Portishead Neighbourhood Planning Workshop - 5th September 2020
Policies for a zero carbon future

On 5th September 2020, the Portishead Neighbourhood Planning team held a workshop facilitated by the Centre for Sustainable Energy (CSE), looking at the predicted impact of climate change and how Portishead could plan for a zero carbon climate future. CSE gave an introductory presentation on the likely impacts of climate change and the UK's domestic and international legal commitments to reduce carbon emissions (net zero emissions by 2050) and posed the question:

"*Imagine it's 2050. We have cut carbon emissions to zero. What have we done to achieve this? How have we adapted our town to reduce carbon emissions and how have we adapted to the potential impacts of climate change*?"

Thinking about our neighbourhood, we could consider these types of option:

- How we generate electricity and heating
- How we protect biodiversity and adapt to possible extreme weather
- The types and design of the buildings we live in and work in
- How we travel and where we could change where we locate housing, offices, shops and services

The workshop came up with the ideas listed below, some of which are clearly unlikely and beyond our scope, but some could lead to future actions and policies. These ideas will be considered when writing the policies for the Portishead Neighbourhood Plan. They could also inspire the community to take actions independently.

We are interested to hear your thoughts. What do you think of these ideas?
Please provide feedback by clicking the link below
[(Portisheadplan.uk/getinvolved.html)](Portisheadplan.uk/getinvolved.html)

Topic 1 - Energy (electricity and heating)

- Allocate land locally for renewable energy schemes (to make us independent as possible from energy perspective)
- Beef up planning policies to promote or make renewable energy solutions mandatory (new builds and retrofitting)
- Incentives for retrofitting existing buildings with renewable energy
- Lobby for government grants to encourage people more towards retrofitting energy efficient solutions for their homes

- Encourage energy pricing to encourage people to use renewables
- Low cost incentive schemes for refitting housing commercial buildings - solar if possible
- Tidal electricity system - small scale if necessary
- Install solar pv panels on car parks
- Localised battery storage + smart energy technology in new builds
- Localised energy from food waste
- Council owned land and buildings to lead the way in efficient energy solutions (where practical)
- Wind turbines especially to be pursued (lobby council to identify suitable land)
- Lobby for Bristol Channel tidal scheme to be prioritised i.e. Build barrage
- Build small scale barrage across entrance to the Marina
- Use of lagoons, rather than enclosed barrage to provide energy
- Encourage less use of household gadgets so as to use less energy
- Hydrogen as an alternative to gas
- Air / Ground source heat pumps
- Heat recovery
- Research into the production of batteries so that they use less rare resources.
- District heating (put in from start)
- Supporting local community energy groups
- Working collaboratively with other communities to develop viable renewable energy projects
- Smart grid to permit additional renewables to connect
- No more gas central heating system in new builds
- Incentives and promotion / education for renewable heating systems.
- Provide a community owned independent energy source for Portishead - may need to combine with nearby parishes as Portishead hasn't got the land required. (onshore wind on seafront?)
- Use water storage as battery source
- New development to maximise on-site renewables including electricity battery storage
- Smart houses incorporating battery or other energy storage to enable intermittent renewable electricity supply (e.g. from solar panels) to be stored to match demand
- Sharing local experiences of owning renewables

Topic 2 - Resilience to extreme weather & protecting biodiversity

- Build in biodiversity requirements into all aspects of the Neighbourhood (and Local) Plan
- Audit and map all our green assets (inc. road verges) looking at range of habitats and wildlife.
- Include rhynes, Portbury ditch, railway line, coastline, coastal path, gardens and other non-obvious spaces in audit and policy decisions
- Build corridors to link wildlife together. Planning policy and decisions need to take a holistic view
- Green spaces - need to think about and protect them all

- Plant trees strategically as shelter to deal with strong winds
- Review flood protection plans - tidal surge?
- Stop building (as much) on the flood plain.
- Review ten year old national coastal management plan to upgrade our coastal defences - funding?
- Continued rewilding in Portishead
- Council to ascribe land being developed as an amenity and not just for building - think about distances to green space + barriers to children accessing playgrounds - road safety
- Apportioning economic value to green spaces
- Plant more trees and tall grasses - native species
- Have to cope with increased water run-off due to increased population and climate change. Need to prevent raw sewage reaching the sea.
- Plastic waste getting washed into sea
- More re-use of consumables
- High street continually getting flooded & outside Gordano school etc.
- Stop the use of plastic grass.
- Decline of hedgehogs - need to provide suitable environment
- Less grass cutting, more wild gardens. (parish council management of land?)
- Monitor wildlife to understand whether we're making things better or worse
- Planting on top of bus stops, roof tops etc. Vertical gardens.
- Educate the general public to appreciate reasons for re-wilding etc.
- Need feedback from the public
- Reclassify plastic waste as a hazardous material
- Cull invasive species (Just plants? - There wasn't agreement on culling introduced animals and birds)
- Any new development to have permeable paving, green spaces - not all tarmac - or no parking spaces at all
- Flood prevention scheme in south and east
- Removal of non-recyclable plastics from the food chain
- Support innovation and piloting of alternatives to plastics
- Plant trees to provide shelter from sun in urban areas and parks
- Plant trees/shrubs that are suited to warmer climates
- Build to deal with flooding that occurs
- Community resilience and understanding of flooding
- Carbon capture in marshlands and peat bogs
- Dark skies initiative (streetlights? Switch off at midnight? LED fitting and luminaire fittings - directional lighting)
- Solar powered street lighting (on demand - PIR?)
- Dark corridors / bat highways along Green infrastructure corridors

- All suitable development to have sustainable urban drainage systems to manage flooding and provide habitats for wildlife (also delivering cooling effects) - not just for major development as currently required in national planning policy
- If sea levels rise and coastal erosion increases - all development on or near the coast to be subject to geological survey.
- If rainfall levels increase surface water run-off is likely to increase as well. As much of Portishead is built on slopes this could be a problem
- Ban / discourage artificial grass
- Shade planting for heatwaves
- Plan for water shortages and management.
- Hempcrete and building materials (e.g. wool insulation) securing carbon sequestration
- General Point - much more publicity about what people can do - e.g amount of diversity possible in your own garden.

Topic 3 - Our buildings

- Thermal efficiency - new buildings to be zero carbon / passivhaus / carbon negative
- Reduced air leakage in new buildings
- Promote the retrofitting of existing buildings - with more insulation, solar power,
- Renewable / low carbon heating - heat pumps - make technologies available and affordable
- Training and deployment + regulation - trusted contractors
- Embedded carbon in construction
- Off-site flatpack construction?
- Hydrogen as green gas
- Need to re-educate our construction industry with new techniques
- Reuse /recycle / repair buildings
- Use of geothermal heating, heat pumps
- Look at model sustainable buildings for ideas. Adopt best practices.
- Label products with through-life CO2 efficiency, think more about where products are shipped from
- Make more use of local materials.
- Living vertical walls and roofs
- Compostable waste as used on campsites.
- Every house should have at least one water butt.
- Re-use of brown water.
- Discourage 2nd home ownership
- Sell houses on square footage rather than the number of bedrooms
- Build upwards rather than outwards
- Common facilities for different groups
- Mixed housing developments with shared common areas
- Cooperative housing and co-housing

- Foster the use of local materials
- Support local food production
- More allotments provided
- Cycle storage
- Window shutters

Topic 4 - Transport, service provision & location of development

- Integrated travel plan needed for new development (railway, buses, foot, bike, cars)
- Promote livable neighbourhoods - restricting car travel whilst at the same time making the area more accessible, by cycling and walking
- Ensure that new development is developed with integrated facilities (shopping etc) to minimise the need to travel.
- Think about social inclusion in transport policy
- Some specific areas/demographics have more need for public transport
- High street and linkage to other areas needs good access (Marina and Lakegrounds)
- Arrival context from train station / dual carriageway through town? Could the dual carriageway be downgraded (though it has just been "improved")
- More local control about how roads are managed / designed?
- Better signposting to the different parts of Portishead
- How do you get to the different facilities so people have a better view of the whole of Portishead
- Develop a Portishead App (raise public awareness)
- Shuttle bus service
- Electric bicycles - (school travel)
- Ban parents from dropping off secondary school children within ¼ mile of school
- Safe walking and cycling to schools - cycle infrastructure in hilly bits of Portishead? - cycle ways on footpaths - making it easier and safer to cycle
- Cycle parking in the places needed (with CCTV?) Refurb of existing
- Electric charging points
- High percentage of electric cars
- Privately owned charging points in new builds
- Charging points per road
- Excellent train service
- Electric/hydrogen buses (poo buses?)
- Reduction of cars + mileage (first and last mile)
- Excellent walking routes to all destinations
- Marked network of walking/cycle/bridle routes
- High ground (walking / cycling?)
- Location of schools to reduce need to drive / travel

- Possible development upwards rather than outwards
- Use of public transport within Portishead
- Local working + home working + sustainable local business development. Green business park. Home working hub / flexible meeting rooms?
- Train station and environment + access in and out.
- 5G will enable autonomous vehicles to be introduced more quickly
- Active travel policy
- Stop car ownership, car sharing, short term car hire / car clubs?
- Encouraging green electric bikes (grants, charging point etc) - take account of Portishead geography
- Water based transport system from Marina to Bristol, Newport, Cardiff etc. Perhaps use of hovercrafts, or Hydrogen ferries
- Fast broadband for everyone (encourage less journeys)
- Mixed development of housing, workplaces, employment areas, etc to reduce need for travel
- Parking facilities for housing
- Pedestrianising the high street - this might lead to higher footfall? (not full agreement on this - would it turn Bristol road into A-road)
- Prioritising brownfield land
- re-developing the big box retail units beyond the high street
- Funicular railway up Avon Way
- Shared space, Cabstand to Avon Way.
- More monitoring points for air pollution inc. outside schools
- Pavements on both sides in Bristol Road?! To get to football club