



Local Development Order

Bristol Heat Network Statement of Reasons

1. Legislation

This document has been prepared in accordance with the requirements of Article 38(1) and (2) of the Town and Country Planning (Development Management Procedure) Order 2015 (DMPO) as amended.

Article 38(1) states that where a Local Planning Authority proposes to make a local development order (herein referred to as 'the Order') they shall first prepare:

- a) a draft order; and
- b) a statement of their reasons for making the order.

Article 38(2) states that the 'statement of reasons' shall contain:

- a) a description of the development which the order would permit; and
- b) a plan or statement identifying the land to which the order would relate.

Paragraph 51 of the National Planning Policy Framework (as updated on 20 July 2021) (NPPF) supports the use of local development orders to streamline the delivery of development that promotes economic, social or environmental gains.

2. Background

An efficient and cost-effective way to cut the carbon emissions produced from heating new and existing buildings is by transporting low-carbon heat and energy across the city using a network of insulated underground pipes. These pipes transport heat from low carbon sources produced in (locally based) energy centres and deliver it to buildings to provide heating and hot water. This Bristol Heat Network (BHN) reduces the need for individual boilers or electric heaters in each building or dwelling and allows the use of more renewable and low carbon energy on a larger scale. Research has also shown that heat networks will be a key factor to the Council achieving emission reduction targets of net zero by 2030.

3. Description of Development Permitted by this Order

This local development order ('the Order') grants permitted development rights for the installation (whether temporary or otherwise), inspection, maintenance, alteration, replacement, repair and removal of a heating transmission and distribution system and ancillary infrastructure comprising of pipes, cables, wires, ducting, valve chambers and heat exchange equipment, including ancillary above ground infrastructure such as informational signage, cabinets, buildings, structures and enclosures reasonably necessary for the purpose of the development permitted, together with any engineering operations and reinstatement works reasonably necessary for the purpose of the development permitted within the defined areas of land in the City of Bristol as shown on the attached Order map ('the Order Map'), subject to conditions.

4. Justification for creating this Order

The aim of the Order is to encourage and facilitate the implementation of the BHN to:

- deliver the infrastructure to enable the distribution of low carbon energy sources; and
- achieve reductions in the Council's CO₂ emissions and contribute to the city's aim of carbon neutrality by 2030.

The Order will facilitate the installation of the BHN by providing a simplified approach to planning which reduces the regulatory processes and potential delays associated with the submission of separate planning applications for each section of the proposed network.

This Order will assist the delivery of Bristol City Council's key aim to achieve carbon neutrality by 2030. The development of a city-wide heat network would create an opportunity to distribute renewable and/or low carbon heat to multiple users across several thousand homes and businesses in a sustainable manner. It would also enable the use of local energy production and would create a cost-effective supply of heat which might help to reduce levels of fuel poverty and improve business productivity. Bristol City Council's Core Strategy, supplementary planning guidance and development frameworks support and set out the requirements for the provision of a heat network and its connection to new and existing development.

The Bristol Core Strategy aims to deliver a city which reduces its carbon emissions and addresses the challenges of climate change. The Order will support this aim whilst also implementing long-term future opportunities to expand the heat network and connections throughout the city.

This aim is also in line with the wider UK approach and government intention. In 2021 it was estimated that there are currently over 14,000 heat networks in the UK that provide heating and hot water to approximately 480,000 consumers. At present, the government is proposing to establish a regulatory framework for heat networks, similar to those that exist for other energy providers. This framework would protect consumers, promote technical standards and progress the growth and decarbonisation of the heat network market. The Government's response (December 2021) to a recent consultation regarding "Heat Networks: Building a Market Framework" noted its intention to continue ongoing engagement to advance policy and identify any emerging issues with the eventual aim of producing relevant policy and framework.

In addition to this framework, the Government outlined its commitment to introducing heat networking zoning by 2025 at the latest. This involves the identification of areas for which heat networks would be the most appropriate and low-cost solution for decarbonisation of heating. It supports the development of legislation relating to connections to the heat zone.

The Order will help to streamline the delivery of infrastructure needed to achieve carbon neutrality whilst also regulating the installation of the infrastructure and ensuring that it has no impact on the surrounding environment during operation.

A similar process exists for statutory undertakers identified within the Town and Country Planning (General Permitted Development) (England) Order 2015, as amended. These undertakers have the ability to install, replace and alter pipework, cables and street furniture without the need for express planning permission. Eliminating the need to seek express planning permission for each element of the BHN would ensure a quicker delivery of the works and minimise any potential disruption through the city and for residential areas.

In areas which are considered to be more sensitive, such as those in close proximity to listed structures or scheduled monuments, development for which the Order grants planning permission will be subject to appropriate restrictions and conditions. These measures aim to safeguard any sensitive areas and ensure the Order does not have a significant or detrimental impact on its surrounding environment.

5. Statement of policies that the Order would implement

The Order will support the delivery and implementation of national and local planning policy and guidance. A number of policies, frameworks and guidance have been set out below which identify the requirements for a heat network and support its use across Bristol City.

The National Planning Policy Framework (updated July 2021)

The NPPF advises that local planning authorities are encouraged to use local development orders to set the planning framework for particular areas or categories of development where the impacts would be acceptable, and in particular where this would promote economic, social or environmental gains for the area.

The NPPF identifies three overarching objectives to achieve sustainable development through the planning system. The environmental objective states that the planning system should aim to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy (paragraph 8).

Paragraph 152 also outlines that the planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.

Mitigating and adapting to climate change through moving to a low carbon energy and economy is supported throughout the NPPF.

The NPPF also sets out that new development should be planned for in ways that:

- a) avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure; and
- b) can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.

Paragraph 155 sets out that to help increase the use and supply of renewable and low carbon energy and heat, plans should:

- a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);
- b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and
- c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

The Order aligns with the NPPF and supports the increased deployment of low carbon energy to support the mitigation and adaption of climate change.

Bristol Local Plan

The current Bristol Local Plan consists of the following documents:

- Bristol Core Strategy June 2011
- Site Allocations and Development Management Policies Local Plan July 2014
- Joint Waste Core Strategy March 2011
- Bristol Central Area Plan March 2015

Bristol Core Strategy 2011

The Bristol Core Strategy 2011 forms part of the Bristol Local Plan and outlines a number of policies that encourage the provision of a heat network to support the sustainable growth of Bristol city. These policies have been identified below and relate to the implementation of a heating network and low-carbon energy supply. The Order accords with and assists with the implementation of the Bristol Core Strategy 2011 as follows:

Policy BCS11 Infrastructure and Developer Contributions

This policy sets out that the growth of the city should be supported by the provision of infrastructure, services and facilities including heating networks and other sustainable energy infrastructure.

Development and infrastructure provision will be coordinated to ensure that growth in the city is supported by the provision of infrastructure, services and facilities needed to maintain and improve quality of life and respond to the needs of the local economy. Development will provide, or contribute towards the provision of:

- *Measures to directly mitigate its impact, either geographically or functionally, which will be secured through the use of planning obligations;*
- *Infrastructure, facilities and services required to support growth, which will be secured through a Community Infrastructure Levy (CIL) for Bristol.*

Without appropriate measures to mitigate impact and investment to enable the provision of infrastructure improvements, the proposed level of development will be neither sustainable nor acceptable. New development will therefore provide or contribute towards the provision of the necessary infrastructure to enable it to be provided in a timely manner and to support the growth of the city.

Where significant local mitigation is required, the Council may pool obligations secured from a number of developments. In addition, contributions secured through CIL may be pooled with those secured from development across the West of England in order to fund major sub-regional infrastructure. The infrastructure, facilities and services to which development may contribute includes a heat network and other sustainable energy infrastructure.

Policy BSC13 Climate Change

Policy BSC13 sets out a requirement for development in Bristol to take into consideration the impact of climate change.

Key to achieving the required reduction in CO₂ emissions will be the use of renewable and low-carbon sources of heat and power. The Bristol Citywide Sustainable Energy Study has identified a range of resource opportunities in the city, the exploitation of which will require the implementation of standards for sustainable energy and sustainable design and construction in new development, as well as a supportive approach to the delivery of new freestanding renewable development and the introduction of sustainable energy supplies to existing buildings.

Development should contribute to both mitigating and adapting to climate change, and to meeting targets to reduce carbon dioxide emissions. Development should mitigate climate change through measures including:

- *High standards of energy efficiency including optimal levels of thermal insulation, passive ventilation and cooling, passive solar design, and the efficient use of natural resources in new buildings.*
- *The use of decentralised, renewable and low-carbon energy supply systems.*
- *Patterns of development which encourage walking, cycling and the use of public transport instead of journeys by private car.*

Development should adapt to climate change through measures including:

- *Site layouts and approaches to design and construction which provide resilience to climate change.*
- *Measures to conserve water supplies and minimise the risk and impact of flooding.*
- *The use of green infrastructure to minimise and mitigate the heating of the urban environment.*
- *Avoiding responses to climate impacts which lead to increases in energy use and carbon dioxide emissions.*

These measures should be integrated into the design of new development. New development should demonstrate through sustainability statements how it would contribute to mitigating and adapting to climate change and to meeting targets to reduce carbon dioxide emissions by means of the above measures.

The delivery of the BHN provides the opportunity for existing buildings and new developments to connect to a more sustainable source of heat whilst contributing to net zero ambitions and reducing carbon emissions across the city.

Policy BCS14 Sustainable Energy

Policy BCS14 sets out requirements for development to minimise its energy requirements and incorporate renewable and low-carbon energy supplies to reduce carbon dioxide emissions.

The development of renewable and low-carbon energy is a key means of reducing the city's contribution to climate change. Renewable and low-carbon energy encompasses a wide range of technologies, including combined heat and power (CHP); combined cooling, heat and power (CCHP); heat networks; energy from waste; biomass; wind (large and small scale); solar thermal; photovoltaics; geothermal sources and heat pumps.

Proposals for the utilisation, distribution and development of renewable and low-carbon sources of energy, including large-scale freestanding installations, will be encouraged. In assessing such proposals the environmental and economic benefits of the proposed

development will be afforded significant weight, alongside considerations of public health and safety and impacts on biodiversity, landscape character, the historic environment and the residential amenity of the surrounding area.

Development in Bristol should include measures to reduce carbon dioxide emissions from energy use in accordance with the following energy hierarchy:

1. *Minimising energy requirements;*
2. *Incorporating renewable energy sources;*
3. *Incorporating low-carbon energy sources.*

Consistent with stage two of the above energy hierarchy, development will be expected to provide sufficient renewable energy generation to reduce carbon dioxide emissions from residual energy use in the buildings by at least 20%. An exception will only be made in the case where a development is appropriate and necessary but where it is demonstrated that meeting the required standard would not be feasible or viable.

The use of combined heat and power (CHP), combined cooling, heat and power (CCHP) and heat networks will be encouraged. Within Heat Priority Areas, major development will be expected to incorporate, where feasible, infrastructure for heat networks, and will be expected to connect to existing systems where available.

Policy BCS14 also sets out that much of Bristol, particularly the central area, is a key starting point from which the Council will grow a heat network. The policy supports the overarching aim of encouraging low carbon energy and reducing carbon emissions from energy use.

West of England Joint Waste Core Strategy March 2011

This Joint Waste Core Strategy (JWCS) (2011) covers four unitary authorities including Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire. The JWCS vision sets out that the quality of life in 2026 will be demonstrated by a carbon neutral sub-regional economy with reduced household, transport and commercial energy consumption, increased renewable energy generation and successful adaptation to climate change and rising sea levels. The Order shares this vision in adapting and addressing climate change and supporting carbon neutrality.

Bristol Central Area Plan 2015

The Bristol Central Area Plan (BCAP) forms part of the Bristol Local Plan and explores how Bristol City Centre will develop over the next 15 years to 2026. BCAP sets out Central Area Plan Policies which are specific to development in the centre of Bristol and helps to deliver a number of Core Strategy policies. Policy BCAP21 *connection to heat networks* includes requirements that relate to on-site renewable energy in new development.

BCAP21 states that proposals for development that would require heating will be expected to demonstrate that account has been taken of potential opportunities to source heat from adjoining development or nearby heating networks. Proposals that would generate waste heat will be encouraged to incorporate infrastructure to capture its waste heat for reuse and/or to supply existing or future heat networks in the area.

It is expected that development explores opportunities to share heat resources with adjacent buildings or connect to existing heat networks. Connections to existing or potential future heat networks are also encouraged.

The Order will directly support policies in the BCAP and subsequently enable a heat network to be installed across the City, providing the opportunity for developers to connect to the system.

Emerging Policy, Supporting Spatial Frameworks and Supplementary Planning Documents (SPD)

Emerging documents – new Bristol Local Plan

The new Bristol Local Plan will replace the Core Strategy, Site Allocations and Development Management Policies Local Plan and the Bristol Central Area Plan and will cover a period up to 2040. The review of the existing local plan is currently underway and sets out how Bristol will develop over the next 20 years. An initial Local Plan Review was undertaken in 2018 which helped shape the second consultation in March 2019. A Local Plan Review Draft Policies and Development Allocations document was produced in March 2019. This draft included a proposed development strategy and draft policies.

Changes in the approach to planning at regional level, national policy changes and the need to give even greater priority to the climate and ecological emergencies meant that further consultation was required on additional policies and some changes to the proposals from 2019. As a result, a Local Plan Review Draft Policies and Development Allocations November 2022 has been produced. Relevant draft policies identified in the Bristol Local Plan Review (November 2022) have been set out below.

Draft Policy NZC1: Climate Change, Sustainable Design and Construction

This draft policy aims to ensure that new development mitigates its contribution towards the drivers of climate change including embodied and operational carbon emissions. It will deliver buildings that are adapted to changes in the local climate expected over their lifetime and external spaces that provide year-round comfort and support well-being. This policy requires development proposals to consider climate adaptation and mitigation from the start of the design process to ensure the best outcome.

Draft Policy NZC2 Zero Carbon Development – Operational Carbon

This policy sets out a draft approach for residential development based on energy use intensities (EUI). It also considers heating systems, noting that these must be selected based on the following hierarchy:

- Where possible, connection to an existing classified heat network or a new classified heat network from the point of occupation; and then
- Elsewhere, employing individual renewable heat or communal renewable heat which is fossil fuel free.

The explanation accompanying this policy also explains heat networks are key to providing a renewable or low-carbon source of heating and cooling to existing buildings and new development. Connection of new development to heat networks supports the expansion of the network and connection of a wider number of existing buildings. Bristol City Council operates heat networks in the city and is actively expanding these. Their development in

combination with energy efficiency is central to the council's strategy for delivering affordable, secure and zero carbon heat across the city.

Draft Policy NZC5 Renewable Energy Development

The development of additional renewable and low-carbon energy capacity is key to putting the city on course to meeting the city's commitments on carbon reduction.

In 2009 the Citywide Sustainable Energy Strategy provided an assessment of renewable and low carbon energy sources in the city. As a largely urban area Bristol has potential for on-site and building integrated renewable heat, cooling and power. There is also potential to use renewable and low carbon heat from other sources such as the floating harbour, waste heat from industrial processes in Avonmouth, and from former mine workings across the city. Avonmouth is identified as the location with the greatest potential for on-shore wind power.

This draft policy sets out that proposals for the utilisation, distribution and development of new renewable energy capacity, including large-scale freestanding installations, will be encouraged.

Urban Living SPD: Making Successful Places at Higher Densities 2018

This SPD adds further guidance to the policies within the Bristol Local Plan and will be a material consideration in the determination of planning applications. Upon the adoption of the new local plan the SPD will be updated to add further guidance to the policies in the adopted local plan.

Urban Living SPD sets out four objectives including the efficient and effective use of land, with aspirations for a positive response to context, successful placemaking and making liveable buildings. By 2036 Bristol will aim to deliver 33,500 new homes alongside associated employment, community and transport infrastructure. The SPD intends to support the growth of the city to better relate housing to employment locations, reduce travel, create more mixed and balanced communities, provide greater lifestyle choices and enhance overall performance of the urban area.

The Order will support the SPDs in achieving and making those higher density places successful through the use of more sustainable heat and low carbon sources, ultimately supporting the reduction in carbon emissions and meeting carbon neutrality targets by 2030.

Progressing Bristol's Development Statement October 2020

This statement relates to planning in Bristol and explains the current approach to making planning decisions. It sets out the approach to development for the city as the new local plan continues to be prepared. A key objective of this statement relates to tackling the causes of climate change and responding to its challenges.

Areas of growth and regeneration have also been identified across Bristol City. It is considered that these locations, such as St Philips Marsh and Bedminster, will contribute a significant proportion of new homes, work space and facilities that Bristol City requires over the next 20 years. This Order will support and aligns with the objectives of this statement, in particular in tackling climate change and responding to its challenges whilst promoting these areas of growth and regeneration.

Climate Emergency Action Plan 2022

The purpose of this updated plan is to describe the carbon reduction and climate resilience actions Bristol City Council has committed to take in the coming years, most of which are already underway. It does not include actions which do not yet have identified funding. The Climate Emergency Action Plan sets out actions to achieve heat decarbonisation and the expansion of a heat network. This Order will support the expansion of a heat network.

The City Centre Framework June 2020

Key objectives include sustainable development and contributing to a carbon neutral and climate resilient city. Sustainable Design and Construction Aim 22 in the framework seeks to promote sustainable energy and heat networks to support the reduction in carbon dioxide emissions and meet the target of being carbon neutral by 2030.

Where a heating network has been installed, developers will be encouraged and expected to connect to the heat network wherever possible to support the aims of the framework. Where developments are not yet ready to be supplied from a heat network, they must aim to be heat network ready. The Council will work with developers to integrate developments into the city's heat network.

The provision of the BHN through this Order will support future connections to new and existing buildings to allow the realisation of the policies within this framework.

Bedminster Green Framework February 2019

The leading aim within this framework includes achieving sustainable growth through ensuring buildings are constructed with good levels of thermal efficiency and ensuring the capability to connect to a heat and power network. By providing the installation of the BHN through the Order and providing the opportunity for buildings to connect to it, the policies in the framework can be fully realised.

Bristol Temple Quarter Enterprise Zone Spatial Framework 2016

The framework promotes the creation of sustainable development and identifies the Enterprise Zone as an area which could be a showcase for development and adaptive re-use which minimises energy requirements, incorporates renewable or low-carbon energy sources and uses smart technology to maintain and manage energy use. The Order will deliver the installation of the BHN which will allow future and existing development the ability to connect to a low carbon heat source, ultimately contributing towards carbon neutrality.

Nelson Street Regeneration Framework SPD March 2006

Nelson Street Framework outlines a number of sustainable development principles including building form, design and construction that must aim to minimise energy consumption, pollution and depletion of non-renewable resources. The delivery of the BHN will help to realise these sustainable development principles.

St Pauls Development Framework SPD December 2006

Key objectives set out in this framework include promoting design excellence in development proposals and ensuring energy efficiency and biodiversity is an integral element which is something the delivery of the BHN will help to realise.

Future of Redcliffe SPD July 2006

Principal objectives include promoting and facilitating high quality and sustainable development. The overarching theme of this SPD is sustainable development. Sustainable development means a better quality of life for everyone, now and for generations to come. Bristol's vision (as set out in the Community Strategy) is to create balanced and sustainable communities with a high quality of life where no-one is disadvantaged. The delivery of the BHN that aims to provide energy security will help to achieve the aim of sustainable development within the SPD.

Climate Change and Sustainability Practice Note (July 2020)

The current local plan policies require specified reductions in carbon emissions. This practice note provides advice on how to design low carbon and resilient developments and the implementation of the Bristol Local Plan policies. The Climate Change and Sustainability Practice Note sets out the benefits of a heat network as recognised by the Council and UK Government as follows:

- Reducing carbon emissions through more efficient heat supply and energy generation and the use of low or zero carbon sources of heat.
- Improving energy security and city resilience through the diversification of energy sources and reducing reliance on imported energy.
- Creating a cost effective supply of heat which can help to reduce levels of fuel poverty and improve business productivity.
- Enabling the use of local energy production and the retention of money within the local economy.

The practice note supports the further growth of low carbon and renewable energy sources which can be achieved from this Order.

6. Lifetime

Subject to any subsequent decision by the Local Planning Authority relating to its withdrawal, modification or extension, this Order shall expire after twenty years from the date of its adoption.

The Order may be modified, withdrawn or extended, based on future decisions by the Local Planning Authority.

On expiry of the Order the local planning authority will have the ability to:

1. Extend the lifetime of the Order attaching the same limitations and conditions;
2. Amend the Order and modify the limitations and conditions (subject to further consultation); or
3. Revoke the Order and return to the established planning system.

If either options 2 or 3 apply, affected developments that have commenced under the provision of the Order will be allowed to complete within a reasonable time period, in accordance with the terms and conditions of the Order.

6. Monitoring and Review

The Order Map shall be kept under review and updated periodically by the Local Planning

Authority to ensure it reflects the up to date planning and policy designations from time to time.

The Appendix shall be kept under review and updated by the Local Planning Authority where necessary to facilitate the expedient administration of written approvals pursuant to this Order.

This Order shall be reviewed by the Local Planning Authority at five year intervals from the date on which it is made to ensure the objectives of the Order are being achieved and that it remains expedient for the proper planning of the area having regard to the development plan and other material planning considerations.