmental quality of the area is poor as a result of a deteriorating road system, low grade industrial and waste related uses and widespread dereliction" and that "the planning framework should provide the structure to address these"[22]. This guidance together with the Vision Implementation Strategy and its Action Plans aims to assist in providing this structure with the Council working closely with its partners (particularly the LDA) in the development of the Dagenham Riverside Opportunity Area framework. Also refer to the Site Infrastructure and Management section.
The myth that the environmental business sector has to be a bad-neighbour/unattractive use needs to be dispelled whilst the existing positive landscape features of Dagenham Dock and surrounds need to be enhanced.

The Council will also work with our partners to attract funding to secure environmental improvements.

DD9: Maximising Land Use and Employment Densities
APPLICATIONS ALONG CURRENT AND FUTURE PUBLIC TRANSPORT CORRIDORS SHOULD SEEK TO MAXIMISE LAND USE AND EMPLOYMENT DENSITIES SUBJECT TO OTHER POLICIES PARTICULARLY DD2.

With potential for significant transport investment in the area and a large increase in the local population, it is recognised that making the best use of land is essential. Good urban design is crucial is making the best use of sites particularly given some of the constraints on the site such as power lines and other services. The policy accords with the draft London Plan designation of 'Opportunity Area' covering Dagenham Dock (Policies 2.5 and 4B.3) which seeks the best use of brownfield land. Advice will be taken from bodies such as the GLA's Architecture and Urbanism Unit.

[21] Draft London Plan paragraph 2B.37
[22] Draft London Plan paragraph 2B.61

The Council will require developers to follow any subsequent design guidance developed as envisaged in the London Riverside Strategy. In advance of such guidance particular points of attention include:

- providing landscaping strips to all highways
- presenting a 'public face' to the highway (for example, wherever possible office components of industrial units should front the highway).
- to link greenspaces to provide green corridors across the site for the movement of fauna and flora.
- High quality building design and materials
- Imaginative boundary treatments and screening (planted screens, earth bunds, gabion walls etc).
- Ensuring as direct access as possible between key building access points and the public transport network.
- Minimising opportunities for crime or vandalism (including through good quality lighting)
- Integrating refuse/recycling storage facilities within design of building and landscaping.

Developers are encouraged to adopt innovative environmental practices such as green/brown roofs[23] which as well as being visually attractive can provide new habitats, aid energy efficiency and reduce impact on drainage systems. The Mayor of London's Biodiversity Strategy and draft London Plan both support this as give further examples.

Transport Links

Dagenham Dock currently offers a poor environment for pedestrians and cyclists whilst public transport users are reliant on Dagenham Dock station. There is considerable scope for major improvements related to Dagenham Dock and other regeneration sites in the area. Necessary improvements to Dagenham Dock station include greater integration with bus services. In May 2002 the Mayor gave approval for phase 1 of the East London Transit (ELT) which would serve Ilford, Barking, Barking Reach and terminate at Dagenham Dock station. The safeguarding plans for the stretch of ELT within Dagenham Dock are included as annex 1 to this document. Further phases of the ELT could extend the route onto Rainham and as far as Romford.

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[23] www.greenroof.co.uk describes them simply as roofs with plants growing on the surface. Generally they have low management requirements and do not usually require artificial irrigation. Planting styles are usually naturalistic with the objective of establishing a self-sustaining plant community on the roof To fit in with the local biodiversity context the Council would promote ruderal vegetation. Green roofs are lightweight systems with minimal structural implications for the building. The main reasons for installing an extensive green roof are visual appeal, reducing the environmental impact of the building, creating habitat for native flora and fauna, and enhancing building performance.

DD10: Transport Links
IN ACCORDANCE WITH NATIONAL POLICY GUIDANCE, ALL MAJOR DEVELOPMENT PROPOSALS MUST BE SUPPORTED BY A TRANSPORT ASSESSMENT.

PROPOSALS FOR THE DEVELOPMENT ON LAND SAFEGUARDED FOR ELT (SEE ANNEX 1) OR ON LAND SAFEGUARDED IN THE FUTURE FOR DLR WILL BE RESISTED.

THE PROVISION OF CYCLE PARKING FACILITIES AND, IN APPROPRIATE CIRCUMSTANCES, ASSOCIATED CYCLE CHANGING AND LOCKER FACILITIES WILL BE REQUIRED FOR ALL NEW DEVELOPMENTS.

PROPOSALS FOR DEVELOPMENT WHICH CONFLICT WITH PLANS OR PROPOSALS FOR THE DEVELOPMENT OF A NORTH THAMES CYCLE/PEDESTRIAN PATH WILL BE RESISTED.

DEVELOPER CONTRIBUTIONS TOWARDS PUBLIC TRANSPORT IMPROVEMENTS AND PEDESTRIAN/CYCLIST ACCESSIBILITY WILL BE REQUIRED THROUGH S106 AGREEMENTS, IN THE FORM OF FINANCIAL CONTRIBUTIONS AND/OR, WHERE APPROPRIATE, LAND (SEE POLICY DD11).

The Council will encourage more sustainable modes of travel than single occupancy car journeys. Greater levels of walking, cycling, public transport, employee car sharing schemes and river/rail freight movements can all be supported and encouraged through the planning system and through regeneration activities.

In doing so, the Council will work with various delivery agencies to improve public transport provision. This will include working with the Port of London Authority to encourage and support movements of freight from road to river. Similarly working with relevant agencies to support movements from road to rail.

As part of its commitment to encouraging walking and cycling, the Council will promote and support the development of a North Thames cycle/pedestrian path through Dagenham Dock linking Dagenham Breach to a potential Barking Reach Country Park. The Council and its partners will undertake a study to assess the feasibility of creating a route for the North Thames foot/cycle path following the northern boundary of the site through the habitat corridor. This would create a more attractive route away from HGV movements as well as creating better pedestrian links to Dagenham Dock station. Much of this land will be constrained until CTRL vacate their compound in 2007. More generally, the Council will promote the integration of the development with public transport, walking and cycling modes, seek improvements to the coverage, frequency and quality of bus services, promote infrastructure and rail service improvements at Dagenham Dock

station[24], and promote the principles of sustainable distribution for freight movements.

Site Infrastructure and Management

DD11: PLANNING OBLIGATIONS FOR DAGENHAM DOCK
TO ACHIEVE THE OBJECTIVES OF THE SIP THE FOLLOWING IN PARTICULAR WILL BE SOUGHT THROUGH NEGOTIATIONS:

i) CONTRIBUTIONS TOWARDS THE UPGRADING AND ADOPTION OF ROADS AND DRAINAGE IN DAGENHAM DOCK.
ii) CONTRIBUTIONS TOWARDS IMPROVED PUBLIC TRANSPORT AND PEDESTRIAN/CYCLIST ACCESSIBILITY AT DAGENHAM DOCK.
iii) CONTRIBUTIONS TOWARDS THE DEVELOPMENT OF THE ETRCL AND SITE WIDE MANAGEMENT OF THE SIP.

Significant public investment has been committed in improving overall access and will be committed to further improvements. However, there will be a need for developers to contribute to the development of Dagenham Dock's infrastructure, public transport accessibility and site management. Dagenham Dock's privately owned and maintained infrastructure has long been a barrier to development. The Council will work with its partners, particularly the LDA, to improve and upgrade site infrastructure as envisaged in the DDVIS Action Plans bringing them into public ownership by agreement or, if necessary, by use of compulsory purchase powers. In most cases a commuted sum is envisaged as the contribution however contributions could also include the handover of relevant pieces of land in order to deliver the improvements. Developers are also encouraged to adopt practices which minimise impact on infrastructure – i.e. green or brown roofs/rainwater collection to reduce demands on the drainage system and green travel plans to reduce vehicles on the roads.

This policy accords with draft London plan policies on planning obligations and the opportunity area policy (Policy 2.5) which states that applications within opportunity areas are "likely to give rise to substantial planning obligations".

[24] Dagenham Dock Station offers the opportunity to be a major transport interchange in the London Riverside area. Integration with bus services with improved accessibility and facilities for pedestrians and cyclists is essential. Long term proposals for Dagenham Dock station (in addition to short/medium term proposals as part of the CTRL development) are being progressed as part of the 'Ambition for South Dagenham' project.

Environmental Management and Social Responsibility

DD12 : ENVIRONMENTAL STANDARDS
TO MEET THE SIP AIMS AND ACHIEVE SUSTAINABLE DEVELOPMENT OBJECTIVES, DEVELOPMENT WILL BE EXPECTED TO BE OF HIGH ENVIRONMENTAL STANDARD.

THE FOLLOWING WILL BE SOUGHT THROUGH NEGOTIATIONS:

I) CONTENT OF GREEN TRAVEL PLANS THOUGH ALL SHOULD INCLUDE A STAFF TRAVEL DATABASE IN ORDER TO ENCOURAGE CAR SHARING SCHEMES AND, WHERE APPLICABLE, SET TARGETS TO REDUCE PARKING SPACES AS PUBLIC TRANSPORT PROVISION IMPROVES.

II) THE PROVISION OF INFRASTRUCTURE/OPERATIONAL PRACTICES WHICH RESULT IN IMPROVED RESOURCE EFFICENCY

III) ADOPTION OF AN ENVIRONMENTAL MANAGEMENT SCHEME.

ALL DEVELOPMENT WITHIN THE DAGENHAM DOCK SIP ABOVE 2,000 SQM WILL BE EXPECTED TO INCORPORATE RENEWABLE ENERGY PRODUCTION EQUIPMENT TO PROVIDE AT LEAST 20% OF PREDICTED ENERGY REQUIREMENTS.

To realise the aims of a Sustainable Industrial Park, developers and site occupiers will need to demonstrate a commitment to sustainable development and consistently seek to improve their performance. The Council, the London Development Agency and the Environmental Technology Resource Centre will seek to assist site occupiers in this process through networking, practical advice, information, research and consultancy. Much advice is given in appendix C. As the Park develops it is anticipated that a set of consistent environmental standards will be developed as part of a site-wide Environmental Management System. Developers will then be required to commit to this overall EMS.
The concept of a Sustainable Industrial Park with its triple bottom line[25] implies not only environmental responsibility, but also social responsibility.

In the initial stages of development of the SIP, the Council will require developers to submit a statement explaining how their development will contribute to the objectives of the Sustainable Industrial Park meeting higher environmental and social responsibility standards. It is anticipated that developers will consider the following factors:

Sustainable Construction
Use of novel construction techniques or the application of established standards such as the Building Research Establishment Environmental

[25] Triple Bottom Line: Holistically addressing economic, social and environmental performance.

Assessment Method (BREEAM) in line with 4B.6 of the draft London plan.

Energy Efficiency

Adopting energy efficiency measures in the design stages to maximise use of renewables in line with policies 4.A7 & 9 of the draft London Plan. This seeks to assist in meeting the Government's target of generating 10% of the UK's electricity requirements from renewable sources.

Land Remediation

There is an opportunity in Dagenham Dock to adopt more sustainable methods of land remediation rather than the traditional approach of removing contaminated material to landfill. Further information on this can be provided by the Council's Contaminated Land Officer.

Industrial Processes

Development of sustainable industrial processes in terms of recycling, waste minimisation, energy efficiency or involvement in "green chains"[26].

Flood Protection

Dagenham Dock lies within the River Thames flood plain and is shown on the Environment Agency's Indicative Flood Risk Maps as being within the 0.1% risk per year of tidal flooding. In determining applications the Council will consult with the Environment Agency on flooding issues and in line with PPG25 will require a flood risk assessment where necessary.

Green Travel Plans

A Green Travel Plan[27] requirement will be made for every significant planning permission as well as for minor permissions where a plan could mitigate against an identified local traffic problem or excessive reliance on single occupancy car journeys. This would include a staff travel database in order to encourage car sharing schemes and where applicable set targets to reduce parking spaces as public transport provision improves. A model agreement has been produced and is available on request whilst advice on the content of plans can be provided by the Council's Green Travel Planner.

[26] Links between businesses with the ultimate aim of a closed loop system where waste products from one business become resource inputs for another. The Vision Implementation Strategy raises the ideal of a virtual eco-industrial park where web based trading could lead to green chains across the region.

[27] A Green Travel Plan is a package of practical measures to encourage staff to choose alternatives to single-occupancy car-use and to reduce the need to travel overall. The Plan should be site and business specific and include targets which are SMART (Specific, Measurable, Achievable, Realistic and Time-bound). All new occupiers in Dagenham Dock will receive a copy of the 'Travel Plan Resource Pack for Employers' to assist in the production of a Green Travel Plan.

Recruitment Practices
Practices which favour local recruitment, training opportunities and equality related to gender, age, disability and race.

Procurement
Commitment to procuring resources from sustainable sources, both during construction and operation of the site.

Community Involvement
Involvement of the company and its employees in the wider regeneration of Barking and Dagenham.

- seek to secure the above through planning conditions and section 106 agreements as appropriate.

APPENDIX A DRAFT LONDON PLAN

Policies and relevant extracts from the Draft London Plan

"High value added activities such as design, creative and green industries are projected to be important in those areas of London where manufacturing has restructured and remains vibrant." Paragraph 1A.33

The Draft London Plan has six overall objectives.

Objective 1: Making the most sustainable and efficient use of space in London; encouraging intensification and growth in areas of need and opportunity.

The key policy directions for achieving this includes:

- Enable the centre of London and the main opportunity areas for development to intensify and to accommodate much of the growth in jobs.
- Beyond the centre, make East London the priority area for new development, regeneration and investment, introducing a new scale and quality of development.

Objective 3 : Making London a more prosperous city with strong and diverse economic growth.

The key policy directions for achieving this includes:

- Support emerging dynamic sectors of growth and innovation, such as green and creative industries…

Objective 6 : Making London a more attractive, well-designed and green city.

The key policy directions for achieving this includes:

- Encourage and support the development of green industries.

Policy 2A.2 Opportunity Areas
As part of the process of producing sub-regional framework, the Mayor will expect boroughs to work with the GLA group and other stakeholders to prepare planning frameworks for Opportunity Areas, or build on frameworks already developed. These frameworks should set out a sustainable development programme for each Opportunity Area so as to contribute to the overall strategy of the London Plan to:

- seek to exceed the minimum guidelines for housing and employment set out in the sub-regional tables
- maximise access by public transport
- promote social inclusion and relate development to nearby Areas for Regeneration
- take account of the community, environmental and other distinctive local characteristics of the area.

Policy 2.5 Opportunity Areas in East London
The East London Opportunity Areas, together with their minimum targets for homes and jobs, are shown in Table 2B.3. The Mayor will work with partners to draw up development frameworks for these areas. They must inform UDP reviews and broader regeneration and community strategies and initiatives. Taking account of other policies, developments will be expected to maximize plot ratios and to contain mixed use developments-see sections 3B and 4B. Given their scale, they are also likely to give rise to substantial planning obligations (see policies 5.3 and 5.4). The general policy directions to be followed in the development frameworks are indicated below.

Policy 3B.7 Supporting Innovation
The Mayor, LDA and other partners will:
- use the London Innovation and Knowledge Transfer Strategy to promote knowledge transfer and innovation
- support retention and development of London's leading edge research capabilities, for example medical research and encourage establishment of new foci for innovation and research excellence.

Boroughs should endure an adequate supply of environmentally attractive, high quality and affordable premises, 'incubator units' and sites for synergy between business and research institutions and academic in line with strategic office policy.

Policy 3B.12 Environmental Industries
The Mayor, LDA other agencies and sub-regional partnerships should support the establishment of green industries and green practices in business through funding, training, business support, market development, promotion initiatives and land use policies.

In revising UDPs and preparing Community Strategies, boroughs should identify and safeguard land and premises in appropriate locations, including town centres, at appropriate river and rail locations, to secure capacity for appropriate environmental industries and facilities for recycling and reprocessing of waste.

The Mayor will and boroughs should encourage demand for environmental goods and services by applying policies on sustainable design and construction in new developments and refurbishment, and through encouraging demand for recycled products.

Policy 4A.2 Spatial Policies for Waste Management
In support of the Mayor's Municipal Waste Management Strategy, the proximity principle and the need to plan for all waste streams, in reviewing UDPs boroughs should:
- identify new sites in suitable locations for new facilities such as…construction and demolition waste recycling plants…
- support appropriate developments for manufacturing related to recycle waste.

- Support treatment facilities to recover value from residual waste.

Policy 4A.4 Better Use of Aggregates
To ensure an adequate supply of aggregates the Mayor will work in partnership with Boroughs and industry to achieve targets of:
- 80% re-use of construction and demolition waste
- 60% re-use of that waste as aggregates in London by 2011.

Policy 4A.5 Spatial Policies to support the better use of aggregates.
Boroughs should:
- support the development of aggregate recycling facilities in appropriate and environmentally acceptable locations, with measures to reduce noise, dust and visual intrusion to a practical minimum.
- Wherever possible, safeguard wharves with an existing or future potential for aggregate handling and ensure adjacent development is designed accordingly to minimise the potential for conflicts of use and disturbance.
- Safeguard existing railhead capacity to handle and process aggregates.
- Minimise the movement of aggregates by road

Policy 4.A.7 Energy Efficiency and Renewable Energy
The Mayor will and boroughs should support the Energy strategy and its objectives of reducing carbon dioxide emissions, improving energy efficiency and increasing the proportion of energy used generated from renewable sources by:
- improving the integration of land use and transport policy and reducing the need to travel by car (see section 3C)
- expecting the inclusion of energy efficient and renewable energy technology and design, including passive solar design, natural ventilation, borehole cooling, combined heat and power, community heating, photovoltaics, solar water heating, wind, fuel cells, biomass fuelled electricity and heat generating plant in new developments wherever feasible
- facilitating and encouraging the use of all forms of renewable energy where appropriate including giving consideration to the impact of new development on existing renewable energy schemes
- minimising light lost to the sky, particularly from street lights.

The Mayor will work in partnership with the Environment Agency, boroughs and industry to ensure that the spatial, transport and design policies of the London Plan support the Mayor's Energy Strategy and contribute towards achieving CO2 and renewable energy targets.

Policy 4.A.9 Providing for Renewable Energy
The Mayor will expect strategic referrals to show how the development would generate a proportion of the site's electricity or heat needs from renewables, where feasible.

Policy 4B.3 Maximising the potential of sites
The Mayor will and boroughs should ensure development proposals achieve the highest possible intensity of use compatible with local context, the design principles in Policy 4B.1 and with public transport capacity. Boroughs should develop residential and commercial density policies in their UDPs in line with this policy. Residential development should conform to the density ranges set out in Table 4B.1. The Mayor will refuse permission for strategic referrals that under-use the potential of their size.

Policy 4B.6 Sustainable Design and Construction
The mayor will and boroughs should expect future developments to meet the highest standards of sustainable design and construction. These will include measures to:

- re-use land and buildings
- conserve energy, materials, water and other resources
- be bioclimatically designed
- reduce the impacts of noise, pollution, flooding and micro-climatic effects
- ensure developments are comfortable and secure for users
- conserve and enhance the natural environment , particularly in relation to biodiversity.

Applications for strategic developments should include a statement showing how sustainable principles will be met in terms of demolition, construction and long-term management.

Boroughs should ensure that where appropriate, the same sustainability principles are used to assess planning applications.

The Mayor will work with partners to produce Supplementary Planning Guidance on sustainable design and construction.

Policy 5.3 Priorities in planning obligations
The Mayor will and boroughs should reflect the policies of this plan and include strategic as well as local needs in their policies for, and negotiation of, planning obligations. The Mayor wishes to develop with boroughs a system of pooling for the provision of facilities. Affordable housing and public transport improvements should generally be given the highest importance with priority also given to learning, skills and health facilities and services.

The Mayor will direct refusal of a strategic planning application if he considers that the planning obligations proposed would not lead to a satisfactory development. The Mayor will seek secondary legislation to enable him to be a party to appropriate 106 agreements.

Policy 5.4 Planning obligations
Boroughs should include a general planning obligation policy in UDPs to the effect that:

- development will not be permitted unless it makes appropriate provision of, or contribution towards, requirement that are made necessary by and are related to, the proposed development

- applicants will be required to finance the full cdaptial and revenue cost or (if it can be demonstrated that this cannot be met) make a contribution towards the full cost of all such provision that is fairly and reasonably related in scale and in kind to the proposed development and its impact on the wider area.
- boroughs should refer to planning obligations that will be sought in the relevant parts of the UDP (such as transport policies)
- priorities should reflect those set out in Policy 5.3 above

Boroughs should take account of any changes to government guidance or legislation in framing relevant policies. The mayor will lobby Government for changes to legislation to require development proposals that have an impact beyond the application site to show how any measures needed to mitigate these impacts are to be met.

Policy BR17 Freight uses on the Blue Ribbon Network
The Mayor will and boroughs should support new development and facilities that increase the use of the Blue Ribbon Network to transport freight and general goods especially in areas of deficiency.

Policy BR18 Wharves on the Blue Ribbon Network
The Mayor will and boroughs should protect safeguarded wharves for cargo handling uses such as inter-port or transshipment movements and freight related purposes. Temporary uses should only be allowed where they do not preclude the wharf being used for cargo handling uses. Development next to or opposite safeguarded wharves should be designed to minimise the potential for conflicts of use and disturbance.

The redevelopment of safeguarded wharves should only be accepted if the wharf is no longer viable or capable of being made viable for cargo-handling. The criteria for assessing the viability of wharves are set out in paragraph 45.

Policy BR31 Green Industries along the River Thames
The Mayor will and boroughs should generally welcome the use of waterside sites, especially those with Preferred Industrial Locations, for green industries, where the majority of materials transshipment is by water.

The increased rates of recycling and reuse of waste sought in the Mayor's Municipal Waste Management Strategy will require locations to be found for such green industries. Locations along the Thames and tidal tributaries will offer the additional advantages of being able to move materials by sustainable means.

Draft London Plan Glossary

Green Industries: The Business sector that produces goods or services which compared to other, generally more commonly used, goods and services, are less harmful to the environment.

Proximity Principle: Dealing with waste as near as practical to its place of production.

Recycling: Involves the reprocessing of wastes, either into the same material (closed-loop) or different material (open-loop recycling). Commonly applied to non-hazardous wastes such as paper, glass, cardboard, plastics and metals.

Renewable Energy: Energy derived from a source which is continually replenished, such as wind, wave, solar, hydroelectric and energy from plant material, but not fossil fuels or nuclear energy. Although not strictly renewable, geothermal energy is generally included.

APPENDIX B Drivers of Change

Legislation, policy, incentives and advice

I want Britain to be a leading player in this coming green industrial revolution. I believe the role of Government is to accelerate the development and take up of these new technologies until self-sustaining markets take over.
Rt Hon Tony Blair MP, Prime Minister

Innovation is the key to success in the rapidly growing global environmental technology and services industry.
Merlin Hyman, Director of Environmental Industries Commission

Recycling, energy efficiency, waste minimisation, transport efficiency and numerous other environmental issues are increasingly rising up the agenda due to a plethora of new requirements including the Kyoto Protocol, EU directives and new recycling targets. All these issues require Governments, businesses, and planners to look at ways of addressing and achieving sustainable development.

It is widely recognised that the environmental business sector will grow considerably due to a number of factors. A range of both 'carrots' and 'sticks' are being applied to industry to improve environmental performance and meet a range of targets. This Appendix lays out in more detail the various drivers of change which set the context for the Dagenham Dock SIP proposals. The drivers of change include EU, Government and GLA policy and legislation, increasing financial incentives for improved environmental performance with a whole plethora of new grants, and an ever increasing range of support and advice services. In addition, increased public awareness of environmental issues is resulting in the 'green consumer' who includes environmental performance as part of purchasing decisions.

Inevitably this appendix could never include all the legislation, policies or support/advice services relevant for all types of industries and all kinds of products or materials. A broad brush approach has therefore been followed with increased emphasis on some of the materials/industries already located in Dagenham Dock. The failure to highlight any specific material in detail (eg. paper) does not necessarily infer that industries involved in that material would be unsuitable for Dagenham Dock. Appendix C highlights further sources of information.

The DTI web site states "Effective management of these [environmental and social] issues - alongside traditional economic and financial risks - can create new opportunities to innovate, differentiate and enhance reputation, and is becoming fundamental to business success…. Competitive pressures will drive others in similar a direction"[28]. Addressing environmental issues can

[28] www.dti.gov.uk/sustainability/bo/index.htm

save companies money as better use of resources could result in lower energy and fuel bills.

Legislation at EU, National and London-wide levels is increasingly driving the environmental business sector creating new markets and increased demands for new technologies. A number of studies aimed at quantifying the scope for 'green jobs' have been produced or are in the pipeline.[29]

Recycling in the past has been through traditional sectors (eg. glass bottles recycled into new glass bottles etc) however new technologies are increasingly resulting in a diverse range of products. For example, RMC at Dagenham Dock produces Glasphelt – road surfacing using recycled glass. Other imaginative products include shredded newspapers as insulation and street furniture from recycled plastic. Many secondary materials could be much more widely used and the need for product research and development is critical - particular to ensure purchasers that products from secondary materials are as good quality and evenly priced as virgin materials.

Legislation

A wave of legislation will drive the change towards using secondary materials more widely. This section highlights a just a few areas where legislation, and the financial implications of it, are drivers of change.

Electrical Waste

Waste Watch[30] states that every year an estimated 1 million tonnes of waste electronic and electrical equipment are discarded by householders and commercial groups in the UK with such goods becoming increasingly short lived. Electronic and electrical equipment makes up on average 4% of European municipal waste, and is growing three times faster than any other municipal waste category. Electrical waste is known as Waste Electrical and Electronic Equipment (WEEE) and covers a wide range of products with the largest component known as 'white goods' making up 43% of the total. The next largest component is IT equipment which accounts for 39%.

The major implication for WEEE is an EU directive. The Directive sets out measures that aim, firstly, at the prevention of waste electrical and electronic equipment, secondly at the re-use, recycling and other forms of recovery such as energy from waste, and thirdly at minimising the risks and impacts to the environment associated with the treatment and disposal of WEEE. The WEEE directive will be required to be put into national legislation.

The potential impacts of the directive are substantial with companies needing

[29] Including 'Jobs from Waste: Employment Opportunities In Recycling' Waste Watch (1999), 'Green Jobs: A Final Report to Bedfordshire County Council' Green Jobs Steering Group & Ecotec (2000), 'Estimating Job Creation from Recycling and Reprocessing' Report for London Remade (June 2002), 'Enabling Business in Resources Management : Report of the Innovation and Growth Team for the Environmental Goods and Services Sector' DTI JEMU and new studies commissioned by the LDA, GLA and the London Assembly.

[30] www.wastewatch.org.uk

to find new technologies for recycling as well as designing new products with the environment in mind.

Glass

Glass is seen as one of the traditional recycling sectors where collected glass is recycled into new glass products. However the industry is now gaining more material than it needs to turn back into bottles and jars. Every year the UK used 2.4 million tonnes of glass bottles with around 1.6 million currently going to landfill[31]. There is a need to find new ways of processing glass into higher value products particularly coloured glass. Dagenham Dock occupier, RMC Aggregates, produce 'Glasphalt' a road basecourse utilising up to 30% recycled glass whilst other companies are looking at utilising glass within aggregates. Research and development into ensuring products utilising glass meet required specifications is essential.

Vehicles

Dagenham has long been closely associated with vehicle manufacture and although Ford Motor Company is no longer manufacturing cars at Dagenham it still has a strong presence with a state of the art diesel engine plant and many other associated facilities. Dagenham Dock itself contains a number of traditional car breakers. Legislation will result in a substantial change in the whole vehicle recycling business. The End of Life Vehicles (ELV) Directive (2000/53/EC) came into force on 21 October 2000.

The ELV Directive aims to reduce the amount of waste from end of life vehicles. In particular it:-

- requires member States to ensure that ELVs can only be scrapped ('treated') by authorised dismantlers or shredders, who must meet tightened environmental treatment standards from the outset;
- requires economic operators (this term includes producers, dismantlers and shredders among others) to establish adequate systems for the collection of ELVs from the outset;
- states that last-owners must be able to return their vehicles into these systems free of charge from January 2007;
- requires producers (vehicle manufacturers or importers) to pay 'all or a significant part' of the costs of takeback and treatment from January 2007. Member States can also apply this requirement from the outset;
- sets rising re-use, recycling and recovery targets ('recycling targets') which must be met by economic operators by January 2006 and 2015; and;
- restricts the use of heavy metals in new vehicles from July 2003.

The ELV Directive will undoubtably require more technology driven solutions and open up new opportunities for recycling operations.

Landfill tax

In the UK the Landfill tax was brought in during 1996 and charges per tonne of waste going to landfill. The tax aims to encourage waste producers to

[31] 'Recycling: Beyond the Glass Ceiling' *The Independent.* 18th November 2002.

produce less waste, recover more value from waste, for example through recycling or composting and to use more environmentally friendly methods of waste disposal. The tax applies to active and inert waste, disposed of at a licensed landfill site. Making the cost of disposal of waste higher results in stronger incentives for recycling.

In addition other EU and Government legislation has/will restrict the level and types of waste that can be landfilled. For example the Landfill of Waste Directive prevents, amongst other things, whole tyres going into landfill.

There is an additional driver of change coming from the introduction of the Landfill tax – landfill tax credits. The landfill tax environmental bodies credit scheme enables landfill site operators to claim tax credits for contributions they make to approved environmental bodies for spending on projects that benefit the environment. The environmental bodies are those enrolled by Entrust, the regulatory body for the scheme. A number of companies operating in the area offer landfill tax credit schemes including RMC, Cleanaway and shortly Shanks.

Aggregates Levy

The Aggregates Levy came in effect on 1st April 2002. The objective of levy is to address, by taxation, the environmental costs associated with quarrying operations (noise, dust, visual intrusion, loss of amenity and damage to biodiversity) in line with the Government's statement of intent on environmental taxation. It also seeks to reduce demand for aggregate and encourage the use of alternative materials where possible. There is no net gain to the Exchequer as the money collected will fund a 0.1% point cut in employer NICs and a new Sustainability Fund to deliver environmental benefits.

Aggregate companies are having to face up to such increasingly legislative demands whilst at the same time having new opportunities opening up to use secondary material. Forward thinking aggregate companies are increasingly looking at innovative ideas like using recycled glass in road surfacing material. Research and development in this area is critical with purchasers of aggregates requiring strict performance from materials purchased.

Policies and Targets

Policies and associated targets at every level of government are also key drivers of change. This section highlights just a couple of relevant ones.

ELWA Waste Strategy

East London Waste Authority (ELWA) is responsible for the disposal of waste generated in the East London Boroughs of Barking & Dagenham, Havering, Redbridge and Newham. This currently amounts to 535,000 tonnes per year with around 90% going to landfill. ELWA's vision is "to provide an effective and efficient waste management service that is environmentally acceptable

and delivers services that local people value" [32]. Their objectives include "encouraging waste minimisation initiatives; seeking to maximise waste recycling and composting opportunities potentially supported by recovery of energy; and contributing to local economic development"[33]. It's 25 year plan is the Integrated Waste Management Strategy (IWMS) which includes a minimum 25% recycling/composting rate of household waste from April 2005. Through a Private Finance Initiative (PFI), ELWA has appointed a contractor (Shanks) for 25 years worth approximately £25 million per year. Shanks will invest over £100 million in new infrastructure

Shanks' proposals include building two Bio-MRF (Materials Recycling Facilities) either side of Dagenham Dock at Jenkins Lane on the Barking & Dagenham/Newham border and at Frog Island in Havering. The 25 year ELWA contract with its recycling targets and diversion from landfill is a significant driver of change requiring substantial new markets for secondary materials. It therefore has significant implications for the Dagenham Dock SIP.

Mayor's Draft Municipal Waste Management Strategy

The Mayor of London's public consultation draft Muncipal Waste Management Strategy was published in September 2002. The closing date for comments was 6th December 2002. The Strategy matches the national target of 25% recycling rate by 2005 and betters it for 2010 with a target of 50%.

The Strategy states "to meet the household recycling targets for 2005/6 London Authorities will need to collect at least 865,000 tonnes of recyclables, a massive increase from the 300,000 collected in 2000/1"[34] and recognises this opens up major business opportunities. It aims to convert waste into new materials, creating new industries and employment recognising that London's substantial waste needs to be addressed more locally.

The Strategy also refers to a new £21m London Recycling Fund which will provide additional funding support to recycling collections. In addition, it aims to rebrand civic amenity sites as 'Reuse and Recycling Centres' with a much greater focus on recycling than currently exists.

Support/Grants/Funding

In addition to legislative 'sticks' there are a plethora of new funding sources in the field of environmental technology supporting measures ranging from flagship innovation projects through to small business advice on methods of improving energy and resource efficiency. This section only highlights a number of those currently in existence in order to highlight this area as a significant driver of change.

[32] ELWA IWMS
[33] ELWA IWMS
[34] 4Q.2 Mayor's Draft Muncipal Waste Management Strategy (2002)

London Remade is an SRB/ERDF funded project to "stimulate new niche sectors, secondary industries and jobs around recycled materials to assist in the re-industrialisation of South and East London"[35]. The scheme's concept of Eco-Industrial areas has a strong tie-in with the Dagenham Dock SIP proposals. Further details of London Remade can be found in Appendix C.

The DTI also co-funds the Sustainable Technologies Initiative (STI). This supports collaborative projects to improve the sustainability of UK business. Key themes of the programme include:

- Step changes (4-10 fold improvements) in the efficient use of resources in processes and products
- New products and processes and service concepts which increase the useable life of products
- Associated sustainability research

The Joint Environmental Markets Unit (JEMU) is a UK Government (DTI) unit with responsibility for promoting and supporting the UK environmental industry. JEMU's prime objective is to nurture the development of a strong, competitive, and world-class UK environmental industry capable of competing successfully in the world marketplace. Technology Partnership Initiative (TPI) is a government initiative, administered by JEMU, which aims to give firms in developing, industrialising and emerging countries better access to environmental technologies and techniques widely adopted in the UK.

The Single Regeneration Budget funded Environmental Business Action project[36] is providing local businesses with advice and support in reducing environmental impacts and improving resource efficiency whilst the University Of East London Thames Gateway Technology Centre is developing a programme for environmental audits of companies.

There are also a range of grants available for utilising renewable energy such as www.est.org.uk/solar/index_solar.html

Further details of many of these funding sources can be found in Annex 6 of the DDVIS with contact details and website addresses found in Appendix C of this guidance.

[35] From London Remade SRB Bid: Re-engineering Secondary Materials for Thames Gateway.

[36] Environmental Business Action: Environmental management for supply chain assurance and resource efficiency. See Appendix C for contact details.