



Climate change

5F: Climate change

175 responses

## Response counts

Section	Count
Comments received	3
Question 13: What renewable energy generation do you think the site could offer?	86
Question 14: What opportunities do you think there are for the design of the redevelopment to ensure resilience to climate change?	86

## Comments received

(R18/session 60853; Friends of the South Downs)  
Created August 2nd 2022

We recognise that the Local Plan policy requires major development to be zero carbon and zero waste; however, it is considered that the suggestion to extend this within the AAP to require a zero whole life assessment covering construction, operations and ongoing repairs etc. should be explored.

(R19/session 60854; Gatwick Airport)  
Created August 2nd 2022

The site is also on the edge of our wind turbine safeguarding zone at 30km. If any wind turbines are proposed for this site, we would be grateful if we could be consulted as depending on their location and height they have the potential to impact on radar utilised by Gatwick Airport.

(R28/session 60868; Horsham District Council)  
Created August 2nd 2022

It is acknowledged that the Local Plan policy requires major development to be zero carbon and zero waste; however, it is considered that the suggestion to extend this within the AAP to require a zero whole life assessment covering construction, operations and ongoing repairs etc. should be explored.

### Question 13: What renewable energy generation do you think the site could offer?

(R206/session 53526; member of public)  
Created June 7th 2022

Hydro potentially and aun

(R196/session 53606; member of public)  
Created June 8th 2022

All the homes must be carbon neutral

(R197/session 53690; member of public)  
Created June 8th 2022

Whatever is viable for what is built. As before, it makes no sense for the site not to be self sufficient in this day and age.

(R208/session 53703; member of public)  
Created June 8th 2022

I don't know enough about this to say, sorry.

(R154/session 53708; member of public)  
Created June 8th 2022

Not on site. Invest in off site renewables.

(R203/session 53949; member of public)  
Created June 10th 2022

Solar Ground source for heatpumps, possibly also using the river water

(R153/session 53964; member of public)  
Created June 10th 2022

Solar, wind and biomass

(R90/session 54020; member of public)  
Created June 10th 2022

Design in all alternative energy at the start so it isn't obtrusive

(R112/session 54076; member of public)  
Created June 11th 2022

None required if you rewild this site.

(R94/session 54186; member of public)

Created **June 13th 2022**

Any would be great - wind and solar?

(R142/session 54348; member of public)

Created **June 14th 2022**

Why are you asking me this? Shouldn't you know this? Solar, wind, ground pumps

(R166/session 54370; member of public)

Created **June 15th 2022**

Solar, Wind and use of the tidal river

(R216/session 54416; member of public)

Created **June 15th 2022**

Solar power

(R78/session 54414; member of public)

Created **June 15th 2022**

Solar power.

(R135/session 54443; member of public)

Created **June 16th 2022**

Solar, wind on roofs

(R119/session 54505; member of public)

Created **June 17th 2022**

Solar and wind

(R209/session 54553; member of public)

Created **June 19th 2022**

solar

(R164/session 54096; member of public)

Created **June 21st 2022**

Very little due to shade and low lying site

(R129/session 54811; member of public)

Created **June 23rd 2022**

solar, wind, ground source

(R139/session 54943; member of public)  
Created **June 24th 2022**

Solar and wind power

(R173/session 54989; member of public)  
Created **June 25th 2022**

Solar, ground source heat pumps, wind energy generation on higher ground

(R186/session 55093; member of public)  
Created **June 28th 2022**

Wind turbines, solar panels, ground source heat pumps.

(R219/session 55134; Greening Steyning)  
Created **June 29th 2022**

Solar energy with battery storage, ground source heating

(R172/session 55230; member of public)  
Created **July 2nd 2022**

Solar, and perhaps wind.

(R117/session 55250; member of public)  
Created **July 3rd 2022**

ground sources heat pumps, solar panels, grey water recycling

(R74/session 55269; member of public)  
Created **July 4th 2022**

Lots of opportunity for solar here.

(R205/session 55260; member of public)  
Created **July 4th 2022**

It is important to minimise the need for energy as far as modern building practices allow. But all clean energy technologies, heat pumps, solar, wind, should be incorporated as long as biodiversity is not compromised.

(R83/session 55267; member of public)  
Created **July 4th 2022**

I would have thought it would only be solar panels that could be used on site but I don't think there is a pressing need for renewable energy generation on the site - that should be done elsewhere.

(R179/session 55304; member of public)  
Created **July 5th 2022**

The area lends itself to use of solar and windpower energy generation. The river is also

tidal, but so narrow that I don't know whether tidal energy creation is an option here.

(R146/session 55327; member of public)  
Created July 5th 2022

Solar panels not wind turbines

(R201/session 55338; member of public)  
Created July 6th 2022

None. It is part of a hillside, leave it be.

(R183/session 55368; member of public)  
Created July 7th 2022

I don't know what I don't know but I would like to see this maximised. Solar, wind and geothermal? But I'm not talking from a position of knowledge.

(R171/session 55391; member of public)  
Created July 7th 2022

Solar, gravity batteries, tidal turbine

(R175/session 55405; member of public)  
Created July 7th 2022

Possibly solar panels if well hidden within the landscape. Possibly tidal energy generation from the river.

(R133/session 55416; member of public)  
Created July 7th 2022

Solar, potentially wind

(R104/session 55482; member of public)  
Created July 9th 2022

I think it would make sense to offer as much as possible. wind, solar, maybe something utilising the river. As well as geothermal.

(R98/session 56023; member of public)  
Created July 15th 2022

There must be an opportunity to have solar panels within the site? It is prime location during the Summer (who knows what we have each year) and yet even in the Winter months, the installing would be of benefit to the site. Could the windfarm, of which the cables are "just up the road" be linked to the site also?

(R176/session 56372; member of public)  
Created July 16th 2022

Solar, ground source heat pumps, methane harvesting?? Reed beds

(R140/session 55534; member of public)  
Created July 17th 2022

Wind turbines probably not appropriate for a residential area. Solar pannels a good idea though.

(R136/session 56490; member of public)  
Created July 18th 2022

Solar on roofs. Given the bat/bird population, wind is probably out of the question. If we really wanted to lead the way - what about putting a small modular nuclear reactor on the moonscape? Nuclear is the only real option to approach net zero in our lifetimes.

(R107/session 56637; member of public)  
Created July 19th 2022

Solar is the most obvious, but I have concerns about glare from panels, as seen from the height of the South Downs to the west. If the orientation of buildings, especially commercial premises, is such that this can be minimised, then large arrays on roofs should be implemented, especially on any commercial properties.

(R187/session 56735; member of public)  
Created July 20th 2022

Definitely solar panels if thoughtfully placed.

(R75/session 56810; member of public)  
Created July 21st 2022

The whole site as a regional energy producing site.

(R207/session 56817; member of public)  
Created July 21st 2022

Solar, Windmill, Wave (from wave garden as well as an emergency reservoir).

(R148/session 56870; member of public)  
Created July 22nd 2022

Solar & Heat pumps seem logical

(R141/session 56885; member of public)  
Created July 22nd 2022

All renewable energy options must be not only considered, but also implemented. Solar, wind and heat exchange must be installed from the start.

(R168/session 56899; member of public)  
Created July 23rd 2022

Solar PV, SolarThermal, Ground Source Heat Pumps

(R159/session 56908; member of public)  
Created July 23rd 2022

not needed here! there are plenty of boring fields where solar panels/turbines can be sited

(R79/session 56961; member of public)  
Created July 25th 2022

wind/ tidal

(R195/session 56984; member of public)  
Created July 25th 2022

PV. Solar hot water is not very effective, especially in winter. (I have used both solar hot water and PV)

(R101/session 56990; member of public)  
Created July 25th 2022

Heat pump

(R212/session 57028; member of public)  
Created July 25th 2022

Water power.

(R182/session 57984; Kingsley Parish Council, Hampshire)  
Created July 25th 2022

Possibly solar, but this should not be gained at the expense of a lost of natural beauty, spectacular views or a reduction in wildlife

(R184/session 57024; member of public)  
Created July 25th 2022

See previous answer (5E) - temporary uses could contribute to this with a range of renewable energy opportunities, but the principle must be short-term, with the goal of full quarry restoration to "natural" downland.

(R103/session 56917; member of public)  
Created July 26th 2022

The site should offer solar energy generation whilst the significant daily tidal flow should be harnessed to generate energy without impacting navigation. Wind power would be unsightly, bio-fuel polluting but hydrogen power might be a possibility. It was always a mystery to me why a sub-station was not installed from the nearby offshore wind generation buried power line that passes to the east of the site.

(R221/session 57159; member of public)  
Created July 26th 2022

Large scale ground heat pumps to provide nergy for the whole site plus some solar power.

(R124/session 57177; member of public)  
Created July 26th 2022

if there are roofs not visible from surrounding countryside then perhaps some solar panels could be installed on them.

(R211/session 57853; member of public)  
Created July 27th 2022

Solar: A 1.5 MW electric solar farm replacing the existing cement works south facing roof surfaces. The solar panels form the actual roof covering and have around 10 % light transmission, with north facets covered in clear glass to flood the interior of the cement works multi storey volumes with very high levels of daylight. Pyrolysis (not incineration) A 1MW electrical demonstration pyrolysis unit powered by dry agricultural waste from the National Park with carbon sequestration facility. The current plans require 1 tonne / hour of local agricultural biomass crop waste which equals one HGV a day. With modest stockpile stored dry under riverside parking deck feeding a 1 MW electric output pyrolysis unit. This means that any agricultural or site generated dry organic waste can be treated on site in line with a zero-waste strategy. A pumped electrical storage facility can be created by using surplus renewable electricity generated on site to pump water from a lower lake to a higher lake (if these were provided). In effect creating a mini hydroelectric generator when extra power supply is needed A research and manufacturing facility for the production of new green energy sources and products

(R156/session 57287; member of public)  
Created July 27th 2022

Solar

(R165/session 57543; member of public)  
Created July 29th 2022

Ground or air source heat pumps, solar difficult considering views of site and glare.

(R99/session 57553; Findon Parish Council)  
Created July 29th 2022

13. Renewable energy should be generated via solar and hydro power.

(R132/session 57586; member of public)  
Created July 29th 2022

Everything possible such as solar panels and rain water collection from roof.

(R137/session 57747; member of public)  
Created July 30th 2022

Air and ground source heat pumps, solar and hydrogen, when available.

(R82/session 57785; member of public)  
Created July 30th 2022

A wind farm would be tragic. Is the ground suitable for underground heat pump installation? Given the background information on solar glare and heat build up, there must



be solar panel potential.

(R76/session 57798; member of public)  
Created **July 30th 2022**

none, leave it for nature not as a business or income stream.

(R220/session 57858; member of public)  
Created **July 31st 2022**

As much as possible.

(R96/session 57924; member of public)  
Created **August 1st 2022**

With a focus on nature recovery and public enjoyment, the need to generate electricity would be limited, but there could be opportunities for solar panels

(R87/session 57957; member of public)  
Created **August 1st 2022**

Solar and perhaps wind

(R130/session 57941; member of public)  
Created **August 1st 2022**

Solar power. Heat pumps.

(R163/session 57979; member of public)  
Created **August 1st 2022**

Solar electricity generation and heat exchangers should be considered

(R158/session 57982; member of public)  
Created **August 1st 2022**

Any development of the site would ideally utilise a mix of innovative technologies for renewable energy generation to showcase sustainable development.

(R143/session 57986; member of public)  
Created **August 1st 2022**

Solar and Air Sourced Heat Pumps are the obvious options right now.

(R102/session 57990; member of public)  
Created **August 1st 2022**

Minimal/Solar + main energy source from Rampion Wind Farms.

(R162/session 57996; member of public)  
Created August 1st 2022

Solar

(R2/session 60855; Adur and Worthing District Council)  
Created August 2nd 2022

The site may offer a range of opportunities for renewable energy generation. In addition to rooftop solar power (either electricity generation from solar photovoltaic or solar thermal hot water systems) there may be opportunities for ground source or water source heat pumps to deliver space heating and hot water. The impacts of any such system on the chalk aquifer and/or the River Adur would need to be considered

(R20/session 60856; member of public)  
Created August 2nd 2022

Solar energy is surely a no-brainer.

(R21/session 60857; Greening Steyning)  
Created August 2nd 2022

Solar energy with battery storage, ground source heating. Wind turbines have a potential to disrupt and harm the bird population we would be trying to protect on the site so we would suggest these are not used.

(R50/session 60893; SDNPA Specialists Team)  
Created August 2nd 2022

All should be explored. Especially solar, but also ground source heat pumps.

(R63/session 60907; Upper Beeding Parish Council)  
Created August 2nd 2022

Solar: A 1.5 MW electric solar farm replacing the existing cement works south facing roof surfaces. The solar panels form the actual roof covering and have around 10 % light transmission, with north facets covered in clear glass to flood the interior of the cement works multi storey volumes with very high levels of daylight. • Pyrolysis (not incineration) A 1MW electrical demonstration pyrolysis unit powered by dry agricultural waste from the National Park with carbon sequestration facility. The current plans require 1 tonne / hour of local agricultural biomass crop waste which equals one HGV a day. With modest stockpile stored dry under riverside parking deck feeding a 1 MW electric output pyrolysis unit. This means that any agricultural or site generated dry organic waste can be treated on site in line with a zero-waste strategy. • A pumped electrical storage facility can be created by using surplus renewable electricity generated on site to pump water from a lower lake to a higher lake (if these were provided). In effect creating a mini hydroelectric generator when extra power supply is needed • A research and manufacturing facility for the production of new green energy sources and products

(R69/session 60913; member of public)  
Created August 2nd 2022

I think there should be a range - innovation and demonstration opportunity. - think about CET in Wales - due to airport proximity and other planning policy, large wind not appropriate - STEM opportunity with many generation sources

(R9/session 60920; Campaign to Protect Rural England (CPRE) Sussex)  
Created August 2nd 2022

See 12 above, the site requires a formal assessment of the potential opportunities.

(R11/session 60846; Cyrrus Brighton City Airport)  
Created August 2nd 2022

Please see our response to question 12. Brighton City Airport would also like to mention that wind turbines have the potential to impact aviation safety. If located within 15Km of an aerodrome, turbine/s could infringe the Obstacle Limitation Surfaces (OLS) or Instrument Flight Procedures (IFP's). They could also interfere with the aerodrome radar and other aids to air navigation. It will therefore be paramount that if turbines of any size are proposed for this site, full details are provided to Brighton City Airport prior to their installation, to allow the appropriate Aerodrome Safeguarding assessment to be completed.

(R91/session 55861; member of public)  
Created August 2nd 2022

Technology is constantly changing and should look at all options - solar, wind, hydrogen,

(R127/session 53652; member of public)  
Created August 2nd 2022

Solar, hydro (river opportunity) and wind. Wind could be done well, but I am also aware of the wildlife in the area and also landscape issues.

(R223/session 58070; member of public)  
Created August 2nd 2022

Solar panels integrated in the new buildings.

(R224/session 58050; member of public)  
Created August 2nd 2022

I think the site could be a torch bearer for new methods of energy generation, not just solar, heat pumps etc

## Question 14: What opportunities do you think there are for the design of the redevelopment to ensure resilience to climate change?

(R206/session 53526; member of public)  
Created June 7th 2022

Need to be resilient to flooding

(R196/session 53606; member of public)  
Created June 8th 2022

Ensure no flooding or or any danger due to cliff collapse

(R197/session 53690; member of public)  
Created June 8th 2022

As above and go easy on the tarmac with run off. You could make this site amazing and a real showcase for 'how' to do it well. Please use some clout and innovation.

(R208/session 53703; member of public)  
Created June 8th 2022

100% opportunity

(R154/session 53708; member of public)  
Created June 8th 2022

Invest in the reforestation and encourage rewilding of farmland in the Downs. Discourage car ownership on the site. Encourage and facilitate green travel.

(R203/session 53949; member of public)  
Created June 10th 2022

Sorry but we have already lost that one

(R153/session 53964; member of public)  
Created June 10th 2022

Using existing buildings with green building materials

(R90/session 54020; member of public)  
Created June 10th 2022

Many opportunities - be an exemplar site.

(R112/session 54076; member of public)  
Created June 11th 2022

None...just create a world-leading pot of Downland wildlife.

(R94/session 54186; member of public)  
Created **June 13th 2022**

Can the site be self-sufficient using renewables?

(R142/session 54348; member of public)  
Created **June 14th 2022**

I think you should pay someone to answer this...

(R216/session 54416; member of public)  
Created **June 15th 2022**

Sloping roofs for solar panels

(R78/session 54414; member of public)  
Created **June 15th 2022**

Solar power.

(R135/session 54443; member of public)  
Created **June 16th 2022**

Riverside section will need river defences in preparation for rising sea levels

(R119/session 54505; member of public)  
Created **June 17th 2022**

Increased building insulation, colour

(R209/session 54553; member of public)  
Created **June 19th 2022**

few

(R164/session 54096; member of public)  
Created **June 21st 2022**

Heat pumps and very high home insulation levels

(R129/session 54811; member of public)  
Created **June 23rd 2022**

total - it has sheltered parts, could have underground homes that are passive, wind power from the chimney height and solar on the cliff base - all types of renewables with options depending on how the climate changes

(R139/session 54943; member of public)  
Created **June 24th 2022**

Buildings on legs or floating in case of flooding. Passive air flow through buildings to avoid need for aircon

(R173/session 54989; member of public)  
Created **June 25th 2022**

Utilising alternative energy, recycling materials, awareness of traffic pressures and encouraging public transport

(R186/session 55093; member of public)  
Created **June 28th 2022**

See previous answer. I'd like to see the development being hailed as an example in sustainable and environmental construction, delivering long-term positive impacts to local biodiversity.

(R219/session 55134; Greening Steyning)  
Created **June 29th 2022**

There is considerable opportunity to develop this as a carbon neutral site and we believe this is imperative.

(R172/session 55230; member of public)  
Created **July 2nd 2022**

Reinforcement of the riverside

(R117/session 55250; member of public)  
Created **July 3rd 2022**

food growing areas, green roofs, use local materials, re-use materials where possible.

(R74/session 55269; member of public)  
Created **July 4th 2022**

Building on any flood plains or vulnerable land is plain shortsightedness and should not be undertaken.

(R205/session 55260; member of public)  
Created **July 4th 2022**

Sustainable building practices as employed in the Zedbed project could be a solution to climate change resilience. A mixture of clean energy solutions would need to be used that are sympathetic to the need to increase biodiversity on the site. Climate change will impact on biodiversity. See previous entries for the need to include suitable nesting sites within the new build.

(R83/session 55267; member of public)  
Created **July 4th 2022**

This seems an odd question to me. The priority should be one of preventing significant climate change rather than mitigating against it, shouldn't it? And if we are going to be facing dramatic climate change it will be the whole area that needs to be abandoned or protected against the elements won't it?

(R179/session 55304; member of public)

Created July 5th 2022

Focus must be on the river, both in terms of protection from flood risk, but also not taking water from the river.

(R146/session 55327; member of public)

Created July 5th 2022

Not building close to the river!

(R201/session 55338; member of public)

Created July 6th 2022

Leaving it to nature

(R183/session 55368; member of public)

Created July 7th 2022

It sounds as though the clifflands need to be protected from climate change as well as the site protected from flooding to avoid a Lewes-like situation.

(R171/session 55391; member of public)

Created July 7th 2022

It should be possible to build in significant rainwater storage: the Riverside may well be a lost cause by the end of the 21st century.

(R175/session 55405; member of public)

Created July 7th 2022

don't know

(R104/session 55482; member of public)

Created July 9th 2022

I think every effort should be made to show the development as resistant to climate change. Certainly with making sure everything is carbon neutral.

(R176/session 56372; member of public)

Created July 16th 2022

Really overthink the flood risk,

(R140/session 55534; member of public)

Created July 17th 2022

Unsure. Any development close to the river should take into account flooding risks.

(R136/session 56490; member of public)  
Created July 18th 2022

Further flood defences. If we really wanted to lead the way - what about putting a small modular nuclear reactor on the moonscape? Nuclear is the only real option to approach net zero in our lifetimes.

(R107/session 56637; member of public)  
Created July 19th 2022

There seems to be little option but to demolish much if not all of the existing buildings on site. Re-use of materials on site should be considered where practicable. Could existing foundations be re-used, especially from the main buildings immediately to the east and west of the A283? Given the need for demolition and some handling of hazardous materials, taking a longer term view of being carbon neutral might be a necessary compromise.

(R187/session 56735; member of public)  
Created July 20th 2022

Trees, trees, green roofs, wild spaces.

(R75/session 56810; member of public)  
Created July 21st 2022

Plenty. Every roof should have solar panel and the buildings should be orientated with this in mind.

(R207/session 56817; member of public)  
Created July 21st 2022

As I mentioned before, Wave Garden to be an emergency Reservoir. Any rain water that runs off the tobogganing slope should be stored in a bunker for the wave garden. (Reused pipe from inside building) Use recycled timber or an alternative eco product for the pirate ship. Recycle any material for road infrastructure. Offering employment. Adapting to change where employee's use public transport (free transport for clients & employees to & from Shoreham train Station) or car share to reduce carbon footprint, or even cycle the southdowns riverside. Create a calm & safe environment for the individual or family, by providing a healthy indoor & outdoor space.

(R148/session 56870; member of public)  
Created July 22nd 2022

Get the experts to answer this

(R141/session 56885; member of public)  
Created July 22nd 2022

All buildings can be insulated/must be insulated and reinforced for both cold and heat. Heat exchangers, water re-use systems can all be put to use.

(R168/session 56899; member of public)  
Created July 23rd 2022



Grey water separation & reuse, together with rainwater collection. Improved public transport links between Shoreham and Steyning / Henfield and beyond (currently just an hourly bus service between Shoreham & Steyning, for example)

(R159/session 56908; member of public)  
Created July 23rd 2022

don't let profit greedy developers get hold of the project!!

(R79/session 56961; member of public)  
Created July 25th 2022

a lot with the right attitudes

(R195/session 56984; member of public)  
Created July 25th 2022

With better national building standards probably limited by what developer would provide. Certainly high quality insulation - both for winter and hot summer days.

(R101/session 56990; member of public)  
Created July 25th 2022

Huge potential for this one

(R212/session 57028; member of public)  
Created July 25th 2022

Proper eco-design of new buildings

(R182/session 57984; Kingsley Parish Council, Hampshire)  
Created July 25th 2022

No comment

(R184/session 57024; member of public)  
Created July 25th 2022

The basic SDNPA requirement is for "zero carbon and zero waste", but any development will not achieve this and it is bad practice to pass the problem onto someone else with offsetting, which the AAP admits "would be needed ... and any energy demands ... in new renewable energy off-site".

(R103/session 56917; member of public)  
Created July 26th 2022

There is a significant opportunity to ensure resilience to climate change if the known technologies are incorporated into the design.

(R221/session 57159; member of public)  
Created July 26th 2022

See Q13

(R124/session 57177; member of public)  
Created July 26th 2022

Shutters on windows, eco friendly building design to minimise energy use

(R211/session 57853; member of public)  
Created July 27th 2022

This site could be an innovative lead site for Zero carbon housing, transport, fuel production and creation of a Green Regional Hub. This site could trial and develop new zero carbon technologies for the South East. A self-sufficient power infrastructure and sewage works to serve immediate and local communities

(R156/session 57287; member of public)  
Created July 27th 2022

Insulate new buildings, include green transport options, tree planting, drought resistant Mediterranean type planting

(R165/session 57543; member of public)  
Created July 29th 2022

Too many to list.

(R99/session 57553; Findon Parish Council)  
Created July 29th 2022

14. Use of appropriate building design and materials, the planting of indigenous species of trees to create natural shade and improved flood defences in vulnerable areas of the riverside would assist resilience to climate change.

(R132/session 57586; member of public)  
Created July 29th 2022

Rain water collection by creating a small reservoir, shaded areas in public spaces, white roofing to deflect intense sun, suitable insulated roofing for winter cold, in-built communal heating system. Actively encouraging wildlife and animals through hedgehog doors/bee hotels/small animal subways, ponds/streams, no 5G masts and plenty of grassy areas.

(R137/session 57747; member of public)  
Created July 30th 2022

Retention of as many trees as possible, build in an eco friendly way using low carbon materials and insulating any buildings with triple glazing, ensure maximum daylight i.e. no overcrowding.

(R82/session 57785; member of public)  
Created July 30th 2022

Clearly not building on land where there is a foreseeable risk of flooding or ground shrinkage. Or from the viewpoint of any riverside housing development, a major fall in the level of the Adur.

(R222/session 57864; member of public)  
Created July 31st 2022

Riverside development of homes should be carbon neutral in design and continued use. Ones at risk of flooding (or even all) should be designed with this in mind.....living areas on pillars?

(R96/session 57924; member of public)  
Created August 1st 2022

This is an oxymoron! The site is isolated and poorly related to existing urban areas. It would be naive in the extreme to assume that people will use the limited bus service or Downslink cycleway. It would generate a substantial amount of traffic on an already busy road which is bound to increase emissions

(R126/session 57939; member of public)  
Created August 1st 2022

restore chalk grassland.

(R87/session 57957; member of public)  
Created August 1st 2022

Huge opportunity: insulation, drainage and interception, well glazed windows

(R130/session 57941; member of public)  
Created August 1st 2022

Don't know.

(R163/session 57979; member of public)  
Created August 1st 2022

Rising sea levels should be considered when positioning buildings.

(R158/session 57982; member of public)  
Created August 1st 2022

On-site renewable energy generation; green walls and roofs and design of buildings to to minimise impact. Tree planting where appropriate. Promotion of walking, cycling, and public transport, any other innovative transport methods to minimise car use. Perhaps a water taxi from Shoreham (the predictions I've seen suggest this area will be under water in a few more decades!)

(R143/session 57986; member of public)  
Created August 1st 2022

Huge opportunities. This needs to be lead by a highly professional design team to ensure that any buildings and landscape that are developed will be resilient to change. The area adjacent to the river is difficult due to the constraining flood risk, with building height and

mass clearly needing to be constrained so as to not to become a larger, built-up mass, visible down the river valley.

(R102/session 57990; member of public)  
Created August 1st 2022

Subsurface rain water collection tanks for times of drought. Ground source heat pumps.

(R162/session 57996; member of public)  
Created August 1st 2022

Re wild it

(R2/session 60855; Adur and Worthing District Council)  
Created August 2nd 2022

Flooding The area labelled as 'Riverside' falls within the jurisdiction of Adur District Council. We note from Section 5c that with climate change allowances, Flood Zone 3 is expected to encroach onto the southern part of Riverside and this may also affect the access road. We recommend better integration or cross reference between the climate change and flooding sections. Section 5.39 states that highly vulnerable development including basement dwellings and temporary dwellings is considered appropriate within all parts of the site with regards to flood risk. However, this conflicts with Table 3 of the Planning Practice Guidance which states that highly vulnerable development is inappropriate in Flood Zone 3 and that the exceptions test is required for more vulnerable development to be located in Flood Zone 3. The NPPF (paragraph 159) states that development should be directed away from areas at highest risk of flooding, whether existing or future. The AAP should be clear how the sequential approach will be adopted across the site to ensure the most vulnerable uses are directed away from areas at high risk of flooding. This should include future flood risk across the lifetime of the development and flooding from all sources. The Strategic Flood Risk Assessment particularly the findings of the Level 2 assessment of the site includes information on flood risk and policy recommendations. This could be better referred to in the AAP, as could maximising the multifunctional benefits of SuDS for biodiversity net gain, green infrastructure and an overall reduction in flood risk. Given recent climate change allowances, it may be beneficial to undertake a Level 2 update of the SFRA, particularly for this specific site. The following Comments have been made by the Council's Engineers Team: Flood risk comments Areas of the "riverside area" are shown to be at risk from tidal flooding in the future when considering climate change. The statement that this area of development is suitable for all vulnerability uses is contrary to policy. The drainage and flood risk assessment could be better reflected within the summary document. The main area action plan document makes no reference to surface water flood risk, which is present within this site. There is a surface water flow path shown within the "riverside area", this may indicate the presence of a watercourse here. All sources of flood risk should be considered to ensure development is safe and does not increase flood risk. Updated climate change allowances for pluvial flooding should be used when evaluating this site. The quality of the existing river embankment defence is unknown however based upon knowledge of embankments elsewhere along the River Adur it may not meet modern design standards and may be at a greater risk of failure. Reliance upon the existing defence should be discussed with the Environment Agency. River environment comments As detailed above reliance shouldn't be placed upon the river defences being located in their current positions for the duration of development. The Adur catchment flood management plan policy for this area is to "take action with others to store water or manage run-off in locations that provide overall flood risk reduction or environmental benefits". It is likely that opportunities will be pursued, during the development lifetime, up and downstream of this area to remove defences or move these further back. The river environment is sensitive and the potential introduction of more people to this environment

should be carefully considered and managed to try to reduce any negative impacts.

**Surface water drainage general comments** Surface water drainage must be considered at the earliest stage of proposals, with spatial planning considering natural topography, existing flow paths and space required for sustainable drainage. The hierarchy for sustainable drainage must be followed with infiltration fully investigated. Winter infiltration testing and winter groundwater monitoring must be undertaken, it is advised that the applicant/authority discusses the extent of this monitoring with us at the earliest opportunity. Infiltration tests must be carried out in accordance with BRE365. Infiltration systems must cater for the 1 in 10 year storm event plus 45% on stored volumes, between the invert of the entry pipe to the soakaway, and the base of the structure. It must also have provision to ensure that there is capacity in the system to contain below ground level the 1 in 100 year storm event plus 45% on stored volumes, as an allowance for climate change. Adequate freeboard must be provided between the base of the soakaway structure and the highest recorded annual groundwater level identified in that location. If on-site infiltration is not possible, drainage via a restricted discharge to a suitable local watercourse may be acceptable. Any discharge should be restricted to the mean QBAR greenfield run-off rates for all design storm events. This rate is derived from only the impermeable area of the development, including any permeable areas that are positively drained. A minimum allowable rate of 2 l/s is generally considered to avoid blockage risk of flow control devices, however, lesser rates can be achieved if adequate blockage prevention measures are incorporated. We suggest that, at the earliest stage, the developer/authority gives due consideration to the appropriate location and design of surface water drainage features to achieve necessary capacity, water quality (via the SuDS management/treatment train), as well as ease of on-going maintenance. Surface water drainage features should also be designed in a manner that positively affects the amenity of the site. We would like to remind the developer that, open features, such as swales, basins and ponds, when designed correctly, can satisfy all the above aspirations in addition to; being easier to maintain, having longer lifespans and offering ecological advantages over subterranean features such as "plastic crate systems". It should also be noted that attenuation features should not be counted within usable public open space provision. Existing and proposed trees (root protection zones) must not conflict with suds features/pipework. Ground raising is discouraged. If it is considered absolutely necessary, then due consideration must be given to the potential impacts on existing properties adjacent the development site, in terms of possible elevated groundwater levels and surface water run-off implications.

**Surface water drainage specific comments** The drainage and flood risk statement identifies that it is considered likely that the existing developed area of the site is served by positive drainage to a number of outfalls to existing ordinary watercourses and the River Adur. We agree that areas C and D should be considered as greenfield for surface water drainage design purposes. The strategy considers an option of only delivering 30% betterment over existing flows; this does not comply with the adopted WSCC policy for the management of surface water. The strategy only considers a 20% climate change allowance, this also does not comply with policy. Upper end allowances must be used and be suitable to the lifetime of development, therefore in this area we require a 45% allowance for climate change to be used. FEH 2013 data should be used with an appropriate value of Cv selected for drainage calculations. Area A/ the riverside is at a relatively low elevation, any proposals to discharge to the River Adur must consider surcharging of the outfalls. With the following events considered as a minimum: a) a 30 year climate change rainfall event combined with a 2121 MHWS tide, to demonstrate no flooding; b) a 100 year climate change rainfall event combined with a 2121 MHWS tide, to demonstrate flooding on site is safely managed and does not increase flood risk elsewhere; and c) a 2 year climate change rainfall event combined with a 2121 200 year tide, to demonstrate flooding on site is safely managed and does not increase flood risk elsewhere. We would recommend consideration of any opportunities to provide drainage "over the wall" to remove this tidal locking. Area A could discharge unattenuated if it is demonstrated that scenarios a-c above are met and other statutory consultees are in agreement with this. Full treatment of surface water prior to discharge would still be required. Any proposals to discharge to ordinary watercourse must also consider surcharging of outfalls, with surcharged water levels set to adjacent top of bank level where modelled data for predicted water levels is not available. Discharge to ordinary

watercourse would have to be restricted and meet policy requirements, i.e. as close to greenfield QBar as possible for all events up to and including the 1 in 100 year plus 45% climate change event. Ordinary watercourse land drainage consent would be required in support of any proposals to discharge to ordinary watercourse. Please note that pumping of surface water is not accepted.

(R20/session 60856; member of public)  
Created August 2nd 2022

A zero carbon development with on-site energy generation. There is also the possibility of carbon sequestration in building materials and tree planting. All present opportunities for climate change resilience.

(R21/session 60857; Greening Steyning)  
Created August 2nd 2022

There is considerable opportunity to develop this as a carbon neutral site and we believe this is imperative. In addition, incorporating nature into the building, including areas of protected habitat, green roofs etc. can also help with climate resilience by offering nature-based mitigation.

(R22/session 60860; member of public)  
Created August 2nd 2022

I am in agreement that the ongoing climate emergency should always be at the forefront of any planning decisions and would suggest that retaining these buildings would minimise the carbon footprint of any development. Renovation to new purpose and not demolition.

(R10/session 60845; Cycling UK Brighton and Hove)  
Created August 2nd 2022

The development needs to contribute to carbon reduction in terms of the Government's 2021 "Decarbonising Transport" plan ([https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1009448/decarbonising-transport-a-better-greener-britain.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1009448/decarbonising-transport-a-better-greener-britain.pdf)) which sets out how "enabling more active travel will contribute to addressing the challenges of climate change". Accelerating modal shift to walking and cycling is identified as a key objective in both the government's "Decarbonising Transport" plan and the Net Zero Strategy (<https://www.gov.uk/government/publications/net-zero-strategy>). Both the Cycling and Walking Plan for England, "Gear Change" ([https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/904146/gearchange-a-bold-vision-for-cycling-and-walking.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gearchange-a-bold-vision-for-cycling-and-walking.pdf)) and the Government's Cycling and Walking Investment Strategy 2 (CWIS2) (<https://www.gov.uk/government/publications/the-second-cycling-and-walking-investment-strategy/the-secondcycling-and-walking-investment-strategy-cwis2>) set out ambitious targets to increase the percentage of short journeys in towns and cities that are walked or cycled to 46% by 2025, and 50% by 2030. CWIS2 aims to make cycling and walking the natural choices for shorter journeys, or as part of a longer journey by 2040.

(R35/session 60876; member of public)  
Created August 2nd 2022

As the Riverside is said to be the most suitable for housing and/or commercial and retail this area needs to be developed to be flood resilient for the next '100' years. Flood resilient design is a specific type and has a cost associated with it. Please see this link which highlight just some of the elements that need to be designed into the scheme <https://www.thehomeforallseasons.com>. There are many more elements that need to be included in the design and some are mentioned in the action plan.

(R50/session 60893; SDNPA Specialists Team)  
Created August 2nd 2022

Microclimate creation, location of homes away from overheated spaces.

(R63/session 60907; Upper Beeding Parish Council)  
Created August 2nd 2022

This site could: • Be an innovative lead site for Zero carbon housing, transport, fuel production and creation of a Green Regional Hub. • Trial and develop new zero carbon technologies for the South East. • Contain a self-sufficient power infrastructure and sewage works to serve immediate and local communities

(R69/session 60913; member of public)  
Created August 2nd 2022

covered above - the site should be committed to science based targets

(R9/session 60920; Campaign to Protect Rural England (CPRE) Sussex)  
Created August 2nd 2022

The whole site's arrangement including the specification for all buildings and design standards should ensure resilience to climate change. Surely nothing else could be envisaged by the SDNPA.

(R91/session 55861; member of public)  
Created August 2nd 2022

This brownfield site could be an exemplar site for regenerative redevelopment design. It should aim to be carbon neutral or positive in its design.

(R127/session 53652; member of public)  
Created August 2nd 2022

Due to the climate change emergency, I think it should be at the forefront of all of our decision making especially when it comes to new development. Thinking about the materials that are used, are they sustainable? What dependences on natural and finite resources will the development have? I think we also need to think about keeping homes cool, especially after the heat wave this year and I assume these kinds of events will only be more common. I think we need to look at what is best for the people buying the homes and how to design them in a future proof sense.

(R185/session 57963; member of public)  
Created August 2nd 2022

Whilst Southern Water does not presently supply clean water to the site itself (ref paragraph 5.33), we supply nearby housing at Dacre Gardens via Sussex North WRZ. Given the water neutrality requirement in this zone, we would look to encourage policies that ensure any development is future proofed in terms of sustainable water usage. According to Water UK (<https://www.water.org.uk/netzerowater/>), 'Total water supply is forecast to decrease by 7% by 2045 as a result of the climate emergency and limits to sustainable abstraction'. There is an opportunity for this site to become an exemplar in terms of sustainable water management through an effective combination of SuDS, greywater recycling and rainwater harvesting systems.

(R223/session 58070; member of public)  
Created August 2nd 2022

Buildings should be zero carbon, zero waste and to highest standard. Car charging points, bike parks, green roofs/ walls, solar panels etc..

(R224/session 58050; member of public)  
Created August 2nd 2022

Could there be opportunities for carbon capture? With the Riverside development, could there be innovative ways of managing flood risk?