

Warwick District Local Plan 2011-2029: Net Zero Carbon DPD

**Sustainability Appraisal (SA)
incorporating Strategic Environmental
Assessment (SEA) & Habitats
Regulations Assessment (HRA)
Report**

September 2021

enfusion



Warwick Local Plan 2011-2029: Net Zero Carbon DPD

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September 2021

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prepared for:	Warwick District Council	
prepared by:	Barbara Carroll	Enfusion
quality assurance:	Barbara Carroll	Enfusion

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Non-Technical Summary (NTS) (available separately)

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1.0 INTRODUCTION

Sustainability Appraisal (SA), Strategic Environmental Assessment (SEA) & Habitats Regulations Assessment (HRA)

- 1.1 Strategic Environmental Assessment (SEA)^{1 2} is a systematic process used during the preparation of plans and policies and it aims to provide a high level of protection for the environment. Sustainability Appraisal (SA) is a process that similarly investigates plans and policies, including consideration of socio-economic factors in the same way as environmental factors. SA incorporating SEA is a mandatory requirement for Local Plan Documents in accordance with planning legislation³ and paragraph 32 of the National Planning Policy Framework (revised 2018, updated 2019)⁴. Government advises⁵ that an integrated approach should be taken so that the SA process incorporates the requirements for SEA – and to the same level of detail.
- 1.2 Local Plan Documents must also be subject to Habitats Regulations Assessment (HRA)⁶. The Habitats Regulations (amended 2018)⁷ afford a high level of protection to sites in a network of internationally important sites designated for their ecological status. These sites comprise European Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), and Ramsar⁸ sites. It is a requirement to consider if the plan is likely to have significant effects on any relevant designated site. HRA is a two staged process – initially screening and then appropriate assessment (if significant adverse effects are screened as likely).
- 1.3 National Planning Practice Guidance sets out the key stages and tasks for the SA process and their relationship with the Local Plan process – as illustrated in the following Figure 1.1. These key stages and tasks are applicable to the SA process for the Warwick Net Zero Carbon DPD. It is important to note that SA is an iterative and on-going process. Stages and tasks in the SA process may be revisited and updated or revised as a plan develops, to take account of updated or new evidence as well as consultation responses. The role of the SA is to inform the plan-making process.
- 1.4 This SA Report explains the Stage A Scoping that was completed earlier and sent to the statutory consultation bodies in accordance with good practice. It reports the findings of Stage B Alternatives and Assessment and comprises

¹ EU Directive 2001/42/EC

² Environmental Assessment of Plans and Programmes Regulations, 2004

<http://www.legislation.gov.uk/uksi/2004/1633/contents/made>

³ Section 19(5) of the 2004 Planning & Compulsory Purchase Act and Regulation 22(a) of the Town & Country Planning (Local Planning) (England) Regulations 2012

⁴ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

⁵ <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal>

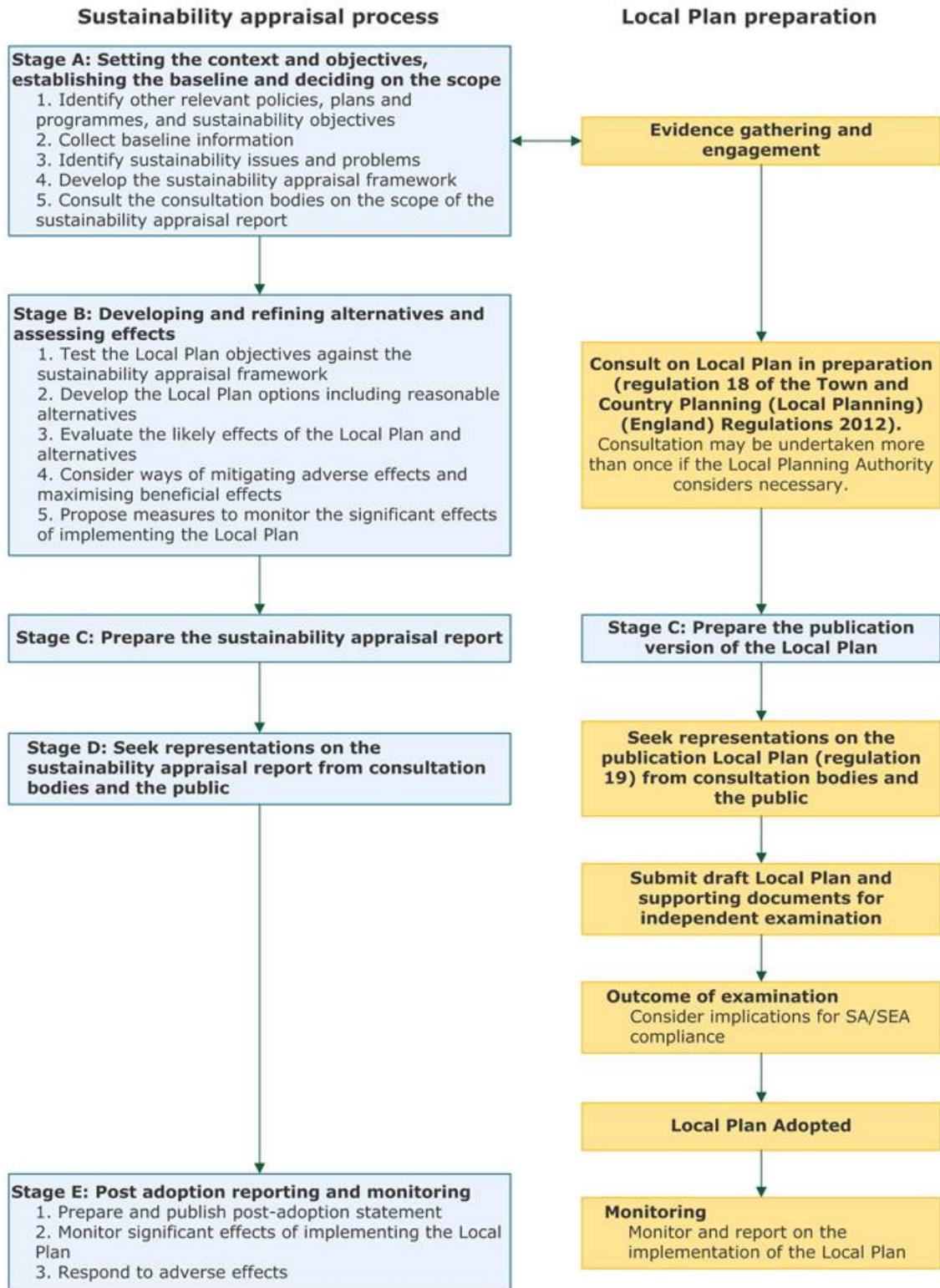
⁶ <https://www.gov.uk/guidance/appropriate-assessment>

⁷ <http://www.legislation.gov.uk/uksi/2018/1307/contents/made>

⁸ Support internationally important wetland habitats and are listed under the Ramsar Convention on Wetlands of International Importance

Stage C Preparation of the SA Report. This SA Report accompanies the Warwick Net Zero Carbon DPD on public consultation for Stage D and seeks comments from the public and the statutory consultees.

Figure 1.1: SA and Plan-making Stages and Tasks



The Warwick Local Plan 2011-2029

- 1.5 The overarching development plan document (DPD) for the Warwick District area is the Local Plan that was adopted in September 2017⁹. The Local Plan set out a commitment¹⁰ to draft two DPDs for the District: Gypsy & Traveller DPD and Canalside DPD. The Council has also published a Supplementary Planning Document (January 2019)¹¹ to update the situation with regard to air quality and reflect the increasing concern about air quality and climate change. The Local Plan DPDs, SPD and Neighbourhood Plans comprise the hierarchy of planning documents that, together with the NPPF, guide applications and decisions for new development in the Warwick District area.
- 1.6 Warwick District Council declared a Climate Emergency¹² on 27 June 2019. This makes it a requirement to take immediate action to drastically reduce carbon emissions. The Council has made a number of commitments, as follows:
- Becoming a net-zero carbon organisation, including contracted out services, by 2025 in terms of Scope 1, 2 & 3 emissions¹³
 - Facilitating decarbonisation by local businesses, other organisations and residents so that total carbon emissions within Warwick District are as close to zero as possible by 2030
 - Working with other local councils to lobby central government to help address the above points including by funding and changing regulation
 - Engaging with and listening to all relevant stakeholders including members of the Warwickshire Youth Parliament regarding approaches to tackling the climate emergency.
 - Ensuring that tackling the Climate Emergency is central to the strategic business plan – both in terms of adaptation and mitigation.
 - Producing within six months an action plan to implement these commitments
- 1.7 The Council adopted a Climate Change Action Programme in February 2020 and this recognises the importance of the planning system in helping to achieve its ambitions. A key aspect is to develop and implement policies that will deliver improved net zero carbon building standards. The new Net Zero Carbon DPD provides the building standards policies to achieve this and (except where policies within the existing Local Plan are replaced by the DPD), these policies supplement those within the adopted Warwick District Local Plan, 2011 – 2029. The DPD outlines the issues facing the Council with

⁹ https://www.warwickdc.gov.uk/info/20410/local_plan

¹⁰ https://www.warwickdc.gov.uk/info/20799/development_plan_documents

¹¹ https://www.warwickdc.gov.uk/downloads/file/5043/air_quality_spd

¹²

https://www.warwickdc.gov.uk/info/20468/sustainability_and_climate_change/1437/climate_emergency_declaration

regard to climate change and sustainable methods of construction and occupation in order to guide new development to help facilitate delivery of these commitments. The Council's climate change ambitions have been further refined (agreed at meeting 8 July 2021)¹⁴ with shared ambitions for Warwick DC and Stratford-on-Avon DC adopted and the recommendations of the People's Inquiry in to Climate Change incorporated into the programme of work subject to being able to identify appropriate resources.

The Warwick Net Zero Carbon Development Planning Document (DPD)

- 1.8 The Net Zero Carbon DPD has been prepared in accordance with the commitments made by the Council in respect of its declaration of Climate Emergency. The DPD has been prepared in line with recent Government recommendations, for example, from Preparing for Climate Change (2019)¹⁵ and in consideration of the IPCC Special Report on global warming (2018)¹⁶, and the update to Planning Practice Guidance (2019) that asserts addressing climate change is one of the core land use planning principles that the NPPF expects to underpin plan-making and decision-making.
- 1.9 The objectives of the Local Plan have sustainability at their heart and this DPD will further progress the Local Plan Objective B: Providing well-designed new developments that are in the right location and address climate change. This new DPD will form the framework within which developments are expected to conform. The Local Plan (adopted 2017) includes policies that deal with many aspects of climate change. The new DPD expands and updates these policies and introduces new standards in development that will positively contribute to the new targets set by both local and central government since the Local Plan was adopted.
- 1.10 Work was recently undertaken with other Warwickshire councils on air quality and a joint Supplementary Planning Document (SPD)¹⁷ was adopted in January 2019. The document aims to assist in reducing the air quality impacts of development and the new Net Zero Carbon DPD has been prepared with a clear understanding of the implications of improvements to air quality and climate change.
- 1.11 Warwick District Council has committed to:
- Becoming a net-zero carbon organisation, including contracted out services, by 2025
 - Facilitate decarbonisation by local businesses, other organisations and residents so that total carbon emissions within Warwick District are as close to zero as possible by 2030

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<https://estates8.warwickdc.gov.uk/cmIS/MeetingDates/tabid/149/ctl/ViewMeetingPublic/mid/637/Meeting/4390/Committee/29/Default.aspx>

¹⁵ <https://www.theccc.org.uk/tackling-climate-change/preparing-for-climate-change/>

¹⁶ <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

¹⁷ https://www.warwickdc.gov.uk/downloads/file/5043/air_quality_spd

1.12 It may be noted that for the purposes of this new DPD, carbon refers to all greenhouse gas emissions (excluding water vapour). The emerging draft Net Zero Carbon DPD comprises the following:

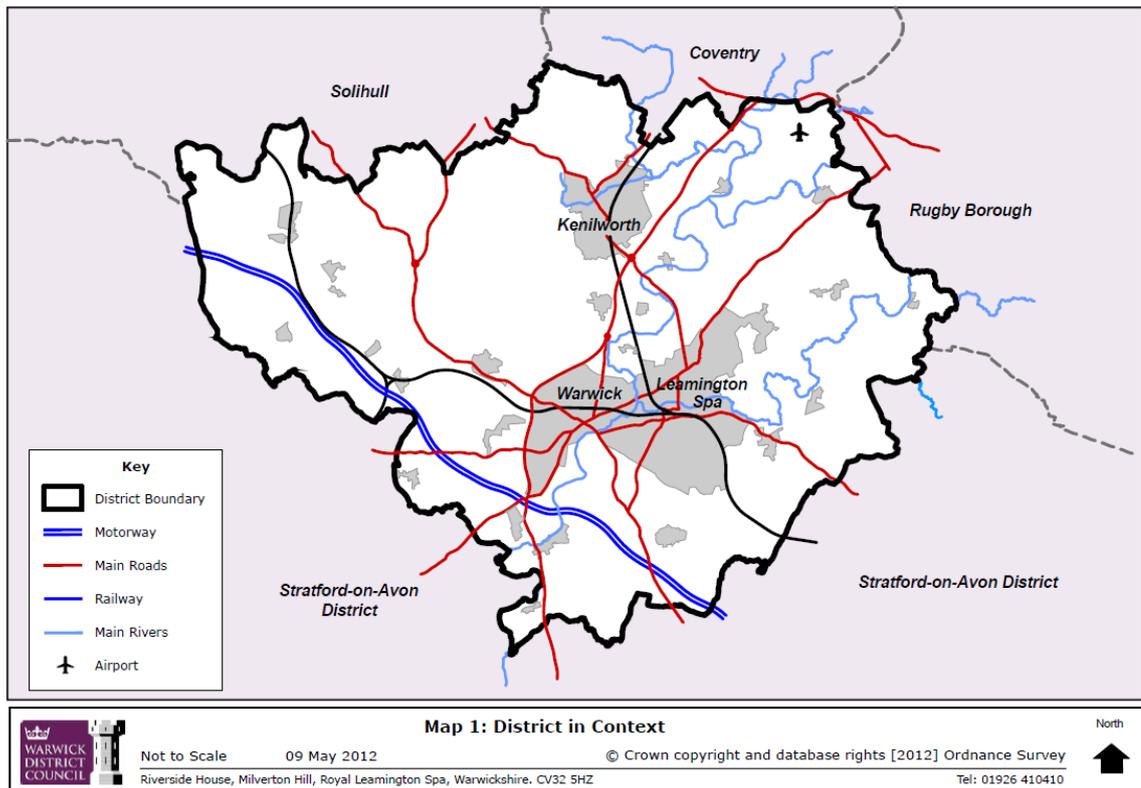
- The Local Context
- The National Context
- The Planning Policy Context
- Aims and Objectives
- Overarching Strategy
 - Policy NZC1 Achieving Net Zero Carbon Development
- Reducing Energy Demands
 - Policy NZC2(A) Making Buildings Energy Efficient
- Energy Sources
 - Policy NZC2(B) Zero or Low Carbon Energy Sources
 - Policy NZC2(C) Zero Carbon Ready Technology
- Carbon Offsetting
 - Policy NZC2(D) Carbon Offsetting
- Viability
 - Policy NZC2(E)

- Local Plan 2011-2029: Policies superseded or amended
- Glossary & Appendix 1: Policy Context

1.13 The DPD explains that the Local Plan was grounded in sustainability but prepared at a time when the new NPPF had recently been published. It also explains that the Local Plan was examined at a time of debate regarding the ability for local planning authorities to prepare local building standards policies. Government has now confirmed that local planning authorities may set their own local building standards and therefore, this DPD expands upon Local Plan policies and introduces standards in development to positively contribute to new targets for carbon. The DPD will also replace the adopted Sustainable Buildings SPD (2008) that is in much need of updating.

1.14 The extent of the Warwick District area is shown in the map following:

Figure 1.2: Location of Warwick District



Consultation

- 1.15 The statutory environmental consultation bodies (Environment Agency, Natural England, Historic England) were consulted upon the SA/SEA & HRA scoping and screening report (May 2021) during May-June 2021.
- 1.16 Warwick District Council is publishing the draft Net Zero Carbon DPD together with this SA Report for statutory and wider public consultation. Any comments on the draft DPD and SA will be taken into account in preparing the next draft of the DPD for further consultation.

Compliance with the Requirements of the EU SEA Directive

- 1.17 The Strategic Environmental Assessment Regulations set out certain requirements for reporting the SEA process and specify that, if an integrated appraisal is undertaken (i.e., SEA is subsumed within the SA process), then the sections of the SA Report that meet the requirements set out for reporting the SEA process must be clearly signposted. This SA Report presents the SA/SEA testing of the emerging Development Plan Document and includes a Non-Technical Summary and an appendix that clearly signposts the requirements for reporting the SEA.

This SA Report

- 1.18 The Warwick Local Plan was subject to SA/SEA (Submission Report 2015 & Addendum 2017)¹⁸ and HRA (Screening Report 2014) during its preparation and examination, including formal and public consultation. The Net Zero Carbon DPD must be in conformity with the adopted Local Plan, and it is important that the SA/SEA is also in conformity with the previous assessments. However, the NPPF was revised in 2018, including significant implications for biodiversity net gain. This SA seeks to incorporate the updated requirements, including the information set out in planning practice guidance.
- 1.19 A Court of Justice of the European Union (CJEU) Judgment (2017)¹⁹ has had implications for the established methods in the UK for undertaking HRA (and through which the Warwick Local Plan had been assessed). The implication of this judgment is that competent authorities cannot take account of any integrated or additional avoidance or reduction measures when considering at the Habitats Regulations Assessment (HRA) screening stage whether a plan is likely to have an adverse effect on a European Site. Therefore, this report seeks to update the assessment process and make explicit that the initial stage of HRA screening has been applied without consideration of embedded mitigation such as through Local Plan policies.
- 1.20 This report has been prepared in accordance with regulatory requirements, government guidance and in consideration of good practice. A proportionate approach has been taken since the Local Plan was adopted in 2017 and the DPD focuses on one issue of net zero carbon for the District. The HRA considerations have been addressed within this SA Report. Warwick District Council has commissioned independent SA/SEA & HRA specialists Enfusion Ltd to undertake the work on behalf of the Council.
- 1.21 Section 2 of this SA Report describes the approach taken and methods used with the baseline characterisation presented in Section 3. The approach to options in plan-making and reasonable alternatives in SA/SEA is explained in Section 4, and the findings of the SA/SEA assessment and updated HRA are presented. An outline of the approach for monitoring is set out in Section 5 and conclusions with next steps outlined in Section 6.

¹⁸ https://www.warwickdc.gov.uk/info/20410/local_plan/1197/local_plan_evidence_base

¹⁹ People over Wind & Sweetman v Coillte Teoranta Case C-323/17

2.0 SUSTAINABILITY APPRAISAL METHODS

Approach, Guidance & Methods

- 2.1 SA incorporating SEA is a mandatory requirement for Local Plan documents in accordance with paragraph 32 of the National Planning Policy Framework (revised 2018, updated 2019)²⁰. Guidance on undertaking SA/SEA of plans is provided through UK government planning practice²¹; guidance²² on HRA for plans is also available. The SA and HRA have been undertaken in accordance with this government guidance and drawing upon professional experience.
- 2.2 The SA has built upon the previous SA work undertaken during the development of the Local Plan, refining it to be focused on the Net Zero Carbon DPD with relevant sustainability topics and issues. The opportunity was taken to update the assessments in line with the revised NPPF and the updated requirements for HRA.
- 2.3 Available information from Defra Magic maps, Environment Agency flood risk maps, the Council's evidence base for the local planning documents, and the evidence base for the draft Net Zero Carbon DPD, together with professional judgment, was used to identify the sensitivity of the DPD area and to undertake the assessments.

Screening & Scoping: SA/SEA & HRA/AA

- 2.4 The scoping for SA/SEA considered whether the policies in the emerging DPD are likely to have significant sustainability effects, as follows:
- how they might affect the environment, communities or economy
 - whether any of the proposals are likely to affect a "sensitive area", such as a Site of Special Scientific Interest (SSSI) or an internationally designated Site for nature conservation (SAC, SPA, Ramsar)
 - whether implementation of policies in the plan might lead to new development in the future

The DPD includes new/updated policies that could affect the nationally important natural and historic environmental assets and their settings that are throughout the Warwick district area.

- 2.5 The scoping/screening for HRA considered whether the draft DPD could have any likely significant effects (LSEs) on internationally designated sites – Special Protection Areas (SACs), Special Areas of Protection (SPAs) and Ramsar – alone or in-combination with other plans or projects. There is only one isolated

²⁰ <https://www.gov.uk/government/publications/national-planning-policy-framework-2>

²¹ <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal>

²² <https://www.gov.uk/guidance/appropriate-assessment>

internationally designated site – Ensor’s Pool SAC – within the Warwick District area. There are no other designated sites within a 20 km radius and therefore, unlikely to be significant effects.

- 2.6 The HRA process comprises two stages: an initial screening stage considers whether a plan or project is likely to have a significant effect on a European site either alone or in combination with other plans or projects. If likely significant effects (LSEs) are identified through the screening stage, then the plan or project should be tested through a second stage – the appropriate assessment (AA). The Warwick Local Plan and the DPD do include relevant policy mitigation and the approach essentially reinforces this through the updated methodology - thus making the process and conclusions explicit with regard to the updated requirements. This precautionary approach is being taken in particular consideration of the significant changes to HRA methods in the UK since the screening undertaken for the Local Plan.

The SA Framework

- 2.7 The SA Framework provides the basis by which the sustainability effects of the DPD are described, evaluated and options compared. It includes objectives, elaborated by decision making criteria, that are relevant to the objectives of the Local Plan and the DPD, the role and duties of Warwick District Council, and sustainable development in the Warwick District area. These objectives were identified through the SA scoping stage for the Local Plan from the information collated in the plans & programmes review, baseline analysis, identification of sustainability issues, and subject to consultation. This SA Framework is the same as that used to assess the emerging Local Plan in order to clearly demonstrate conformity with the higher level of development planning and assessment, as follows:

Table 2.1: SA Framework

Objective	Key Questions
1. To have a strong and stable economy <i>SEA Directive topics: population & health</i>	Will it help meet the employment needs of the local community? Will it help diversify the economy in general? Will it enhance the vitality and viability of the town centre? Will it encourage or enable inward investment? Will it promote investment in future prosperity (for example by supporting R&D, small businesses and/or encouraging skills development)?
2. To enable a range of sustainable transport options <i>SEA Directive topics: air, climatic factors, health</i>	Will it encourage the use of public transport, walking or cycling? Will it help reduce traffic congestion?

<p>3. To reduce the need to travel</p> <p><i>SEA Directive topics: air, climatic factors, health</i></p>	<p>Will it reduce the overall need to travel? Will it help reduce the need to travel by car / lorry?</p>
<p>4. To reduce the generation of waste and increase recycling</p> <p><i>SEA Directive topics: soil, health, biodiversity</i></p>	<p>Will it encourage the management of waste in line with the waste management hierarchy, giving first priority to reducing waste, followed by reuse and recycling, then other forms of energy recovery and lastly disposal? Will any residual disposal be undertaken in the least environmentally detrimental manner?</p>
<p>5. To ensure the prudent use of land and natural resources</p> <p><i>SEA Directive topics: biodiversity, flora, fauna and soil</i></p>	<p>Does it optimise the use of previously developed land and buildings? Will it minimise development on greenfield land? Will it reduce the amount of derelict, degraded or underused land? Does it make efficient use of existing physical infrastructure (i.e. instead of requiring new infrastructure to be built)? Does it encourage resource-efficient design and/or construction (in terms of water and/or raw materials)? Does it encourage the use of materials from alternative and renewable sources?</p>
<p>6. To protect and enhance the natural environment</p> <p><i>SEA Directive topics: biodiversity, flora, fauna and landscape</i></p>	<p>Will it protect and enhance species, habitats and sites designated for their nature conservation interest? Will it safeguard and/or enhance the character of significant landscape areas?</p>
<p>7. To create and maintain safe, well-designed, high quality built environments</p> <p><i>SEA Directive topics: landscape, cultural heritage</i></p>	<p>Will it help provide a sense of identity and local distinctiveness? Will it protect or enhance the setting of the town? Will it promote design that enhances townscapes? Will it protect or improve safety in built environments?</p>
<p>8. To conserve and enhance the historic environment</p> <p><i>SEA Directive topics: cultural heritage</i></p>	<p>Will it conserve and enhance sites, features and areas of historical, archaeological and cultural value? Will it encourage appropriate use of and/or access to buildings and landscapes of historical/cultural value?</p>
<p>9. To create good quality air, water and soils</p> <p><i>SEA Directive topics: soil, water, air</i></p>	<p>Will it affect local air quality? Will it affect air quality in the Air Quality Management Areas? Will it minimise pollution of soils? Will it minimise light and noise pollution levels? Will it retain the best quality agricultural land? Will it minimise adverse effects on ground and surface water quality? Will it prevent deterioration of water quality as measured by the Water Framework Directive?</p>

<p>10. To minimise the causes of climate change by reducing greenhouse gases and increasing the proportion of energy generated from renewable and low carbon sources.</p> <p><i>SEA Directive topics: air, climatic factors</i></p>	<p>Will it reduce overall energy use through increased energy efficiency? Will it reduce or minimise greenhouse gas emissions? Will it increase the proportion of energy generated from renewable and low carbon sources?</p>
<p>11. To adapt to the predicted impacts of climate change including flood risk</p> <p><i>SEA Directive topics: water, climatic factors</i></p>	<p>Will it reduce or minimise the risk of flooding? Will it minimise sensitive development in medium and high risk flood zones?</p>
<p>12. To meet the housing needs of the whole community (ensuring the provision of decent and affordable housing for all, of the right quantity, type, size and tenure)</p> <p><i>SEA Directive topics: population, health</i></p>	<p>Is it enabling the housing target to be met? Does it provide for the development of balanced communities by encouraging an appropriate mix of housing (in terms of type, size and tenure)? Will it reduce homelessness and housing need? Will it reduce the number of empty homes?</p>
<p>13. To protect, enhance and improve accessibility to local services and community facilities</p> <p><i>SEA Directive topics: population, health</i></p>	<p>Will it maintain and enhance existing community facilities? Will it put unacceptable pressure on existing services and community facilities? Will it improve access to local services and facilities for the whole community?</p>
<p>14. To improve health and well being</p> <p><i>SEA Directive topics: health</i></p>	<p>Will it promote healthy lifestyles? Will it provide and improve access to health and social care services? Will it provide and/or enhance the provision of open space? Will it improve opportunities to participate in the district's cultural, sport and recreational opportunities?</p>
<p>15. To reduce poverty and social exclusion</p> <p><i>SEA Directive topics: population, health</i></p>	<p>Will it reduce poverty and social exclusion in those areas most affected?</p>
<p>16. To reduce crime, fear of crime and antisocial behaviour</p>	<p>Will it reduce actual levels of crime? Will it reduce the fear of crime? Will it reduce / discourage anti-social behaviour?</p>

SEA Directive topics: population, health	
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Table 2.2: Significance Key

Categories of Significance		
Symbol	Meaning	Sustainability Effect
++	Major Positive	Proposed development encouraged as would resolve existing sustainability problem
+	Minor Positive	No sustainability constraints and proposed development acceptable
=	Neutral	Neutral effect
?	Uncertain	Uncertain or Unknown Effects
-	Minor Negative	Potential sustainability issues: mitigation and/or negotiation possible
--	Major Negative	Problematical & improbable because known sustainability issues; mitigation likely to be difficult and/or expensive
+	-	SA Objectives 2, 5, 6, 13 and 14 consider more than one topic & as a result there is the potential for different effects. For example, Objective 2 relates to encouraging the use of public transport, walking & cycling as well as reducing traffic congestion. Development could have a negative effect on traffic; however, it could also provide new cycle/walking routes with a positive effect – and thus, two symbols.

Appraising the Net Zero Carbon DPD

- 2.8 The number and extent of reasonable alternatives to be considered through plan-making and the SA are limited. The DPD is also being prepared during a time of some uncertainty – the national pandemic and economic situation remains uncertain, and it is unclear yet how the legislative and policy requirements might change or further evolve. The draft DPD explains the current situation, for example, with regard to the standards for Building Regulations²³ in the Future Homes Standard that is being developed by Government. In January 2021, Government published the outcome of its consultation with the Future Homes Standard, and this included that Councils may continue to set local energy efficiency standards. There are no distinct options that are meaningful and relevant for such a limited topic DPD and it is considered that there are no reasonable alternatives that need to be tested through SA.
- 2.9 The assessment of the DPD Policies and the DPD as a whole were presented as a narrative to allow the SA to focus on the aspects of the DPD that are likely to have significant effects, thus providing further detail whilst minimising the number of detailed technical matrices. It allows for the consideration of mitigation measures that may be provided through policies in the adopted Local Plan and embedded within the DPD. This is appropriate and proportional for the level of plan-making and assessment. The SA objectives were grouped into sustainability topics, as follows:

²³ <https://www.gov.uk/government/consultations/the-future-buildings-standard>

- Economy: SA No 1 Economy
- Housing, Communities, Health & Wellbeing: SA No 12 Housing; SA No 13 Access to Services/Facilities; SA No 15 Reduce Poverty; SA No 16 Reduce Crime
- Transport: SA No 2 sustainable Transport; SA No 3 Reduce Need to Travel
- Air Quality & Climate Change: SA No 9 Good Quality Air; SA No 10 Minimise Causes of Climate Change
- Land/Soil Resources: SA No 4 Reduce Waste; SA No 5 Land/Soil & Sustainable Construction; SA No 9 Good Quality Soils
- Natural Environment: SA No 6 Biodiversity; SA No 6 Landscape; SA No 7 High Quality Design
- Historic Environment: SA No 8 Historic Environment
- Water: SA No 11 Adapt to Impacts of climate change – flooding; SA No 9 Good Quality Water

2.10 The assessment included consideration of the likely effects on sustainable development, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects in accordance with Schedule 2 12(3) of the SEA Regulations. Any possibilities for mitigating any potential significant negative effects, or enhancing potential positive effects, were suggested to the plan-makers, as relevant.

Consultation

- 2.11 The SA/SEA and HRA scoping/screening report (May 2021) was sent to the three statutory environmental bodies in England for 5 weeks consultation in May-June 2021. No comments were received from the Environment Agency at this stage. Historic England advised (letter 28 May 2021) that they consider the SA/SEA screening/scoping opinion findings for the NZC DPD acceptable. Historic England (HE) welcomed that the same SA Objective No 8 Historic Environment is to be used as was previously used for the SA of the adopted Local Plan.
- 2.12 Natural England (NE) advised (email 10 June 2021) that they agree with the described approach, SA Framework questions, significance key, and SA report contents. NE provided advice regarding risks to functionally linked watercourses and migratory fish in respect of the Severn Estuary Special Area of Conservation/Ramsar, and to risks in respect of functionally linked land and wild birds of the Severn Estuary Special Protection Area. Studies are ongoing and will be taken into account in the next draft of the NZC DPD and its accompanying SA/HRA Report.

3.0 SUSTAINABILITY CONTEXT & BASELINE CHARACTERISATION

Other Plans and Projects

3.1 The SA/SEA and Habitats Regulations include a requirement to consider the implications of other relevant plans and projects. This was undertaken during the SA of the Warwick District Local Plan. The key plans and projects relevant to the Net Zero Carbon DPD are as follows:

- UK Committee on Climate Change Reducing UK emissions – 2019 Progress Report²⁴ with 4 key recommendations for net-zero emissions by 2050
- The Future Homes Standard: changes to Part L and Part F of the Building Regulations for new dwellings²⁵
- Environment Bill (2019)²⁶ provides for a cleaner, greener and more resilient country for the next generation
- Stratford-on-Avon District Local Plan
- Solihull District Local Plan
- Coventry District Local Plan
- Rugby Borough Local Plan
- Warwick District Neighbourhood Plans²⁷
- Warwick District Green Infrastructure Study (2012)
- Warwickshire, Coventry & Solihull Green Infrastructure Strategy (2014)²⁸
- Severn River Basin Management Plan (2016)²⁹
- Severn Trent Water Resource Management Plan (2019)³⁰
- Warwickshire Energy Plan (2019)³¹
- High Speed 2 HS2³²
- Warwick District Council with Coventry City Council, Coventry & Warwickshire Public Health, Nuneaton and Bedworth Borough Council, Rugby Borough Council, Stratford District Council and Warwick District Council – Air Quality SPD (2019)³³
- Decarbonisation & Economic Strategy Bill (2019-2021)³⁴

²⁴ <https://www.theccc.org.uk/publication/reducing-uk-emissions-2019-progress-report-to-parliament/>

²⁵ <https://www.gov.uk/government/consultations/the-future-buildings-standard>

²⁶ <https://www.gov.uk/government/publications/environment-bill-2019>

²⁷ https://www.warwickdc.gov.uk/info/20444/neighbourhood_plans

²⁸ <https://www.warwickshire.gov.uk/greeninfrastructure>

²⁹ <https://www.gov.uk/government/publications/severn-river-basin-district-river-basin-management-plan>

³⁰ <https://www.severntrent.com/about-us/future-plans/water-resource-management/water-resource-managment-plan/>

³¹ <https://www.warwickshire.gov.uk/energyplan>

³² <https://www.hs2.org.uk/where/>

³³ https://www.warwickdc.gov.uk/downloads/file/5043/air_quality_spd

³⁴ <https://bills.parliament.uk/bills/2758>

Baseline Conditions

- 3.2 The baseline characterisation of the Warwick District area was undertaken as part of the SA scoping stage in 2014 and updated as the SA progressed in line with the development of the Local Plan through to adoption in 2017. The key relevant information has been updated further here and the characterisation of the District area relevant to net zero carbon and planning policies may be summarised as follows:
- 3.3 **Biodiversity & the Natural Environment:** There are no internationally designated sites³⁵ (SACs, SPAs or Ramsar) within a 15 km radius of the Warwick District area; one SAC (Ensor's Pool, Nuneaton) is within a 20 km radius. Areas of environmental national importance in the District as a whole include 7 Sites of Special Scientific Interest (SSSIs) and 15 Sites of Importance for Nature Conservation (SINCs). There is no nationally designated landscape (AONB) but the landscapes in the District are valued for their scenic qualities, rich wildlife and cultural associations, and are fundamental to the intrinsic character and local distinctiveness of the area. Much of the rural areas is designated as Green Belt and their openness is protected.
- 3.4 There are 10 Local Nature Reserves (LNRs)³⁶ in the Warwick district area and the Council manage these LNRs in partnership with the Warwickshire Wildlife Trust. The reserves have a wide range of habitats from woodland heathland and meadows to marsh. There are also Local Wildlife Sites (LWSs)³⁷ and rich networks of green infrastructure throughout the District and including the water and canal networks.
- 3.5 **The Historic Environment:** The District has a rich historic and cultural heritage and includes 2,145 Listed Buildings; 30 Conservation Areas; and 11 Registered Parks and Gardens; and Scheduled Monuments.
- 3.6 **Air Quality & Transport:** There are good road and rail links with surrounding major urban areas with two railway stations at Warwick, Leamington Spa, Kenilworth, Hatton and Lapworth. However, air quality and traffic congestion, particularly in the main towns, are key issues. Warwick District Council has designated five air quality management areas (AQMAs)³⁸ due to elevated annual average concentrations of nitrogen dioxide (NO₂). The AQMAs include Warwick Town Centre, Coventry Road (Warwick), Leamington Spa and two AQMAs in Kenilworth. The Council's recent Air Quality SPD (January 2019) guides new development with regard to transport, air quality, energy and green infrastructure.
- 3.7 **Water Quality, Levels & Resources:** There is a network of rivers and watercourses running through the District, including the canals (The Stratford upon Avon and Birmingham & Fazeley, as well as The Grand Union) and the Warwickshire River Avon. The river runs north to south through the district and then feeds into the Severn Estuary towards the south-west. The networks of

³⁵ <https://magic.defra.gov.uk/MagicMap.aspx>

³⁶ https://www.warwickdc.gov.uk/info/20331/countryside/508/nature_reserves

³⁷ <https://data.gov.uk/dataset/669d39c1-df92-4974-aa39-fa815acaba44/warwickshire-local-wildlife-sites-lws>

³⁸ https://www.warwickdc.gov.uk/downloads/file/5043/air_quality_spd

watercourses and water bodies are interconnected. Water is abstracted from the canal system for both agriculture and commercial uses. The water levels need to be maintained for navigation and to support the multifunctionality of the water including biodiversity/green infrastructure, recreation/leisure & wellbeing, together with its contribution to climate change resilience and role in sustainable water management.

- 3.8 The local water quality of the canals and River Avon is not precisely known but nationally (Environment Agency, 2018), nitrates are a major issue³⁹ – mostly water run-off from agricultural land or deposited on land and water from traffic emissions. About 20% of abstractions were considered to be unsustainable in 2017, reducing water levels and damaging wildlife. High winter river flows have increased over the past 30 years, with a subsequent increase in the frequency and magnitude of flooding. There is no clear trend in droughts, but summer river flows and groundwater levels may decrease in the future.
- 3.9 Water is supplied to the Warwick district by Severn Trent Water Ltd within the Strategic Grid Water Resource Zone (WRZ) that extends from the Peak District to Gloucester and covers most of Worcestershire⁴⁰. The Strategic Grid is made up of 14 major water treatment works (WTWs), five reservoir complexes, three major grid booster pumping stations and a number of strategic pipeline network connections and aqueducts – representing a complex interaction of abstraction, treatment and transfer, and particularly focused on the River Trent catchment system. The WRMP includes the ongoing commitment to restore sustainable abstraction.
- 3.10 There appear to be no significant major water proposals that would affect the water systems in the Warwick District area. Severn Trent Water also plans and manages the wastewater treatment and sewerage systems in the Warwick district area. However, the adopted Local Plan (2011-2029) contains Policy FW3 Water Efficiency relating to the conservation of water and the standard imposed is 110 litres/person/day. This recognises that the district is an area of water stress and therefore this more stringent standard was imposed to reflect that situation.
- 3.11 **Soils/Land Use:** The rural parts of the district comprise mostly agricultural land quality Grades 3a & 3b but there are significant areas of the best and most versatile agricultural land at Grade 2 adjacent to the south-west of Whitnash and north of Leamington Spa⁴¹.
- 3.12 **Communities, Housing & Employment:** Approximately 90% of the District's population live in the four main urban areas (Royal Leamington Spa, Warwick, Kenilworth and Whitnash) with the remaining 10% living in a number of relatively small villages. These main centres contain a wide range of different types of housing but there are some affordability issues. The population has grown from 124,000 in 2000 to around 142,000 in 2018⁴². Compared to other

³⁹ <https://www.gov.uk/government/publications/state-of-the-environment>

⁴⁰ <https://www.severntrent.com/about-us/future-plans/water-resource-management/wrmp-19-documents/>

⁴¹ <https://magic.defra.gov.uk/MagicMap.aspx>

⁴² www.ons.gov/

parts of Warwickshire, a higher proportion of the District's population is of working age. The highest rate of projected population growth in the future is expected to be amongst those aged 65 and over – in line with the rest of the UK.

- 3.13 Neighbourhood Plans (NPs) are the local level of plans that sit within the Local Plan and the DPDs; they reflect local community interests. A number of NPs are adopted and other NPs are in preparation, including at Burton Green and Bishops Tachbrook.
- 3.14 The District has a strong local economy, with a skilled population and higher than average levels of productivity and earnings compared with regional and national averages. However, the changing needs of business means that some of the District's traditional industrial areas require regeneration, with many of these areas located alongside the Grand Union Canal in Warwick and Royal Leamington Spa.
- 3.15 **Climate Change & Energy:** The preparation of Local Plan was informed by various studies on climate change, low carbon and renewable energy⁴³. Early work established that energy consumption is dominated by heat whereas CO2 emissions are more balanced between heat and electricity. Solihull is the highest consuming authority in the study area, reflecting the high density of commercial and industrial activities as well as the large number of existing dwellings. The study assessed the potential for local renewable energy up to 2026 has been undertaken, looking at decentralised generation together with opportunities in future new development and retrofit within existing buildings. Particular attention was given to Rugby and Stratford-on-Avon, since the limited existence of absolute constraints suggest large swathes of each being technically suitable for development. Advice was given regarding new build and existing buildings; wind energy and biomass; and support for carbon targets.
- 3.16 Guidance on adaptation to climate change was provided by a study in 2012 including issues for flood protection and dealing with summer heatwaves, high wind/storms, and winter snow/ice.
- 3.17 The Warwick Low Carbon Action Plan (2012) identified that from analysis of current and projected energy use in the District shows that by far the biggest opportunity and need is to address energy use in existing buildings and infrastructure. Opportunities to incorporate financially advantageous local energy schemes such as district heating and CHP, as well as sustainable urban design to minimise transport emissions, should not be missed when appropriate.
- 3.18 As part of the Air Quality Action Plan (2014) low emission guidance is provided for developers. Guidance for developers is provided by the Air Quality SPD (2019)⁴⁴ and this aims to simplify the consideration of air quality impacts associated with development schemes and focus on incorporation of

⁴³ https://www.warwickdc.gov.uk/downloads/download/669/climate_change_low_carbon_and_renewable_energy

⁴⁴ https://www.warwickdc.gov.uk/downloads/file/5043/air_quality_spd

mitigation at design stage, thus countering the cumulative impacts of aggregated developments.

- 3.19 Government data for 2018⁴⁵ indicates that primary energy production rose in 2018, up 2.9 per cent on a year earlier. The rise was driven by growth in output from primary oil, wind, solar and biomass. Overall fossil fuel growth increased, but with coal output falling to a record low level. Total renewables, as measured by the 2009 EU Renewables Directive, accounted for 11.0 per cent of total energy consumption in 2018, up from 9.9 per cent in 2017. Low carbon electricity's share of generation increased from 50.0 per cent to a record 52.6 per cent, driven by the increase in renewables generation.

Key Sustainability Issues & Opportunities

- 3.20 The key issues and opportunities for sustainable development and the Net Zero Carbon DPD may be summarised as follows:
- The Council is committed to become a net-zero carbon organisation by 2025
 - Facilitating decarbonisation by local businesses, other organisations and residents so that total carbon emissions within Warwick District are as close to zero as possible by 2030
 - Limiting global warming to 1.5°C compared to the predicted 2.0° C would ensure a slower rate of sea level rise, reduced risks to marine life and fisheries and fewer losses of species by reducing impacts on biodiversity and ecosystems
 - Need to consider long-term effects
 - Setting standards & targets that will contribute positively to the new targets set by Government since the Local Plan was adopted
 - Encourage households to reduce their emissions
 - Promote and support more sustainable transport
 - No viable locations for commercial-scale onshore windfarms or fast running watercourses for hydroelectric power
 - Risks to human health & wellbeing from higher temperatures and more extreme weather
 - Flooding and water resources – their wider role in sustainable water management and climate change resilience
 - Green infrastructure – making linkages to networks and improvements with biodiversity gains for wildlife and people to protect ecosystems and their multifunctionality
 - Risks to historic assets and their settings
 - High Speed 2⁴⁶

⁴⁵ <https://www.gov.uk/government/news/statistical-press-release-digest-of-uk-energy-statistics-2019>

⁴⁶ <https://www.hs2.org.uk/> (now delayed for 5 years)

4.0 SUSTAINABILITY APPRAISAL OF THE WARWICK NET ZERO CARBON DPD

Assessment of Alternatives in SA/SEA

- 4.1 The EU SEA Directive requires assessment of the likely significant effects of implementing the plan and “reasonable alternatives” taking into account “the objectives and geographical scope” of the plan and the reasons for selecting alternatives should be outlined in the report. The Directive does not specifically define the term “reasonable alternative”; however, UK SA/SEA guidance advises that it is taken to mean “realistic and relevant” i.e. deliverable and within the timescale of the plan.
- 4.2 National planning guidance⁴⁷ advises that “Reasonable alternatives are the different realistic options considered by the plan-maker in developing the policies in the plan. They need to be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made”. It is considered that there are no meaningful other options for this specific topic DPD that would need to be tested through SA.
- 4.3 Doing nothing is not a reasonable alternative for the Council as the local planning authority is required to provide sufficient development land to meet the needs of the local communities for housing and employment. This specific DPD supports and updates the Warwick Local Plan (adopted 2017) with regard to net zero carbon, taking into account the revised NPPF (2021)⁴⁸ and other emerging requirements related to climate change and net zero carbon, thus providing further information and guidance for planning applications to help ensure that the objectives of the Local Plan may be met.

Compatibility of Objectives

- 4.4 The overall aim of the DPD aims to focus on minimising carbon emissions from new buildings within the District to support the achievement of national and local carbon reduction targets; it will aim to ensure all new developments should be net zero carbon in operation. In achieving this aim, the DPD will ensure that new development does not add to the District’s carbon deficit and will therefore ensure that the significant cost of retrofitting buildings to achieve net zero carbon does not increase.
- 4.5 There are four Objectives for the DPD, as follows:
- To provide a clear policy framework to enable developers to understand the requirements for planning proposals to ensure new

⁴⁷ <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal>

⁴⁸ <https://www.gov.uk/government/collections/revised-national-planning-policy-framework>

buildings are planned and constructed to be net zero carbon in operation

- To ensure practical and viable low carbon building standards that can be applied to new buildings
- To support the consideration of low carbon energy sources as part of large scale development proposals
- To provide the policy framework for addressing residual carbon from new buildings through a robust carbon offsetting policy

4.6 The sustainability themes with grouped SA Objectives were tested for compatibility with these specific DPD Objectives, using professional judgment and using an approach - + compatible; - not-compatible; 0 not relevant/not applicable. The SA findings are summarised as follows:

Table 4.1: Compatibility of SA & DPD Objectives

DPD Objective /SA Theme	Policy Framework	Building Standards	Low C Sources	Carbon Offsetting
Economy	+	+	+	+
Housing, Communities, Health & Wellbeing	+	+	+	+
Access to Services/Facilities	+	+	+	+
Transport	+	+	+	+
Air Quality & Climate Change	+	+	+	+
Land/Soil Resources	+	+	+	+
Natural Environment	+	+	+	+
Historic Environment	+	+	+	+
Water	+	+	+	+

4.7 The SA found that both DPD Objectives were compatible with all the sustainability themes; there were no incompatibilities identified. Potential incompatibility with SA objectives for the economy are mitigated through the inclusion of “practical and viable” in the DPD objective for building standards. Confirmation of commitment and implementation is demonstrated through the inclusion of “robust” offsetting policy to address residual carbon from new buildings. Particularly strong compatibilities were found for SA Objective SA No 4 Reduce Waste; No 5 Land/Soil & Sustainable Construction; SA No 7 High Quality Design; No 9 Good Quality Air; SA No 10 Minimise Causes of Climate Change; SA No 11 Adapt to Impacts of Climate Change – flooding; No 12 Housing; and No 14 Improve Health & Well-being.

SA of DPD Policies NZC1, NZC(A-E)

Economy:

SA Objective No 1: Economy

SEA Directive Topics: Population; Health

- 4.8 Not addressing climate change could have adverse implications for the economy (and wider issues) of the District area and overall, for the UK. Nonetheless, the DPD has understood the concerns about costs of addressing climate change and one of the objectives for the DPD is to ensure “practical and viable low carbon building standards” – thus providing mitigation measures that will help resolve any concerns about potential negative effects/costs of progressing the zero-carbon economy.
- 4.10 DPD Policy NZC2(A) Making Buildings Energy Efficient recognises that, in addition to reducing CO₂ emissions, energy efficient homes minimise energy bills and provide healthier environments to live in. This will have positive effects for SA Objective No 1 Economy, as well as No 14 Health and No 15 Reduce Poverty (through reducing fuel poverty). Policy NZC2(A) is not prescriptive about which standard is used as long as the certification is widely recognised and demonstrates that energy efficiencies have been incorporated into the design to deliver carbon reduction of at least 75% over and above 2013 building regulation standards. The appropriate standard may be used that is applicable/relevant to the particular characteristics of the development – thus providing mitigation measures to enable optimisation of costs. The supporting text requires that the best use should be made of site orientation, building form, layout, landscaping, and materials to maximise natural light and heat, whilst avoiding internal overheating. This will further support positive effects for economy and health.
- 4.11 DPD Policy NZC2(B) Zero or Low Carbon Energy Sources will only allow the use of fossil fuels if it is clearly demonstrated that the costs of installation are unviable or running costs could result in fuel poverty. Thus, the potential for negative effects on objectives for the economy are mitigated resulting in neutral effects for SA No 1 Economy and No 15 Reduce Poverty.
- 4.12 DPD Policy NZ2(C) Zero-Carbon-Ready Technology acknowledges that renewable or low carbon options may be unable to meet energy demands or be unviable but requires that such developments must incorporate zero-carbon-ready technology that will allow future decarbonisation. Thus, adverse effects on the economy through viability issues are further recognised and mitigated whilst safeguarding the longer-term positive effects on other SA Objectives.
- 4.13 DPD Policy NZC2(D) Carbon Offsetting requires that where a development proposal cannot demonstrate that it is net zero carbon at the point of determination of planning permission, it will be required to address any residual carbon emissions – through a cash in lieu contribution or a verified

local offsetting scheme. Offsetting should only be used where carbon reductions have been maximised through Policies NZC2(A) & NZC2(B) – it is considered that offsetting is an option of final resort. Policy NZC(E) Viability allows for unusual circumstances where the nature or location of the site may affect viability – thus providing mitigation measures to ensure that there are no significant negative effects on SA Objective No 1.

- 4.14 Thus, the DPD seeks to support new development by providing updated guidance and clear requirements. Importantly, Policy NZC1 requires that new development “should achieve net carbon emissions” such that delivery will be implemented, and Policy NZC2(C) ensures that longer-term positive effects will occur where there is any proven unviability. Therefore, overall, the DPD provides additional updated guidance with at least neutral effects in the shorter term and likely positive effects for the economy in the longer term.

Housing, Communities, Health & Wellbeing:

SA Objective No 12 Housing; SA No 13 Access to Services/Facilities; SA 14 Improve Health & Well-being; SA No 15 Reduce Poverty; SA No 16 Reduce Crime

SEA Directive Topics: Population; Health

- 4.15 Provision of high-quality housing and buildings will contribute to health and well-being with positive effects. High standards are required through Policy NZC1 as all new development should achieve net zero carbon emissions - with major positive effects in the longer term that will be cumulative. Policy NZC2(A) Energy Efficiency seeks to maximise natural light and heat, whilst avoiding internal overheating and reducing the reliance on air conditioning – with positive effects for health and well-being. Policy NZC2(B) requires all new developments to consider low or zero carbon sources of energy – with positive effects that could be synergistic depending upon location and will be cumulative in the longer term.
- 4.16 SA Objective Nos 13 & 16 are not directly relevant to the DPD and therefore with neutral effects indicated. The potential negative effects associated with fuel poverty are recognised by the DPD and Policy NZC2(B) allows for the possibility of renewable or low carbon energy sources to be unviable – in terms of cost of installation or resulting in running costs that could result in fuel poverty. Thus, potential negative effects for SA No 15 are mitigated. Overall, the provision of mitigation measures for climate change predicted effects through the updated guidance in the DPD will confirm positive effects for housing, communities and health and wellbeing, particularly in the longer term.

Transport:

SA Objective SA No 2 Sustainable Transport; SA No 3 Reduce Need to Travel

SEA Directive Topics: Material assets; Population

- 4.17 Transport is the largest single contributor to carbon emissions in the Warwick district area (39%). With government targets for zero carbon emissions, the introduction of electric vehicles at a much higher proportion is a necessary part in meeting those targets. The Council has already adopted standards within the Parking Standards and Air Quality SPDs⁴⁹. The updating of policies in the DPD has focused on delivering zero carbon emissions from new development and, as such, the effects on transport objectives are not applicable – overall, neutral effects.

Air Quality & Climate Change:

SA Objective No 9 Good Quality Air; SA No 10 Minimise Causes of Climate Change

SEA Directive Topics: Air, Climate Change

- 4.18 The major threat to air pollution is from traffic emissions⁵⁰. Warwick District Council has designated five air quality management areas (AQMA) due to elevated annual average concentrations of nitrogen dioxide (NO₂). The AQMAs include Warwick Town Centre, Coventry Road (Warwick), Leamington Spa and two AQMAs in Kenilworth. Guidance on air quality, transport-related emissions and planning is provided through the Air Quality SPD (January 2019)⁵¹ that includes information and suggests mitigation measures. This Net Zero Carbon DPD does not in itself address transport-related carbon emissions and therefore, effects are neutral/not applicable with regard to SA Objective No 9.
- 4.19 Overall, the DPD Policies NZC1-NZC(A-E) with their focus on achieving the Council's targets for decarbonisation will have major positive effects on SA Objective No 10. The overarching strategy set by Policy NZC1 requires that new development should achieve net zero carbon emissions.
- 4.20 Policy NZC2(A) aims to reduce energy demands by making buildings more energy efficient, and thus reducing carbon emissions. The policy requires that new development must, as a minimum, achieve carbon reductions in design and operation of 75% over and above 2013 building regulations standards. The requirements for both design and operation indicate that carbon reductions will continue through the life of the building and thus the longer-term as well as the shorter-term construction phase – confirming positive effects for SA Objective No 10. Supporting text explains the need to make best use of site orientation, building form, layout, landscaping, and materials to maximise natural light and heat whilst avoiding internal overheating. This provides clear mitigation measures for the predicted changes in temperature and more extreme weather, further supporting positive effects.

⁴⁹ https://www.warwickdc.gov.uk/info/20794/supplementary_planning_documents_and_other_guidance

⁵⁰ <https://uk-air.defra.gov.uk/air-pollution/causes>

⁵¹ https://www.warwickdc.gov.uk/downloads/file/5043/air_quality_spd

- 4.21 Implementation is ensured through measurement of energy performance and emissions, in accordance with the metrics set out in the Government's response to the Future Homes Standard (January 2021). This is further ensured through the policy requirement for testing with the most up-to-date Standard Assessment Procedure (SAP) to minimise any performance gap between design and construction. Implementation is also confirmed as policy requires certification to a recognised standard to demonstrate energy performance across the entire development. The policy is not prescriptive about which standard is used as long as certification clearly demonstrates that energy standards have been incorporated to deliver the requirements. This enables the appropriate standard to be applied relevant to the characteristics of the development.
- 4.22 Policy NZC2(B) requires all new development proposals to include an energy statement which demonstrates that zero and low carbon sources of energy have been considered – onsite, offsite, heat networks, and other low carbon sources. The requirement to consider the specific local context of each development should enable appropriate energy sources to be identified and thus confirm positive effects. Developers are expected to incorporate local renewable energy generation within schemes as a way of reducing the offsetting requirements. Offsetting is lower in the mitigation hierarchy than the preferred approach of avoidance at the top of the hierarchy – and therefore, this requirement explained in the supporting policy text reflects further support for positive effects.
- 4.23 The supporting text explains that where a development falls short of carbon neutral on occupation, it will require retrofitting or need to incorporate “zero carbon ready” technology. This further confirms that requirements will be implemented with positive effects. The Council expects that energy sources avoid fossil fuels except in very specific circumstances (see NZTC clauses a & b) and further details are provided through Policies NZC2(C) and NZC2(D).
- 4.24 Policy NZC2(C) sets out requirements for zero carbon ready technology and it is made clear that this is only applicable in exceptional circumstances. Carbon offsetting is set out in Policy NZC2(D) and should only be used where carbon reductions have been maximised through Policies NZC2(A) & NZC2(B) – it is considered that offsetting is an option of final resort. Annual operational carbon emissions need to be calculated for each of the 30 years after completion of development. Thus, Policies NZC2(C) and NZC2(D)4&5 enable development to progress in exceptional circumstances but ensure that net zero carbon targets/standards will be progressed. Therefore, overall likely major positive effects for SA No 10 that will be cumulative in the longer-term.

Waste, Land & Soil Resources:

SA Objective No 4 Reduce Waste; SA No 5 Land/Soil & Sustainable Construction;
SA No 9 Good Quality Soils

SEA Directive Topics: soil

- 4.25 SA Objective Nos 4, 5 and 9 are not directly relevant to this DPD so neutral effects.

Natural Environment:

SA Objective SA No 6(a) Biodiversity; SA No 6(b) Landscape; SA No 7 High Quality Design

SEA Directive Topics: Biodiversity, flora, fauna; landscape

- 4.26 The importance of addressing climate change to reduce the predicted adverse effects on ecosystems and biodiversity is well documented. Biodiversity is affected by climate change, with negative consequences for human well-being, but biodiversity, through the ecosystem services it supports, also makes an important contribution to both climate change mitigation and adaptation⁵². Other policies in the Warwick Local Plan protect and seek to enhance biodiversity and landscape – NE1, NE2, NE3 and NE4. Overall, the DPD policies will contribute to the reduction of negative effects by progressing towards net zero carbon development and this will be cumulative and synergistic in the longer term for biodiversity and ecosystems. The specific requirements for passive and low energy design and technology as explained in the text supporting Policy NZC2(A) will contribute towards positive effects for SA No 7. The requirement in Policy NZC2(B) to consider low carbon/renewable energy sources within the specific local context of each development will further support Local Plan policies for biodiversity and green infrastructure.

Historic Environment:

SA Objective No 8: Historic Environment

SEA Directive Topics: Historic environment

- 4.27 The pressures for new development and the issues associated with climate change effects that may threaten the high-quality built environment in the district, especially in the historic areas. Other policies in the Warwick Local Plan protect the historic environment and its settings – HE1-HE4. Overall, there will be no significant negative effects for SA No 8.

⁵² Convention on Biological Diversity <https://www.cbd.int/climate> also, for example, <https://naturallengland.blog.gov.uk/2020/06/22/climate-change-biodiversity-and-nature-based-solutions/>

Water:

SA Objective SA No 11 Adapt to Impacts of climate change – flooding; SA No 9 Good Quality Water

SEA Directive Topics: Water; Climate Change

- 4.28 The concern that flooding events will increase because of climate change is well documented⁵³. Local Plan Policies FW1 Reducing Flood Risk and FW2 Sustainable Drainage provide strong clear guidance to ensure that there will be no increase in flood risk and that sustainable water management will be encouraged with requirements for incorporation of sustainable drainage systems (SuDS) that provide biodiversity, water quality and amenity benefits. Overall, there is strong mitigation provided through Local Plan policy to ensure no negative effects on the water environment from new development. Policies NZC1-NZC2(D) in the DPD will contribute to reducing the negative effects from flood risk through seeking to progress net zero carbon development with overall positive effects for the water environment, particularly in the longer-term.

Inter-Relationships & Cumulative Effects

- 4.29 As this is a topic specific DPD, focused on seeking to progress net zero carbon in new development, most of the effects are inter-related. As the policies are implemented, over the longer term, the positive effects identified will be cumulative. There were no significant negative effects found.

SA Findings Summary

- 4.30 The summary findings of the SA are shown by symbol in the table 4.2, as follows:

⁵³ For example, <https://deframedia.blog.gov.uk/2019/08/29/climate-change-linked-to-increased-risk-of-flooding-in-uk/>

Table 4.2: SA of DPD Policies

SA Theme	Economy	Housing & Health	Access	Transport	AQ & C Change	Waste Land & Soils	Natural Env	Historic Env	Water
DPD Policies									
NZC1 Achieving Net Zero Carbon Development	+	++	0	0	++	0	+	0	+
NZC2 (A) Making Buildings Energy Efficient	++	++	0	0	++	0	+	0	+
NZC2(B) Zero or Low Carbon Energy Sources	0	++	0	0	++	0	+	0	+
NZC2(C) Zero-Carbon-Ready Technology	0	+	0	0	+	0	0	0	0
NZC2(D) Carbon Offsetting	+	+	0	0	+	0	0	0	0
NZC2 (E) Viability	+	+	0	0	+	0	0	0	0
Overall:	+	++	0	0	++	0	+	0	+

Habitats Regulations Assessment (HRA)

- 4.31 The HRA screening (2014)⁵⁴ undertaken of the developing Local Plan concluded that there would be no likely significant effects (LSEs) associated with changes in air quality, water quality and levels, recreational disturbance or habitat loss/fragmentation on Ensor's Pool SAC. The SAC is somewhat isolated as an abandoned claypit and designated for the presence of the white-clawed crayfish such that it was unlikely that the new development proposed in the Local Plan would have any impacts. The pool is clay-lined and not connected to other waterbodies/watercourses; it is replenished through rainfall.
- 4.32 The HRA screening at that time also noted that the need for supplying water from Wales to growing Midland conurbations could have a potential impact on hydrologically dependant Welsh SACs. At that time, Severn Trent Water advised that water resources in the Warwick District area would continue to be sourced locally and therefore, the HRA screening concluded that this would not be a potential issue for the Warwick Local Plan.
- 4.33 The Warwickshire River Avon drains into the Severn Estuary to the south-east and this is designated as a SPA, SAC & Ramsar. The canals are supplied through surfacewater and groundwater sources and therefore, there is the

⁵⁴ https://www.warwickdc.gov.uk/downloads/file/2425/b02 - habitat_regulations_assessment - screening_report - march_2014

potential for environmental pathways through the water networks. It is considered very unlikely that any development activities arising from the Net Zero Carbon DPD would have significant effects on designated sites.

- 4.34 The Warwick District area is some 75 km distance⁵⁵ from the Severn Estuary such that it is considered very unlikely that there is any relevant functionally linked land. It is understood that there is some concern about increased recreational use arising from new development in Gloucestershire and potential impacts on functionally linked habitats used by certain bird species associated with the Severn Estuary SPA/SAC/Ramsar. However, it is considered that the Warwick area is too distant, and the Net Zero Carbon DPD does not propose any additional new development such that there would be no LSEs in this respect.
- 4.35 However, it is appreciated that the HRA screening for the Warwick Local Plan was prepared before certain recent CJEU's (2017-2018)⁵⁶ were issued with significant implications for the HRA methods used in the UK. Competent authorities cannot take account of any integrated or additional avoidance or reduction measures when considering at the HRA screening stage whether a plan is likely to have an adverse effect on a European Site. The HRA screening (2014) for the Local Plan reached its conclusions taking into account embedded policy mitigation such as environmental criteria in policies that have to be met.
- 4.36 Therefore, in consideration of the increased awareness and requirements for sustainable water management and building resilience to climate change; the fundamental change to the UK method of undertaking HRA screening/ appropriate assessment with recent updated Government guidance (July 2019)⁵⁷ that takes into account the implications of the CJEU's; increased understanding of potential disturbance on SPA/SAC/Ramsar sites, particularly the Severn Estuary; and since the Net Zero Carbon DPD is focused on the air and water environments – the HRA screening with regard to air quality and water levels was updated.
- 4.37 A pragmatic and proportional approach was taken and to clearly demonstrate due process in line with the updated guidance. Since the DPD is focused on air and water systems, there could be the potential for environmental pathways. The Warwick Local Plan does include relevant policy mitigation and this HRA essentially clarifies this through the updated methodology - thus making the process and conclusions explicit with regard to the updated requirements. This precautionary approach is being taken in particular consideration of the significant changes to the HRA process in the UK since the screening undertaken for the Local Plan.

⁵⁵ Measured directly from the centre of the area to the nearest designated point of the Severn Estuary using Defra Magic Mapping <https://magic.defra.gov.uk/MagicMap.aspx>

⁵⁶ For example, please see *People over Wind & Sweetman v Coillte Teoranta* Case C-323/17

⁵⁷ <https://www.gov.uk/guidance/appropriate-assessment>

- 4.38 As a result of a High Court Judgment in 2017, Natural England developed internal guidance⁵⁸ and advises that usually only those European sites present within 200m of the edge of a road on which a plan or project will generate traffic will need to be considered when checking for LSEs from road traffic emissions with regard to HRAs. The Net Zero Carbon DPD does not propose any new development that is not already accounted for within the adopted Local Plan, and therefore, there are no LSEs associated with air quality and road traffic emissions.
- 4.39 The primary reason for designation of habitats in the Severn Estuary SAC⁵⁹ is for its estuaries, mudflats, sandflats and Atlantic salt meadows; also, for species of lamprey and the Twaite shad. The Severn Estuary SPA⁶⁰ supports internationally important assemblages of overwintering birds with conservation objectives for Bewick's Swan, Gadwall, White-fronted Goose Dunlin, Shelduck and Redshank. The Ramsar⁶¹ designation relates to the importance of the estuary and river for migratory fish (salmon, trout, lamprey, shad and especially eel) and the particular importance for birds during spring and autumn.
- 4.40 HRA screening indicates that there is the potential for an environmental pathway through the linkages between the water networks of river, canal and groundwater with the River Severn catchment area⁶² covering the Warwick District area. Whilst the Net Zero Carbon DPD does not propose new development, it would support renewable energy generation such as small-scale hydroelectric power schemes. Thus, there could be the potential for likely significant effects on the designated site – its functionally linked water and/or land since migratory birds may extend some distance upstream on the River Severn.
- 4.41 Therefore, if this aspect is taken to the second stage of the HRA process – appropriate assessment – the embedded policy mitigation measures may be taken into consideration. Local Plan Policy FW4 Water Supply requires developers to ensure that there is an adequate water supply having regard to the Severn Trent Water's WRMP; it also recognises the ecological status of water and requires that development must not affect objectives as set out in the River Severn RBMP. LP Policy NE5 Protection of Natural Resources requires that new development should not give rise to water pollution where the level of discharge, emissions or contamination could cause harm to sensitive receptors; does not result in a reduction in the quality or quantity of groundwater resources. LP Policy NE1 Green Infrastructure and NE2 Protecting Designated Biodiversity provide further embedded mitigation measures through policy requirements.
- 4.42 Therefore, it was concluded that the Warwick Net Zero Carbon DPD will not have adverse effects, alone or in combination with other plans and projects,

⁵⁸ NE Internal Guidance – Approach to advising competent authorities on Road Traffic Emissions and HRAs (June 2018) <http://publications.naturalengland.org.uk/publication/4720542048845824>

⁵⁹ <https://sac.jncc.gov.uk/site/UK0013030>

⁶⁰ <http://archive.jncc.gov.uk/pdf/SPA/UK9015022.pdf>

⁶¹ <http://archive.jncc.gov.uk/pdf/RIS/UK11081.pdf>

⁶² <https://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/9>

on the integrity of the internationally designated site Severn Estuary SPA/SAC/Ramsar. Natural England has advised of studies relating to functionally linked watercourses and migratory fish in respect of the Severn Estuary SAC/Ramsar, and to risks in respect of functionally linked land and wild birds of the Severn Estuary SPA. These studies and any other emerging evidence will be taken into account in developing the next draft of the NZC DPD and its accompanying SA/SEA/HRA Report.

SA of Implementing the Warwick Net Zero Carbon DPD

- 4.43 Overall, the Net Zero Carbon DPD is likely to have major positive effects for air quality and climate change. Minor positive effects were indicated for the economy, housing, health, the natural environment, and the water environment. These positive effects are inter-related and likely to be cumulative, particularly in the longer term. There were no significant negative effects identified. The DPD clearly helps to resolve an existing key sustainability problem for addressing climate change.
- 4.44 The DPD has recognised where there could be certain negative effects arising from requirements to achieve zero carbon and ensured that there are adequate mitigation measures to support and/or strengthen the policies. For example, Policy NZC2(B) recognises that renewable or low carbon options could be unviable due to running costs that could result in fuel poverty and makes provision for such a situation – but only in exceptional circumstances. The requirement for energy statements and assuring performance in Policy NZC2(B) illustrates a clear commitment to implementation and thus ensuring more certainty of the predicted positive effects.

5.0 MONITORING

- 5.1 The SEA Directive and Regulations require that the significant effects (positive and negative) of implementing the plan should be monitored in order to identify at an early stage any unforeseen effects and to be able to take appropriate remedial action. Government guidance⁶³ on SA/SEA advises that existing monitoring arrangements should be used where possible in order to avoid duplication. Government requires local planning authorities to produce Monitoring Reports (MRs), and the Warwick District Council Monitoring Report (produced annually)⁶⁴ is considered sufficient to ensure appropriate monitoring takes place.

⁶³ <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal>

⁶⁴ https://www.warwickdc.gov.uk/info/20376/planning_policy/270/monitoring_reports

6.0 CONCLUSIONS, CONSULTATION & NEXT STEPS

- 6.1 The SA has been undertaken according to good practice and in line with Government requirements and guidance. It is aligned with the SA of the adopted Local Plan, following the same methods and approach, and is proportionate - acknowledging the hierarchy of plan-making and the tiering of assessment processes. Overall, the SA has found that the implementation of the Warwick Net Zero Carbon DPD will have positive effects; mitigation measures for any potential negative effects on the natural and historic environments are provided through policies in the DPD and the Local Plan. Potential negative effects on the economy and businesses have been mitigated through consideration of exceptional circumstances.
- 6.2 A pragmatic and proportionate HRA screening and appropriate assessment was undertaken to demonstrate that the HRA had been considered in line with recent changes to Government guidance. Whilst unlikely, there is the potential for environmental pathways through the canal and river systems for adverse effects on the internationally protected Severn Estuary and linked land and water. It was demonstrated that there is embedded mitigation through Local Plan Policies such that there will be no significant effects on the designated Severn Estuary, alone or in-combination with other plans and projects.
- 6.3 The Net Zero Carbon DPD updates and adds to existing Local Plan Policies associated with building standards and other sustainability requirements, planning for climate change adaptation, planning for renewable energy and low carbon generation, and assessing viability including carbon offsetting. It is focused on the role that the land use planning system can have to progress the commitments made by the Council when adopting its Climate Change Action Programme in 2020. Major positive effects are indicated for SA objectives on air quality and climate change, particularly in the longer term.
- 6.4 This document reports the SA and HRA processes for the Warwick Net Zero Carbon DPD and is submitted for public consultation alongside the Draft DPD. Any comments on the SA report will be taken into account at the next stage of developing the NZC DPD and its accompanying SA/HRA Report. These will be subject to public consultation and any comments made taken into account in preparing the Pre-Submission DPD & SA/HRA Report.
- 6.5 Any comments on this SA Report should be sent to:

https://www.warwickdc.gov.uk/info/20376/planning_policy

APPENDICES

I Statement of Compliance with the SEA Directive & Regulations

Appendix I: Statement on Compliance with SEA Directive & Regulations

The EU SEA Directive (Annex 1) requires certain information to be provided in the Environmental Report. This requirement is implemented into UK legislation through the SEA Regulations (2004). This is Appendix 1 of the Environmental Report as required by the SEA Directive and the UK SEA Regulations. This Appendix 1 sets out how the requirements for SEA have been met and signposts where this information is found in the Sustainability Report (May 2021) - and in accordance with paragraph 32 of the National Planning Policy Framework (revised 2018).

SEA Directive & Regulation Requirements	SEA Report Section	Summary of Contents
<i>An outline of the contents, main objectives of the plan and relationship with other relevant plans</i>	Section 1 Introduction	Sets out the contents and purpose of the Net Zero Carbon DPD
	Section 3 Context & Baseline	Outlines context, baseline & including the relationship with other relevant plans; also signposts links with the WDC Local Plan & SA/SEA Scoping (2014)
<i>The relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the plan</i>	Section 3 Context & Baseline	Summarises the relevant baseline conditions for environmental/sustainability aspects in the WDC area, and likely evolution without the DPD
<i>The environmental characteristics of the area likely to be affected</i>	Section 3 Context & Baseline	Summarised in Section 3 of SA Report
<i>Any existing environmental problems which are relevant to the plan including, in particular, those in relation to any areas of a particular environmental importance</i>	Section 3 Context & Baseline	Summarises existing environmental & sustainability issues/problems for the WDC area
<i>The environmental protection objectives relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation</i>	Section 2 SA Methods Section 3 Context & Baseline	Detailed SA Framework guiding assessment of effects against the Objectives – same as in the SA/SEA for the Local Plan.
<i>The likely significant effects on the environment including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic</i>	Section 2 SA Methods Table 2.1	Presents the SA Framework of objectives that shows the issues listed by the SEA Regulations that are progressed by which SA objective. The draft DPD was assessed against SA objectives by themes to avoid

SEA Directive & Regulation Requirements	SEA Report Section	Summary of Contents
<i>factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects</i>		duplication and address inter-relationships.
	Section 4	Describes the likely significant effects of implementing the Net Zero Carbon DPD. Where possible, an indication is given of whether the effect is likely to be cumulative, short, medium and long term.
<i>The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan</i>	Section 4	No significant negative effects were predicted; the SA noted where the Local Plan provided mitigation measures through Policies.
<i>An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information</i>	Section 2	There are no other reasonable alternatives to the DPD. The do-nothing scenario is this is explained in section 2.
	Section 4	
	Section 2 Method	Outlines how the assessment was undertaken.
<i>A description of the measures envisaged concerning monitoring</i>	Section 5	Outlines measures proposed for monitoring the environmental effects of the implementation of the DPD.
<i>A non-technical summary of the information provided under the above headings</i>	Report preface	Provides a non-technical summary.