



Urban Forestry Policy Review

Supporting Document for Birmingham's Urban Forest Master Plan



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This policy review was carried out by Treeconomics

Preamble

As part of the development of a new Urban Forest Master Plan, Treeconomics have been commissioned by Birmingham Tree People to carry out this policy review. The review draws up the relevant policy context and framework, linking the urban tree resource to various government policies at different geographical scales. Birmingham's trees and green spaces are a critical natural resource which is vital in securing a sustainable future for this vibrant city. The trees that make up Birmingham's urban forests are at the front line in the fight against climate change, cooling the air, filtering pollution, and improving our health and wellbeing.

Despite covering only 2% of the planet's surface, cities are the home of around 55% of people around the globe. This number is expected to rise to around 70% by 2050. With such large growth in population, cities will have to expand and adapt, and it is vital that this expansion is managed in the most sustainable way possible-economically, socially, and environmentally-to ensure the best possible quality of life for urban residents.

Mayors, planners, and other urban decision-makers are often unaware of the crucial economic, social and environmental benefits that urban and peri-urban forests can provide. It has been demonstrated that investment in these resources can help create a healthy environment. However urban and peri-urban forests are often appreciated more for their aesthetic value than for their ecosystem functions. In reviewing the policies which relate to urban forests, we hope to highlight all environmental aspects of this resource and link these to the works being undertaken by the City of Birmingham.

In recent decades, as the climate emergency has become more apparent and nations are more aware than ever of the risks posed by global climate change, governments must take responsibility for the damage done by deforestation, pollution, waste, and poor land management. New and updated environmental policies, and legally binding documents have been introduced at all levels to ensure local, national and international commitment to minimising and mitigating the effects of climate change. Urban planning, forestry, biodiversity, conservation, agriculture, clean growth and clean air provisions are some of the key policy areas where sustainability and green infrastructure goals are being implemented. In addition, the Covid19 pandemic has once again stressed the importance for urban forests for our mental and physical health and wellbeing. Trees and other vegetation are increasingly recognised for their important role as nature-based solutions for climate, health, biodiversity, and other challenges.

Policies, frameworks, schemes, agendas, agreements, and goals provide all the necessary guidelines to build more sustainable communities, cities, countries and nations. This document aims to summarise key relevant documents which should be followed to ensure Birmingham's development is in line with these goals.

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1. International Policy

1.1 The Paris Agreement

The Paris Agreement of 2015 is a legally binding international agreement on tackling climate change. Its goal is to limit the rise of global temperatures to below 2 degrees Celsius. To achieve this, nations are directed to cut greenhouse gas emissions and aim to achieve carbon neutrality by 2050. Each country has communicated a Nationally Determined Contribution (NDC) under the Paris Agreement to the United Nations Framework Convention on Climate Change (UNFCCC).

1.2 2030 Agenda for Sustainable Development

The 2030 Agenda for Sustainable Development is a multifaceted action plan adopted by the United Nations (UN) with the aim of achieving global sustainability and encouraging member states to further progress the three aspects of sustainable development - economic, social and environmental.

Outlined within this document are 17 Sustainable Development Goals and associated targets. These create a broad and universal policy agenda which influence many other international, European, national, and local policies, strategies and frameworks. Of these, urban forests can contribute directly to meeting at least 9, as illustrated by table 1 below.

These goals are being implemented at all levels of policy. The Environmental and Social Sustainability Framework (ESSF) of the UN Environment Program (UNEP) aims to strengthen the sustainability and accountability of UNEP projects and programmes and bring them in line with the 2030 Agenda.

Table 1. The role of trees in relation to the Sustainable Development Goals devised by the United Nations Food and Agriculture Organisation.

**Sustainable
Development
Goal**

The Role of Urban Forests

1 NO POVERTY 	Trees in cities provide valuable ecosystem services, improve the aesthetic appearance, create opportunities for employment, increase economic activity through their presence by positively affecting consumer footfall and expenditure, alongside raising the value of properties within the community.
2 ZERO HUNGER 	Urban Forests can contribute towards this development goal through the provision of natural products such as, fruit, seeds and fungi and other associated species. Additionally they support healthy lifestyles indirectly through “<i>affordable woodfuel</i>”, clean water and higher quality soils.
3 GOOD HEALTH AND WELL-BEING 	Urban Forests encourage healthy lifestyles and can lead to increased levels of wellbeing and mental health. Open spaces can be used for exercise and recreational activities. Air quality can be directly improved through the removal of pollutants by trees.
6 CLEAN WATER AND SANITATION 	According to the UN FAO guidance Urban Forests are “<i>efficient regulators of urban hydrological cycles. They filter drinking water by reducing biological and chemical pollutants, reduce the risk of floods and erosion, and reduce water losses by minimizing mesoclimatic extremes through evapotranspiration processes</i>”
7 AFFORDABLE AND CLEAN ENERGY 	Renewable energy such as wood fuel, can be produced by urban forests. In some parts of the world wood fuel energy is “<i>the most affordable and sometimes only available source</i>”
8 DECENT WORK AND ECONOMIC GROWTH 	Trees in cities provide improved aesthetics for business and tourism which leads to a greater property value, increased rental fees, job opportunities and cost savings (in terms of energy and healthcare).
11 SUSTAINABLE CITIES AND COMMUNITIES 	Urban forests protect cities through reducing storm water runoff, they mitigate climate change and in addition to environmental ecosystem services, they can contribute towards improvements in nutrition, exercise and mental health and spaces for social cohesion.
13 CLIMATE ACTION 	Through carbon storage and sequestration urban forests directly reduce greenhouse gas emission. As discussed earlier, as a result of their physical presence trees can enable urban cooling and mitigate flooding through reductions in storm water runoff. They also produce oxygen, filter pollution and reduce energy costs.
15 LIFE ON LAND 	Trees improve soil quality and enhance local biodiversity. Many small mammals, birds and invertebrates rely on the habitats trees provide.

1.3 FAO Guidelines on Urban and Peri-urban Forestry

Providing perhaps the most relevant global framework and guidance for the urban forest, this document explains what the urban forest and urban forestry are, what they do for us, and how the urban forest can be managed, improved, and grown to maximise the range of benefits it provides. Following these voluntary guidelines will assist the global audience - and relevant decision makers in particular - to develop urban and peri-urban forests as a way of meeting the present and future needs of cities for forest products and ecosystem services. The document offers guidance for policy makers and encourages focus on urban and peri urban policy within other urban policy frameworks and as part of overall 'green city' policies. Particular emphasis is put on peri-urban areas as a link across the urban and rural divide. It is recommended that any policy maker in urban planning departments refers to this document to ensure that they are addressing key issues such as health, climate change, biodiversity, economy, land degradation, water, food security, and sociocultural values, and fully support urban forests through communication, community engagement, partnerships, and research.

1.4 FAO Green Cities Initiative

The Green Cities Action Programme (2020) has the objective to “increase people’s wellbeing through increased availability of and access to products and services provided by green spaces including urban and peri-urban forestry, agriculture and by sustainable food systems”. As a metropolitan City, Birmingham faces challenges such as increasing consumption of food, water, and energy, and decreasing green space, agricultural lands and water catchment. For metropolitan cities key actions include FAO’s support on: i) increasing the adoption of innovations and green technologies for food systems and green infrastructure (e.g. green walls, rooftop and vertical farming, pocket parks, retrofitting of public spaces, etc.); ii) improving food distribution systems, particularly last mile logistics; iii) improving the food environment to increase access to nutritious food; iv) improving the food and water waste management; v) improving governance mechanisms.

1.5 Post-2020 Global Biodiversity Framework

After the UN Convention on Biological Diversity, the Post-2020 Global Biodiversity Framework is being developed on the vision that by 2050 biodiversity is “valued, conserved, restored and wisely used, maintains ecosystem services, sustains a healthy planet and delivers benefits essential for all people”. Though it is still currently in its draft phase, this will be a vital framework, outlining specific quantitative biodiversity targets for 2050 and 2030 milestones.

The Leaders' Pledge for Nature, which has been signed by the UK, is a commitment to reversing biodiversity loss by 2030 for sustainable development. The development and implementation of the post-2020 framework is central to the pledge.

1.6 UN Decade on Ecosystem Restoration (2021-2030)

The UN is aware that ecosystem restoration and the prevention of ecosystem degradation is imperative to meeting the SDGs. This new initiative is driven by the FAO and UNEP. Prior to this it was clear that the political support and technical capacity in both public and private sectors was insufficient to support the immense scale of the necessary works. This UN initiative aims to inspire governments, agencies, private companies, and local peoples to collaborate and implement restoration initiatives worldwide. Urban forests will support ecosystem restoration and contribute to this global cause dramatically especially as urban ecosystems are one of seven types of ecosystems in focus.

1.7 UN Habitat -The New Urban Agenda

The New Urban Agenda was first adopted at the UN Conference on Housing and Sustainable Urban Development (Habitat III) in 2016. Within this agenda, reference is made multiple times to the development and prioritisation of “safe, inclusive, accessible, green and quality public spaces”. There is a commitment to the sustainable management of resources including forests, and to the reduction of greenhouse gas and air pollution emissions. Point 14c outlines the commitments of the agenda to “Ensure environmental sustainability by promoting clean energy and sustainable use of land and resources in urban development, by protecting ecosystems and biodiversity, including adopting healthy lifestyles in harmony with nature, by promoting sustainable consumption and production patterns, by building urban resilience, by reducing disaster risks and by mitigating and adapting to climate change.” A focus is on investment in stormwater management and promoting the sustainable management of water resources within the urban, peri-urban and rural areas by reducing and treating wastewater, minimising water losses, and increasing water storage, retention and recharge. Urban Forest play a vital part in supporting cities to achieve these goals, and increasing tree canopy cover in urban areas would have a profound effect.

Habitat III also call for National Urban Policies (NUPs) to drive public space led development.

1.8 The UN Strategic Plan for Forests (2017-2030) (UNSPF)

The UNSPF aims to “promote sustainable forest management and the contribution of forests and trees outside forests to the 2030 Agenda”. There are six Global Forest Goals of which urban forests can influence at least the following three:

1. Reverse the loss of forest cover worldwide through SFM, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation and contribute to the global effort of addressing climate change.
2. Enhance forest-based economic, social and environmental benefits, including by improving the livelihoods of forest dependent people.
3. Increase significantly the area of protected forests worldwide and other areas of sustainably managed forests, as well as the proportion of forest products from sustainably managed forests.

The UN Forest Instrument is a tool for the implementation of these six goals by strengthening the commitment of member states to the UNSPF and the 2030 Agenda.

1.9 Other International Programs

Birmingham City has actively and voluntarily become involved in several international programs which promote green cities, urban forests, and green infrastructure. The efforts of the city council and other bodies have been recognised through these programs which now provide frameworks for change at a city-wide level.

Biophilic Cities Network

Biophilic Cities is a global network of cities, launched by a group of experts and organisations including the University of Virginia, USA. This initiative aims to promote urban design and planning which integrates and brings back nature into the city and to the everyday life of citizens. Birmingham was the first UK city and the third European city to join the network. Through this, cities and urban planners are encouraged to advance biophilic design, i.e. to bring (more) nature into the city, making it greener and richer in nature.

Tree Cities of the World

The Tree Cities of the World programme is an international effort to recognise cities and towns committed to ensuring that their urban forests and trees are properly maintained, sustainably managed, and duly celebrated. FAO and the Arbor Day Foundation developed the programme to celebrate green cities. To be recognised as a Tree City, a community must meet five core standards (see table 2 below) that illustrate a commitment to caring for its trees and forest. Birmingham has worked hard to achieve these standards, and is one of just six UK cities to have received this recognition thus far. The core standards, shown in table 2 below, help to provide a framework for action at a local level. Other local policies contribute to achieving and maintaining these standards.

Table 2. The core standards which Birmingham has met in order to achieve recognition as a Tree City of the World

 STANDARD 1 ESTABLISH RESPONSIBILITY	The city has a written statement by city leaders delegating responsibility for the care of trees within the municipal boundary to a staff member, a city department, or a group of citizens—called a Tree Board.
 STANDARD 2 SET THE RULES	The city has in place a law or an official policy that governs the management of forests and trees. These rules describe how work must be performed—often citing best practices or industry standards for tree care and worker safety—where and when they apply, and penalties for noncompliance.
 STANDARD 3 KNOW WHAT YOU HAVE	The city has an updated inventory or assessment of the local tree resource so that an effective long-term plan for planting, care, and removal of city trees can be established.
 STANDARD 4 ALLOCATE THE RESOURCES	The city has a dedicated annual budget for the routine implementation of the tree management plan.
 STANDARD 5 CELEBRATE ACHIEVEMENTS	The city holds an annual celebration of trees to raise awareness among residents and to acknowledge citizens and staff members who carry out the city tree programme.

2. European Policy

While the UK is no longer part of the European Union, in the past EU policy has been used as a framework for UK policy. It is expected that the UK will continue to work closely with the EU and use these frameworks to partially shape UK policy. Relevant current EU policies are summarised here.

2.1 The European Green Deal

In response to the climate emergency the European Union has developed a new growth policy, the European Green Deal, which, amongst other things, sets out explicitly the aim to achieve no net emissions of greenhouse gasses in 2050. It also aims to “protect, conserve and enhance the EU's natural capital, and protect the health and well-being of citizens from environment-related risks and impacts”. While this document mostly concerns emissions and climate, it also clearly expresses the importance of biodiversity and forest resources, and makes clear the benefits and importance of afforestation and forest restoration in the sequestration of carbon and the resilience of forests and agriculture. It states that the new EU Forest strategy will have key objectives in these areas.

The European Climate Law has been designed to underpin the Green Deal. It is still in its proposal stage at present, and only applies to member states, which the UK no longer is. It aims to set in legislation Europe's goal of climate neutrality by 2050.

2.2 Common Agriculture Policy (CAP)

The CAP is a vital tool for policy makers and strategists, though the new reformed CAP is not due to come into effect until 2022. It largely aims to provide clear guidelines which facilitate the goals of the European Green Deal. CAPs should be implemented at national level in line with the recommendations by the EU, though the UK, having now left the EU, will be implementing its own management scheme to replace this; the Environmental Land Management Strategy.

2.3 Forestry Strategy

The EU Forestry Strategy from 2013 has provided a framework for cohesive and consistent policies and objectives. It is in the process of being updated and is due to come into effect early in 2021. Within the new framework significant focus is put on afforestation and forest restoration, and it includes a roadmap to planting at least 3 billion trees in the EU by 2030.

2.4 EU Biodiversity Strategy for 2030

This strategy builds on key aspects of the [UN Post-2020 Global Biodiversity Strategy](#) and the [Sustainable Development Goals](#). Tree planting is a major part of the Biodiversity Strategy. It states that through the [CAP Strategic Plans](#), tree planting will be promoted to support biodiversity and ecosystem restoration. There is reference to the benefits of planting in urban areas, and cites the upcoming Forest Strategy's "Urgent need" to bring back at least 10% of agricultural area under high-diversity landscape features, much of which can be done in an urban setting. Green infrastructure is identified as a key component, and it commits to the development of a GI strategy. Section 2.2.8 on urban and peri-urban areas states the benefits of green space for people, and reiterates how green spaces have been vital to people's health and wellbeing during the lockdowns imposed throughout the current pandemic. This strategy aims to reverse the trend of green urban spaces being lost in competition with other urban land uses, encouraging the incorporation of nature-based solutions in urban planning.

It also includes a call on European cities of at least 20,000 inhabitants to develop ambitious Urban Greening Plans by the end of 2021; "These should include measures to create biodiverse and accessible urban forests, parks and gardens; urban farms; green roofs and walls; tree-lined streets; urban meadows; and urban hedges. They should also help improve connections between green spaces, eliminate the use of pesticides, limit excessive mowing of urban green spaces and other biodiversity harmful practices. Such plans could mobilise policy, regulatory and financial tools." In support of these efforts, an EU Urban Greening Platform will be set up under a new 'Green City Accord' with cities and mayors.

2.5 EU Strategy on Green Infrastructure

This strategy adopted in 2013 is closely linked to the former Biodiversity Strategy, calling for healthy green infrastructure to be developed, preserved and enhanced "to help stop the loss of biodiversity and enable ecosystems to deliver their many services to people and nature". The Commission believes that the green infrastructure strategy can be implemented in the form of an enabling framework, with key elements being promoting GI in the main policy areas, improving information, strengthening the knowledge base and promoting innovation, and improving access to finance.

3. National Policy

3.1 The UK's Nationally Determined Contribution (NDC)

Under the [Paris Agreement](#), the UK has submitted its new NDC to the UNFCCC. It commits the UK to reducing greenhouse gas emissions by at least 68% by 2030 (compared to 1990 levels). The UK has been advised by the Climate Change Committee (CCC) that this would align with the Intergovernmental Panel on Climate Change (IPCC) for achieving the 1.5 degrees Celsius goal. Supplementary documents, the Adaptation Communication and Biennial Finance Communication, have also been published to outline the mitigation, adaptation and finance aspects of the UK NDC.

Within the Adaptation Communication, emphasis is put to the role of the [UK Climate Change Act](#) and the [National Adaptation Program](#) as tools for achieving the NDC.

3.2 The UK Climate Change Act

This is a legally binding framework for the UK to reduce greenhouse gas emissions and strengthen resilience to climate risks. Originally adopted in 2008, this was a commitment to reduce greenhouse gas emissions by 80% by 2050, however a 2019 amendment now sets the goal as net zero emissions by 2050. It also introduced carbon budgets over successive 5-year periods.

The Act facilitated the introduction of a Climate Change Risk Assessment (CCRA) which is to be completed every five years, followed by a National Adaptation Program (NAP). The Act also established the CCC which advises the UK government and administrations. Since climate policy is devolved in the UK, Scotland and Wales have unique emissions reduction targets set by the Devolved Authorities.

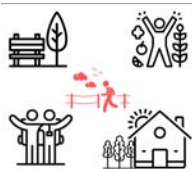
The Second NAP was published in 2018 and sets out how highlighted risks are to be addressed over the following five years. With regards to forestry, the NAP refers to the [UK's 25 Year Environmental Plan](#), and commits to increased woodland management, increased tree planting, and incentivising planting on private land. Chapter 2.7 states "We will promote urban tree planting through actions supporting Community Forests, both as part of the Northern Forest and in wider partnerships to bring trees and green infrastructure to towns and cities across England." This reflects the importance of the urban forest and green infrastructure in improving cities and adapting to the climate emergency. Forest resilience is to be improved by increased diversity. Green infrastructure is recognised to be vital to building resilience to climate change within urban areas, as well as improving health and wellbeing.

The CCC have produced the Sixth Carbon Budget as required under the Climate Change Act. The committee has advised the UK sets its budget to require a reduction of emissions by 78% by 2035. This builds on the NDC which is 68% by 2030. They recommend policy strengthening across the economy, however the report was only released in December 2020.

3.3 National Planning Policy Framework (NPPF)

The NPPF sets out planning policies for England and how they should be applied. With reference to sustainable development, the NPPF states “Planning policies and decisions should contribute to and enhance the natural and local environment by... recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland”. Also “development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists” and “strategic policies should set out an overall strategy for the pattern, scale and quality of development, and make sufficient provision for conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure, and planning measures to address climate change mitigation and adaptation”. Promoting healthy and safe communities is a large part of urban planning, and climate change mitigation is key component. Urban forests and the incorporation of green space into planning is vital to achieve these goals. Further details on how urban trees can contribute to a healthier, more sustainable city environment can be seen on the table below.

Table 2: Trees in the National Planning Policy Framework Review (July 2021)

NPPF Section	The Role of Urban Forests
	<u>NPPF 2</u> Achieving sustainable development Sustainable development is defined as meeting the needs of today without compromising the needs of future generations.¹ Economic, social, and environmental objectives must be actively integrated. The NPPF states that plans should 'meet development needs' while they also 'improve the environment' and 'mitigate climate change (including by making use of land in urban areas) and adapt to its effects'. Urban forests therefore have a vital role to play through the multiple social and environmental benefits of green infrastructure.² These benefits are well known, and include improvement of the natural environment, climate change mitigation, economic growth, and improvement of local community health and wellbeing.^{3 4} This echoes a key driver for the 'England Trees Action Plan 2021-2024'; 'to leave the environment in a better state than we found it'.²
	<u>NPPF 6</u> Building a strong, competitive economy Planning should 'support economic growth and productivity' in urban and rural areas to 'capitalise on their performance and potential'. Increased urban tree cover can contribute to this through increased prosperity,⁵ revitalised high streets with improved customer spending and greater investments,⁶ and the provision of forest products such as fuel and timber.⁷ There is also the opportunity for the development of a larger, innovative, and skilled forestry workforce.²
	<u>NPPF 7</u> Ensuring the vitality of town centres The contributions of urban forests outlined in NPPF 7's section (below) could also be linked to a growing economy. As the 'heart of local communities', planning should allow for the 'growth, management and adaptation' of urban centres.
	<u>NPPF 8</u> Promoting healthy and safe communities As detailed in NPPF 6's section (above), urban forests contribute to economic prosperity in commercial areas⁵. Furthermore, where tree cover is greater, property values increase² and businesses are prepared to pay greater ground rents⁸. This is also associated with higher paid earners who are also more productive⁹. Revenue from tourism and recreation can be added⁷. Additionally, town centres can be safer, with greater tree cover associated with reduced crime levels.^{10 19} Community plans 'should aim to achieve healthy, inclusive and safe places'.
	<u>NPPF 9</u> Promoting sustainable transport Urban forests provide multiple benefits to physical health.¹ These include cleaner air, reduced stress, quicker patient recovery times, and green spaces can encourage exercise activity. They can also contribute to improved mental wellbeing, improve self-esteem, and alleviate symptoms of anxiety and depression.²⁰
	<u>NPPF 11</u> Making effective use of land Social values can be improved, providing a sense of pride in place, community cohesion, and more harmonious environments⁶. These social aspects contribute to enhanced safety, alongside evidence that higher tree coverage reduces crime rates.^{7 19} Transport network plans should be based on and account for the 'environmental impacts of traffic and transport infrastructure', thereby 'avoiding and mitigating any adverse effects' and including opportunities for 'environmental gains'. The NPPF also promotes walking, cycling and public transport. The urban forest supports sustainable transport, improves journey quality¹¹, and can encourage use of alternative travel corridors such as pavements and cycleways.¹² Additionally, trees near road networks absorb pollution and airborne particulates, therefore helping to fulfil obligations under local air quality action plans.¹³ Trees also buffer noise,¹⁴ lower traffic speeds¹⁵, and increase pedestrian safety.⁷ The NPPF emphasizes that planning should encourage multiple benefits; 'meeting the need for homes and other land uses, safeguarding, and improving the environment, and ensuring healthy living conditions'. Suggestions are made for net environmental gains through habitat creation and improved access to green space, as well as realizing the value of undeveloped land for 'wildlife, recreation, flood risk mitigation, cooling/shading, carbon storage, or food production'. Land development which includes protection for existing, and plans for new planting of trees will promote this plethora of ecosystem services. Trees are therefore a priority in development requirements and can be enabled directly and indirectly through policy.⁷

	NPPF 12 Achieving well designed places	High quality design is a 'key aspect of sustainable development'. The NPPF explicitly emphasises that trees have an 'important contribution to the character and quality of urban environments'. It also states that 'planning policies and decisions should ensure that new streets are tree-lined [where appropriate], that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly planted trees, and that existing trees are retained where possible'. The role of local planning authorities in working with highways and tree officers is also emphasised to ensure right trees are planted in the right place. The incorporation of trees into new development, when done in the right way with minimal conflict, will provide a positive contribution to good design.
	NPPF 13 Protecting green belt land	The Trees and Design Action Group¹² also point out that trees are critical infrastructure that improve development viability through financial, environmental, and social values. The importance of Green Belts in maintaining open land is well recognised by the NPPF. The NPPF makes recommendations and highlights the opportunities provided the National Forest and Community Forests for 'improving the environment around towns and cities'.
	NPPF 14 Meeting the challenge of climate change, flooding and coastal change	Trees are key to enhancing the beneficial use of the Green Belt, including recreation, landscape enhancement, visual amenity, biodiversity, and improvement of damaged land; as stipulated by the NPPF. Mitigating and adapting to the impacts of environmental changes has become central to long-term planning implications. The NPPF states that planning should 'minimise vulnerability and improve resilience' through a low carbon transition and accounting for flood and coastal risks.
	NPPF 15 Conserving and enhancing the natural environment	Trees are fundamental to such strategies. Trees sequester and store carbon, and decrease peak summer temperatures in both the urban and wider environment by several degrees¹⁶. Trees also reduce stormwater runoff by attenuating precipitation in their canopies¹⁷.
	NPPF 16 Conserving and enhancing the historic environment	The ability of trees to improve the landscape is well understood. The NPPF recognizes that planning should 'enhance the natural and local environment' through habitat networks, green infrastructure, natural capital, ecosystem services, biodiversity protection, conservation and land / pollution remediation; to all of which trees are integral. Specifically, it is stated that 'the intrinsic character and beauty of the countryside' must be recognised, 'including the economic and other benefits of the best and most versatile agricultural land, and of trees and the woodland'. Historical and cultural assets are irreplaceable resource and planning should conserve their significance and 'contribution to the quality of life of existing and future generations'. The England Trees Action Plan 2021-2024³ highlights that trees form a significant part of our cultural heritage and sense of place. It states the importance of increasing people's engagement with the planning, planting and management of nation's forests for 'health, wellbeing and learning' and reconnecting ourselves with nature. It also states that ancient woodlands and veteran trees will be more resilient through recognition of their cultural and ecological values that have accumulated over centuries.

¹ United Nations General Assembly, 2021, 2. Rolls and Sunderland, 2014, 3. Turner-Skoff et al, 2019, 4. Gov.uk, 2021, 5. Wolf, 2005, 6. Gov.uk, 2012, 7. Forestry Commission, 2010, 8. Laverne and Geideman, 2003, 9. Kaplan, 1993; Wolf, 1998, 10. Wolf, 2007; Kuo and Sullivan, 2001a & 2001b, 11. Davies et al., 2014, 12. Trees and Design Action Group, 2014, 13. Escobedo and Nowak, 2009, 14. Van Renterghem, 2014, 15. Mok et al., 2003, 16. Doick et al., 2012, 17. Thomas and Nisbet, 2007, 18. gov.uk, 2021, 19. Troy, 2012, 20. Wolf, 2020

3.4 The 25-Year Environmental Plan

This plan sets out government actions to tackle climate change and “help the natural world regain and retain good health”. The table below lists the goals outlined by the plan which urban forests can contribute to achieving.

Table 3. Goals of the 25-Year Environmental Plan and the role urban forests can play in achieving them.

	Goals	The Role of Urban Forests
1	Clean air	Trees and other plants filter particulates out of the air, removing pollutants and chemicals which could otherwise cause harm to people and the environment.
2	Clean and plentiful water	Trees reduce surface run off from roads by intercepting rainfall. This reduces waste and water treatment.
3	Thriving plants and wildlife	Urban vegetation provides vital habitat for a wide range of wildlife, from birds to insects.
4	Reduced risk of harm from environmental hazards such as flooding and drought	Trees can help protect our water resources by intercepting rainfall and delaying it from entering drains and rivers. This can reduce flash flooding and help retain water on land to protect from drought.
5	Using resources from nature more sustainably and efficiently	Urban forests are a vital natural resource which provide many benefits to the local community. Protecting and enhancing this resource can create more sustainable cities and improve community wellbeing in a simple and sustainable way
6	Enhanced beauty, heritage and engagement with the natural environment	Trees and green spaces are key to creating an attractive and engaging environment, and can have a huge effect in urban areas, encouraging people to interact with the natural environment on their doorstep.
7	Mitigating and adapting to climate change	Urban forests can mitigate the effects of climate change in a multitude of ways, including protecting water resources and reducing waste, providing clean air, reducing CO ₂ levels in cities, reducing temperatures, and increasing resilience.
8	Minimising waste	Waste water treatment comes at a huge cost, particularly in urban areas. Increasing tree canopy cover decreases the volume of water entering drainage systems, thereby reducing waste water, and wasted energy.
9	Managing exposure to chemicals	Chemical exposure can come in many forms, however the highest risk to people in cities is the exposure to airborne particulates, which can cause respiratory illnesses. Trees can filter large volumes of particulates and pollutants.
10	Enhancing biosecurity	By enhancing biodiversity we can help protect ourselves from harmful diseases and pests. A healthy ecosystem is vital to a healthy planet, and by extension, healthy cities.

The plan identifies six key policies which will aid in achieving these goals, five of which relate to urban forests:

- **Using and managing land sustainably:**

- Embedding an 'environmental net gain' principle for development, including housing and infrastructure; Improving how we manage and incentivise land management; Improving soil health and restoring and protecting our peatlands; Focusing on woodland to maximise its many benefits; Reducing risks from flooding and coastal erosion.

- **Recovering nature and enhancing the beauty of landscapes:**

- Protecting and recovering nature; Conserving and enhancing natural beauty; Respecting nature in how we use water.

- **Connecting people with the environment to improve health and wellbeing:**

- Helping people improve their health and wellbeing by using green spaces; Encouraging children to be close to nature, in and out of school; Greening our towns and cities; Making 2019 a Year of Action for the environment.

- **Increasing resource efficiency, and reducing pollution and waste:**

- Maximising resource efficiency and minimising environmental impacts at end of life; Reducing pollution.

- **Protecting and improving the global environment:**

- Providing international leadership and leading by example; Helping developing nations protect and improve the environment; Leaving a lighter footprint on the global environment.

These policies facilitate the implementation of other policy documents, such as the [Environmental Land Management Scheme](#), [Clean Air Strategy](#), and the Strategy for Nature.

3.5 Environmental Land Management Scheme (ELMS)

Having left the European Union, the Common Agricultural Policy is no longer appropriate for the UK. The Environmental Land Management Scheme is a new policy document currently being developed to replace the CAP. It is vital to implementing the 25-Year Environment Plan. The Forestry Commission has been carrying out an urban-focused Environmental Land Management System (ELMS) Test and Trial to help assess how the new ELMS grant system will work for these areas specifically. The ELMS system will be the new form of support for landowners and farmers when we are no longer within the Common Agricultural Policy. Urban ELMS grants will be of interest to urban landowners, developers going beyond planning obligations, and others who influence land use. ELMS will pay grants for projects and approaches that create 'public good'. There are six public goods: water; air; biodiversity; environmental protection; adaptation/mitigation of climate change; and beauty, heritage and engagement with the environment.

3.6 Clean Air Strategy

This policy's main focus is the health of people and the environment; "This Clean Air Strategy shows how we will tackle all sources of air pollution, making our air healthier to breathe, protecting nature and boosting the economy." It highlights benefits of investment in green space and green infrastructure as a method of reducing health issues by improving air quality, and advises intelligent tree planting to fight pollution.

3.7 Clean Growth Strategy

Clean growth means growing the economy whilst cutting greenhouse gas emissions. The strategy highlights eight policies for achieving this. Though the main focus is cutting emissions, Urban forests can be instrumental in implementing and facilitating areas of two of these; improving business and industry efficiency, and enhancing the benefits and value of our natural resources.

3.8 England's Tree Strategy

England's Tree Strategy (ETS) sets out policies to expand tree cover, support woodland management, and increase public engagement with trees and woodlands, increasing tree planting in England, working towards the manifesto commitment of planting 30,000 hectares per year across the UK by 2025 – working closely with devolved authorities, communities and landowners to do so. It states how to expand, protect, and improve public and private woodlands, and highlights the role of trees in supporting the economy, connecting people to nature, and combatting climate change. This strategy, along with the Tree Health Resilience strategy and developing Nature, Peat and Flood strategies, will support the [25-year Environment Plan](#). The tree planting programme from the Department for Environment, Food and Rural Affairs (Defra) and Forestry Commission England will deliver the necessary changes to accelerate woodland creation in England, including the implementation of the Nature for Climate Fund.

3.9 Government Pledges

Though this is not (yet) in policy, the government has made promises to the people of the UK regarding tree planting. In 2015 the Conservative government manifesto contained a pledge to plant 11 million trees in the next five years. Shortly after, it was clear that actions were insufficient, and the pledge was renewed in 2017. They also pledged to plant one million trees in and around cities. The introduction of incentivised schemes such as the Woodland Carbon Guarantee and the Urban Tree Challenge Fund, has resulted in 3,639,000 new trees planted between 2017-2019. This is on track to meet the target, and in 2019 the government also pledged to plant 30 million trees annually by 2025.

3.10 National Urban Policy

To date, the UK has no explicit National Urban Policy (NUP), instead favouring to grant powers of planning to local authorities via [City Deals](#).

4. Regional Policy

There is little relevant regional policy due to the structure of policy and authority in the UK. There has not been any regional development policy since the regional development agencies closed in 2010. Prior to 2010, Regional Spatial Strategies were in place as well. Presently policy delivery is focused on the City Deals.

4.1 WM2041 Climate Action Plan

The West Midlands Combined Authority (WMCA), which includes the City of Birmingham, has produced the WM2041 Climate Action Plan. This plan was designed to implement environmental recovery across the West Midlands. This is a green paper containing a set of proposals, including some existing policies, for the region to develop in a sustainable way. Its primary focus is reaching carbon neutrality by 2041.

Learning from the government-backed 2013-2014 Green Deal scheme, WMCA are establishing a range of proposals and initiatives primarily focussed on energy saving, solution reduction, green transport and clean growth. There is less emphasis on green spaces, however statements do refer to collaboration to increase planning requirements for green space within the first five years of the plan, and “big ambitions for a tree planting programme with one tree for each resident”, though this is not expanded upon.

5. Local Policy

5.1 The City Deal

Despite UN and European frameworks on National Urban Policies (NUPs), the UK does not have an explicit NUP. Instead the UK has been working to decentralise urban policy, and powers have been granted to the local authorities by way of the City Deals. The purpose of the City Deal's was to grant further control to the local authority over city planning and management, with the goal of directing infrastructure spending to projects which boost employment, productivity and economic growth. As Birmingham is one of the UK's largest cities, Greater Birmingham and Solihul was among the first to establish its City Deal in 2012.

This deal, which should encompass any and all aspects relevant to city planning and urban development, is almost entirely economically focussed. It describes the importance of growth in terms of increasing housing and employment, but not of public space or green infrastructure. It appears to actively encourage the destruction of green belt land for housing; "40% of the land-area of the LEP is Green Belt. This figure rises to 92% in Bromsgrove. Much of this is treasured agricultural, amenity, leisure and/ or protected landscape. Some, however, is land on the urban fringe that might otherwise be attractive for development and which would make an invaluable contribution to meeting the demand for new housing". As mentioned in the [FAO Guidelines for Urban and Peri-Urban Forestry](#), the urban fringe and peri-urban areas are key to bridging the divide between urban and rural areas, for both infrastructure and wealth. Green infrastructure can provide a backbone for such linkages.

It is clear that no thought was given to the urban forest during the conception of this deal, despite the existence of relevant policies and programs, including the [NPPE](#), and other documents which describe the benefits of such a resource in city planning and urban environments.

Local developers will look to this deal to provide direction, however those using it are unlikely to develop in a sustainable way, as the three pillars of sustainability - economic, social and environmental - are not upheld equally or to the fullest potential.

5.2 Birmingham's Environmental and Green Policies

In recent years, Birmingham City has made a huge push for green policy. Its aim to stay at the forefront of green development and sustainability as a city is admirable and has resulted in many policies, strategies and plans pertaining to the urban forest resource. Birmingham's comprehensive Green Vision is summarised in Figure 1

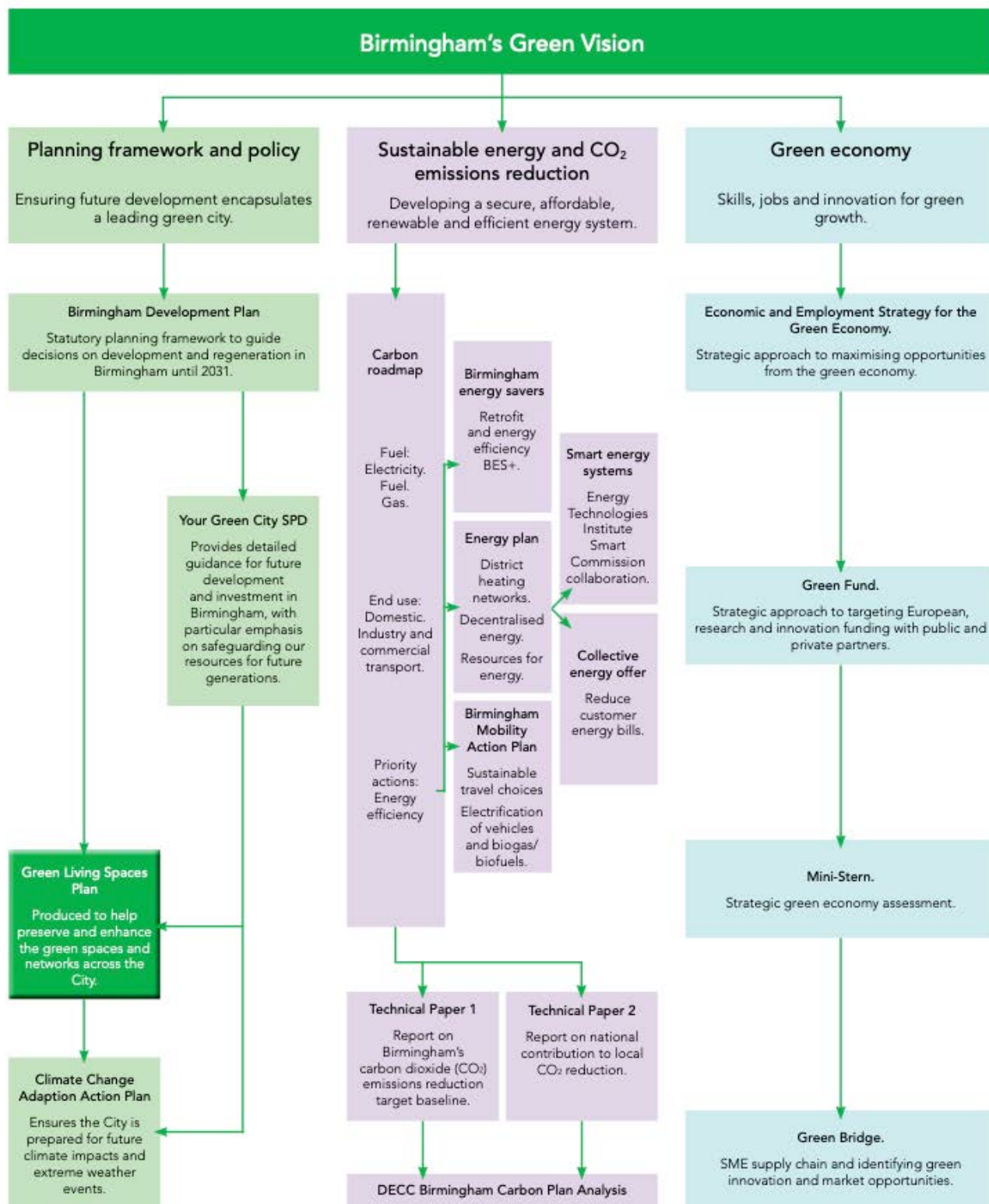


Figure 1. Birmingham's Green Vision

Birmingham Development Plan

The Birmingham Development Plan is the central urban development and planning policy, covering the period 2017-2031, and is an important framework plan impacting and guiding urban forests in the city. Its goal is sustainable growth, and a large part of that is the environment and sustainability. The plan commits the City Council to a 60% reduction in CO₂ emissions by 2027, and its thematic policies address this and other issues relating to the urban forest by:

- Reducing the carbon footprint by supporting the expansion of trees and woodlands,
- Adapting to climate change by promoting and enhancing green infrastructure, protecting the natural environment and enhancing biodiversity and ecosystems, encouraging resilience, using green infrastructure to minimise overheating and encourage greening, providing accessible green roofs and green walls where possible,
- Sustainable construction which conserves water and incorporates measures to enhance biodiversity,
- Managing flood risk and water resources by sustainable urban drainage, enhancing water resources and managing trees and woodland,
- Maintaining and expanding a green infrastructure network which is protected from development and conserving Birmingham's woodland resource (the 'Birmingham Forest'). All new developments should allow for tree planting in both the private and public domains. The importance of street trees in promoting the character of place and strengthening existing landscape characteristics will be recognised,
- Maintaining, enhancing and restoring sites of national and local importance for biodiversity will be promoted and supported, and wildlife corridors will be protected from harmful development. Development proposals should clearly identify how ongoing management of biodiversity enhancement measures will be secured,
- Planning permission will not normally be granted for development on open space except where reasonable mitigation action is taken,
- All residents should have access within 400m, (5 to 10 minutes' walk) to an area of publicly accessible open space which should have grass and trees and be at least 0.2 ha in size; within 1km (15 to 20 minutes' walk) of all residents there should be an area of publicly accessible open space of at least 2 ha in size which should have paths, seating, bins, trees and landscape features; within 3km of all residents there should be access to a publicly accessible park which has a wide range of facilities and features which may include water features, children's play facilities, cafés and formal landscaping.

The Green Living Spaces Plan

The Green Living Spaces Plan (2013) expresses the importance of understanding the ecosystem services and health benefits of green spaces over and above the aesthetic value. Of the seven green living spaces principles, urban forests can contribute to helping Birmingham follow and achieve the desired outcomes for 6. These include: An Adapted City, A Healthy City, The City's productive Landscapes, The City's Greenways, The City's Ecosystems, and The City's Green Living Spaces.

The Local Development Framework

The Local Development Framework (LDF) is partly formed by both the Birmingham Development Plan (BDP) and the 'Your Green and Healthy City' - supplementary planning document (SPD). The BDP states: "An integrated and systemic approach to linking the city's physical transformation and development to the carbon and environmental challenges, is a fundamental requirement of becoming a leading green city."

Tree Policies

The Birmingham Tree Strategy (2009) is a policy document pertaining to the value, benefits, protection, and management of individual and street trees in Birmingham. It explicitly states Birmingham's positions on tree issues including felling and replanting.

The Birmingham Tree Policy (2018) builds on the Birmingham Tree Strategy, and is more specific in its directions. Good practice guidelines refer to street trees, urban development and planning permissions, maintenance and funding.

Several smaller policies, guidance documents, and good management practices relate to trees though these are more niche, including Footway Crossings and Trees Policy, and the Good Practice Guide to Tree Works. Some policies also refer to the responsibility of the public to respect public spaces and other community members using said spaces. In Birmingham, these include the Parks and Open Space Strategy, Places for All, and the Equality and Diversity in Parks, amongst others. Birmingham Parks By-Laws express the local people's responsibility to respect and protect the parks and public spaces by not undertaking any activity which may cause damage to the parks or the infrastructure within or causing areas to be unusable or uninviting to other community members.

6. Policy and Birmingham's Urban Forest Master Plan

The following tables provide an overview of how the Key Targets of the new (draft) Urban Forest Master Plan for Birmingham link to other policies, frameworks, and initiatives at the international, European, national, regional, and local level. Note that EU policies are no longer directly applicable to the UK, but it is expected that some form of policy coordination between the UK and the EU will take place.

Trees and Forest Structure Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
T1 - Relative tree canopy cover	2030 Agenda for Sustainable Development The Paris Agreement FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative Post-2020 Global Biodiversity Framework UN Decade on Ecosystem Restoration UN Habitat -The New Urban Agenda The UN Strategic Plan for Forests Other International Programs	The Green Deal Forestry Strategy EU Strategy on Green Infrastructure	UK's Nationally Determined Contribution The UK Climate Change Act The 25 Year Environmental Plan Environmental Land Management Scheme Clean Air Strategy Clean Growth Strategy England's Tree Strategy Government Pledges	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies

Trees and Forest Structure Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
T2 - Age diversity (or Size?)	FAO Guidelines on Urban and Peri-urban Forestry UN Decade on Ecosystem Restoration The UN Strategic Plan for Forests	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
T3 - Species diversity	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry UN Decade on Ecosystem Restoration The UN Strategic Plan for Forests	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
T4 - Species suitability	FAO Guidelines on Urban and Peri-urban Forestry The UN Strategic Plan for Forests	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
T5 – Publicly owned trees (trees managed “intensively”)	FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Habitat -The New Urban Agenda The UN Strategic Plan for Forests	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies

Trees and Forest Structure Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
T6 – Publicly owned natural areas (trees managed “extensively”)	FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Habitat -The New Urban Agenda The UN Strategic Plan for Forests	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
T7 – Trees on private property	FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Habitat -The New Urban Agenda The UN Strategic Plan for Forests	EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan	Birmingham's Environmental and Green Policies
T8 – Other elements of the UF; shrubs, hedges, green walls and roofs, plants, animals and water	FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Habitat -The New Urban Agenda	EU Biodiversity Strategy for 2030	The 25 Year Environmental Plan Environmental Land Management Scheme Clean Air Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies

Trees and Forest Structure Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
T9 – Tree benefits (including biodiversity)	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative Post-2020 Global Biodiversity Framework UN Decade on Ecosystem Restoration UN Habitat -The New Urban Agenda The UN Strategic Plan for Forests	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	UK's Nationally Determined Contribution The UK Climate Change Act The 25 Year Environmental Plan Environmental Land Management Scheme Clean Air Strategy England's Tree Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies

Trees and Forest Structure Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
T10 – Wider Environmental Considerations (including Climate Change, Air quality and Water)	2030 Agenda for Sustainable Development The Paris Agreement FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative Post-2020 Global Biodiversity Framework UN Decade on Ecosystem Restoration UN Habitat -The New Urban Agenda The UN Strategic Plan for Forests Other International Programs (Biophilic Cities Network, Tree Cities of the World)	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	UK's Nationally Determined Contribution The UK Climate Change Act The 25 Year Environmental Plan Environmental Land Management Scheme Clean Air Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies

Community Framework Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
C1 – Governance and leadership	2030 Agenda For Sustainable Development UN Habitat- The New Urban Agenda	European Green Deal	The UK Climate Change Act National Planning Policy Framework	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
C2 – Birmingham Council departmental cooperation	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative		National Planning Policy Framework Clean Growth Strategy	Birmingham's Environmental and Green Policies
C3 – Utilities cooperation	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative		National Planning Policy Framework Clean Growth Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
C4 – Green industry cooperation	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative	European Green Deal	National Planning Policy Framework Clean Growth Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
C5– Involvement of large private and institutional landholders	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative		National Planning Policy Framework Environmental Land Management Scheme Clean Growth Strategy England's Tree Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies

Community Framework Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
C6 – Community involvement and neighbourhood action	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative		Environmental Land Management Scheme England's Tree Strategy	Birmingham's Environmental and Green Policies
C7 – General appreciation of trees as a community resource	2030 Agenda for Sustainable Development FAO Green Cities Initiative UN Habitat -The New Urban Agenda Other International Programs (Biophilic Cities Network, Tree Cities of the World)		National Planning Policy Framework Environmental Land Management Scheme Clean Air Strategy England's Tree Strategy	Birmingham's Environmental and Green Policies
C8– Regional collaboration	FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Decade on Ecosystem Restoration		National Planning Policy Framework Environmental Land Management Scheme England's Tree Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
C9 - International Reputation	2030 Agenda for Sustainable Development FAO Green Cities Initiative UN Habitat -The New Urban Agenda Other International Programs (Biophilic Cities Network, Tree Cities of the World)	The Green Deal EU Biodiversity Strategy for 2030	Environmental Land Management Scheme England's Tree Strategy	Birmingham's Environmental and Green Policies

Sustainable Resource Management Approach Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
R1 – Tree and woodlands inventory	2030 Agenda for Sustainable Development FAO Green Cities Initiative UN Habitat -The New Urban Agenda FAO Guidelines on Urban and Peri-urban Forestry	The Green Deal Forestry Strategy EU Strategy on Green Infrastructure	UK's Nationally Determined Contribution The UK Climate Change Act The 25 Year Environmental Plan Environmental Land Management Scheme Clean Air Strategy Clean Growth Strategy England's Tree Strategy Government Pledges	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
R2 – Tree valuation and asset management approach	2030 Agenda for Sustainable Development FAO Green Cities Initiative UN Habitat -The New Urban Agenda FAO Guidelines on Urban and Peri-urban Forestry	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies

Sustainable Resource Management Approach Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
R3 – Canopy cover assessment and goals	2030 Agenda for Sustainable Development FAO Green Cities Initiative UN Habitat -The New Urban Agenda FAO Guidelines on Urban and Peri-urban Forestry	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
R4 – Environmental justice, cultural values and equity	2030 Agenda for Sustainable Development FAO Green Cities Initiative UN Habitat -The New Urban Agenda	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
R5 – Reviewing and improving the urban forest masterplan	FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
R6a– Urban forestry funding	UN Habitat - The New Urban Agenda FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
R6b– Arboricultural funding	FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative	EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	The 25 Year Environmental Plan	Birmingham's Environmental and Green Policies

Sustainable Resource Management Approach Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
R7 – Urban forestry program capacity and staffing	2030 Agenda for Sustainable Development UN Habitat -The New Urban Agenda FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Decade on Ecosystem Restoration The UN Strategic Plan for Forests	EU Biodiversity Strategy for 2030	The 25 Year Environmental Plan Environmental Land Management Scheme Clean Air Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
R8 – Tree establishment planning and implementation	2030 Agenda for Sustainable Development UN Habitat -The New Urban Agenda FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Decade on Ecosystem Restoration The UN Strategic Plan for Forests	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	UK's Nationally Determined Contribution The UK Climate Change Act The 25 Year Environmental Plan Environmental Land Management Scheme Clean Air Strategy England's Tree Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies

Sustainable Resource Management Approach Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
R9– Growing site suitability	FAO Guidelines on Urban and Peri-urban Forestry	The Green Deal Forestry Strategy EU Biodiversity Strategy for 2030 EU Strategy on Green Infrastructure	UK's Nationally Determined Contribution The UK Climate Change Act The 25 Year Environmental Plan Environmental Land Management Scheme Clean Air Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
R10 – Tree protection policy development and enforcement	2030 Agenda for Sustainable Development UN Habitat -The New Urban Agenda FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Decade on Ecosystem Restoration The UN Strategic Plan for Forests	Forestry Strategy	National Planning Policy Framework Environmental Land Management Scheme England's Tree Strategy	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
R11 – Maintenance of publicly owned, “intensively” managed trees	FAO Guidelines on Urban and Peri-urban Forestry		National Planning Policy Framework Environmental Land Management Scheme	Birmingham's Environmental and Green Policies

Sustainable Resource Management Approach Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
R12 – Management of publicly owned natural “extensively” managed areas	FAO Guidelines on Urban and Peri-urban Forestry		National Planning Policy Framework Environmental Land Management Scheme	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
R13 – Tree risk management	FAO Guidelines on Urban and Peri-urban Forestry		Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
R14 – Biosecurity	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative UN Decade on Ecosystem Restoration	The Green Deal EU Biodiversity Strategy	National Planning Policy Framework The 25 Year Environmental Plan Environmental Land Management Scheme	Birmingham's Environmental and Green Policies
R15 – Urban wood and green waste utilisation	2030 Agenda for Sustainable Development FAO Guidelines on Urban and Peri-urban Forestry FAO Green Cities Initiative The UN Strategic Plan for Forests	Forestry Strategy	The 25 Year Environmental Plan	WM2041 Climate Action Plan Birmingham's Environmental and Green Policies
R16 – Native vegetation	FAO Guidelines on Urban and Peri-urban Forestry	The Green Deal Forestry Strategy	Environmental Land Management Scheme	Birmingham's Environmental and Green Policies

Sustainable Resource Management Approach Targets	Relevant policies supporting/supported by the targets and KPI's			
	International	European	National	Regional & Local
R17 – Research and Development	2030 Agenda for Sustainable Development	The Green Deal	The 25 Year Environmental Plan Environmental Land Management Scheme	
R18 – Open Urban Forest data and Web-map (management and assessment tools)	Other International Programs (Biophilic Cities Network, Tree Cities of the World)		The 25 Year Environmental Plan	

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