

Development Plan Document

DPD1:

Trafford Core Strategy:

Further Consultation on Revised Policy L5 – Climate Change

June 2011

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1.0 Introduction

- 1.1 During the Hearing Session on Policy on the 25th May 2011 concerns were raised about the evidence base for setting the carbon emissions reductions targets within the policy and the feasibility of delivering them as detailed in CD 12.71.
- 1.2 As a result of this the Council has re-written the policy and supporting text to address these concerns. This consultation paper contains the revised Climate Change Policy L5 for comment.

2.0 Background

- 2.1 Policy L5 as submitted, detailed the Council's approach for bringing forward the zero carbon agenda for new major built development.
- 2.2 The submitted policy detailed Trafford's local CO2 reduction targets which were supported by the Trafford Low Carbon Study and resulted in two sets of targets being proposed from the 2006 Building Regulations Part L.

3.0 A Summary of the Main Changes

- 3.1 The Policy has been re-drafted to address the concerns detailed above in the following ways:
 - Removal of Table L5.1 (and therefore the specific targets);
 - Basing the policy on the Building Regulations 2010 but retaining reference to the 2006 Building Regulations in the justification to provide a link with the evidence base;
 - Making it a requirement for new major built development proposals to demonstrate that they have explored realistic ways of reducing the effect of the proposed development on climate change;
 - Setting out the basis for the Council's assumptions as to the potential for developments within the Low Carbon Growth Areas (LCGAs) (which include three of the Council's Strategic Locations) to deliver a higher level of carbon reduction than that required in the national standards; and
 - Clearly stating that these higher levels of reduction will only apply until such time that national standards require developments to be constructed at zero carbon.
- 3.2 Text relating to the Pollution and Water sections of the Policy has not been altered.

4.0 The Sustainability Appraisal

4.1 This policy has been subject to a revised Sustainability Appraisal which is available to view alongside this document. The results of this revised SA detail that, whilst removing the targets from the Policy will reduce the certainty of its effects on the sustainability objectives, this does not significantly reduce the positive impacts of the policy and does not introduce any negative impacts.

5.0 Consultation

- 5.1 This document has been prepared for consultation prior to this matter being revisited through the Trafford Core Strategy Examination. You are therefore invited to consider its contents and submit comments.
- The consultation is being administered by the Programme Officer, therefore any written representations in respect of these matters should be submitted, ideally in electronic form, as further representations to the programme.officer@ntlworld.com. Hard copies should be sent to the following address: Yvonne Parker, The Programme Officer, c/o Strategic Planning and Developments, Trafford Council, First Floor, Waterside House, Sale Waterside, Sale, M33 7ZF.
- 5.3 Please note that the Inspector has requested that any statements submitted should be no longer than 3000 words with very short appendices and that repetitious or lengthy submissions will be returned by the Programme Officer.
- 5.4 Following the conclusion of this consultation and consideration of its outcomes, the Council will submit a further proposed change to the Examination in respect of Revised Policy L5 of the Plan.

6.0 Revised Policy L5 Climate Change

14.1 Climate Change is one of the biggest challenges we face and it impacts on a wide range of different policy areas. The effects of climate change need to be considered at all stages of the development process in order to ensure that development minimises its impacts and mitigates its effects.

POLICY L5 CLIMATE CHANGE

L5.1 New development should mitigate and reduce its impact on climate change factors, such as pollution and flooding and maximise its sustainability through improved environmental performance of buildings, lower carbon emissions and renewable or decentralised energy generation.

CO2 Emissions Reduction

- L5.2 New mMajor built development proposals will be required to demonstrate that they can to minimise its their the contributions towards and/or mitigate its their effects on climate change, in line with both national standards and local targets opportunities and programmes. For the purposes of this policy, "major development" is defined as comprising:-The local CO2 emissions reduction target set in Table L5.1 will apply to the following:
 - Residential development equal to or greater than 10 units; and
 - Non-Residential development above a threshold of 1,000m2 floor area.
- L5.3 Developments below the thresholds, but involving the erection of a building or substantial improvement to an existing building (such as extensions or change of use), will be encouraged to adopt the principles of energy efficiency and incorporate appropriate micro-generation technologies, to help contribute towards reducing CO2 emissions within Trafford. Those developments within Conservation Areas or which include Listed Buildings will also be encouraged to adopt these principles.

CO2 Emissions Reduction Target

L5.4 Development will need to demonstrate how it contributes towards reducing CO2 emissions within the Borough. This should include incorporating measures such as applying sustainable design and construction techniques prior to utilising renewable energy generation technologies, examples of which can be found in the Supporting Technical Note.

- L5.5 The Council recognises that the achievable levels of reduction in CO2 emissions in new developments is strongly influenced by, and are dependent upon the scale and location of the proposed development. Therefore, the following spatial areas have been identified which have distinct opportunities for major development to deliver different CO2 reduction targets:
 - Low Carbon Growth Areas (LCGAs) where their is potential to deliver CO2 reduction target of up to 15% above current Building Regulations; and
 - Outside LCGAs where their is potential to deliver CO2 reduction target of up to 5% above current Building Regulations.
- L5.6 The main focus for high levels of both residential and economic growth has have been tested to determine a CO2 reduction target(s) for the Borough. In light of the viability testing, This has resulted in three LCGAs being have been identified that the Council considers major development to have the potential to can deliver a higher local CO2 emissions reduction target (see Table L5.1), than the rest of the Borough. This is subject to the new energy generation infrastructure and programmes in these locations being delivered within the plan period. Location plans outlining the LCGAs these are (Altrincham Town Centre, Carrington and Trafford Park) are provided within the Supporting SPD Technical Note.
- L5.7 These higher CO2 reduction targets will be applicable where the infrastructure exists at the time that the relevant planning application is determined. The higher reduction targets will only be applied until the national standards (Building Regulations) require developments to achieve zero carbon.
- L5.8 Table L5.1 details a CO2 reduction target using the 2006 Part L Building Regulations as a baseline.

L5.9 Table L5.1 – Local CO2 emissions reduction targets

	Minimum % CO2 emission reduction target from a baseline Part L Building Regulations 2006
LCGA	40%
Outside LCGA	30%

L5.10 Once changes in Building Regulations exceed the targets in Table L5.1, the targets will no longer apply.

How to Calculate and Reduce CO2 Emissions

- L5.11 L5.8 All new built development meeting the thresholds set within paragraph Policy L5.2 should detail how they will meet the requirements of this policy alongside their planning application. will be required to submit a Carbon Budget Statement. A template for the Carbon Budget Statement is included within the associated SPD Supporting Technical Note to help applicants calculate the baseline level of CO2 emissions to be emitted from the proposed development and to provide guidance on measures to reduce emissions.
- L5.12 L5.9 CO2 emissions should be reduced by applying the following hierarchy:-
 - 1. Design and construction techniques to reduce the demand for energy (for example: through the orientation of building; internal layout; and superior energy efficiency measures such as extra insulation);
 - 2. Technology (for example through sourcing low carbon or renewable energy generation, including any district energy network which may be accessible).
- <u>L5.13 L5.10</u> The Council will encourage applicants to consider and incorporate CO2 reduction design techniques within the building prior to investigating technology solutions. Guidance on both these options is detailed in the associated SPD and the Supporting Technical Note.

Viability

- L5.14 The Council expects that all new major development will deliver the required CO2 emissions reductions. However in those circumstances where it can be demonstrated that provision can not be feasibly delivered on site/near site and/or where meeting the higher targets set out in Policy L5. targets in Table L5.1 would affect scheme viability such that the development could not proceed, contributions will be sought to fund a carbon off-set scheme (allowable solutions fund), which will fund infrastructure measures off site to reduce CO2 emissions at a lower cost than on site measures.
- L5.15 The allowable solutions will introduce a scheme to fund measures and required infrastructure in line with the Core Strategy Policy L8 and the associated SPD. Allowable solutions contributions development set at a level which enables the developer to meet the carbon reduction target for the development as set out in Table L5.1, except where this can be shown to make the development unviable, in which case a lesser contribution will be accepted by the Council.

Energy Generating Infrastructure Opportunities – Commercial or Community

L5.16 L5.11 The Council recognises the role that commercial and community low carbon, renewable and decentralised energy generation and distribution facilities can play in reducing CO2 emissions and providing viable energy supply options to serve new and existing developments. The impact of such infrastructure and any suitable mitigation measures will be assessed in line with the policies within this Plan, in particular Policy L7 – Design Quality and Protecting Amenity.

Pollution

L5.17 L5.12 Development that has potential to cause adverse pollution (of air, light, water, ground), noise or vibration will not be permitted unless it can be

- demonstrated that adequate mitigation measures can be put in place.
- L5.18 L5.13 Where development is proposed close to existing sources of pollution, noise or vibration, developers will be required to demonstrate that it is sited and designed in such a way as to confine the impact of nuisance from these sources to acceptable levels appropriate to the proposed use concerned.
- L5.19 L5.14 Within the Borough's Air Quality Management Zones developers will be required to adopt measures identified in the Greater Manchester Air Quality Action Plan, to ensure that their development would not have an adverse impact on the air quality.

Water

- L5.20 L5.15 The Council will seek to control development in areas at risk of flooding, having regard to the vulnerability of the proposed use and the level of risk in the specific location. This will involve a sequential approach to determining the suitability of land for development and application of the exception test, as outlined in national planning policy, where necessary.
- L5.21 L5.16 Developers will be required to demonstrate, where necessary by an appropriate Flood Risk Assessment (FRA) at the planning application stage, that account has been taken of flood risk from all sources (including rivers, canals, sewers, surface water run-off and groundwater) as identified in the Council's Strategic Flood Risk Assessment and/or shown on the Key Diagram, and that the proposed development incorporates flood mitigation and management measures appropriate to the use and location.
- L5.22 L5.17 Developers will be required to improve water efficiency and reduce surface water run-off through the use of appropriate measures such as rain water harvesting, water recycling and other Sustainable Drainage Systems (SUDS) appropriate to the various parts of the Borough, as mapped in the Council's Strategic Flood Risk Assessment. Further guidance will be set out in the supporting Technical Note SPD.

IMPLEMENTATION

Implementation Mechanisms

Implementation will generally be through <u>public/private</u> sector development. Climate change priorities will be identified and allocated in the Land Allocations DPD. Other climate change needs will be implemented through the planning application decision making process.

Delivery Agent

The delivery agents will include the public and private sector.

Timescales

This will be ongoing throughout the Plan period. Phasing for the development of the Strategic Locations is set out in detail in Tables L1 and W1. This phasing reflects the likely availability of funding and programme of works anticipated at this time.

Funding

Funding will include private and public sector investment, and \$106 contributions.

Justification Text

CO2 Emissions Reduction

14.2 The thresholds applied within this policy have been tested by the Trafford Low Carbon Study (2011). Developments below these thresholds, or are Listed Buildings or those located in Conservation Areas are encouraged to adopt the principles of energy efficiency and low carbon energy generation detailed in this policy. Further guidance on energy efficiency for Listed Buildings and developments in Conservation Areas can be found on English Heritage's website.

CO2 Emissions Reduction Target

- 14.3 The Climate Change Act (Amendment 2009) sets out a target of 34% reduction in CO2 emissions by 2020 and 80% reduction by 2050. This supports the Governments policy commitment through Building Regulations to progressively reduce CO2 carbon emissions from new buildings through to 2016 and from non-residential buildings through to 2019, or any subsequent superseding timescales.
- 14.4 The justification to set local CO2 emissions reduction targets is detailed in national, sub-regional and local documents. The Supplement to PPS1 sets out the guidance for local authorities to identify the potential for renewable and low carbon technologies and to set local requirements for decentralised energy supply within Development Plan Documents.
- 14.5 In 2009, the UK government designated Greater Manchester as a Low Carbon Economic Area for the Built Environment. This designation indicates that the city region is expected to be an exemplar for low carbon buildings, to provide a

focus for job creation and economic development in the low carbon sector. This is supported by the Greater Manchester Strategy, of which a key component is to achieve a reduction in CO2 emissions of between 30-50% by 2020.

- 14.6 Trafford's Sustainable Community Strategy contains key objectives around carbon emissions reduction: PE5 (more energy saving environmentally friendly homes) and PE6 (less carbon emissions from businesses per capita). Trafford's Low Carbon Study (2011) tested a range of development types across the Borough along with a range of low carbon and renewable technologies. Trafford's Low Carbon study identified local CO2 emissions reduction targets primarily linked to the location of development and how this influences viability. These local targets are applied on top of Building Regulations Part L 2006.
- 14.7 The Trafford Low Carbon Study (2011) identified opportunities across the Borough to reduce CO2 emissions by more than the national standards. In key areas of the Borough identified as Low Carbon Growth Areas (LCGA's) the reduction could be up to 15%¹, dependent on the nature of the development being proposed.
- These areas have been identified as the Council considers that they have the potential to deliver a higher CO2 emissions reduction target for major development by virtue of the scale, the mix of uses and density it will create opportunities.
- 14.9 The LCGAs identified are Altrincham Town Centre (Policy W2), Carrington (including Policy SL5) and Trafford Park (including Policies SL2 and SL4), the location plans will be identified in the associated SPD.
- 14.10 Within the LCGAs opportunities for both micro-generation technologies and large scale low/zero carbon energy generating infrastructure options (known as Area Wide Options) exist. The micro-generation technologies (of a scale for individual households) tested include: solar hot water, ground source heat pumps, air source heat pumps, biomass boiler, solar photovoltaic, wind and combined heat and power. The Area Wide Options (of a scale to serve large scale development proposals) include: district heat networks, energy from waste, a combination of micro-generation technologies, biomass combined heat and power and utilising waste heat via pipeline from the Carrington power stations.
- 14.11 The Trafford Low Carbon Study (2011) details that up to 5%² CO2 reduction above national standards can be achieved outside of LCGAs where realistic opportunities exist to connect to existing low/zero carbon energy generating facility(s).

¹ The Low Carbon Study (2011) refers to a 40% reduction in carbon emission using 2006 Building Regulations. For the purposes of this policy and when determining planning applications, the current Building Regulations are to be applied (2010). Therefore this translates to a 15% reduction in carbon emissions.

² The Low Carbon Study (2011) refers to a 30% reduction in carbon emission using 2006 Building Regulations. For the purposes of this policy and when determining planning applications, the current Building Regulations are to be applied (2010). Therefore this translates to a 5% reduction in carbon emissions.

- 14.12 The targets were determined following assessments which considered the scale of the development, the requirements of Affordable Housing and other s106 contributions, the build cost element for Code for Sustainable Homes (Level 4), technology construction costs and land costs. The selection of development typologies and housing market areas, including the related sensitivity testing using development appraisal case studies, has demonstrated that delivering CO2 emissions reductions targets higher than national standards the targets would not impact upon the supply or pace of housing delivery set out in the Council's housing trajectory and provision of affordable housing (Policies L1 and L2).
- 14.7 The delivery of these targets and their effect on viability has been considered through Policy L8. The viability of all the case study development proposals within the Trafford Low Carbon Study have been tested against the cost for CfSH Level 4 and the BREEAM 'very good' standard. Therefore viability has been tested at a higher development costing than is currently required.
- 14.8 The selection of development typologies and housing market areas, including the related sensitivity testing using development appraisal case studies, has demonstrated that the targets would not impact upon the supply or pace of housing delivery set out in the Council's housing trajectory and provision of affordable housing (Policies L1 and L2).
- 14.9 A range of CO2 reduction targets were modelled (from 10% to 50% compared to the baseline of Part L of 2006 Building Regulations). The results showed the LCGAs to be viable to deliver 15% CO2 reduction using these technologies (on top of Part L Building Regulations 2006), with the rest of the Borough (Outside of LCGAs) able to deliver a 5% reduction target (on top of Part L Building Regulations 2006). Once changes in Building Regulations exceed this level the revised Building Regulations will be applied. The Trafford Low Carbon Study (2011) has assumed a developer's return of at least 15% for a scheme to be viable.
- 14.10 The higher carbon emissions reduction target for the LCGAs can be delivered through a combination of superior energy efficiency measures, on-site microgeneration measures and/or large-scale technology options/Area Wide Options (AWO). AWOs provide an opportunity for carbon reduction infrastructure at a scale (including district energy networks), which may prove more affordable to deliver than micro-generation measures. The Trafford Low Carbon Study tests the viability of a range of example AWOs.

How to calculate and reduce CO2 emissions

14.11 14.13 All new built development meeting the thresholds should seek to minimise its use of energy. The Council requires the application of good design principles and construction techniques to reduce the energy demand of the development, prior to incorporation of technologies. For example, this could include siting, passive solar gain, thermal performance, internal layouts of rooms, extra insulation (including green roofs and walls resulting from their insulation properties) to maximise the energy efficiency of the development. Further guidance is included in the Supporting Technical Note and associated SPD.

14.12 14.14 A tool to help applicants identify how much CO2 their proposed development will emit and to calculate the CO2 reduction target has been produced in the form of a Carbon Budget Statement (CBS). A template for the CBS is available in the Supporting Technical Note. Applicants are advised to complete a CBS, or incorporate the content within the Design and Access Statement or Planning Statement which may accompany their planning application. An equivalent document will be accepted if it meets the required content of the CBS. The associated SPD and Supporting Technical Note also offer guidance on design and construction techniques and appropriate technologies.

Delivery

- 14.15 Applicants are advised to use the following to help determine the appropriate percentage reduction in CO2 emissions to be delivered by the proposed development:
 - The Trafford Low Carbon Study (2011);
 - The Supporting Technical Note (for guidance on matching/combining technologies to suit development type(s));
 - The Carbon Budget Statement; and
 - Pre-application discussions with the Council to assist in understanding the opportunities for major developments.

Viability

- 14.13 The Council expects that all new major development will deliver the required CO2 emissions reductions. However in those circumstances where it can be demonstrated that provision can not be feasibly delivered on site, and/or where meeting a higher the targets would affect scheme viability such that the development could not proceed, contributions will be sought to fund a carbon off-set scheme, which will fund infrastructure measures. Allowable solutions will enable the developer to meet CO2 emissions reduction targets at a lower cost per tonne of CO2 saved than on-site/near site infrastructure solutions which may render the development non-viable. Where necessary to maintain viability, the Council will accept proposals which combine design and construction techniques, technologies and allowable solutions to help applicants achieve their CO2 reduction target on-site.
- 14.14 Allowable solutions contributions will be set at a level which enables the developer to meet the CO2 reduction target for the development, except where this can be shown to make the development unviable, in which case a lesser contribution will be accepted by the Council.
- 14.15 The Government consultation on The Definition of Zero Carbon Homes introduces "allowable solutions" as a way of introducing a carbon offset scheme to fund larger schemes and required infrastructure. "Allowable Solutions" will include a range of off-site solutions, from retrofitting existing buildings to large scale stand alone renewable energy generating schemes.

The viability of all planning applications will be assessed in line with Policy L8 and the associated SPD.

Energy Generating Infrastructure Opportunities – Commercial or Community

- 14.16 PPS1 states that planning authorities should provide a framework that promotes and encourages renewable and low carbon energy generation and distribution. Trafford encourages the development of commercial and community energy generation infrastructure in suitable locations, providing the opportunity for new and existing developments to use energy which is more carbon efficient. This position reflects the Department of Energy and Climate Change (DECC) progression towards formulating a strategy for national and local government to help people individually, and as a part of their community, to heat and power their homes and businesses, to provide energy security as well as CO2 emissions reduction, and delivery of such energy infrastructure should take both of these factors into account.
- 14.17 The impact of commercial or community energy generating facilities will be assessed in line with the policies within this Plan and against any suitable mitigation measures proposed. Impact will be assessed with particular regard to:
 - Matters of design quality: addressing scale, density, height, massing, layout, elevation treatment, materials, hard and soft landscaping, boundary treatment; and
 - Matters of protecting amenity: the development to be compatible with the surrounding area; not prejudice the amenity of the future occupiers of the development and/or occupants of adjacent properties by reason of overbearing, overshadowing, overlooking, visual intrusion, noise and/or disturbance, odour or in any other way.

Pollution

- 14.18 The Borough generally possesses a good quality environment which the Council intends to retain and improve wherever possible. Pollution, noise and vibration damage the environment and should be prevented or mitigated. The Council will use its planning powers as the most effective mechanism to control pollution, noise and vibration at source. Proposals for development close to sources of pollution, noise or vibration will be required to ensure an acceptable environment for users of the development.
- 14.19 The Trafford Air Quality Management Area identifies where air quality will not reach the national health based objectives. Trafford and the 9 other Greater Manchester Authorities published their Air Quality Action Plan, which sets out how the conurbation will improve air quality. The plan is mainly concerned with tackling transport related emissions, and is closely tied to the Local Transport Plan for Greater Manchester.

Water

- 14.20 A Strategic Flood Risk Assessment for Greater Manchester was published in August 2008 and identified broad flood risk arising from all sources within the sub-region, including Trafford. Detailed mapping was produced for river flood zones 2 (medium risk), 3a (high risk), 3b (functional floodplain) and 3 (with climate change). A map identifying the different types of Sustainable Drainage System which are appropriate in various parts of the sub-region was also produced.
- 14.21 Due to a number of data limitations in the sub-regional SFRA, in May 2009 Manchester, Salford and Trafford Councils commissioned further work in the form of a Level 2/Hybrid Strategic Flood Risk Assessment (SFRA). This detailed study, the first outputs from which were published in March 2010, provides an updated assessment of flood risk arising from rivers (including revised maps for the river flood zones) together with an assessment of flood risk from canals, sewers, surface water and groundwater.
- 14.22 The Manchester, Salford and Trafford Level 2/Hybrid SFRA comprises 4 volumes:-
 - 1.1 User Guide
 - 1.2 Level 1 Report
 - 1.3 Level 2 Report
 - 1.4 Maps
- 14.23 Key elements of relevance to Trafford include detailed outputs on flood risk arising from the Manchester Ship Canal, Bridgewater Canal, the River Mersey at Carrington and within Sinderland Brook catchment. A number of Critical Drainage Areas (CDAs) are also identified due to known surface water/sewer flooding issues. The User Guide provides technical advice on reducing runoff within CDAs and advises that Flood Risk Assessments (FRAs) will be required for developments within these areas on sites of 0.5 Hectares or above.
- 14.24 In accordance with national policy, the Manchester, Salford and Trafford Level 2/Hybrid SFRA will be used to assist in the application of the Sequential and Exception tests in identifying strategic locations and other development areas, and in determining planning applications. Information within the SFRA will also be of benefit in informing a range of other Council functions, including those identified in the Flood and Water Management Act 2010 and related Regulations.
- 14.25 Trafford has developed a Climate Change Adaptation Strategy setting out in more detail action planned over the next 10 years. It highlights opportunities for water efficiencies and reducing surface runoff. Stamford Brook with its wider more holistic approach to water management is a good example of SUDS.
- 14.26 In developing its strategic policies for flood risk, the Council has also had regard to the Environment Agency's North West River Basin Management Plan, the objectives of which will need to be achieved by 2015, and Catchment Flood Management Plans for the Upper Mersey and the Irwell.

14.27 Recognising the close hydrological and functional links with neighbouring authorities, the Council will continue to work with other AGMA districts, the Environment Agency, United Utilities and other stakeholders as required on documents such as Surface Water Management Plans, other flood risk/water management studies and strategies.

Which Objective(s) delivered by this Strategic Location/Policy	Reference Number(s)
Key Objective(s) of the SCS	SE7
	PE5, PE6, PE7
	BH3
Strategic Objective(s)	S07
Place Objective(s)	TPO16, TPO17
	OTO22, OTO23
	STO19, STO20
	URO14, URO15
	MVO14
	SAO20, SAO21
	ALO25, ALO26
	PAO18, PAO19
	CAO22, CAO23