Your Place, Your Plan

'Low Carbon Infrastructure'

Summary of Comments and Issues Raised

Winchester City Council Local Plan - Strategic Issues & Priorities Consultation

Issue 8: Low carbon infrastructure and Local Plan Viability.

Introduction

New development which is planned for in the Local Plan needs to be supported by appropriate infrastructure. The term 'infrastructure' includes many different types including physical, green, historic, social and community infrastructure. As part of the preparation of the new Local Plan, the council will prepare an Infrastructure Delivery Plan (IDP) outlining infrastructure needs, costs timescales for delivery and funding. As set out in the SIP, the Local Plan can play a role in planning for low carbon infrastructure in future and could, for example, support new renewable energy generation proposals in the district, as well as domestic battery storage proposals.

The Consultation Questions regarding low carbon infrastructure, were:

1. Are there any key infrastructure issues that we need to be aware of?

2. Are there any other options available to the council to address low carbon energy or other infrastructure?

The responses to these two questions are summarised together below, under the current themes:

⇨ Infrastructure requirements and the Local Plan Development Strategy;

⇨ Transport Infrastructure;

⇨ Water Infrastructure, Drainage and Sewage;

⇨ Waste management Infrastructure;

⇨ Digital/ ICT Infrastructure;

⇨ Energy Infrastructure

⇨ Community and Social Infrastructure

⇨ Green Infrastructure

⇨ Local Plan Viability

Infrastructure Requirements and the Local Plan Development Strategy

74 respondents highlighted that when selecting the Development Strategy for the new Local Plan (as set out in the Homes for All topics), the existence of infrastructure is an important consideration, so that physical infrastructure can be re-used or adapted where possible. This minimises the carbon emissions associated with construction of wholly new infrastructure to serve a new settlement. Therefore, these respondents favoured an approach which focuses development upon brownfield sites, or in existing settlements where physical infrastructure such as roads and utilities are already in place as well as community infrastructure such as schools, health care facilities and shops.

C361; C363; C364; C392; C325; C187; C255; C262; C304; C347; C372; C291; C352; C364; C79; C449; C567; C568; C569; C439; C397; C399; C407; E223; C342; E207; C421; C588; C56; C487; C569; C567; C231; C253; C262; C255; C291; C331; C347; C348; C399; C372; C397; C407; C421; C119; C497; C494; C119; C231; C308; E186; C489; C331; C498; C461; C241; C554; C326; C348; C253; C461; C464; C487; E1232; C79; E1230; C393; E195; C382; C549; C198; C248; E718

By contrast, one respondent (E190) favoured a development strategy which focuses new development in countryside locations. Such an appropriate allows infrastructure needs to be planned for and delivered comprehensively, as opposed to a) brownfield development, which places additional pressure on existing aged infrastructure, or b) development on the edge of existing settlements, which adds pressure to transport infrastructure and removes green infrastructure which is an important asset, particularly for those in towns and cities.

E1211 (Bus Operator) favours a development strategy which focuses development along existing transport corridors, to help strengthen transport networks, which may include development of green sites on the edge of existing urban areas. Sites should be developed at large enough scale to justify/ make viable the provision of sustainable transport infrastructure such as bus services.

Some respondents went on to discuss specific locations for development, and whether or not appropriate, in light of infrastructure considerations:

- Micheldever Station: E195 commented that development of new towns in locations such as Micheldever, would create a car dependent development (despite the presence of the station) and should be avoided, instead focusing development on existing settlements with more infrastructure. By contrast, E739 promotes development of a new settlement at Micheldever on the basis that single ownership of the site provides an opportunity for comprehensive infrastructure-led development. This respondent is of the view that the existing train station, currently under-utilised, will encourage modal shift away from the private car.
- St John Moore Barracks: Respondent E1092 promotes the site based on the accessibility of its location, in proximity to existing transport infrastructure and local facilities. E1228 expressed concern about operation of a Park + Ride on the site, and the possibility that large scale development of the site could affect the rural character of the parish.
- Royaldown: E1209 submitted highways and transport information, suggesting greater information is needed around transport impacts of any development on the site and

that significant investment in infrastructure would be required. They also commented on the accessibility of the site, in terms of proximity to local amenities, and suggested is it not connected enough, via sustainable modes of transport, to Winchester City Centre or the railway station, to be a sustainable location for large scale development.

The promoters of a number of SHELAA sites responded, to provide detail of how their sites could connect to existing infrastructure or contribute to improvement of local infrastructure. These include:

- E1082 (SHELAA Site WO10)
- E1092 (SHELAA Site LH05)
- E1123 (SHELAA Site WI19)
- E1124 (SHELAA Site NA01/NA04/NA05)
- E1128 (SHELAA Site CU32)
- E1162 (SWA06/21, DE11, and BS01)
- E1114 (SHELAA Site HW02)
- C597 (SHELAA Site SW01)
- C515 (SHELAA Site HU01 and WI09)

E1238 (Hampshire County Council, in their capacity as the Minerals and Waste Planning Authority) highlighted the need for greater emphasis on how minerals and waste policy will apply to the Local Plan development strategy. Viable mineral resources need to be safeguarded (by avoiding development on land which could prevent extraction of the minerals below) to secure the long term future supply of mineral resources. Equally, safeguarded waste sites need to be protected.

Transport Infrastructure

Public Transport:

Blue Star, the Bus Operator provided a comprehensive response to the consultation (E1211) highlighting:

- The need for engagement with bus operators on new developments to facilitate long term service provision. Ensure connectivity from new developments, and clearly set this out in the Local Plan;

- Support for 15 minute cities which promote walking, cycling and public transport infrastructure;

- Residential developments should have access to main bus corridors, with sufficient carriageway widths, and reduced delay from the need to deviate off routes unnecessarily. Quality, well planned routes and services are more attractive to users.

- Ensure roadside infrastructure is a quality product.

E718 and C445 also supported new development being located along existing [road/ rail] transport corridors.

Highways England's response (*E1212*) supports the SIP's action to move away from use of private cars and create low traffic neighbourhoods, reduce reliance on the private car, promote 15 minute cities, cycling and walking infrastructure and access to public transport which connects together neighbourhoods, facilities and services.

12 respondents comments on the importance of public transport, in general, and the need for high quality public transport, with frequent, reliable, clean and coordinated services (including buses) to reduce car usage. (*C555; C356; C244; C88; C243; C194; C436; C718; C570; H53; C385; C127*).

Road space should be allocated away from private cars to sustainable modes of travel including public transport (*570*). Ready availability of car parking causes ongoing reliance on private cars; redevelopment of car parks into housing sites would assist in encouraging a move towards use of sustainable public transport (*C436*).

Public transport networks should be well integrated/ linked with cycling and walking infrastructure *(C578; C343)* and public transport hubs should provide a focus for local walking and cycling feeder routes (*C343*). Public transport hubs should have safe bicycle storage facilities (*C343*).

A number of respondents supported the use of electric buses/ the latest sustainable technology in the fleet (*C36; C197; C356; C223; C360; C127*) and two suggested Park and Ride facilities/ fleet should have a solar panel roof (*C554; C449*).

Incentives should be provided for use of public transport and public transport planning should ensure there is capacity for increased demand (*C382*).

Nine respondents commented on the public transport services available at present:

- Rural areas/ villages/ outskirts of towns not well served by affordable public transport (*C335; C243; C244*);
- Colden Common not well served by public transport (*C103*);
- South Wonston has limited bus services, which needs improving to reduce car usage (*C357*);
- Current bus service is poor (*C365*), as not sufficiently frequent, comfortable or efficient *(C194)* and does not serve key residential areas and is prohibitively expensive (C155 - eg Olivers Battery twice weekly bus service and costs £8 for 2 adults to travel to Winchester and back which is much more expensive than driving and parking);
- Micheldever, whilst on the railway network, is not a suitable location for development, as those living there currently use private cars to travel to work school rather than train (*E195*). A new town in this location would need bus links and additional amenities at the train station which has major adverse carbon implications associated with building this new infrastructure.

One respondent suggests there is a need for a park and ride facility on the North East side of Winchester City (*C502*)

One respondent wishes to see a tram system developed, to reduce road congestions, reduce carbon emissions from cars, and to quickly move people into and out of Winchester

city (*C538*). Another (*C399*) suggested consideration of new railway stations or branch lines off the main line.

One respondent highlighted the need to ensure public facilities such as the new leisure centre are accessible by public transport (*C87)*.

Respondent C299 suggested:

- Abort the Station Approach scheme;
- Remove the bus station in Silver Hill;
- Build a transport interchange next to the railway station; and
- Provide electric powered shuttle buses within Winchester City – free to anyone holding a bus or rail ticket and a small fixed charge to others, with tokens dispensed at bus stops.

Cycling and Walking Infrastructure:

19 respondents feel good quality cycle routes are required (*C239; M14; C517; C254; C543; C502; C194; C323; C578; M38; H53; C445; C365; C363; C343; C33; C550; E718; C1218*).

C36 suggested a need for clearer actions, based on their opinion that the Movement Strategy is merely a set of aspirations for sustainable travel, without clear actions. C47 suggested planning should be more linked to the Movement Strategy.

Action is needed to reduce car use in the city centre immediately (*C394*).

In the Local Plan 'Live Event No.2', participants were asked what they would like to see more of in towns and high streets across the district in the future. The word cloud below was produced via participant inputs on slido.com and shows cycle lanes to be particularly important to participants:

What would you like to see more of in towns and high-streets across the district in the future?

Better public realm

Sense of place   Entertainment

Cultural facilities

Cycle lanes

Open spaces

Work hubs

Evening activity

less coffeee shops

Public art

Green spaces in the towns

river walks

Pedestrianisation

street entertainment

shops

Public realm

trees   Cinema

independent shops   Less cars   Better lighting

Flexible spaces

Venue for live music   nature

homes for young people   Covered market

Attractive outside spaces   Celebrate the city

Roads need to give priority to cyclists, providing segregated cycle lanes to encourage cycling and make all cyclists feel safe (whether experienced cyclists or not) (*C12; C127; C393; C543; C445; C570; C127*). Alternatively maps could be produced to show cycle routes running parallel to main routes (*C127*).

Cycle routes should be district-wide (*C365*), linking communities and enabling travel from villages to market towns and the city of Winchester (*C543; C586*) and should be reasonably level (C543). Cycling and walking routes should link with the public transport network (C578).

There is a need for bicycle storage at transport hubs eg the train station (*C78*) and in town centres (*C78; C239; C517; C323; C563*), at village shops and pubs (*C127*) and in all new homes (*C586*) or buildings (*E1218*). Bicycle storage must be safe and weatherproof (*C578; C563*).

Cycle infrastructure has a role to play in ensuring a vibrant economy in future: (*C570*):

> "*A network of well-planned, continuous, cycle routes from the outlying districts will be a huge asset in the transition [to more leisure and cultural activity in the city centre, as a result of the inevitable downturn of everyday retail in the city centre due to online shopping]*"

13 respondents highlighted the need for good quality walking routes (*C239; M14; C323; C578; M38; H53; C445; C549; C343; H49; C550; E718; E1218*). These need to be safe, pleasant environments (C393; C517; M14; C549) and green/ re-wilded where possible (*M38; C549*). Routes should be district- wide, linking communities together (*C517; C586; C365*). Pedestrian routes should have priority over vehicles on local roads (*C323*). Vehicles must not be allowed to park on pavements and block access for pedestrians (*C545*).

New development should be located within walking distance of a range of amenities and open spaces, to achieve healthy and safe communities (*E1223*).

New public facilities such as the leisure centre should be accessible without the need to use private cars (*C87*)

Highways England's response (*E1212*) supports the SIP's action to move away from use of private cars and create low traffic neighbourhoods, reduce reliance on the private car, promote 15 minute cities, cycling and walking infrastructure and access to public transport which connects together neighbourhoods, facilities and services.

C586 suggested the council could be bold and issue a bike to every child aged 11 for trips to school and short journeys up to 2 miles, so that they can form new habits and make this the norm.

E718 highlighted some of the challenges with cycling and walking as a mode of transport:

> *"All transport needs to be weather, fitness, terrain and purpose sensitive —-walking and cycling are not suitable in all weathers, nor for disabled or unfit people, nor where steep hills are involved, as in Winchester, nor where goods or children need to be carried. Policies for walking and cycling, electric scooters etc must recognise the limited use of these modes of travel. Most people will not use them most of the time!"*

Electric Vehicle (EV) Infrastructure:

A number of respondents highlighted the need to develop EV Infrastructure to support the transition to electric vehicles.

27 responses wish to see development of infrastructure to facilitate charging of electric vehicles (*C78; C278; C293; C245; C341; C356; C259; C185; C538; C557; C514; C164; C538; E1221; C550; C103; C75; C42; C586; C492; C457; C323; C413; C248; C514; C542; C360*), with some highlighting the need for such facilities at private homes, in rural villages (*C293*) and in the city (*C538*). There is a need to consider homes without private parking (who park on-street and not necessarily outside their own home), and how to deliver EV charging infrastructure for them (*E1242; C360*). There is also a need to help small businesses to install charging points for their employees (*C538*). C550 suggests section 106 agreements could fund EV Charging Infrastructure/ PV/ Batteries on site.

Three respondents wished to see the council provide subsidies for EV charging infrastructure at private residences, and also subsidies to help purchase electric vehicles (*C164; C248; C395*).

A number of respondents suggested highway arrangements which prioritise electric vehicles – such as creating areas of road only accessible to Electric Vehicles (*C164; C323*); city centre parking only for electric vehicles (*C323*); reduced parking charges for non-polluting vehicles (*C360*); and allowing e-scooters to use cycle lanes (*C127*).

Five respondents wished to see electric/ hydrogen powered bus services (*C164; C194; C117*) and other council owned/ operated vehicles (*C560; C495*) including rubbish lorries (*C117*). C54 suggests the use of e-taxis.

C198 highlighted the importance of investment in road infrastructure to support the use of EVs or hydrogen fuelled cars in future (*C198*). C545 highlighted that shift to EVs does not solve the congestion issue, nor the hostile environment for walkers and cyclists. There is still a need to promote these forms of sustainable transport, and prevent pavement parking (particular as vehicles get heavier with batteries) to prevent damage to walking infrastructure.

C277 and C386 highlighted the need for flexibility to adjust quickly to improvements in technology for electric vehicles, over the plan period.

Two respondents suggested there will be a need to boost utilities capacity to meet increased demand for electricity to power vehicles (*C298; C542*) – local distribution networks may require reinforcement in medium/ high density residential areas (*C542*) which may require land/ space.

Some respondents queried whether encouragement of a shift to electric cars really is 'green':

- waste of non-recyclable components (*C37*);

- electricity used by EVs is not necessarily 'green' – EVs still contribute to CO_2 emissions if the electricity they run on is from non-renewable sources (*C574; C498*)

- electric cars use scarce resources, and the batteries are probably not sustainable (*C198*)

C245 wishes to see the encouragement of hydrogen filling services, in addition to EV infrastructure outlined above.

C394 supports provision of green transport options, in general. Similarly C501 seeks that the Local Plan encourage sustainable methods of transport due to carbon emissions associated with cars.

Miscellaneous Transport Infrastructure comments

E223 is of the view that new towns encourage car use – even if near public transport, they end up car-dependent. By contrast, C342 opposed any new development that funnels into already bust transport corridors.

Some respondents expressed concerns about the impact of new development, in terms of traffic congestion (from residential development adding to the network) (*C222; M18; M24*) and congestion for vehicles the city centre (*C259*). They highlighted that this has implications wider than simply time delay (eg air pollution (*C222*), and heavy construction vehicles damaging the road network (*M24*)).

C560's response indicates that climatic conditions and topography in Winchester City contribute to the air pollution problem. They suggest motorway traffic speed limits could be limited and to allow no motorway diversions passing through Winchester. C555 proposes a reduction in speed limit on all the county's single track country lanes to 20mph, to divert traffic away from dangerous, narrow, poorly maintained roads.

Two respondents expressed support for car sharing schemes (*C357; C550*). C550 proposed the inclusion of a car shared scheme on a development could reduce the level of highway contributions payable.

C538 suggests banning petrol/ diesel cars from the city (*C538*) and C396 suggests widening the use of low emission zones in the city centre. C495 suggests introducing a congestion charge for fossil fuel powered transport in the centre.

Land for an urban consolidation/ distribution centre could be allocated on the city outskirts, to receive deliveries from large HGVs (*C396*), and local deliveries could then be made by a fleet of small EVs (*C543*). C436 suggested that freight should be carried only in electric vehicles within towns in the district (*C436*). C32 wishes to see lorries kept off B roads and on motorways, and to keep them away from schools.

To encourage a shift away from HGVs towards rail freight distribution, space near railway hubs could be allocated as a distribution hub, from which EVs/ e-cargo-bikes make local deliveries in town centres (*C436; C343; C365*). The distribution hub buildings could have solar panel roofs to power the fleet of local delivery vehicles (C543).

C32 would like to see street lights turned off at night when the moon is full and the council encourage government to move to gmt+2 all year round (C32).

C12 would like to see the council take bold action, eg close roads to through vehicular traffic (C12)

10 respondents highlighted the need to invest in - and keep well maintained - the existing road infrastructure: (C198; C27, E1233, C32, C222, M18, M24, C342, C586, C555). E1233 highlighted a particular problem in Durley during peak times and the need for a roundabout to assist those trying to get onto the B2177. Reduce construction of new roads, due to CO2 emissions/ pollution (C164; C382) and only build new roads where they link to existing communities together (rather than a road travelling into one location) (*C586*).

Lack of drainage on roads is a problem, as well as littering along road sides – support communities who are undertaking voluntary clean ups (*C542)* and take enforcement against those littering.

Listen to and act on local views [about roads and traffic volumes] in planning decisions (C27)

Two respondents seek new railway stations (E1233: at Allington Lane, Durley and C399: consider new railway stations or branch lines off the main line).

Reduce the need to commute, to assist with reducing traffic volumes (*C299, C248, C116, C334*)

Highways England (*E1212*) commented:

- Any planned growth in the district should consider impacts (including cumulative impacts) on the Strategic Road Network, (*A303, A34, M3* and *M27*) so there is no material increase in traffic on the SRN;
- They support the council's efforts to promote alternatives to use of private cars and ensure a safe and reliable transport network. Action No. 6 in the SIP closely aligns with their Strategic Business Plan 2020-2025 outcomes.
- They wish to be consulted during the development of the IDP – identify any SRN infrastructure necessary to deliver the Local Plan, and identify funding sources, timescales for delivery and phasing plans.

Water Infrastructure, Drainage and Sewage

34 responses commented on the issue of water/ drainage or sewage infrastructure.

In planning for infrastructure, the Local Plan needs to consider more than just new renewable infrastructure, it also needs to consider water management to prevent flooding which is occurring at present (*C264; C170; C395; C482; C542*); and to prevent future increases in flooding events due to climate change /increased rainfall and extreme weather events (*C262; C304; C347; C79; C588; C119; C231; C331; C392; C348; C253; C461; C464; C487; E1232; E1209*).

Three responses related to water consumption and its effects. Households should be helped to reduce water consumption (*C557*). Demand for water results in the need to pump water from the chalk aquifer which has operational carbon implications (*C75*). Any longer term solution would also involve carbon emissions associated with development of new infrastructure to secure future water supplies (*C23*).

Two responses commented on the issue of front gardens being paved with non-porous surfaces and the negative impact this has on surface water flooding (C464; C542).

Five responses commented on a lack of sewage infrastructure in some parts of the district, potentially impacting water quality (C542; C586) and the need to modernise sewage infrastructure (C326; C482; C395).

Four responses supported a requirement for sustainable drainage systems (C353, C516) including grey water recycling (C282) and rain water harvesting (C586).

Waste Infrastructure

29 responses commented on waste management infrastructure. 16 commented that the Local Plan needs to plan not just for renewable energy infrastructure but also waste management infrastructure (C347, C262, C79, C588, C199, C231, C331, C392, C348, C253, C461, C487, C464, E1232, E1209, H49).

Three responses opposed the use of waste incinerators (C243; C346; C118) which emit carbon and rely upon continued generation of waste as fuel rather than targeting a reduction in waste generation or boosting recycling rates (C42). C244 opposed rural burning of plastic materials or commercial rubbish on 'hobby farms'.

One respondent highlighted the need for new homes to be designed with sufficient space to accommodate the storage of recyclable materials, pending collection (C586).

C233 seeks improvements to kerbside recycling, with local processing of waste rather than shipping offshore. One respondent suggested the need to review the lifetime cost/ benefit of schemes such as green waste 'brown bins' which are made of plastic, and doorstep collection of glass (C346).

Three respondents wish to see more action on food waste and redistribution of surplus food (C532; C535; C516). One respondent suggested the council could refurbish and resell white goods, funded by a disposal charge levied on those disposing of the appliances. One

respondent wish to see modernisation of recycling systems, with recycled materials used in urban pathways (C326).

Digital/ ICT Infrastructure

21 respondents commented on the need for digital infrastructure, such as superfast broadband and reliable mobile phone coverage across the district (C123; C239; C309; C277; C542; C494; H53; C357; C386, E1218; E1224; E1232) and the impact this may have in facilitating 'working from home' and thereby reducing the need for transport (and therefore, reducing carbon emissions associated with travel to work). 8 respondents suggested that WCC should monitor the health and availability of digital infrastructure so that it does not act as a constraint to progression (E1230; C397; C399; C407; C569; C568; C567; C291.

Energy Infrastructure

Generation of renewable energy

Support for boosting rates of renewable energy generation and de-carbonising home heating through the use of on-site renewables such as solar panels: C5, C361, C78, C165, C341, C501, C277, C376, C566, C164, C215, C457, C557, L29, C304, C489, C27, H53, C365, C323, C357, C586, C580, C343, C365, C326, C386, C464, H49, C445, C343, C394, C42, C241, C550, E1209, E1237, E1224, E1242, C580,

One respondent (C353) suggested WCC should approach the Church Commissioners with a proposal that they use the 20 hectares of the Bushfield Camp for a community solar energy farm, the centrepiece for a council-led flagship environmental project to develop the wider 80-hectare site for a mixture of recreational, allotment and environmental agricultural uses.

Concern about visual/ landscape/ biodiversity impacts of solar energy generation / battery storage on green fields etc: C588, C464, C580, C497, E718, E1209, E1237, C580; E1244/C336 (and C241 concerned about visual impact of wind generation)

Solar should be on existing buildings/ previously developed land, not green fields: C361, C588; C489, C15, C584, C464, C461, C392, C445, C241, C79, C497, E1209, E1232, E1244/C336

CPRE Hampshire's response (E1244 and C336) supports development of renewable energy infrastructure but wishes to see solar panels on buildings (particularly on brownfield sites/ industrial areas) rather than in the countryside. Where propose din the countryside there is a need to consider landscape and visual amenity impacts and fencing and lighting of solar farms should be minimized. CPRE opposes large wind turbines in Hampshire and suggests the Local Plan should discourage applications for these. For small wind turbines they would wish to see consideration of the issues identified above for solar.

Solar on council owned buildings: C15, C439, C167 including solar panels over P+R parking spaces as seen in many countries (C445; C439; C352)

Support for other renewable energy:

- Ground source heating and geothermal energy: C33; C538, C343, C586, C282, C445, C5. C546, C386,
- Explore viable hydrogen fuel alternatives (eg CERES, small power plant for a small housing estate) E1221; C136; C574, C168, C169, C75, C144,
- Hydro Power: C584, C357, C37, E1237
- Wind Power C584, C215, C357, C168, C169, E1237, E1224
- Sewage/ Farm waste/ Anaerobic Digestion Facilities: C574, C215, E1237
- Biomass C365, C343, C187, (By contrast, C208 and C305 detail why biofuel is not low carbon and should be dis-incentivised, due to time taken for replacement saplings to reach maturity)
- District Heat Networks/ centralised CHP to supply electricity and heat to a group of buildings – which provides economies of scale: C54, C365, C323, C343, C254, C187,

C4 and E1242 suggest exploring potential for an Energy Company partnership. C586 suggests looking at hydrogen generation alongside motorways, perhaps in conjunction with another authority or commercial partner. C441 suggests the council could provide its own low cost heating and energy to residents and businesses, produced sustainably.

There's a need to plan for on-site battery storage: C277, C215, C365, C343, C386, C42, C241, C208, C305 E1242, E1218 but as noted by C574, battery storage may not be possible when the world runs out of finite rare metals resources:

There may be a need for small local gas generation sites, to provide top up generation to the use of solar power: C208, C305.

Concern about the Carbon implications of construction of the Aquind Interconnector project: C208, C305.

Approach to Site Allocation, to maximise energy efficiency/ low carbon opportunities:

- M38 suggest housing be allowed where renewables are built in;
- C33: require low carbon energy is developed before new houses built;
- E195 is of the view that new housing should be built where energy infrastructure already exists.
- E739: Allocate large centres of residential growth, such as garden towns, in a planned way which enables delivery of low carbon infrastructure such as fuel efficient CHP/ district heating systems due to the scale of development.

C550 suggests a number of measures which could be considered including:

- Site allocations aligned with renewable energy sources/ biodiversity improvements/ carbon capture opportunities;
- Allow higher density on projects which are zero carbon/ Passivhaus
- Commit to faster determination period for zero carbon projects
- Require 20% zero carbon/ passivhaus on all scheme of 10+ residential units.

Introduce measures to reduce energy consumption / increase energy efficiency in:

- council buildings (including housing):
  - 'Lights out policy' in buildings when not in use/ empty (C386)
  - To include solar generation/ use green energy tariffs (C223)

- Other commercial buildings:
    - 'Lights out policy' in buildings when not in use/ empty (C386)
    - Green energy used for schools, street lights, shops, restaurants, construction H49
- Residential Buildings:
    - Support for ensuring new residential buildings are energy efficient: (C42; C586; C5, C58, C574; C304; M38; C254; C464; C234, C248; E1224; E1128);
    - Support for improving energy efficiency of existing buildings: (C574; C557; C546; C385; C304; C248; E1242; E1216; E1128);
    - C586 suggested working with Housing Associations to tackle energy performance of buildings in a locality by providing a local heating system;

There are challenges in de-carbonising home heating: (C337, C4)

The council should offer financial and other support (eg advice/ information) to home owners wishing to generate solar energy on domestic premises / increase their take up of low carbon energy options / improve the energy efficiency of their properties: (C491; C4; C198; C557; C218; C248; C542; E1216; E1219; E1128, H49)

The council should also offer financial and advisory support to community centres and village halls, to help them improve the energy efficiency of important community infrastructure: (C286)

The council should develop its own standards for energy efficiency which address heat loss issues: (C542)

Introduce policy which supports greater numbers of self-build applications, which are more likely to be 'eco' homes/ meet high energy efficiency standards: C139; C58; C139, C116

Utilities Capacity:

C298 highlighted that a transition to electric infrastructure, such as electric cars and heat pumps, will generate additional demand for utilities networks for electrical cables. C78 also highlighted that increased rates of home working place additional demands on the network.

Community and Social Infrastructure

A number of respondents comments on the important role that community facilities have in climate change adaptation and resilience as detailed below.

There is a need to ensure that health and education infrastructure is resilient when the effects of climate change are felt, e.g. flash flooding, extreme weather events. Local community facilities provide access to essential supplies, and temporary accommodation in village halls etc if required in emergencies. (C262, C347, C79, C119, C331, C231, E1209, C588, C348, C253, C461, C487, C464).

Food supplies, local food markets, and food growing locations are important elements of 'community infrastructure (C47; C532; C252). Food systems should be developed, to improve human health and environmental sustainability. Action can be taken to redistribute surplus food and reduce food waste (C532).

New homes need access to community facilities such as schools, doctors, cinemas, bowling alleys (M36; E195) and creation of new facilities has carbon implications (E195). E1221 and C144 highlight the hospital, and issues of accessibility of any new Hospital, as an important issue. The Department of Education (E1110) requests that the Local Plan identifies specific sites which can deliver the school places needed to support growth, based on the evidence of need/ demand in the IDP.

Two respondents discussed the role of community infrastructure in health and well-being – in terms of access to space for exercise/ dog walking by foot (rather than driving to a suitable location) (C436), and the benefits of access to networks of countryside trails, outdoor gyms, and cycle parking.

C232 suggests that a broader approach to community facilities should be taken, including community-owned shops, cafes, co-working facilities, conservation groups, orchards and allotments. Such infrastructure, should be governed by the community and can support the whole community in reducing its carbon emissions.

C372 highlights that social and community infrastructure should be nurtured not just in new developments but also in existing communities (C372).

One respondent (C583) outlines that contribution that development at Mill Mead, Bishops Waltham, could make the district's affordable housing requirements, which is another important form of community infrastructure.

Green Infrastructure

A number of respondents highlighted the multiple benefits provided by green infrastructure, including:

- Climate change mitigation (C326; C323; E1221; E195; E1221;)
- Flood control (E195; C516; C535)
- Absorption of pollutants (Air Quality) (E1221)
- Health and Wellbeing/ Social Value (C323; E739; E1223; H49; E195; C118)
- Supporting biodiversity (C323)
- Food production, agriculture, including allotments, agricultural land, community orchards (C118; E195; C516; C535; C47).

C516 and C535 noted that land can be used for food production alongside solar energy generation. By ensuring sufficient local land for food production this can limit transport related emissions from transport of food. There is also a need to take action on surplus food/ food waste.

New development should incorporate green space and other green infrastructure networks and features (eg bat/ bird bricks) which support biodiversity and access to nature: H59; C254; H53; M38; E739.

The Development Strategy in the Local Plan should avoid developing on green fields, as they provide critical benefits (as identified above) (E223; E219; C164; E195).

Existing green spaces should be protected and the green infrastructure network further developed: C199; E199; E1224; C372; C356; C164; C549; C118; C326; C15; C252; E1221; M38.

More trees should be planted: C254; C346; C274; C491; E1224

C15 made suggestions regarding the management of vegetation in sports fields – fringes of long grass/ wildflower meadow could be left around the edges, merging into hedges, and hedged could be cut only every 2 -3 years so that they can become thicker overall, especially at the base and taller. Sports fields could have tall grass and flowering plants running in a strip along each side, to provide wildlife habitat and assist with carbon sequestration.

Slido Poll at Live Events No.1 and 4 highlighted that attendees would like to see more green space/ open space in town centres and high streets.

Live Event 1 Word Cloud:

Live Event 4 Word Cloud:

What would you like to see more of in towns and high-streets across the district in the future?

0 2 6

Vibrant creative spaces   Vibrant social activities

Variety   emporia   spacious town housing   Wildflowers

Welcoming   cycling   Green spaces   lower business rates

Disabled friendly   Local housing   walking cycle access Wildlife

                                          Housing

streets for people Safe   Trees markets   street food halls

Independent shops

suitable retail   musea
            pedestrian areas   Open spaces electrical bicycles
cycle routes   local shops
                        independent bsuinesses green networks
  friendly for walking
                         Green infrastructure   Variety of shops
easy access to vehicles

Provision for wildlife cycle toutes

                        Zero-carbon housing

Two respondents raised issues around equality of access to green space/ nature:

- the council could partner with organisations to increase access rights to non-public land, eg to access swimming/ river rights (C346)
- the focus should be on green space accessible to all, eg community orchards and forest gardens, as opposed to riding stables and golf courses. (C252).

Three respondents commented on roadside green infrastructure:

- encouraging wildflower meadow planting on roadside verges, reducing the need for herbicides and pesticides and reducing carbon emissions (C118)
- encouraging liaison with HCC and only cutting natives twice a year. Providing grass verges in the settlement boundaries. Asking communities to adopt verges and maintain as wildlife habitat. Limit financial inducements for farmers to cut hedges unless genuinely required for safety reasons (C15)
- front gardens are being converted to parking to avoid parking charges in outer areas – reduce permit parking charges for those planting/ maintaining front hedges.(C491)

A few respondents comments on the value of specific local green spaces:

- Five Oaks Farm near Shedfield should be designated as Local Green Space for recreational value, tranquility and wildlife (and do not allow development for quarrying) (C264)
- Protect 'unofficial' green spaces including Bushfield and the Texas Fields in Olivers Battery as they provide recreational and biodiversity value as well as carbon offsetting and flood mitigation (C118)
- North Walls/ River Park – permanently protect as community green space (C346)

Local Plan Viability

Issue 8 also covers Local Plan viability – the contributions expected from development (e.g. towards affordable housing or community infrastructure, or the costs of including low carbon technology) need to be clearly set out in the Local Plan. These requirements must not undermine the deliverability of the Local Plan and for sites allocated in the Local Plan it must be shown that cumulative cost of all policy requirements (i.e. affordable housing, climate change issues, infrastructure contributions, CIL, etc.) are not such that it would be unviable to develop that site. This is done by way of a whole Local Plan viability study.

Whilst no specific Consultation Question was asked on the issue of Local Plan Viability, some responses have been provided, as set out below.

The Department of Education (E1110) responded in relation to the planning for schools, and ensuring education contributions are sufficient to deliver the places required to meet increased demand. They suggest that the Local Plan viability assessment should adopt an initial assumption that development will provide both land and funding for the construction of schools – and that the cost of this is incorporated into the Local Plan viability assessment from the outset. They suggest early consultation with HCC to identify education needs and costs of provision.

E1223, E1224 and C515 highlighted the importance of making progress with the Infrastructure Delivery Plan (IDP) at an early stage in the Local Plan process. An understanding the requirement for, and cost of infrastructure is key to assessing the deliverability of higher environmental/ building standards. Early consultation with developers and those in the construction industry should be undertaken. As noted by E1224, "there is risk that the application of higher standards [eg for energy efficiency] comes at the expense of other important objectives, such as delivering affordable housing, and achieving good urban design and architectural quality."

C144, C452, E1149 and C554 queried how realistic the council's objectives are, and whether they will impact Local Plan viability. C315 (Bargate Homes) and C540 (Taylor Wimpey Strategic Land) also expressed concern that the drive for carbon neutrality could render some potential development sites unviable. They seek that some of the more onerous carbon neutrality measures set out in the SIP be omitted from the draft Local Plan.

Persimmon Homes (E1162) agrees with the need to improve environmental performance of new residential but that viability implications require assessment, and they have therefore reserved their comments on policy approaches pending further information on viability assessment of the Local Plan.

The Home Builder's Federation responded (E1225) to underline the importance of viability assessment of the Local Plan, and work to understand the cumulative cost of higher energy efficiency standards alongside affordable housing/ biodiversity net gain and nutrient neutrality issues in the district. They identify that the council will need to prioritise its objective to ensure that any sites coming forward are viable with all costs imposed on it. They emphasis the need for collaborative working to strike the balance between aspirations of landowners/ developers and the planning system.

C326 suggests the target date for carbon neutrality in the district is just aspirational.

C116 commented on the already high cost of CIL and suggested developers could use CIL money on projects on their own sites.

C36 suggests requiring development at higher density so as to make more efficient use of land (conforming to SA12).

C491 is keen to ensure that Local Plan policies do not impact unfairly/ increase daily costs of people trying to carry out business and move around outside of town.

Miscellaneous Comments

Infrastructure has an influence on the populations' health and well-being. Below is the Slido responses from the ''Living Well' live event where people said access to open space, green space, transport, cycle routes, affordable housing and community infrastructure are things the Local Plan can do to enhance health and wellbeing.

Furthermore, the ageing population has implications for infrastructure and the way we plan for it. Below is the word cloud from the 'Living Well Live event:

Wordcloud poll

What are the implications of an ageing population for the ways we plan our District?   0 1 6

Neighbourliness & neighbourhoo
reducing loneliness and isolat
health services close to home
Smaller houses two bed
transport
human scale
Health   winchester brand
housing for life
corner shops
accessible transport
proximity of services
barriers
Support

More care and support services
appropriate services
suitable accommodation
accessible sport

health services   accessible activities

digital inclusion

accessibility   safety
dementia

isolation   safe walking routes
intergenerational opportunitie

Public transport

How can the Local Plan enhance peoples' health and well-being?   0 1 1

Improving rights of way

Improve access to existing spa

Make what's there better

Open green spaces

reduce through traffic   Improving signage for walks

Create open space promote Winchester

Plans for places to embed

traffic free areas

provide safe space

remove barriers for access

walking routes   reducing weight of doors

Plan for Winchester

cycle routes   Be proactive

transport

group activities

accessible green space

Open space

Remove barriers

permanent parkrun location   wayfinding for dementia   Space

transport to hospital   provide information

gives them a say/ownership

Links between communities

affordable housing   seating for open spaces   Informal delight

Design of new developments

Small development housing clos

Make it easier to access space

slido

Five respondents expressly supported the councils intention to promote low carbon infrastructure (E1220, E1224, C353, C462, C117, C345). H24 emphasised that all development should be accompanied by infrastructure to support the new population and C41 wishes to see all policies applied across the whole Local Plan area.

C394 commented that the main point is to 'get on with it' and that strong visionary leadership is needed to deal with the climate emergency. E1221 suggested the council needs to take expert advice on a strategy and how to implement it to ensure plans can become a reality.

By contrast, three respondents suggested the council is overly focused upon carbon neutrality C189; C252; C40. One suggested the council should focus on rubbish collection and maintaining footpaths rather than 'minority issues' (C8)

One suggested the average citizen has limited useful input on infrastructure issues and that the council should allocate infrastructure funding where most effective to do so (C101)

E1123 welcomed the council's approach of undertaking a call for sites for land for renewable energy generation, biodiversity net gain, green infrastructure and nitrate mitigate, noting it is "positive that the council is proactively seeking to accommodate such forms of infrastructure".

Four respondents commented on the embodied carbon associated with building/ construction materials. C164 noted that cement and concrete are one of the highest contributors to CO_2 and there are alternative building materials which are much lower in carbon. C99 wishes to see home construction carried out with minimal carbon emissions;

C282 wishes to see less concrete used in development, and concrete volumes included in carbon footprint of new developments. C144 suggests homes should be designed to be flexible so they are homes for life - construction works associated with extending homes costs carbon (C144). C550 suggest decisions around site allocations in the Local Plan should be based upon the carbon footprint of the various alternatives.

E1232's response commented on infrastructure issues of specific concern to Crawley, including the need to ensure residents of rural villages are still able to travel to larger settlements to make use of facilities which are not available in small villages. They also comment on issues associated with narrow roads and lack of mains drainage.

C549 suggested local communities be more involved in developing their own plans (for development in their area), rather than this being driven by the major landowners who are financially driven (C549). C342 reinforced the need to work with groups such as Winacc and the Energy Saving Trust who specialize in climate change work, green energy and reducing carbon footprints.

E848 commented on the district's cultural infrastructure and its implications for land use. They suggest the council undertakes a stocktake of all cultural facilities in the district, whether formal or informal, and sure the population to establish the take up of cultural offerings. The voluntary sector could potentially assist. A 2013 report published by the council sets out the gross value added by the cultural and creative sector, and the 5000 jobs created across the district. The respondent highlights that a thriving arts industry attracts visitors and drives growth.