

Biodiversity, Resilience and Energy

The following is adapted from [neighbourhood-planning-in-a-climate-emergency-feb-2020.pdf](#)
([centreforsustainableenergy.ams3.digitaloceanspaces.com](#))

I. Biodiversity

What is green infrastructure?

Access to nature and healthy green habitats is vital to human health and wellbeing, vital to the health of other wild creatures and plants, and a crucial element of adapting to climate change. Green spaces can (and where possible should) perform multiple functions which contribute to both climate change mitigation and adaptation:

- Wildlife habitat.
- Routes for walking and cycling.
- Space to grow food.
- Regulation of microclimates (e.g. trees' significant contribution to cooling urban areas in heatwaves).
- Increased flood water retention and reduced surface water runoff

Neighbourhood plan policy ideas for green infrastructure

Potential topics your policies could cover are:

- Support development which integrates new multi-functional open space within it – include a requirement for a plan which outlines how the space will be managed to enhance biodiversity.
- Support development which actively seeks to improve the connectivity of green infrastructure and enhance biodiversity (and not supporting development which further fragments green infrastructure and impacts negatively on biodiversity).
- Support development which increases the number of street trees in a locality.
- If you are supporting standalone renewable energy developments within your neighbourhood, require biodiversity improvements to be planned in from the start. Research by the Building Research Establishment shows that where best practice is followed and a biodiversity management plan is developed, field based solar farms can deliver habitat enhancements: www.bit.ly/bre-solarbiodiversity.
- If your neighbourhood is prone to heat stress or flooding, oppose the loss of front gardens to paving and parking and the complete loss of back garden space through “garden grabbing”.
- Where landscaping is proposed in association with new developments, encourage the use of native species to support wildlife.
- Designate local green spaces in order to protect them from development. See this resource from Locality www.bit.ly/locality-NDO, and our report on Potential Designated Green Spaces in Haslingfield.

Questions for Discussion

- What are the current green infrastructure assets within your neighbourhood? Could you map these assets to see how they join up and show any gaps or weak links between them?
- What is the condition of the wildlife or biodiversity assets that you have?
- What actions would increase biodiversity or improve the condition of habitats that are present?

Biodiversity, Resilience and Energy

- Are any habitats rare in your region, and therefore in need of greater protection (i.e. chalk streams, wildflower meadows)?
- We have a county wildlife site in our parish, in the Haslingfield Quarry. What changes in the management of the surrounding land could increase its value for wildlife?
- How might climate change affect habitats over the period of your neighbourhood plan and the coming decades?
- What are the threats to your neighbourhood's green infrastructure (e.g. housing developments without enough additional green infrastructure, buffer zones or wildlife corridors)?
- Are there green spaces that are of particular importance to your community, and are they protected?

II. Energy

Why Plan for Local Renewable Energy?

- Potential for local ownership: revenues can be re-invested to benefit local community.
- Potential for reduced bills: new mechanisms may allow reduced tariffs in locality.
- Sustainability: reducing reliance on finite fossil fuel reserves.
- Climate change mitigation: decarbonising energy supply.
- Resilience and economy: Balancing local supply with local demand and working towards local energy markets.

Neighbourhood plan policy ideas for renewable energy

Through your neighbourhood plan, you could aim to explore all the renewable energy resources that could viably be developed within your neighbourhood and identify those which could carry community support.

Potential topics your policies could cover are:

Local locations for renewable energy plants

Identify an area that has good potential for particular kinds of renewable energy (for example streams or rivers that used to have mills on them, fields suitable for solar farms, or the potential for an anaerobic digester in a neighbourhood that is very agricultural) and which you have identified community support.

Criteria for support

Things the community requires for renewable energy plants, i.e., Community will support a solar farm in a particular field, but only if effectively screened from view by native planting.

Community energy

The NPPF states that local planning authorities “should support community-led initiatives for renewable and low carbon energy (paragraph 152)”, but very few local plans have policy to reflect this national objective. Your neighbourhood plan is a great opportunity to encourage community owned projects that will return tangible benefits to your neighbourhood.

Questions for discussion

- How do households and businesses feel about energy costs? Are rising energy bills a problem?

Biodiversity, Resilience and Energy

- Could your neighbourhood produce a higher proportion of its own energy from renewable energy, become fully self-sufficient, or even become a net exporter of renewable electricity?
- What forms and scale of renewable energy would carry support in your community
- Where could renewable energy developments happen? Are there locations in your community that would be particularly suitable or resources that could be exploited?
- Would people support community owned renewable energy developments, or jointly owned ventures with commercial renewable energy companies or fully commercial developments?
- Are there major consumers of electricity in your neighbourhood who could be potential purchasers of renewable electricity?
- What opportunities are there for renewable heat generation in your area? Is there an opportunity to create a district heating network? Is there a significant heat source (e.g. power station, heavy industry) or heat demand (e.g. swimming pool, nursing home, hospital) that could help support this?
- How might you use revenue from community energy projects?
- Would your community want to encourage 'smart' technologies? Are there opportunities for income generation from reducing demand at peak times?

III. Resilience

Exploring local vulnerability

Climate change and biodiversity loss are leading to a cascade of effects which could impact on our lives locally, including flooding, deadly heat waves, and food insecurity.

Neighbourhood planning introduces the opportunity to explore the vulnerability of your local community to these effects, and what the opportunities are to increase your community's resilience.

Questions for discussion

- How would residents cope if heatwaves were an additional 3, 4 or even 5°C hotter than at present, or if heatwaves like that of 2018 occurred every other year? Do we need to think about additional shade (trees or canopies) over specific sites, i.e. playground, side of village hall, uncovered bus stops?
- We have a few streets which experience flooding problems. Is it clear what the root causes are? (e.g. rivers or drains overwhelmed by heavy rain, loss of green space including paving over of front gardens). Are there specific areas where surface water drainage is inadequate or sometimes overwhelmed?
- Does our area suffer from water stress and over-abstraction? Do streams and rivers disappear in the summer?
- Does new development incorporate sufficient landscaping, to absorb rainfall and provide shade? Are tree plantings maintained and planted appropriately to ensure living trees for years to come, despite heat and water stress?
- Could new developments incorporate green roofs and walls?
- What could new developments do to reduce water use and reduce surface water flooding?
- Are developments resilient to extreme heat as well as cold?
- Is there enough access to opportunities for growing food?
- Could/should we investigate the possibility of a community farm or garden?