

Carbon Impact Assessment Report

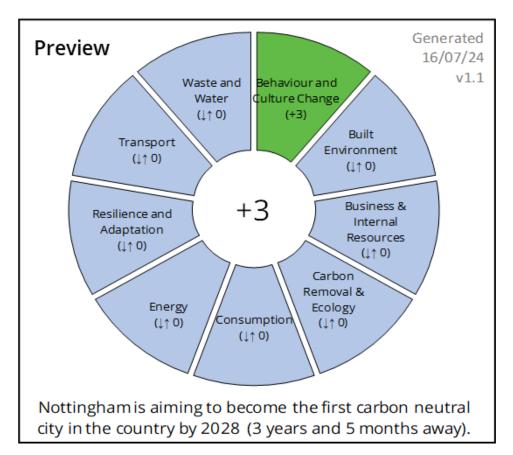
Greater Nottingham Strategic Plan - Publication Draft

Report Details

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Project Notes

The Greater Nottingham Strategic Plan - Publication Draft (GNSP) will provide Strategic Planning Policy for Broxtowe, Gedling, Nottingham and Rushcliffe for 2023-2041. It is Part 1 of the Local Plan. The Plans first Policy covers Climate Change, Sustainable Design, Construction, Energy and Managing Flood Risk. The Plan has an important role to play in addressing climate change and its effects. Climate change is now widely recognised as the most significant issue for spatial planning, cutting across all land use sectors and affecting the area's environment, economy, and quality of life. There is a particular issue with flood risk in the area, especially along the Trent Valley. The Plan has an objective of environmentally responsible development addressing climate change.





Categories and Impact Analysis

Carbon Impact Assessment (higher priority impacts shown in green)

Behaviour and Culture Change

- 1. Communication & Engagement: "Publication of the Plan will allow for the increase in awareness of climate change through communication and engagement including with local communities. All comments made through this process will be assessed to help shape the final Plan. The Plans first Policy (Policy 1) covers Climate Change, Sustainable Design, Construction, Energy and Managing Flood Risk. The Plan has an important role to play in addressing climate change and its effects. Climate change is now widely recognised as the most significant issue for spatial planning, cutting across all land use sectors and affecting the area's environment, economy, and quality of life. There is a particular issue with flood risk in the area, especially along the Trent Valley. The Plan includes the key objective of environmentally responsible development addressing climate change: to reduce the causes of climate change and to minimise its impacts, by locating development where it can be accessed by sustainable transport; requiring environmentally sensitive design and construction; reducing the risk of flooding; conserving and improving water quality; contributing to carbon neutrality; and addressing air, noise and other types of pollution. Score is dependent on assumption from comments that communication and engagement work is planned e.g consultation or campaign Score: 3
- 2. **Wider Influence**: The Plan is being prepared with the Greater Nottingham Partnership who are leading authorities on climate change and will be used to determine the overall scale and broad location for different types of development and strategy for achieving sustainable development over the long term. The Plan covers Broxtowe, Gedling, Nottingham and Rushcliffe. This is not a new partnership. **Score: 0**
- 3. Working with Communities: Publication of the Plan will allow for the increase in awareness of climate change through communication and engagement including with local communities. All comments made through this process will be assessed to help shape the final Plan. Score: 0
- 4. **Working with Partners**: The Council is working in partnership with many parties around Strategic Planning. Based on a sound evidence-based approach to addressing impacts from climate change through planning policy, the Plan will be implemented by a range of public and private bodies, developers and community groups who have the necessary skills and resources to deliver and capacity to build new skills and knowledge. **Score: 0**

Built Environment

1. **Building Construction**: Policies have a direct effect on how buildings are to be constructed. Policy 1 requires residential and non residential to achieve net zero regulated operational carbon status through a mixture of improvements to the fabric of the building and use of onsite renewable energy. All major developments will also be required to complete whole life carbon assessments to limit embodied carbon use. Policy 1 and Policy 10 (design and enhancing local identity) also set out key principles for addressing climate impact through



mitigation by design for example orientation to achieve solar gain and for adaptation to future changes in climate. These policies have been subject to comprehensive Sustainability Appraisal as required by legislation. However, it must be acknowledged that these developments will result in a carbon impact due to embodied carbon. To mitigate this, developers will need to comply with Local Plan policies and provide a Sustainability Assessment due to the Interim Planning Statement on Carbon. **Score:0**

- 2. **Building Use**: There should be higher efficiencies due to densities of development housing more people in more sustainable buildings. As direct impact and scale of action is yet unknown, score as 0 **Score: 0**
- 3. Switching Away from Fossil Fuels: Newer developments are designed to be more environmentally friendly, contributing to lower CO2 emissions. These policies have been subject to comprehensive Sustainability Appraisal as required by legislation. However, it must be acknowledged that these developments will result in a carbon impact due to embodied carbon. To mitigate this, developers will need to comply with Local Plan policies including Policy 1 and provide a Sustainability Assessment due to the Interim Planning Statement on Carbon. As direct impact and scale of action is yet unknown, score as 0 Score: 0

Business & Internal Resources

- 1. **Developing Green Businesses**: The Plan provides land for businesses Score as 0, as activity must explicitly support green business in order to be scored **Score:0**
- 2. **Marketable Skills & Training**: Policy 1 will lead to training to individuals and businesses in improving their climate change performance. Only direct action can be scored, rather than objectives that set out to achieve this. **Score: 0**
- 3. Sustainability in Business: Not Applicable Score: 0
- 4. **Material / Infrastructure Requirement**: Whilst the Plan will mean that more materials are used it seeks to encourage that the appropriate steps are taken in new developments to ensure that we are using the minimum necessary resource, and that it is at the highest possible environmental standard. **Score: 0**

Carbon Removal & Ecology

- 1. **Carbon Storage**: The Plan does not include direct proposals to improve the storage of local low carbon energy. However, if proposals do come forward this would be supported in principle. Score as 0 as negative impact as a direct impact of this plan is specifically not known **Score: 0**
- 2. **Biodiversity & Ecology**: New development will need to enhance biodiversity in accordance with local and national planning policies but it needs to be acknowledged that there could be some loss too even on brownfield sites. The Plan has a policy on Biodiversity. Score as 0 as the negative impact as a direct impact of this plan is specifically not known **Score: 0**
- 3. **Bee-Friendly City**: This guidance does not hinder having a bee friendly city. The Plan provides guidance on Biodiversity Net Gain. BNG would exist outside of this strategic plan, so positive impact cannot be attributed here. **Score: 0**
- 4. **Carbon Offsets**: Development should strive for a high standard of environmental sustainability, aligning with the council's goal of achieving carbon neutrality by 2028 (see also the council's emerging Carbon Reduction SPD). The council actively promotes building designs and methods that reduce energy costs and



incorporate renewable and low-carbon technologies. To ensure alignment with this objective, the council requires a Carbon Reduction Energy Statement for all new planning applications for developments of 10 or more homes or commercial developments of 1,000 m² and above. This statement should outline how the proposed development will contribute to the City's carbon-neutral objective, covering aspects such as energy efficiency, renewable energy, and sustainable design and construction. **Score: 0**

Consumption

- 1. Food & Drink: Not applicable. Score: 0
- 2. **Products**: The Plan will provide dwellings for an increase in population, but sites selected have been subject to a Sustainability Appraisal. Score as 0 as the negative impact as a direct impact of this plan is specifically not known. **Score: 0**
- 3. **Services**: The Plan will provide dwellings for an increase in population, but sites selected have been subject to a Sustainability Appraisal. Score as 0 as the negative impact as a direct impact of this plan is specifically not known. **Score: 0**
- 4. Local and Low-Carbon Production: Building designs and methods that reduce energy costs and incorporate renewable and low-carbon technologies are promoted. To ensure alignment with this objective, the Council requires a Carbon Reduction Energy Statement for all new planning applications for developments of 10 or more homes or commercial developments of 1,000 m² and above. This statement should outline how the proposed development will contribute to the City's carbon-neutral objective, covering aspects such as energy efficiency, renewable energy, and sustainable design and construction. **Score: 0**

Energy

- 1. Local Renewable Generation Capacity: Building designs and methods that reduce energy costs and incorporate renewable and low-carbon technologies are promoted. To ensure alignment with this objective, the council requires a Carbon Reduction Energy Statement for all new planning applications for developments of 10 or more homes or commercial developments of 1,000 m² and above. This statement should outline how the proposed development will contribute to the City's carbon-neutral objective, covering aspects such as energy efficiency, renewable energy, and sustainable design and construction. Score as 0 as the negative impact as a direct impact of this plan is specifically not known. **Score: 0**
- Reducing Energy Demand: Developments must encompass sustainable principles comprehensively. This includes aspects like promoting walking or cycling, and providing a high-quality residential environment. From the initial design stage, sustainability should be integrated into the concept, encompassing energy efficiency, sustainable construction features and the use of technologies. Policy 1 requires higher standards of energy efficiency than current building regulations. Score as 0, as these are pre-existing requirements Score: 0
- 3. Improved Energy Storage: Not applicable. Score: 0

Resilience and Adaptation

1. **Green / Blue Infrastructure**: Part of Part 1 requires development proposals to integrate with green and blue infrastructure networks on and where possible off site. Policy 16 of the plan covers Blue and Green Infrastructure, Parks and Open



Space. The Policy takes a strategic approach to the delivery, conservation and enhancement of Blue and Green Infrastructure. Policy 16 will bring positive benefits by integrating the development strategy with the Green Infrastructure strategy that will seek contributions towards blue and green infrastructure in priority locations including strategic corridors of sub regional, county and local importance both improving the network and connectivity within the network. Emphasis is on multi-functional blue and green infrastructure delivery including enhancements to the natural environment that help mitigate against climate change and reduce flood risk. **Score: 0**

- 2. **Natural Flood Management**: Policy 1 of the Plan covers Managing Flood Risk. Development should not increase the risk of flooding and Sustainable Drainage Systems will be incorporated into all new development. **Score: 0**
- 3. Drought Vulnerability: Not applicable. Score: 0
- 4. **Flooding Vulnerability**: Policy 1 of the Plan covers Managing Flood Risk. Development should not increase the risk of flooding and Sustainable Drainage Systems will be incorporated into all new development. **Score: 0**
- 5. **Heatwave Vulnerability**: New buildings will be designed to mitigate solar gain. However the Plan itself is silent on this issue so neutral score. **Score: 0**

Transport

- 1. Staff Travel Requirement: Not applicable. Score: 0
- 2. Decarbonising Vehicles: Not applicable. Score: 0
- 3. **Improving Infrastructure**: Development will be designed to include the provision of footpaths, cycle storage and repair facilities, lighting on public rights of way etc. Score as 0, as these are pre-existing requirements. **Score: 0**
- 4. Supporting People to Use Active Travel: The locational strategy is to secure new development in the most accessible locations in order to reduce the need to travel. Policy 14 (Managing Travel Demand) directly addresses climate impact from transport by prioritising new development on sites that already or can be made accessible by walking, cycling and public transport. The Policy seeks to deliver sustainable transport networks to serve new development and prioritises public transport and active travel including cycling facilities such as cycle lanes. Policy 15 sets out Transport Infrastructure Priorities and includes a number of Active Travel Schemes and Public Transport Improvements. As direct impact and scale of action is not yet known, score as 0 Score: 0
- 5. **Reduced Need to Travel**: Development is often located in more accessible locations such as the City Centre or within or adjoining the urban area, resulting in a reduced need to travel. As direct impact and scale of action is not yet known, score as 0. **Score: 0**

Waste and Water

- 1. Single-Use Plastic: Not applicable. Score: 0
- 2. End of Life Disposal / Recycling: Part 2 a) of Policy 1 of the Plan requires development to be efficient in the use of mineral resources, use of recycling materials and to minimise waste. Developers are advised to liaise with the council's Planning Department and the council's Waste Department for support and advice at the design stage to help clarify requirements and ensure that a suitable and satisfactory layout for the scheme is achieved for the management of waste. Score: 0



- 3. **Waste Volume**: New development is likely to be more intensively used than existing buildings/sites and result in additional waste created. The Plan encourages the reduction in energy demand through waste minimisation and use of recycled materials. Score as 0 as the negative impact as a direct impact of this plan specifically is not known. **Score: 0**
- 4. Water Use: The Plan should result in water efficiencies being incorporated in new build development. As direct impact and scale of action is not yet known, score as 0. Score: 0

Summary

The Carbon Impact Assessment of the GNSP reveals that the GNSP has strong potential in influencing developers and setting a positive example (particularly in communication and engagement). The GNSP cements sustainability policies and objectives into planning for the coming years, however a Carbon Impact Assessment is made based on added value/harm and what specific action or outcomes are known as a direct result of work, therefore only a low positive score can be attributed at this point.