Neighbourhood planning in a climate emergency

A guide to policy writing and community engagement for low-carbon neighbourhood plans

tcpa

ef Esmée Fairbairn FOUNDATION

centre for sustainable energy

Imagine a neighbourhood that is greener and more pleasant to live in, helps sustain community and the natural environment, and contributes to a safer climate; a good neighbourhood plan can help achieve all of these goals.

Reproducing content from this guide ...

Neighbourhood Planning groups
Feel free to copy and paste any text for use in your plan; all sources are fully referenced to make this easier. But remember, if you're using our policy examples, you'll need to back them up by relevant local evidence of your own.

Local planning authorities
You are welcome to link to our resources, or if you'd prefer, copy, paste and adapt sections of our material into your own guidance for neighbourhood planning groups, though please provide an attribution.

For more resources, visit www.cse.org.uk/local-energy/neighbourhoodplans.

For free advice and support in drafting a low carbon neighbourhood plan, please email neighbourhoodplanning@cse.org.uk or call 0117 934 1400.

centre for sustainable energy

Contents

Foreword

....

Neighbourhood planning has proved incredibly popular, with hundreds of plans currently in preparation. Government has described neighbourhood planning as "a revolution to hand power back to local communities" and a tool that will give people "the power to shape the future of their local area".

Climate change is single biggest threat to the future of our society and dealing with its implications has to be at the heart of all Neighbourhood plans. The growing and severe impacts of climate change mean that any plan made now that does not consider radical reductions in carbon and help build our resilience to things like flooding will simply not be fit for purpose. Despite their popularity, recent research has shown that the overwhelming majority of plans already adopted simply do not consider these issues in any meaningful sense. Neighbourhood plans will be in force for 15-20 years. If they are to successfully help communities deal with the future we will actually experience, they must move away from the narrow focus on accommodating housing that has blighted local planning in general, and move to an approach that plans for resilient, sustainable communities.

This publication explores the huge potential of neighbourhood plans to plan for and build a positive future for local communities, through addressing and responding to this, the most challenging issue of our times. As a champion of approaches that place climate change at the front and centre of the policy priorities of the spatial planning system, the Town & Country Planning Association welcomes this guidebook.

Hugh Ellis
Director of Policy Town and Country Planning Association, January 2020

1   Introduction

As the climate emergency escalates, so does the urgency with which we need to take action at all levels. Our society faces significant challenges for communities, the economy, human health and the environment.

But imagine a neighbourhood that helps you feel positive about the future, that enhances your health and wellbeing, and that creates a greater sense of connection with those around you. Neighbourhood planning and the Localism Act give powers to communities to shape the development and growth of their local area.

Developing a neighbourhood plan offers a unique opportunity for your community to proactively set out a positive and ambitious vision for the future and increase your community's resilience in the face of the challenges associated with climate emergency.

This guidebook has been developed for neighbourhood planning groups and those supporting the development of neighbourhood plans. It is intended to help you create a positive and ambitious neighbourhood plan, using a 'low carbon' lens.

The guide begins with an overview of the climate emergency and introduces the basics of neighbourhood planning. The main text of the guide is themed around specific climate emergency and sustainability issues (which all inter-relate but are dealt with separately for convenience). The guide has grown in length, so we'd advise against reading it cover to cover. Instead, we suggest reading chapters 1-4 which provide a good introduction, and then dipping into the rest theme by theme.

For each of the issues covered you'll find:

1   An overview of the topic (including explanatory notes and references to national policies).

2   Key questions and considerations.

3   Examples of policies that have successfully been included in other plans, and suggested wording you could include or adapt for your plan.

4   Ideas for non-statutory actions and projects.

5   Recommendations for supporting evidence.

6   Resources to help you.

Why create a low carbon neighbourhood?

• **Empower your community**

• **Improve people's health and quality of life**

• **Help tackle climate change**

• **Improve community resilience**

• **Benefit the local economy**

"If we have not taken dramatic action within the next decade we could face irreversible damage to the natural world and the collapse of our societies."

David Attenborough
(Climate Change: The Facts, BBC1, 18 April 2019)

2   Climate change and the policy context

There is ever greater clarity of the urgent need to address climate change, and of the grave consequences if we don't.

Here are some key facts and figures to use in your Neighbourhood Plan:

- Globally, atmospheric CO_2 exceeded 400 parts per million in 2016, the highest in human history, and continues to rise. The last time we had CO_2 at this concentration was 3-5 million years ago, at which point global average temperatures were 4-5 degrees hotter than today[1].

- Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels and it is predicted that on the current trajectory, warming will likely increase to 1.5°C above pre-industrial levels between 2030 and 2052[2].

- Extreme weather events have been seen around the world, not least in Australia which, at the time of writing, is still battling out-of-control wildfires that have claimed dozens of lives and done immeasurable damages to wildlife. There is mounting evidence that human activity is raising the risk of some types of extreme weather, especially those linked to heat[3]. This animation from Carbon Brief shows global temperature anomalies since the year 1900: **www.youtube.com/watch?v=-yIHxOui9nQ**

- The UK's winter floods of 2013-14[4] and the European summer heatwaves of 2018[5] and 2003 (where heat-related deaths ran into tens of thousands)[6] were all made more likely by climate change.

- The 2018 summer in the UK was the joint hottest on record together with 2006, 2003 and 1976[7].

- Sixteen of the 17 warmest years on record have occurred since 2001[8].

- Arctic sea ice extent has declined by around 13% per decade since 1979[9].

The UK Met Office predicts[10] that in a business-as-usual (high emission) scenario, Britain could experience summers as much as 5°C hotter by 2070, with a 50% chance that by 2050 they will be as consistently hot as the 2018 one. Winters could be up to 4.2C warmer, and sea levels would rise by up to 1.15 metres by 2100, leaving the UK coastline unrecognisable. Average summer rainfall could decrease by up to 47% by 2070, while there could be up to 35% more precipitation in winter.

The, Intergovernmental Panel on Climate Change (IPCC) has warned that a global temperature rise of 2°C will "significantly increase" the risk of "drought, floods, extreme heat and poverty for hundreds of millions of people" and cause a 99% collapse in the world's coral reefs. "The challenge of avoiding catastrophic climate breakdown requires rapid, far-reaching and unprecedented changes in all aspects of society" it says[11].

What's Britain doing?

A lot – but at the same time nowhere near enough!

The landmark 2008 Climate Change Act[12] committed the UK to reducing carbon emissions by 80% by 2050. However, in recognition of the severity of situation, recent environmental activism and recommendations by the Committee on Climate Change[13], parliament declared a climate emergency in

May 2019 and called on the government to set a more demanding target. This it did in June 2019, by amending the Act and committing the UK to achieving net zero carbon emissions by 2050[14].

Achieving this will require the vast majority of households, communities, businesses and local authorities to be fully engaged and aligned with this government policy.

Neighbourhood plans are one way in which a new direction can be taken, helping to mitigate climate change and adapt to its effects, and, by local communities taking the lead and effectively giving consent for this rapid transition to take place, expanding the space within which politicians feel they can safely operate.

How does our existing legal commitment translate into planning documents?

The 2004 Planning and Compulsory Purchase Act (as amended) states: "Development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change."[15]

The National Planning Policy Framework (NPPF), which sets out government's planning policies for England and how these are expected to be applied by local government, says (para 149 and footnote 48): "Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures, in line with the objectives and provisions of the Climate Change Act 2008."[16]

This means that local plans must demonstrate how their policies are in line with the **legally binding carbon emission reduction targets** set out in the Climate Change Act (i.e. net zero carbon by 2050). Local plans should be based on an understanding of both the baseline carbon dioxide emissions within the council area, the emissions inherent in future development and growth within the plan period, and the actions and policies that will reduce emissions in line with the trajectory set out in the Climate Change Act.

If you think your council's local plan doesn't make enough of a contribution to climate change mitigation and adaptation or include these provisions, you can challenge them on these points. Your neighbourhood plan is then an opportunity to fill this gap.

DECLARING A CLIMATE EMERGENCY

According to the website **www.climateemergency.uk**, over 260 district, county, unitary and metropolitan councils have passed motions declaring a climate emergency. Many have set targets to be carbon neutral by a specific date.

You could declare a climate emergency in your town or parish, and tie this into the vision and high level objectives for your neighbourhood plan. Frome Town Council have published resources you could use to help you: **www.frometowncouncil.gov.uk/climate-emergency**. You could also petition your local council to declare a climate emergency for your council area as a whole: **www.campaigncc.org/councils_climate_emergency**.

CSE's new Climate Emergency Support Programme offers local authorities free 'critical friend' support to write climate emergency declarations and develop deliverable action plans. Email **climateemergency@cse.org.uk** for details.

---

3 What does a low carbon neighbourhood plan look like?

The NPPF (paragraph 2) summarises the objective of sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" and states "the purpose of the planning system is to contribute to the achievement of sustainable development".

It can't be overstated that sustainability issues don't just belong in the environment chapter of your plan. If sustainability and climate issues are only addressed in the environment chapter, there's a risk that these issues will be looked at narrowly or superficially, resulting in policies which are limited in what they can achieve.

The challenge of entirely eliminating carbon emissions within the current generation requires rapid, far-reaching and unprecedented changes in all aspects of society, and must therefore inform the background to policy formation across all policy areas in your neighbourhood plan.

Therefore, it is more effective to embed a commitment to environmental sustainability (and tackling climate change) within the vision statement for your plan along with other aspirations. High level objectives should then translate what would be required across different policy areas to achieve this. Having stated this, there is no value in duplicating planning policies which are already set out in your council's local plan policy. **Your plan should instead focus on what's missing from the local plan, what could be strengthened and responding to local considerations.**

A neighbourhood plan, when brought into place, becomes part of the statutory development plans for the area. A low carbon neighbourhood plan is a plan which embeds ambitious climate change mitigation and adaptation policies within it.

Mitigating climate change by reducing carbon emissions should be a universal aim, but communities will have different opportunities and challenges in doing so. The potential consequences of climate change will also vary from locality to locality. Some areas might be more vulnerable to overheating, or flooding or water stress impacts, and different communities of people will be more or less resilient or vulnerable to these different impacts.

Rural communities will often have greater potential for renewable energy, but residents might experience enforced car dependence, with a lack of basic transport infrastructure (e.g. pavements!) and local services. Urban areas conversely can have more sustainable development patterns, with service and employment provision closer to people's homes making sustainable transport options more feasible, but experience more acute problems with heat stress, air pollution, traffic congestion or dangerous roads and unsafe streets. Typically urban areas also have fewer renewable energy resources.

To summarise, all communities should seek to reduce carbon emissions and increase their resilience to the impacts of climate change, but how they might choose to do this, and the issues they might choose to concentrate on, will vary. Some contrasting examples are set out overleaf:

Case Study

Resilience challenges in a small market town: the Frome Neighbourhood Plan (2016)

Frome is a small market town in Somerset. The vision in the Frome Neighbourhood Plan is "to build a community that is resilient in its capacity to support the needs of residents in the face of global shocks such as economic downturns, rising energy prices and climate change".

The plan adopted ten principles for sustainable development (see below), developed by Bioregional and WWF, which ensure that sustainability considerations underlie all policies.

The Frome plan identifies particular resilience challenges - dependence on nearby towns and cities for services and employment, a lack of choice and affordability of housing, car dependence and rising energy prices - and has developed policies and initiatives to address these:

- Remodeling the town centre to improve the environment for pedestrians and cyclists, reduce the impact of traffic and improve town centre health.

- Integrated transport strategy seeking completion of missing cycle links, creation of links along the river corridor, environmental improvements around the station, provision of bus and coach stops, identifying clear and safe routes for pedestrians and cycling.

- Linking together the wildlife corridor along the river.

- Protection of employment land.

- Creation of community renewable energy company.

For further details, visit **www.bit.ly/ frometowncouncil-neighbourhoodplan2017** (opens pdf of plan).
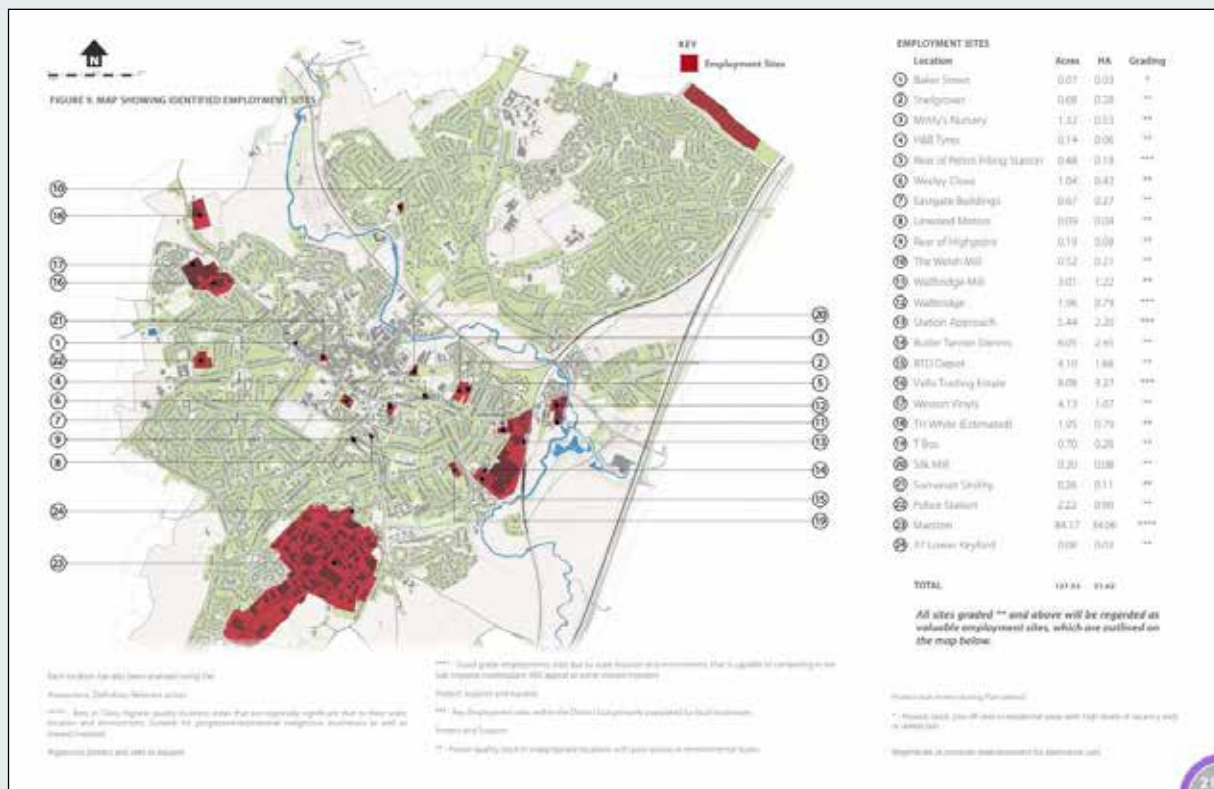
Case Study

Resilience Challenges in the inner city: Old Market Neighbourhood Plan, Bristol (made 2016)

Old Market is a historic inner city suburb in Bristol, divided from the city centre by the inner ring road. Prior to the ring road's construction Old Market was a major shopping destination and historically the wide space hosted markets outside the city walls. The construction of the ring road and other major roads isolated it from the city centre and other neighbourhoods.

On the perimeter of Old Market, this has resulted in a road-dominated and sometimes threatening environment for pedestrians and cyclists. It has also suffered from vacant and underused shops. Old Market also has a strategically important cycle route passing through it (one of the busiest in the country, the Bristol to Bath cycle track) but the end of the cycle track is poorly linked to the city centre and its route is unclear for first time users.

The plan concentrates on improving the quality of the environment and movement routes through the area. The plan aims to re-balance the layout of the main shopping street to focus on people, street activities and businesses instead of vehicles. It will also benefit the wider city by formalising cycle routes from the cycle path to the city centre and linking up currently disconnected parks and public open spaces. These improvements would be funded by Section 106 and Community Infrastructure Levy (CIL) payments.

In the long term, the plan identifies areas where over-engineered road layouts could be rationalised to release additional land for housing and knit the neighbourhood back into its surroundings. At the time of writing, the Bristol council is consulting on proposals to allocate the land identified for housing. If carried out well, this development will deliver a substantial amount of housing in a sustainable, accessible location close to facilities, and could create a safe and pleasant environment for walking and cycling.

Further details: **www.bit.ly/bristol-council-Old-Market-Neighbourhood-Plan** (opens pdf of plan).

Case Study

Resilience Challenges in a high value city suburb: Knightsbridge Neighbourhood Plan (made 2018)

Knightsbridge is a wealthy and beautiful residential and retail district in inner London. However, air pollution in parts of Knightsbridge is among the worst in the UK, with some areas experiencing twice the WHO guideline and legal limit for the concentration of nitrogen dioxide. The plan also identifies risks of heat stress associated with the heat island effect.

Major themes of the plan are:

- Healthy air which is fit to breathe and use of renewable energy which does not hasten climate change.

- Increasing the energy efficiency of historic buildings.

- Enabling the natural environment to flourish.

- Maximising the environmental benefits of trees.

- Secure sustainable water supplies.

The plan aims to "be an exemplar in sustainable city living by complying fully with international laws, standards, guidelines and best practice" and the principles which underpin the Plan reflect the 17 Sustainable Development Goals within the United Nations 2030 Agenda for Sustainable Development. This ensures that sustainability considerations run through all policies. New development is to:

- Be air quality neutral, with encouragement for development which gives rise to zero emissions to air.

- Minimise energy use and maximise energy efficiency, and major development to consume less non-renewable energy than the development it replaces.

- To achieve a BREEAM 'excellent' for major commercial development.

- Incorporate sustainable planting including multi-functional roof gardens and the use of green walls and roofs.

- Minimise water consumption through good design and rainwater harvesting systems and greywater recycling.

- Demonstrate how it has been designed to mitigate and adapt to climate change and overheating.

Further details: **www.bit.ly/westminster-council-knightsbridge-neighbourhood-plan** (opens pdf of plan).

Case Study

Case study: Resilience Challenges in a disadvantaged outer city suburb: Lawrence Weston Neighbourhood Plan

Lawrence Weston is a post-war housing estate on the North West fringe of Bristol. The area is cut off from neighbouring communities; falls within the most deprived 10% of areas in England and has an above average rate of fuel poverty. Levels of self-employment and youth attainment are also low and public transport links to neighbouring employment areas are poor. Climate change, energy and fuel poverty issues are prominent within this plan and the following policies are included:

- New development to incorporate on-site renewable energy.

- Encouragement of sustainable design and construction for housing.

- District heating required in major housing schemes on specific sites.

- Provision of new cycling and walking routes, linking with employment locations.

The following non-planning projects are also mentioned:

- Community Infrastructure Levy funds to be used for: district heating infrastructure (including a possible heat main to a nearby industrial area), sustainable energy generation and storage, and dedicated local distribution, enhancement of existing and creation of new cycle routes, the development of car clubs and use of electric and alternative fuel vehicles.

- Creation of community energy group.

- Energy efficiency initiatives.

Further details: **www.bit.ly/bristol-council-LWNP** (opens pdf of plan).

Lawrence Weston's neighbourhood plan encourages more sustainable homes. These new homes built by Halsall to passivhaus standards for Bristol council, were completed in 2020 as part of a development of 21 dwellings.

Low-carbon and proud! Brightly painted external
wall insulation in Bristol

4   Producing your neighbourhood plan

Despite the over-arching legislation described in Chapter 2 there is in fact no explicit requirement or even encouragement from government for neighbourhood plans (as opposed to local plans made by the local authority) to address climate change mitigation and adaptation, with the exception of renewable energy, so it is up to you to do this. However, a neighbourhood plan must meet a set of basic conditions[19] before it can be put to a public referendum, including:

- Having regard to national policies and advice contained in guidance issued by the Secretary of State it is appropriate to make the neighbourhood plan.

- That the making of the neighbourhood plan contributes to the achievement of sustainable development.

- That the making of the neighbourhood plan is in general conformity with the strategic policies contained in the development plan for the area of the authority (or any part of that area).

- That the making of the order (or neighbourhood plan) does not breach, and is otherwise compatible with, EU obligations.

You'll notice there is no reference to climate change here, only a very general reference to sustainable development, and there are no cross-references to our binding targets for carbon reduction through the climate change act.

Your neighbourhood plan might inlcude:
- A mission statement or vision
- High-level objectives
- Specific policies
- Supporting text and supporting evidence

You could also include other projects and action you would like to start or support in your community.

Vision statements and high-level objectives deserve more attention than they typically get. A logical narrative flow is needed, from a vision statement (which mentions sustainability) through your high-level objectives, where issues are discussed in the context of climate change, to the robust policies that deliver them. This will help in tying the policies that make up the plan into a coherent whole. We've developed a workshop to help communities set high-level policy objectives, see page 17.

Your neighbourhood plan can include both planning policies, used to assess planning applications, and non-planning activities or priorities that your community would like to address (we've called these 'neighbourhood plan actions and projects' in the different sections of this guide). It's an opportunity for your community to express what is important to it, and what you'd like to see happen in your neighbourhood in the future – the non-planning components will just not be examined when that time comes.

If you include non-planning community initiatives in your plan, be sure to clearly differentiate these from your planning policies. Current practice is to put this in an annex to the plan.

Community engagement and consensus building

At the heart of localism and neighbourhood planning is community engagement – understanding what the local priorities and problems are, tapping into local knowledge, expertise and capacity. So before writing any policies it's important to consider how to engage and enthuse the whole of your neighbourhood, in order to reach a shared vision for the future. This will enable you to build a consensus around a shared vision for how you would like your area to develop and then design policies to achieve this.

Ultimately, the decision about whether or not your plan becomes part of the statutory development plan for the area will be decided by a public referendum with all people on the electoral register entitled to vote. For this reason, it is essential to properly engage people from the beginning on the content of the plan. But you'll struggle to do this if you adopt only the consultation methods normally used in the planning system (formal letters quoting legislation, thick consultation documents, formal evening meetings). While formal consultation methods are needed to meet some of the legal requirements for consultation, more accessible approaches should be used to get people enthused in the first place, and keep them engaged.

Here are some inventive ideas we've seen being used:

- Organise a 'group walkabout' of your area. You may think you know it, but walk it with others to discover areas and perspectives you're not so familiar with and to hear others' views.

- Use social media - Facebook, Twitter but also Linkedin, Instagram, Tumblr - to organise and publicise events, to access younger people and also to capture ideas on the go.

- Encourage everyone - including children - to use smartphones to capture images or video of what they like and dislike in their neighbourhoods and what they would like to change. Map the responses and see if there are themes. Use Instagram or Twitter to collect images.

- Link your neighbourhood plan events with the cultural life of your community: sport, drama, music, film, art. Go wherever there is a crowd!

- Change the seating plan and loosen things up! Instead of a traditional formal meeting with everyone facing forward (where only the views of those confident enough to talk in public get heard) organise a dinner with people grouped around smaller tables, with themes to discuss. One person on each table to record the main talking points. And make your meetings fun - add cake and tea, bunting, music, and invite children.

- Have residents annotate maps to capture the spatial dimension of key issues, e.g. "danger point for cycling and walking" or "sustainable location for housing" or "river crossing here please!". People are more likely to annotate hand-drawn maps. Make the map as big as you can. (We do this by sticking multiple sheets of A0 paper to the wall and projecting a conventional map (e.g. from Googlemap) on to it, and then tracing over the road layout and major landmarks with a marker pen.

We think it's critical to include climate change and sustainability considerations into your questionnaires and surveys and initial community involvement processes from the very start. Time and again we see neighbourhood plans which don't say anything about renewable energy for example. When we ask why, we often find that the community is actually very supportive, but the question wasn't asked in the initial consultations. Once again, the questions you ask and topics you raise in your community involvement set the agenda for what follows.

CSE workshops and resources to help your community-involvement processes

It is more effective in the long-run to use workshops and other participatory processes to enable your community to delve more deeply into specific issues and reflect on the trade-offs between different options, for instance drawing up their own objectives and policies around climate change or renewable energy.

As tempting as it is for committed individuals to draw up objectives and ambitious policies themselves and then seek to build support around them - the "announce and defend" approach - this doesn't bring your community with you, or take them through the thought process that led to your conclusions.

CSE has developed the resources listed below to help you carry out your community involvement. All workshops and presentations are accompanied by full facilitation notes and can be found at
www.cse.org.uk/npce

- **Questionnaire picklist**
  A selection of questions for your neighbourhood plan questionnaire, embedding sustainability and climate issues at an early stage, helping you to raise the issues and build a mandate for ambitious, innovative policies.

- **Workshop - creating high level policy objectives for your neighbourhood plan**
  This 2.5 hour workshop takes attendees through the context of climate change. Attendees are then asked to imagine that its 2050, that we have solved the climate crisis and to list how this has been achieved, concentrating on how we've adapted our villages, towns and cities to reduce carbon emissions and adapt to the impacts of climate change. The workshop outputs are an initial list of high level policy objectives, a list of possible community actions and initiatives to sit alongside the plan and an action plan, setting out next steps.

- **Energy and Landscape workshops**
  This 1.5-day in-depth workshop can help your community work towards an informed consensus about what types of renewable energy might be acceptable within your neighbourhood and possible sites. The workshop outputs can provide the basis for a renewable energy strategy for your neighbourhood for further consultation and refinement and can form part of your evidence base.

Subject to our availability and capacity, we have funding to deliver bespoke public workshops and presentations around the country, to help you build support for the type of policies set out in the guide. Please get in touch if you'd us to deliver a presentation or workshop for your group: neighbourhoodplanning@cse.org.uk or 0117 934 1400.

Getting the wider community on board

In producing a community plan of any sort, you'll inevitably encounter existing power structures and people of influence, for example parish and town councils, parish councillors and neighbourhood plan steering groups. They will often be the driving force behind the desire for an ambitious and innovative plan, but in some cases the impetus will come from individual residents. Sometimes these significant players may need to be persuaded that the agenda and the suggested policies presented here are worthy of the investment of time, money and effort. And of course, whilst the majority of the UK population is convinced of the science around climate change and of the need for action on some level, there are still people who reject this scientific consensus.

Counter-intuitively, given that a neighbourhood plan is a bottom-up "community" plan, sometimes it's just a few key individuals, or even just the one person in charge of the purse strings, who sets the agenda for what "the plan" is and what it looks at. So, how do you get them on board, or get around them to the wider community? A few pointers ...

- Stress the other benefits. Throughout the guide we've tried not to talk exclusively about carbon emission reductions, and you should do the same. Instead, build links to other issues that already matter to people. For example, policies encouraging cycling and walking will help reduce carbon emissions, but planning our communities so that residents can walk and cycle easily delivers a broad range of other benefits: healthy lifestyles which combat obesity, good mental health, opportunities for social interaction, independence for teenagers and old people who can no longer drive… and every year the evidence about the illness and disease caused by air pollution from traffic grows.

- If you're lobbying for improvements to the neighbourhood plan for your area produced by someone else, unpick the vision and high level objectives within the draft plan with a fine tooth comb. Most people will want to include within the vision statement for the plan some mention of sustainability, or leaving a better environment for the generations that follow. If the vision statement for your neighbourhood plan does this, and it's not mentioned again in the plan, it's just empty words.

  If sustainability is mentioned, is there any mention of the biggest global threat to environmental sustainability, climate change, and of its likely local impacts within your neighbourhood within the plan period? If not why not? Floods and heat waves can affect your community too.

- Appeal to a wider audience and build public support behind this agenda, so that the support and need for these policies can no longer be denied. Ultimately a neighbourhood plan is a community plan, and evidence is needed throughout the process of community involvement and engagement. If you build a wide enough local public support for your policies, a narrower agenda becomes increasing untenable.

More information on the statutory requirements for community engagement and consultation can be found in the Locality Roadmap guides: **https://neighbourhoodplanning.org/toolkits-and-guidance**.

Writing and evidencing your plan

What should go into your policy and what should go into the supporting text?

Planning proposals are assessed against your planning policies which are normally presented in bold text in a coloured box and given a policy number. The supporting text around your policy (not in bold) helps with the interpretation and justification of the policy, but it isn't the planning policy itself.

If you want a developer to do something (e.g. provide 20% of energy needs from on-site renewable energy) you should put it in a numbered planning policy in bold within your plan, not within the supporting text. All the example policies in this document are formatted in the way you should format your policies within your plan.

The precise words you use in your policies are important too. "Should aim to provide secure and weatherproof cycle parking", for example is less strong than "should provide…", which in turn is less strong than "shall provide", or the ultimate: "must provide".

"Must provide" means that the local planning authority will (or should!) refuse if a development doesn't provide secure and weatherproof cycle parking. The more strongly your policy is worded however, the more evidence will be needed to demonstrate that it's reasonable and proportionate.

It is best practice when drafting your policy to avoid requiring that renewable energy schemes have "no adverse impacts", for instance no adverse landscape or visual impacts. It would be difficult to impossible to install a renewable energy development which gave rise to no visual impact at all. Instead you could refer to no unacceptable visual impacts.

Planning law and practice accepts that the adverse impacts from a proposed development can be weighed against the benefits delivered by the scheme. It is legitimate for a decision maker to accept adverse impacts in one policy area if, overall, the public harm is outweighed by greater public benefits, such as for example the creation of renewable energy.

Useful guidance on how to structure your neighbourhood plan is available from Locality: **www. neighbourhoodplanning.org/toolkits-and-guidance**. An excellent guide to policy writing is available on the MyCommunity website: **www.mycommunity.org.uk/resources/writing-planning-policies**.

Providing an evidence base to justify your policies

The Government's planning guidance (para 040) states that: "there is no 'tick box' list of evidence required for neighbourhood planning. Proportionate, robust evidence should support the choices made and the approach taken. The evidence should be drawn upon to explain succinctly the intention and rationale of the policies in the draft neighbourhood plan."

Essentially, evidence needs to demonstrate why the policy is needed and what effect it will have. And it should go beyond what your community thinks or feels, to include objective evidence about your neighbourhood. For each of the issues covered in the guide, there are suggestions on what supporting evidence to include.

Record keeping

It is important to keep a record of your activities as this can be used to inform the wider community and your local planning authority of your neighbourhood's priorities, and to demonstrate what engagement you've done. This record could include keeping summary notes, a record of who attends events or provides feedback, and keeping summary notes and other details of meetings. This could be as simple as a photograph of the issues jotted on a flip-chart in a workshop.

Other sources of advice and information

Locality is the lead organisation in a consortium providing 'frontrunner' support to neighbourhood planning groups in 2013-15: **www.locality.org.uk/projects/building-community**

Planning Aid England, part of the Royal Town Planning Institute (RTPI), has developed several useful resources: **www.ourneighbourhoodplanning.org.uk**

If you're looking for free mapping tools, check out **www.community21.org/toolbox**, a free online tool developed by Brighton City Council that allows you to create collaborative online maps and share surveys to assist with your consultation, or **www.magic.gov.uk/MagicMap.aspx**, the mapping resource that shows many ecological and landscape designations relevant to planning.

If you are struggling to get data from your local council or would like to compare your local area with neighbouring Local Authorities, look at Open Data Communities (**www.opendatacommunities.org/data**).

CSE has a couple of useful documents which can both be found at **www.cse.org.uk/local-energy/neighbourhood-plans**

- **'How Green is my Plan'** will help you to assess your draft plan and see how well it performs in terms of climate change and sustainability and how it could be improved. There are different versions for whether your community is urban or rural.

- **'How to identify suitable areas for onshore wind development in your neighbourhood plan'**: a step-by-step guide.

Town hall, Rugby

Photo: G-man

Engaging with your local planning authority

Your local authority can be a vital ally when developing your neighbourhood plan, helping you to develop your policies, build up an evidence base and understand how your neighbourhood plan engages with existing planning policies.

Your main contact for the neighbourhood plan should be with the planning authority's planning policy team, sometimes called the 'forward planning team', who are in charge of preparing the local plan. Most councils will have a neighbourhood planning champion, a designated officer responsible for liaising with and assisting neighbourhood planning groups. Another key contact - if the post exists in your council - will be the sustainability officer, who may be responsible for drafting and co-ordinating the implementation of their climate emergency resolution

Try to remember the following four principles when engaging with your local authority:

1   Be prepared. Before speaking with the local authority, have a clear idea of what you hope to achieve, and what information or help you need from them. Keep a note of who you speak to and what is said, and retain emails for your records to aid project management.

2   Be positive. Keeping a positive attitude is far more likely to lead to a quick and full response than if your request sounds negative or demanding. Planning departments are increasingly under-resourced, and staff thinly spread.

3   Be persistent. You will need patience and networking skills to find the team or person with the right information. If you find communication is failing with one particular officer then try other contacts within the council. There is often more than one route to the support you need.

4   Be inclusive. There is no harm in engaging multiple officers on the same project, though where possible let each officer know who else is involved within the council to avoid work being duplicated.

It's also a good idea to speak with your locally elected councilor about your plans, especially if you struggle to engage with your council via officers. You may also wish to speak to your local MP. You can find out who they are here: **www.findyourmp.parliament.uk**

There is no standard structure for local authorities, but the following table provides a typical structure of the different council teams in unitary authorities and how they might support you. In two-tier authorities, with a district council and overarching county council, the district council is responsible for most of these functions, with education, highways, transport planning, waste disposal and strategic planning administered by the county council.

Council department	Useful for
Planning – Planning Policy, Strategic Planning, Forward Planning Strategic planning, including the local plan; interpretation of national policy; supporting planning-related consultations.	• Understanding your local council's interpretation of national policy. • Accessing and influencing local planning documents and their evidence base, such as sustainable energy studies, and evidence to support an onshore wind allocation. • Supporting consultations or referendums for your parish, town or neighbourhood plan. • Their advice on policy wording.
Planning Department - Development Management and Planning Applications Processing planning applications.	• Enforcing your neighbourhood plan once made. • Finding out who is responsible on specific projects. • Getting an overall understanding of planning constraints on a site. • Offering pre-application advice, e.g. on renewable energy projects. They should be engaged early-on in the process to build rapport. • Offering advice regarding permitted development rights.
Planning – Historic Environment, Heritage, Conservation Responsible for protecting conservation areas, listed buildings and other heritage assets.	• Understanding whether parts of your local area are within a conservation area or whether there are listed buildings. • Helping you to develop policies encouraging the responsible retrofitting of historic properties.
Sustainability, Climate Change, Energy Embedding sustainability and climate change considerations within local council services. Often responsible for the council's climate emergency declaration.	• Useful for explaining the council's sustainable design and construction policies and how your policies might complement them. • Useful as a point of contact with the council to identify other sources of information and relevant contacts. They are likely to understand and support what you're trying to achieve, and once on board can help champion your activity.
Neighbourhoods & Communities Coordinating of projects within specific community areas.	• Useful for finding out and understanding what community groups and activities are happening in your area.
Environment May include ecologists, tree landscape and urban design officers and other environmental protection services such as pollution monitoring, etc.	• Helping develop your biodiversity policies and understand the wildlife assets you have in your neighbourhood. • Checking the environmental designations that may apply to the area, such as smoke control zones, (which may limit the use of biomass boilers and energy from waste) or ecological designations. • They may also have an understanding of environmental considerations for waterways, woodland and other types of environment. • The landscape officer has an influential role in commenting on the landscape impacts of renewable energy projects.

Property Services, Estate Management Management of council buildings and possibly land ownership. Council energy consumption and approach to building management.	• Useful if you wish to deliver projects on non-domestic buildings operated by the council, understand the council's corporate approach to sustainable energy.
Parks and Open Spaces, Allotments, Green Spaces, Land Management Maintenance and management of council-owned land. Can be included in estate management above.	• Useful for planting schemes, collecting waste biomass or for projects on open spaces – such as a community fête. • Also useful if you want to influence how the council manages its own land (e.g. approach to landscaping public areas).
Economic Development, Regeneration Embedding local economic considerations within other local council services. Also may bid for external funding and support project delivery with relevant teams.	• Collecting information on local employment, funding opportunities and supporting your activity – community energy projects typically help strengthen your local economy, creating local economic growth in addition to the jobs created to deliver energy projects.
Housing Co-ordination of council services to private and social housing, including council housing where still present. Responsible for meeting Home Energy Conservation Act requirements.	• Engaging with your community; they could help publicise details of events or consultations via their newsletters, mailing lists, etc. May enable you to access "hard to reach" residents. • Understanding your local council's approach to domestic energy and insulation in their own housing stock and other stock. • Understanding the local housing stock, they'll often have housing condition surveys that provide details of the construction types, energy efficiency levels and details of occupants. • Engaging with their housing partners – housing developers, social housing providers, etc.
Waste and recycling Waste and recycling services.	• Useful for understanding council approaches to and contracts for waste and recycling; useful if investigating the potential for energy from waste.

Changes to the 'general power of competence' brought in through the Localism Act means that local authorities are now allowed to undertake anything they wish as long as it is not illegal (previously, local authorities were only allowed to undertake actions that they were specifically authorised to do). This may provide opportunities for them to take on more innovative and leading edge projects to support sustainable communities and low carbon development.

National planning policy stresses the need for neighbourhood plans to provide a positive strategy for renewable energy

5   Renewable energy

In addition to generating all of our electricity from renewable sources, decarbonising our society will also require our transport and heating systems, currently largely reliant on fossil fuels, to be electrified. The Committee on Climate Change estimates this could result in a doubling of electricity demand. Overall the CCC predicts we need to quadruple the supply of low-carbon electricity by 2050[18].

National planning policy[19] stresses the need for plans to provide a positive strategy for renewable energy, so as to help increase its use and supply, and encourages plans to identify suitable areas for renewable energy where this would help secure their development. It's clear that responding to climate change will require a total transformation of how we supply and use energy, and a major increase in the number of renewable energy developments hosted in local communities.

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.

Given the drop in government subsidies for renewable energy - namely the closure of the feed-in tariff (FIT) in March 2019 - you might question whether it's worthwhile drafting policies for renewable energy projects which might not be financially viable. However, the costs of installing both solar and wind energy have fallen rapidly and the removal of subsidies actually reflects this improved competitiveness with fossil fuels.

A recent report from Arup found that on-shore wind development is now competitive with new gas power stations without subsidy[20], and in the short to medium term it may be cheaper to generate your own electricity from solar power than to buy it from the national grid[21]. Globally and within the UK, we're edging towards the point where renewable energy out-competes fossil fuels on economic grounds alone without the need for subsidy.

As we move towards a more distributed energy system with more local renewable energy developments, neighbourhood plans offer the potential to shape how and where these are developed. There are also opportunities here to direct energy spending back into our communities and distribute the benefits more fairly.

Exploring renewable energy

To get people thinking about energy, both within your group and across the broader community, here are some questions you could ask:

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

- Across your community, what is the balance between the electricity used and produced?

- 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 deducing demand at peak times?

There are various ways in which your neighbourhood plan could support your community's ambitions for renewable energy, both through planning policies and non-planning activities.

Left: There's probably a good wind resource here! Above: A former mill site on a map. Could this be redeveloped as a micro-hydro site?

Tree, Ronald Saunders; map, Magic (Defra)

Neighbourhood plan policy: renewable energy

Having a renewable energy policy which supports the principle of hosting renewable energy developments within your neighbourhood is a great start. However, a policy that just expresses 'in principle' support for renewable energy, with no detail as to what would be supported or where, isn't that helpful, as this support is already set out at national level.

Likewise, you could set out a policy giving support to small-scale renewable energy projects, but we'd encourage you to be more ambitious. Provided that unacceptable landscape and other impacts can be avoided or mitigated, why limit your support to small-scale projects? Remember that in the case of wind turbines, size matters, with electrical output increasing dramatically with size and height (e.g. if the wind speed doubles the turbine will produce eight times as much power, and if the length of the turbine blades doubles, power output is quadrupled - see **www.cse.org.uk/news/view/2109** for details).

Instead through your neighbourhood plan, you could aim to explore all the renewable energy resources that could viably be developed within your neighbourhood, and bottom out which could carry community support. Ideally your policy should spell out what types of renewable energy might be acceptable within your neighbourhood and what your criteria for support are.

Developing a renewable energy project (even the initial viability studies) can be an expensive business, so anything that you can do through your policy to provide certainty and reduce risk will increase the likelihood of renewable energy projects coming forward.

Your policy or policies could include detail on:

Local resources and locations for renewable energy plants
If you live in an area that has good potential for particular kinds of renewable energy (for example streams or rivers that used to have mills on them, areas with a good wind resource, fields suitable for solar farms, or the potential for an anaerobic digester in a neighbourhood that is very agricultural), and your community is theoretically supportive of these, could you detail these in your policies?

Scale of development and criteria for support
Once your community starts talking about possible sites and particular types of renewable energy, you'll find pretty quickly that your community has strong opinions. Would medium scale wind turbines be supported along a particular hillside, but not large scale turbines? Would a solar farm be supported in a particular field, but only if effectively screened from view from the west by native planting? This sort of detail is really helpful for would-be developers, and can help you to roll out the welcome mat for renewable energy developments of the type that will carry support in your community (and discourage developments that wouldn't). We think it is entirely reasonable for communities to express nuanced and conditional support for renewable energy projects.

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 fill this policy vacuum, and encourage community owned projects that will return tangible benefits to your neighbourhood.

Moving from generalised support for renewable energy to specific policies

It can be particularly difficult for non-specialists to develop these detailed renewable energy policies. Some forms of renewable energy can be perceived to be controversial though, in fact, surveys repeatedly show that the overwhelming majority of the population (84% in the last survey) supports the use of renewable energy, with only 1% strongly opposed[22].

Nevertheless, discussing specific sites for the development of renewable energy projects can be sensitive, so CSE has produced detailed workshop resources to help you do this. A complete set of the workshop resources can be freely accessed here: **www.cse.org.uk/projects/view/1315**

The workshops can help your community work towards an informed consensus about what would and wouldn't be acceptable within your neighbourhood and can help you to consider types of renewable energy that you might have overlooked. The workshops also help you to explore with your community what is important about your landscape, and include objective information on the pros and cons of different renewable energy options (see our introductory videos on different forms of renewable energy at **www.youtube.com/csebristol/videos**). The workshop outputs can provide the basis for a renewable energy strategy for your neighbourhood for further consultation and refinement and can form part of your evidence base. The workshops can be self-led or CSE can facilitate these for you at cost. Please contact **neighbourhoodplanning@cse.org.uk** for further details.

To help you with potential wording for a renewable energy policy, here are some good examples from other plans. These policies identify potential renewable energy resources, express support for specific forms of renewable energy, define and support community-led developments, identify suitable sites, or detail assessment criteria for applications.

Westmill Wind Farm Co-op is a 100% community owned wind farm near Swindon, commissioned in 2008. Four years later a community-owned solar-farm was created on the same site.

Community Energy Policies

The following extract from Cornwall's local plan[23] gives specific support to community owned or led energy projects, and could be adapted for use in neighbourhood plans.

Cornwall Local Plan - Policy 14

Support will be given to renewable and low carbon energy generation developments that:

a. are led by, or meet the needs of local communities; and

b. create opportunities for colocation of energy producers with energy users, in particular heat, and facilitate renewable and low carbon energy innovation.

When considering such proposals, regard will be given to the wider benefits of providing energy from renewable sources, as well as the potential effects on the local environment; including any cumulative impact of these proposals.

The Cornwall Renewable Energy Planning Advice[24] (2016) includes further text to help define what is meant by projects that are 'led by' or 'meet the needs' of local communities. It would be helpful to adapt and include similar text to this within your supporting text to help define what community energy projects are.

'Led by' local communities

The proposed development has community involvement at the heart of the project's development process. Examples include:

• Proposals which are conceived in partnership between a community organisation and a developer (commercial or non-profit), or another party;

• Proposals which are supported, or promoted by a community at the planning or pre-planning stage.

'Meets the needs' of local communities

The proposal is capable of producing social, economic or environmental benefits which are inclusive and accessible to all within the local community over the lifetime of the project. Examples of such benefits include:

• Community ownership and control over renewable energy assets (and their energy and financial outputs);

• The generation of surpluses which can be spent by the local community;

• Cheaper and more secure local energy supply (which could be achieved through measures such as deployment of smart energy management technologies, energy storage and through community controlled energy supply);

• Benefits to the local environment which are identified and desired by the local community.

Policies supporting specific renewable energy technologies

Much Wenlock's policy sets out criteria for support for individual and community scale projects, and also expresses support for specific types of renewable energy.

Much Wenlock Neighbourhood Plan (2014)

Policy SCC2
Proposals for individual and community scale energy from hydro-electricity, solar photovoltaic panels, local biomass facilities, anaerobic digestions and wood fuel products will be supported subject to the following criteria:

- the siting and scale of the proposed development is appropriate to its setting and position in the wider landscape; and

- the proposed development does not create an unacceptable impact on the amenities of local residents; and

- the proposed development does not have an unacceptable impact on a feature of natural or biodiversity importance.

Faringdon's policy essentially allocates a site for a micro-hydro scheme. Whilst a planning application would need to be assessed in detail, the policy nevertheless confirms that in principle an application would be supported. We would have suggested that an extra policy was written setting out the criteria by which other renewable energy projects would be assessed, and include within the policy itself (rather than the supporting text) a desire for community owned or led schemes.

Faringdon Neighbourhood Plan (2016)

Within the parish we have a river frontage and lock at Radcot. This has the potential for development as a micro hydroelectricity scheme. This would be of low impact to the surroundings and environment and have the potential to supply 60kw of electrical power, subject to Environment Agency permits. A proposal is being prepared to develop this scheme as a community project.

Policy 4.13C: Alternative energy schemes
A micro hydroelectricity scheme at Radcot on the River Thames will be supported, as will other alternative energy schemes

Many rivers were once a source of power and some neighbourhood plans allocate specific sites for micro-hydro development, should the possibility arise.

Colwich in Staffordshire identifies a specific area for a **solar** farm:

Colwich Neighbourhood Plan (2016)

Opportunities to contribute to energy efficiency and renewable low carbon energy generation will be encouraged, particularly if they conserve or enhance biodiversity. A solar farm proposal will be welcome alongside the river on the site shown in Map 20 as this could take advantage of a possible adjacent hydro-electricity scheme. It will also allow grazing beneath the panels and the creation of wildlife meadows. Hedges and landscaping around the perimeter of such farms should provide screening and important wildlife habitat.

Policy CE4: Proposals for a solar farm.
Map 20 identifies land north of Gt. Haywood marina for a solar farm to provide photo voltaic power. The solar farm should be less than 5ha, carefully designed to protect the local wildlife population and landscaped to enhance the scenic beauty of the area.

By law, planning permission for new onshore wind turbines can only be granted if the site has been clearly identified as being suitable for wind development in a local plan or neighbourhood plan. This means that if your community intends to develop its own wind turbine or farm, or is supportive of commercial wind projects going ahead, it must identify suitable areas and include these in any neighbourhood plan being drawn up.

The process of identifying suitable sites is complicated, so we have produced a guidance note to help (**www.cse.org.uk/news/view/2109**) which includes suggested policy wording and tips on how to get your community behind you and which stakeholders to consult.

This is how Gwinear-Gwithian in Cornwall included proposals for **wind** development in their parish neighbourhood plan.

Gwinear-Gwithian Parish Neighbourhood Plan (2017)

Policy GGP 12a: Wind turbines

Proposals for wind turbine development should be located in an area identified as suitable for wind energy development in Map 8: Map of Potential Sites for Wind Energy. Wind turbine proposals should address the planning impacts of the scheme in accordance with guidance in the Cornwall Renewable Energy SPD and ensure that the potential harmful impacts on the following are appropriately avoided or mitigated ...
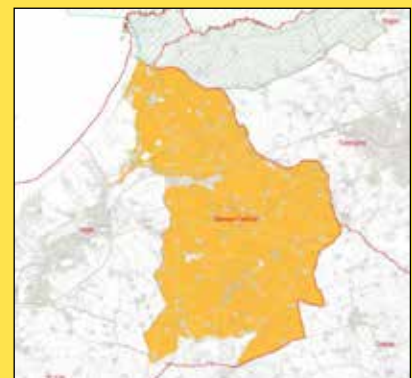
And here is how the plan of Fernhurst parish in West Sussex included a policy on **biomass energy**.

Fernhurst Neighbourhood Plan (2016)

With Fernhurst parish's well-wooded surroundings, the wood chip industry is a significant one. Wood chip is one of the key forms of biomass which can be used to create renewable energy. Its use to provide energy to new developments should therefore be supported and any application for development which proposes a biomass facility to generate renewable energy from local sources should be viewed favourably.

Policy EE1: Biomass energy
Developments which propose on-site renewable energy generation through the demonstrable use of local biomass (wood chip) sources shall be considered favourably.

Biomass sustainability considerations

There are questions about the sustainability - or otherwise - of biomass as a fuel source. Harvested biomass can reduce emissions by displacing fossil fuels as an energy source, but to achieve emission reductions biomass must, as a minimum, be harvested from sustainably-managed land that has stable or increasing carbon stocks over time (measured over appropriate spatial and time scales)[25]. As a consequence the source of the fuel and how the land has been managed influences how sustainable it will be. In the example above from Fernhurst for example, the harvesting of wood-fuel from sustainably managed (and replanted) local forest may be highly sustainable in terms of carbon emissions.

The Renewable Heat Incentive (the subsidy regime put in place to incentivise energy users to switch to low-carbon heat sources) sets limits on the lifecycle GHG emissions for bioliquids, biomass and biogases and restricts the land that the feedstock can be sourced from. Therefore, whilst the regulations are not perfect, biomass or biofuels which are eligible for payments from the Renewable Heat Incentive could be assumed to be acceptable in terms of sustainability considerations.

From a different perspective, biomass heating can give rise to air quality problems in the immediate vicinity of use, and the increase in burning solid fuels in our homes in recent years is having an impact on our air quality and now makes up the single largest contributor to our national PM (particulate matter) emissions at 38%[26]. Even the most efficient wood burning stoves are quite polluting.

In a recent report, the Committee on Climate Change advised Government not to support any biomass for heat in urban areas because of the air quality impacts, including PM2.5 (fine particulate matter with a diameter below 2.5 microns), although they did comment on the potential role biomass boilers can play a role in certain niches, for example, hard-to-insulate rural properties where heat pumps are not viable[27]. You may wish to consider the context of your neighbourhood before deciding whether it is appropriate to include policies giving specific support to the development of biomass projects.

In recognition of the dangerously high levels of air pollution in the area, Knightsbridge neighbourhood plan encourages new development to be electrically heated and to give rise to zero emissions to air (that is development which emits no emissions to air other than filtered air after ventilation or cooking), and their policy requires new development to be air quality neutral.

Knightsbridge Neighbourhood Plan – made 2018

KBR34: HEALTHY AIR

A. Development should not damage the health of the air by increasing emissions of harmful pollutants to it. Such pollutants include: greenhouse gases; those considered by the United Nations to cause adverse impacts to the natural environment; and particles and gases considered by the World Health Organisation (WHO) to be harmful to human health. Any proposal that results in a significant increase in air pollution will only be justified in exceptional circumstances.

B. Development should comply at least with all minimum EU or UK environmental requirements in relation to air pollutants whichever is the more stringent.

C. All development must aim to be at least 'air quality neutral' and not cause or contribute to worsening air quality. On major development this should be demonstrated through an air quality assessment and, if necessary, proposed mitigation measures.

D. Major development must demonstrate that it is designed to ensure that indoor air quality complies with the latest WHO guidelines for short and long term air quality including particulate matter (PM2.5 and PM10), nitrogen dioxide (NO_2), carbon monoxide (CO), formaldehyde and volatile organic compounds (VOCs). Carbon dioxide (CO_2) concentrations in indoor air should also be considered. Compliance with such standards is also encouraged on medium development and substantial refurbishment schemes. …

Supporting renewable energy in the Green Belt

Green Belt designations are intended to keep land permanently open and undeveloped, and essentially place a strong presumption against planning permission being granted for any development outside of a very few limited exemptions. Development outside of these limited exemptions is inappropriate and harmful by definition. The NPPF states "When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development ... in such cases developers will need to demonstrate very special circumstances if projects are to proceed, such as the wider environmental benefits associated with increased production of energy from renewable sources."

The NPPF (para 151) advises that "to help increase the use and supply of renewable and low carbon energy and heat, plans [presumably including neighbourhood plans] should provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts)". The government probably never anticipated that neighbourhood plans might encourage renewable energy developments within the Green Belt by setting out the circumstances or locations where suitable proposals could be viewed favourably, however nowhere is this explicitly disallowed.

Where a community has a particular wish to promote renewable energy within its neighbourhood but is heavily constrained by Green Belt, it might be possible to put together the evidence and arguments in your plan which would help an applicant for a renewable energy development demonstrate the very special circumstances necessary before an 'inappropriate development' in the Green Belt can be approved. Very special circumstances are unique to an individual case, but your policy could set out the circumstances of your community which could form part of these arguments, for example community aspirations to be

net zero carbon or to maximise energy self-sufficiency from renewable energy sources and the context of your neighbourhood within the Green Belt. It could then set out criteria which subsequent planning applications should address for example the following, adapted from 'Renewable energy in the Green Belt' by Bath & North East Somerset Council[28]:

- That alternative options outside the Green Belt are not available or have been investigated and rejected for valid reasons

- The temporary nature of the renewable energy development and the ability to restore land to its original condition at the end of the project's life.

- That the specific benefits of the renewable energy project outweigh the harm it would cause to the Green Belt, which might include:
  - Contribution to increasing renewable electricity and heat generation, meeting local and national targets for renewable energy generation and carbon emission reductions.
  - Social and economic benefits, including for example local job creation and rural diversification.
  - Community benefits that the project might bring (e.g. community ownership or the income from energy generated).

- That the impact on the openness and character of the Green Belt has been considered and mitigated at the design stage. The purpose of the Green Belt as outlined in national planning policy is defined at paragraph 134 of the NPPF.

Community Infrastructure Levy: funds for renewable energy

You could include a policy statement in your neighbourhood plan outlining the priorities your community has for how you would like CIL funds to be spent – this could include supporting community renewable energy schemes, or putting in district heating infrastructure, as Ambition Lawrence Weston has done (below). For more information on the Community Infrastructure Levy, see p81.

Lawrence Weston Neighbourhood Development Plan (2017)

Community infrastructure priorities to be funded from developer contributions

- Support provision of infrastructure for district heating, sustainable energy generation, storage, and dedicated local distribution.

- Community energy projects to address fuel poverty and investment for community projects.

- Support the development of car clubs and use of electric and alternative fuel vehicles.

See **www.tinyurl.com/bristol-gov-uk-lawrence-weston**

Neighbourhood plan actions and projects: renewable energy

Within your plan you can include objectives, actions or initiatives that your community is keen to pursue but which are not planning issues. These are statements of intent for what your community will do, or would like to see happen (it's important that these are clearly labeled as non-planning issues, and that you separate them from the planning issues in your plan).

a. Set up a local energy group to carry forward project ideas

Your neighbourhood plan could include the objective to set up a community energy group, as in the Balcombe example, below. In the past five years, at least 5,000 different community energy groups have undertaken renewable energy or energy efficiency initiatives, many of them of a significant scale. Inclusion of statements supporting a local community energy group in a plan will raise the profile of the group and help to secure local authority support for the group's activities. The community energy group, Repower Balcombe, emerged from a public meeting held in 2013, and was set up with the following mission:

REPOWER Balcombe was set up with a simple mission to generate the equivalent of 100% of Balcombe's electricity demand through community-owned locally-generated renewable energy. These aims were included in the Balcombe Neighbourhood Plan, adopted in 2016. Additional aims were:

- To meet at least part of this target in 2015.

- To use part of any profits from the enterprise to reduce local energy demand through education and by financing energy efficiency improvements to community buildings and local homes through a community benefit fund.

- To ensure that the financial benefits of harnessing local clean energy resources are primarily shared amongst local people.

- To take responsibility for meeting local energy needs in a way that does not contribute to climate change or harm the prospects of future generations.

- To be sensitive to local landscapes and environments; and to develop responsibly by targeting roof space first, and by adhering to the industry best practice.

- To unite the local community in support of these goals.

b. Develop your own community owned renewable energy project

Your neighbourhood plan could include the objective to explore the feasibility of setting up its own community renewable energy project. Often a community will set up a company, usually a form of cooperative, to develop these projects and raise funds through running share offers within the locality. You could include an objective in your plan to set up such a company – like in Frome's Neighbourhood Plan:

Frome Neighbourhood Plan (2016)

Achieved by:
(4) Establishing a Local Renewable Energy Company (supported by Bath & West Community Energy, Frome Town Council and Sustainable Frome).

Such projects can provide funds for community projects, provide employment, and distribute surpluses to local shareholders, and so help keep energy expenditure within the local economy. Different supply models are being trialled which allow suppliers to create their own local tariff, and to sell the electricity they generate directly to people in the local community, without routing it first through the national electricity market. These options allow more control of the price offered to local people and enable more of the economic benefits to be captured locally[29].

Case Study

Community Energy at Scale

Bath & West Community Energy have to date raised more than £9m through community share and bond offers with which to develop a series of large ground mounted solar PV projects amounting to some 12MW. These generated £40,000 of funding to support local projects in 2017.

Energy Local (www.energylocal.co.uk) are developing a new approach to developing subsidy free renewable energy. Their model sets up a local market in power via Energy Local Clubs matching local renewable energy generators with local consumers in real time.

This enables households to buy renewable energy generated in their local area at a competitive price and allows local energy generators to earn more for their renewable electricity than they would otherwise do.

A different model again, a new entrant, Ripple Energy (www.rippleenergy.com) will enable households around the country to invest and own a small proportion of a commercial wind farm, enough to meet their energy demand. They own the wind farm along with thousands of other households, and get renewable electricity at a set, competitive price. (Onshore wind is currently the UK's cheapest source of electricity, so this should be possible.)

c. Getting in expert help or establishing a shared ownership renewable energy project with a private developer.

Your community might be supportive of renewable energy and of the idea of funding community initiatives from renewable energy, but daunted by the prospect of developing a project in isolation: a totally reasonable conclusion. In such cases, a partnership with a commercial renewable energy company, where the community owns part of a commercial renewable energy project could be an option. This would enable you to benefit from the professional skills and knowledge of the commercial developer, whilst still having a say and receiving an income from your share of the project.

Such an approach has considerable support from government, who have committed to greater community involvement in renewable energy projects, and advised that communities should be offered shared ownership of new commercial renewable energy schemes.

d. Work with your distribution network operator to reduce or move peak electricity demand in your neighbourhood

Distribution network operators (DNOs) own and manage the distribution network of towers and cables that bring electricity from the national transmission network to homes and businesses. As new smart grid technology develops, opportunities are emerging for communities to create savings on bills or even generate income by more proactively managing demand.

Supporting evidence

Supporting evidence could include:

- The available renewable resource (e.g. average wind speed, potential for hydro-power, local supplies of biomass fuel).

- Local need and support for the proposal.

- Capacity to mitigate negative impacts (e.g. noise, visual and ecological impacts).

- Further detail on the evidence needed to support an onshore wind allocation is set out in the CSE guidance note, 'How to Identify Suitable Areas for Onshore wind development in your neighbourhood plan' (**www.cse.org.uk/news/view/2109**).

- The second edition of our publication 'Common Concerns About Wind Power' (**www.cse.org.uk/projects/view/1334**) provides a comprehensive grounding in the facts for communities undertaking the development of local policies with regards to wind power and renewable energy in general. It is fully referenced and is based on academic peer-reviewed publications and government studies.

Resources to help you

Any evidence your local authority commissions or compiles itself is likely to be a vital resource for you. Most authorities have a 'local plan evidence' webpage, which details all the evidence they are using, and many have commissioned renewable energy capacity studies. See also Community Energy England **www.communityenergyengland.org**, the Low Carbon Hub **www.lowcarbonhub.org** and Rural Community Energy Fund **www.wrap.org.uk/content/rural-community-energy-fund** who have resources and expertise to support new community energy groups.

Land Explorer (**https://landexplorer.cc**) is a free online mapping tool to help communities to find and map land suitable for self-build, community land trust developments for housing, renewable energy developments and food growing.

The Rural Community Energy Fund **www.gov.uk/guidance/rural-community-energy-fund** is a £10m programme which supports rural communities in England to develop renewable energy projects which provide economic and social benefits to the community. Grants of up to £140,000 are available to fund feasibility studies and business development.

CSE has produced a number of useful resources including short, low-budget films giving an introduction to most forms of renewable energy that could be deployed in your neighbourhood, and which could be used to assist you in weighing up their pros and cons: **www.bit.ly/2tMHkeW**. We also run workshops which help neighbourhood planning groups explore what forms of renewable energy could be generated in that area and which might carry community support. See **www.cse.org.uk/projects/view/1315**

And on this page of our website **www.cse.org.uk/local-energy/resources** you'll find more materials that are helpful for starting to build a picture of available renewable resource in your area.

Low-carbon self-build in progress ... Neighbourhood plans can have an impact on the types of homes built

6 Sustainable buildings

This section looks at sustainable buildings and how your neighbourhood plan can have an impact with specific regard to energy efficiency, sustainable design and construction, and on-site renewable energy.

In their new report, 'UK housing: Fit for the future?'[30] the Committee on Climate Change (CCC) warns: "We will not meet our targets for emissions reduction without near complete decarbonisation of the housing stock. Energy use in homes accounts for about 14% of UK greenhouse gas emissions. These emissions need to fall by at least 24% by 2030 from 1990 levels, but are currently off track … The technology exists to deliver homes that are low-carbon, energy efficient and climate-resilient, with safe air quality and moisture levels. The costs are not prohibitive, and getting design right from the outset is vastly cheaper and more feasible than having to retrofit later."

You can include policies in your neighbourhood plan to encourage zero carbon homes and high levels of energy efficiency in new development, and potentially, create binding energy efficiency standards for new development. Seeking to do so pushes up against (and potentially beyond) what can be done through a neighbourhood plan, but the need for such policies is well documented, and many local plans entirely lack adequate policies.

The reality is that the homes we build today will be still be in use in 2050. Therefore to achieve our carbon reduction targets cost effectively, new housing built today must be built to zero carbon standards as soon as possible.

However, even if all new housing were to be carbon neutral from tomorrow, this would still not be enough to achieve our carbon emission reductions, as around 70% of buildings that will be in use in the 2050s already exist[31].

If our carbon reduction targets are to be met, and if fuel poverty is to be tackled, it is essential that we also improve the energy efficiency of existing buildings, including historic and listed buildings. The poor quality of the housing stock also contributes to existing health and social problems. Around 11% of UK households are fuel poor and so can't afford to heat their homes adequately. The health cost to the NHS of conditions exacerbated by poor housing is currently estimated to be at least £1.4bn per year in England alone[32].

The CCC report also warns about the resilience of our buildings to the effects of climate change: "Efforts to adapt the UK's housing stock to the impacts of the changing climate: for higher average temperatures, flooding and water scarcity, are also lagging far behind what is needed to keep us safe and comfortable, even as these climate change risks grow. Around 4.5m homes overheat, even in cool summers; 1.8 million people live in areas at significant risk of flooding"

Exploring sustainable buildings and resilience to climate change

To get people thinking about energy efficiency, both within your group and across the broader community, here are some questions you could ask:

- Do residents feel at risk to any climate change issues locally? Flooding, heat stress, storms? What would they like to see to address these risks?

- Could you set out policies encouraging high levels of energy efficiency and sustainability in new buildings?

- Could you require new housing developments to provide a proportion of their energy demand from on-site renewable energy, e.g. roof mounted solar panels? If major new residential development is proposed, could it incorporate district heating?

- Is your neighbourhood historic, with a large number of solid walled buildings (without cavity wall insulation)? How easy are these properties to heat, and how energy efficient are they?

- Are there concerns about rising energy bills? How comfortable are people in their homes and what proportion of their income do residents spend on heating or power?

- Are there groups of residents in your neighbourhood who are particularly vulnerable to rising fuel costs and inefficient homes – the elderly, people with health conditions (e.g. asthma), or people who are out of work?

- Are there many properties in your area that aren't connected to mains gas? These properties may be using the most expensive forms of heating.

Historic (in this case, Victorian) homes in Chester.

Neighbourhood plan policy: sustainable buildings

Energy efficiency policies for new housing (designing out fuel poverty)

It is possible to develop policies encouraging sustainable design and construction and high levels of energy efficiency, such as that shown below from Frome Neighbourhood Plan. Their policy covers both the energy efficiency of new dwellings and sustainable design and construction issues.

Frome Neighbourhood Plan – Made 2016

Policy LHN 1 - Provision of well-designed energy efficient buildings and places

The design and standard of any new development should aim to meet a high level of sustainable design and construction and be optimised for energy efficiency, targeting zero carbon emissions. This includes:

- Siting and orientation to optimise passive solar gain,

- The use of high quality, thermally efficient building materials,

- Installation of energy efficiency measures such as loft and wall insulation and double glazing.

- Non-residential developments should aim to meet the Buildings Research Establishment BREEAM building standard 'excellent'.

- Any new development to incorporate on-site energy generation from renewable sources such as solar panels, to at least the extent required by NS core strategy policy CS2.

- The retrofit of heritage properties/assets is encouraged to reduce energy demand and to generate renewable energy where appropriate, providing it safeguards historic characteristics and development is done with engagement and permissions of relevant organisations.

- Alterations to existing buildings must be designed with energy reduction in mind and comply with sustainable design and construction standards.

Knightsbridge use a different approach in their neighbourhood plan policy. They don't set out a policy requirement for the proportion of renewable energy which must be generated on-site, but instead require development to reduce the consumption of non-renewable energy when compared with the development it replaces.

Underfloor heating being laid in a public building in Somerset. Underfloor heating is often a feature of low-carbon homes and buildings.

Knightsbridge Neighbourhood Plan – made 2018

Policy KBR36: Renewable energy

A. To mitigate emissions that worsen climate change it is essential that buildings in the Knightsbridge Neighbourhood Area minimise energy use and maximise energy efficiency and the production and use of renewable energy to meet their needs.

B. Major development must minimise energy use and maximise the proportion of energy used from renewable sources, and medium development and substantial refurbishment of existing buildings is also encouraged to do so. Such development should consume significantly less non-renewable energy than the development it replaces. Such development should:

   a. demonstrate that it has taken all reasonable steps to minimise energy use and maximise energy efficiency;

   b. demonstrate that systems have been designed to operate at optimum efficiency e.g. low return water temperatures;

   c. facilitate the reduced use of unregulated energy on-site where technically feasible and commercially viable;

   d. maximise the proportion of renewable energy generated on-site consistent with local amenity, the character of any Conservation Area and Policy KBR10 (Roofscapes and balconies);

   e. facilitate the maximum use of renewable energy from off-site sources for example by the provision of space for battery storage that takes fire risk into account;

   and

   f. be future-proofed where practical.

…

E. Development seeking to comply with sustainability standards is encouraged to maximise electricity usage over other forms of energy generation that can have adverse impacts on air quality.

And you may find this suggested wording a useful basis for an innovative low carbon homes policy

Innovative Low Carbon Homes: suggested policy wording developed by CSE

Subject to the development being found to be acceptable when judged against other policies in the Development Plan, innovative approaches to the construction of low carbon homes which demonstrate sustainable use of resources and high energy efficiency levels will be supported. Examples would include, but would not be limited to earth sheltered, rammed earth, or straw bale construction, construction to Passivhaus standards, conversion to EnerPHit standards.

Binding Energy Performance Standards for new housing

The policy examples above from Frome and Knightsbridge are good, however they don't set binding standards for how energy efficient a new housing development needs to be in order to be acceptable, and therefore it would be difficult to refuse permission on these grounds alone. It is possible to rely on the minimum energy efficiency standards for new housing set out in the Building Regulations, which are becoming increasingly stringent, however the Building Regulations still do not go far enough. In order to achieve our carbon reduction commitments, new housing needs to be carbon neutral, that is designed to be energy efficient enough to emit no carbon dioxide in use, as well as sourcing the energy it does use from renewable sources.

In terms of the scope for binding energy performance policies, the consultation response[33] accompanying the revised Planning Policy Framework stated (page 48):

> "The Framework does not prevent local authorities from using their existing powers under the Planning and Energy Act 2008 or other legislation where applicable to set higher ambition. In particular, local planning authorities are not restricted in their ability to require energy efficiency standards above Building Regulations."

In a further update[34], the government has confirmed that local planning authorities can set energy performance standards for new housing that are higher than the building regulations, but only up to the equivalent of Level 4 of the Code for Sustainable Homes.

This welcome clarification means that local planning authorities are able to adopt binding energy performance standards, and many are doing so. It is unclear whether or not neighbourhood planning groups are able to adopt binding standards in this way, though several groups are seeking to do so. The Planning and Energy Act 2008, which gives local planning authorities the legal right to set binding standards pre-dates neighbourhood planning and makes no mention of neighbourhood plans. The government is currently consulting on upgrade to building regulations which might remove these powers from local planning authorities.

The IPCC report[35] and the latest update report from the Committee on Climate Change however provide abundant evidence of the need to go further and faster than current national policy to reduce carbon emissions, in particular in respect of emissions from new housing. The housing we build today must be built to run without emitting greenhouse gas emissions. If this does not happen, costly energy retrofits will be required to this housing within the next 20 to 30 years, with the costs falling to the home owner or tax payer.

These arguments, documents and the planning policies in force and in preparation by your local authority could theoretically be used to build a case that current policies within your neighbourhood are inadequate and that your neighbourhood plan could fill the void. However you would also need to produce technical evidence to demonstrate that your policy requirements are both feasible, and economically viable. If you intend to propose these type of policies, we can assist you in putting these arguments together (and help you at examination if it would help), and can refer you to technical consultants who can provide evidence with respect to viability and feasibility, for a cost.

We would stress that policies setting out binding standards for the energy efficiency of housing can be highly complex and require significant evidence to demonstrate that they are feasible and don't compromise the viability of development in your area.

These policies are best tackled at a national level, or failing that, by local planning authorities. Therefore we would only recommend developing these policies if your council's policies are inadequate and if you are prepared to be challenged. And we would recommend engaging in detail with your local authority to get their support for your approach, and to ensure it is capable of being applied effectively.

Energy efficiency improvements to historic and traditional buildings

Traditional and historic buildings, including listed buildings and those within conservation areas are often expensive to heat and can be drafty and cold to live in. Greater care is needed in planning energy efficiency improvements to this type of building to avoid harm to their historic fabric and character. Nevertheless, the government and Historic England recognise that historic buildings (including listed buildings) are not immune from the need to secure carbon emission reductions and energy efficiency improvements. Provided a sensitive approach is adopted and the character and heritage significance of the building is conserved, Historic England are usually supportive of proposals to improve energy efficiency and reduce energy use in historic buildings.

Despite this, very few local plans include policies in them encouraging the responsible retrofitting of traditional and historic buildings. Your neighbourhood plan is an opportunity to fill this void and develop your own supportive policy. We have included suggested wording below based on planning policy CP1 of Bath and Northeast Somerset council's local plan used with modification from the Knightsbridge Neighbourhood Plan. We would suggest approaching your council's conservation team at an early stage to secure their support for such a policy and get their help in developing your policy wording.

Retrofitting Historic Buildings - suggested policy wording - Centre for Sustainable Energy

The sensitive retrofitting of energy efficiency measures and the appropriate use of micro-renewables in historic buildings will be encouraged, including the retrofitting of listed buildings, buildings of solid wall or traditional construction and buildings within conservation areas, whilst safeguarding the special characteristics of these heritage assets for the future.

Historic buildings can be sensitively refurbished to make them warmer and more energy efficient without damaging their heritage value and fabric.

Energy efficiency of new non-residential development

The housing standards review does not apply to non-residential development, so it may be possible to write a neighbourhood planning policy that requires new non-residential development to be more energy efficient than otherwise required by building regulations. The policy below from Wirksworth Neighbourhood Plan is an example.

Wirksworth Neighbourhood Development Plan (June 2015)

Policy NP16: Energy-saving standards for non-residential developments

All new non-residential buildings should achieve the following standards:
- In the period ending June 2017, BREEAM Good;
- In the period from July 2017 to June 2020, BREEAM Very Good;
- In the period from July 2020 onwards, BREEAM Excellent.

These days, BREEAM "good" isn't actually that ambitious and commercial developers are able to charge a premium for commercial buildings with low running costs. Therefore if this type of policy is used, we'd encourage you to push for a minimum of BREAAM "Excellent" or "Outstanding"*.

Onsite renewable energy - requiring the incorporation of renewable energy in new developments

Some local planning authorities have adopted a 'Merton Rule' type policy, requiring a minimum proportion of new developments' energy demands to be met by on-site renewable energy. Generating renewable energy on site can reduce energy bills and protect against future price increases, whilst generating emissions reductions. If your local authority doesn't have such a policy, you could talk to them about including one in your neighbourhood plan, like Tickhill did, below.

Tickhill Neighbourhood Plan - made July 2015

All new developments must secure at least 10% of their total regulated energy from decentralised and renewable or low carbon sources.

Such policies need detailed discussions with the local planning authority, so that they can get the processes and procedures in place to implement the policy, and help you assess the impact of your planned policy requirement on the financial viability of projects coming forward. A requirement for 10% of energy to be provided from renewable energy isn't that ambitious anymore. You could test the viability and feasibility of requiring a higher percentage.

* BREEAM is a sustainability assessment method for masterplanning projects, infrastructure and buildings. It recognises and reflects the value in higher performing assets across the built environment lifecycle, from new construction to in-use and refurbishment.

Neighbourhood plan policy: on-site renewable and low carbon heat

The government's 2019 Spring Statement introduced a commitment to a "Future Homes Standard, mandating the end of fossil-fuel heating systems in all new houses from 2025" and are presently consulting on upgraded building regulations standards. We have yet to see how this will be implemented – in time this may supersede Local and Neighbourhood plan policies, and require all new development to be heated using renewable sources – but this policy is still years from coming into force.

Your local planning authority is usually best placed to develop a district heating policy, as this kind of policy would usually require the submission of technical evidence to demonstrate that a district heating system would be technically possible and economically feasible within a particular area.

However, you might wish to consider developing a policy if all of the following apply:

- There are major residential developments coming forward within your neighbourhood.

- There are obvious existing or proposed sources of waste heat nearby (for example a power station, major industrial uses, or swimming pools, which are all significant heat users).

- The area you are looking at has a high heat density. (Heat density is the ratio of demand for heat against the length of the district heating network piping. Even where there is significant heat demand and large-scale heat providers, a network will not necessarily be viable if these are too far apart.)

Wolverton Neighbourhood Plan (2015)
Policy W3 – The Railway Works site

Proposals for redevelopment and regeneration of the site will: …

K. Subject to viability, give a particular emphasis to sustainability through the use of zero carbon solutions, designed for climate change and district heating.

L. Actively encourage the incorporation of a local energy network, such as a link to the Waste Recovery Park at Old Wolverton where practicable and viable to do so.

District heating networks – using large insulated pipes like these – are the part of many local authorities' low-carbon plans

REGEN SW Model policy - District Heating

Major new development will be expected to incorporate district heating infrastructure in line with the following hierarchy:

1. Where there is an existing heat network, new developments will be expected to connect to it.

2. Where there is no existing network, new developments will be expected to deliver an onsite heat network, unless demonstrated that this would render the development unviable.

3. Where a developer is unable to deliver the heat network themselves, they need to demonstrate that they have worked in detail with 3rd parties (commercial or community) to assess the opportunity.

4. Where a heat network opportunity is not currently viable and no third party is interested in its delivery, the development should be designed to facilitate future connection to a heat network unless it can be demonstrated that a lower carbon alternative has been put in place – e.g. Passivhaus standard.

New development will be expected to demonstrate that the heating and cooling systems have been selected according to the following heat hierarchy:

1. Connection to existing Combined Heat & Power (CHP)/Combined Cooling, Heat & Power (CCHP) distribution networks

2. Site-wide renewable CHP/CCHP

3. Site-wide gas-fired CHP/CCHP

4. Site-wide renewable community heating/cooling

5. Site-wide gas-fired community heating/cooling

6. Individual building renewable heating

There are two potential options for heat network policy development that can be used together or separately. The first is a policy that requires all new development to include a heat network. The second is to use heat mapping to identify existing areas and planned developments with suitable heat loads to support a network and to designate these as "heat priority areas". Developments within these areas can then be required to incorporate or connect to heat networks. The policy wording above could be adapted to be a heat priority area policy with the inclusion of the words "In heat priority areas..." at the start. (Text adapted from the REGEN SW discussion paper: Model policies for energy in neighbourhood plans, 2016.)

Information board in Bristol set up during the laying of a large heat network in the city in 2019. low-carbon plans

Neighbourhood plan actions and projects: sustainable buildings

As outlined in chapter 4, you can include objectives, actions or initiatives in your plan that your community is keen to pursue but which are not planning issues. Improving the energy efficiency of your community's building stock will increase your resilience to rising energy prices, and support householders who already struggle to afford to keep their home warm. There are many activities you can do to address this, as detailed in the following videos:

- Energy efficiency walk-arounds: **www.bit.ly/video-energy-walkaround**.

- Running an open homes event: **www.bit.ly/video-running-open-homes-event**.

- Providing energy advice in your community: **www.bit.ly/video-energy-advice-in-community**.

- Rolling out an area-wide retrofit programme: **www.bit.ly/video-area-wide-retrofit-prog**.

It is worth noting that revenues from community energy projects are a significant source of funding for projects like those described above. If fuel poverty is a particular issue for residents in your community, you could potentially fund a retrofitting or insulation programme through use of Community Infrastructure Levy funds. For more information on the Community Infrastructure Levy, see chapter 12.

Even with a supportive planning policy, homeowners are often still uncertain as to the energy efficiency improvements that will be acceptable for their homes - often because of a lack of locally relevant guidance. Indeed, few councils have written supplementary planning documents along the lines of these two from Bath & North East Somerset council: Sustainable Construction & Retrofitting and Energy Efficiency & Renewable Energy Guidance For Listed Buildings and Undesignated Historic Buildings (pictured below, downloadable from **www.bit.ly/bath-council-planning-docs**).

If this is the case, you could set about consulting your local community and heritage groups to produce practical guidance for the type of historic buildings found in your neighbourhood. This won't have the status of planning policy, but could help convince your council of the need to draft formal guidance.

The community group, Warmer Cheltenham, have created an online resource to give practical guidance on how the historic houses, of the type found in the town, can be retrofitted to improve their energy efficiency. They hope that other groups will use and adapt their online platform to create their own guidance, and can be contacted via their website: **www.warmer.org.uk**.
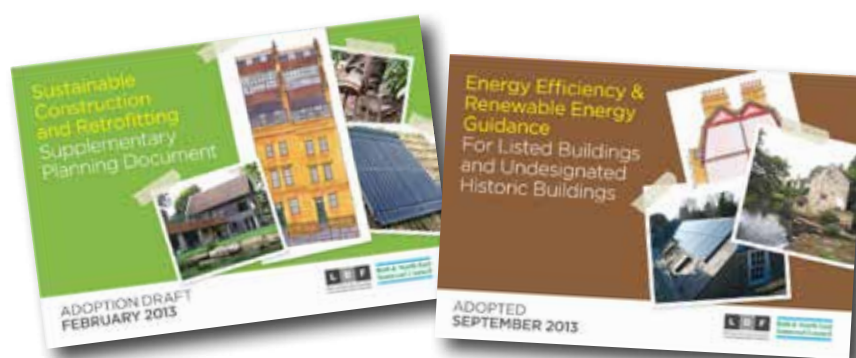
Supporting evidence

At the minimum you should provide the following evidence in support of your policies:

- Total energy use in your community: the cost of energy and how it is used.
- Fuel poverty: the main housing types and fuel poverty statistics for your area.
- Energy saving: your area's best opportunities for energy and fuel bill savings.

To save time and money, it is worth finding out whether there is already useful data prepared for an earlier parish or area plan, or collated or commissioned by your local authority. Your local authority's housing department has statutory responsibilities to tackle fuel poverty, so should already have data on the energy consumption, energy efficiency standards and fuel poverty levels of your area.

If not, you may wish to access the following data sources on the government website: Electricity and gas consumption at the community scale, **www.bit.ly/beis-stats**; Local authority and regional CO_2 emissions: **www.bit.ly/co2-stats**; and fuel poverty sub-regional statistics: **www.bit.ly/fuel-pov-stats**.

On CSE's website (**www.cse.org.uk/opendata**) there is a range of open-source datasets, including areas that qualify for Energy Company Obligation (ECO) subsidies, domestic energy consumption, heating and housing census data, GB household emissions, GB postcodes off the mains gas grid, Display Energy Certificates for UK public buildings. And check out **www.cse.org.uk/local-energy/resources** for lots of resources including tools for measuring community energy use.

'Non-gas map' is a detailed data-rich map of Great Britain showing properties off the gas grid, plus fuel poverty statistics, house type and tenure and heating source by ward, **www.nongasmap.org.uk**.

And finally, don't forget that data on energy use in your community can be collected through household questionnaires, energy audits of a sample of homes, and through modelling typical houses in your community to estimate their typical energy consumption. Various resources on methods of local data collection can be found at **www.cse.org.uk/local-energy/resources**.

Resources to help you:

Love Your Old Home – **www.cse.org.uk/advice/advice-and-support/older-homes** – is a webpage by CSE that gives guidance on energy efficiency measures that could be adopted by homeowners of traditional buildings.

Historic England conservation research report – The Sustainable Use of Energy in Traditional Buildings **www.bit.ly/sustainable-energy-historic-buildings**

Practical advice on saving energy in older homes – **www.historicengland.org.uk/advice/your-home/saving-energy**

Planning Responsible Retrofit – **www.bit.ly/stba-retrofit** – is a guide by the Sustainable Traditional Buildings Alliance retrofitting historic buildings without harming their historic character or fabric.

7   Sustainable transport

Re-shaping transport systems has enormous potential to enhance quality of life. Better facilities for walking, cycling and public transport, alongside reductions in car traffic, can create a cascade of benefits, including improved public health, improved air quality, more hospitable public spaces, greater footfall to support town centre uses and reduced economic losses from congestion. At the same time these measures will help meet environmental commitments: the transport sector is responsible for approximately 36% of all UK energy use[36], and 23% of CO_2 emissions[37], so reducing car usage can bring significant savings.

Why sustainable transport?

Resilience: reduced reliance on imported oil

Climate change mitigation: reduced carbon emissions from transport

Reduced congestion: improved air quality, reduced traffic noise

More choice of travel modes: improved access to services and employment

More popular public spaces and improved community cohesion

Improved health and quality of life

Health impacts of transport

What has come to light in the last few years is the adverse health impact of air pollution caused by our transport system and adverse health. Air pollution is linked to cardiovascular and respiratory disease, increased risks of dementia[38] and stunted lung and brain growth in children[39], and causes 40,000 premature deaths a year, according to the Royal College of Physicians. A joint investigation by the Guardian and Greenpeace found over 2,000 schools and nurseries within 150 metres of a road emitting illegal levels of nitrogen dioxide[40].

As well as lowering the health risks of air pollution, increasing walking and cycling would also improve our health through increasing activity levels. Travel habits developed in childhood are hugely influential for our travel habits (and activity levels) across our lifetimes. A Sustrans (www.sustrans.org) survey in 2010 found that nearly half of all children want to cycle to school but currently only 4% do.

Open spaces and transport

High quality public spaces are a vital component of the social life of a neighborhood, providing spaces for people to interact, as well as opportunities for commerce and events. Streets make up 80% of accessible public space, but are normally designed just for cars, not people. People are more likely to spend time talking with each other on streets with low traffic flows: evidence indicates that residents on quieter streets enjoy more friendships and connections with their neighbours[41].

Carbon savings and transport

Significant carbon savings are required in the transport sector to meet our international climate change commitments, but in any event, the way we get around is likely to change hugely over the coming years. The government has announced that new diesel and petrol cars and vans will be banned in the UK from 2040 to help improve air quality, from which point all cars will need to be electric or hybrid. Action by car manufacturers suggests that the move to electric cars will be quicker. More radically, self-driving cars are currently being tested on our roads and can be expected to come to market in the next 5 to 10 years. The consequences for our communities are not yet clear, but could be quite far reaching:

- Reduction in local air pollution from hybrids and electric vehicles (but even electric vehicles still need to be powered by electricity, and so are only as "clean" as their energy source, and a considerable proportion of air pollution from traffic is caused by degrading brakes and tires).

- Electric vehicles will increase demands on our electrical distribution system, but vehicle batteries could be used to store electricity from local renewable energy generators and address problems of intermittency.

Electric cars are set to increase in number, particularly now that the government has announced that new diesel and petrol cars will be banned from 2040. But neighbourhood planning groups will be aware that while electric cars have many environmental benefits, they are still cars, with many of the issues involved with this form of transportation: congestion, road accidents, parking demand and the dominance of roads in city centres.

Exploring sustainable transport

To get people thinking about transport issues, both within your group and across the broader community, here are some questions you could ask:

- What do people feel about the level of traffic in your community? What is your neighbourhood like during rush hour?

- How do people feel about their commute? Does it benefit or harm their health or quality of life?

- Does your neighbourhood experience high levels of air pollution? What are the rates of asthma and respiratory problems in your community?

- Which modes of transport do people use and how far do people travel? Are there forms of sustainable transport that people would like to use more? Is your community well connected to areas of employment? Are residents dependent on having access to a private car to get to work and meet their daily needs?

- How do local children get to school, and how would they like to get to school? If safe cycling or walking routes were available, would they like more independence?

- Are there safe and well-linked walking and cycling routes or opportunities to create new ones? What stops people from walking or cycling? Is there a train station nearby, and are there walking and cycling routes to it? Are there bus services radiating from it?

- Are the streets where people live safe for children to play in? Could a different layout (e.g. a homezone) or different surfaces slow traffic and make it safer?

- What proportion of people use, or would like to use electric or hybrid vehicles? Is the charging infrastructure available to support this?

It could be good to map your community's answers to these questions so that you have an evidenced and community-supported plan showing current transport issues, and how you'd like sustainable transport to be better supported in the future. This will help you to see the big picture and to develop the most effective strategy to encourage sustainable transport in your community.

A local train calls at Windermere. Some neighbourhood plans make specific provision for local rail travel, for example the Tisbury Neighbourhood Plan specifies that new developments must not prevent future re-opening of Tisbury Station.

Neighbourhood plan policy: sustainable transport

Below are some inspiring examples of how communities have integrated sustainable transport objectives into their neighbourhood plans through new infrastructure and public realm improvements for pedestrians and cyclists:

Barnham & Eastergate Neighbourhood Plan (2014)

Objective: Improve footways, footpaths and cycleways and promote the use of walking and cycling routes

Policy GA1: Connection to sustainable transport.
New developments should integrate with the current green infrastructure network and provide access to public and community transport, to connect with the social, community and retail facilities of the villages.

Policy GA2: Footpath and cycle path network.
Support will be given to proposals that improve and extend the existing footpath and cycle path network, allowing greater access to new housing, the village centres, green spaces and the open countryside. The loss of existing footpaths and cycle paths will be resisted.

Policy GA3: Contributions to maintain and improve the network.
Funds raised from the Community Infrastructure Levy (CIL) will be put towards the costs of maintaining and improving the network of footpaths and cycle paths. Developer contributions towards those costs will be sought in appropriate cases.

Wye Neighbourhood Plan - Policy WNP10 Density and layout

Development will be encouraged to provide links with safe walking and cycling routes to the village centre, facilitating access to schools, the surrounding countryside and station - minimising the need for car use. The loss of existing footpaths and cycleways will be resisted. New development should be built round the idea of a walkable village with integrated adequate pathways directly connecting to the centre of the village.

Major developments should be designed to provide new green amenity spaces, reflecting and extending the existing network of accessible green space running through the village.

Harvington Neighbourhood Plan – consultation version

Policy IH3

1) All new flats, apartments or maisonettes must provide a cycle storage unit assigned to that dwelling, with capacity for at least one bicycle for each bedroom.

2) The cycle storage unit assigned to each dwelling is to be in or immediately adjacent to the property, fully-enclosed, secure and at ground-level.

Dursley Neighbourhood Plan – Referendum Version

Policy T2: Improve Connections for Cyclists and Pedestrians

Development proposals which include, where possible, footpath and cycle links to improve access to green space, the town centre, wider countryside and Cam and Dursley train station will be supported.

Explanatory text: Where development proposals can include improvements for pedestrians and cyclists within the scheme or directly related to the scheme these will be sought. Improvements are not only sought to better connect to the town centre, but also to the wider countryside. Improvements will need to be proportionate and related to the development proposal is scale and kind.

Ross-on-Wye Neighbourhood Plan - Consultation Draft November 2018

Policy A5: Provision of Electric Charging Points

All new houses where dedicated parking per house is provided will be required to have an appropriately located charging point. Where general parking areas are included in housing developments, these are required to provide 1 charging point. Those proposing new employment, leisure or retail developments are encouraged to provide electric charging points for staff and/or users.

Frome Neighbourhood Plan (2016)

Policy TC1 – town centre re-modeling

Re-modelling the Town Centre should provide improvements to the public realm. Re-modelling of the Town Centre within the area shown on Figure 18 [see map inset] which accords with the following principles will be permitted:

- Improve the Town Centre environment for pedestrians.

- Reduce the impact of traffic movement from vehicles and re-order the priorities between motorised vehicles, cycles and pedestrians.

- Enhance the character and appearance of the Town Centre, taking into account guidance in the Frome Town Design Statement (October 2015) relating to this area.

- Provide an improved setting and location for the markets.

- Demonstrate that it will cause no deterioration in air quality.

In the inset map above, the light beige area is the carriageway in Frome town centre, which the plan proposes is reduced in width, with the pavements widened and crossings placed on popular routes. These improvements are to be funded by s106 and CIL. The intention is to reduce traffic speeds and prioritise pedestrians, and so change the character and purpose of this space from that of a road to a market place – Frome has an extremely popular monthly market – and a space for shopping, social interaction and community events such as fetes or festivals. It is likely that by improving the quality of the environment the vitality of the town centre will increase.

In the example below, Tisbury Neighbourhood Plan seeks to safeguard the railway station to allow its possible expansion if the service from Tisbury in Wiltshire to London is revived.

Tisbury Neighbourhood Plan – Made November 2019

Policy TR.2 Tisbury Railway Station

Development at or within the environs of the Tisbury Railway Station that protects and enhances the existing railway service will be supported. To ensure the necessary co-ordination, proposals should be developed in conjunction with the Local Planning Authority, Network Rail and other interested parties as appropriate.

Proposals should have appropriate regard for the following:

1. Increasing and accommodating the use of public transport - train, bus and taxi.

2. Accommodating sustainable travel needs, such as pedestrian accesses, bicycle shelters and electric car charging points.

3. Extending car parking in line with the levels of station usage.

4. The requirements of the Tisbury Conservation Area and the Victorian character of the station buildings

Community Infrastructure Levy: funds for sustainable transport improvements

As with other topics in this guide, you could include a policy statement outlining your community's priorities for how Community Infrastructure Levy funds can be spent on local infrastructure – and this could include creating, or enhancing existing sustainable transport infrastructure, such as walking and cycling paths. Further discussion of how Community Infrastructure Levy funds can be used can be found on page 81.

Neighbourhood plan actions and projects: sustainable transport

As outlined elsewhere, you can include initiatives in the plan that are not planning issues but which have been identified as key aspirations by the community. Increasing the opportunities for people to use sustainable modes of transport will have multiple benefits for your community – improving air quality, increasing health and well-being, increasing the accessibility of public spaces, reducing the dominance of cars, and improving the appearance of your neighbourhoods.

This can be done through larger initiatives, such as improving the street layout, linking walking and cycling paths, and reinstating a railway station; or much smaller measures which encourage people to use public space, such as adding cycling parking, street planters and public artworks, or setting up regular 'playing out' days where residents close their street to traffic for the benefit of children. For adults, conditioned to car dependence and convenience, these temporary closures help us to experience (for one day a month, or less) the cost of convenience and the opportunities which are given up when streets are given over to parking. What would we gain by using our streets differently?

Various innovative projects around community EV charging points (including those powered by solar) are being developed, and there are existing schemes around the country for community buses and bike load schemes (including electric bikes).

Dursley and Cam, in Gloucestershire, are two adjoining parishes with separate neighbourhood plans who are working together to deliver a 'Cam-Dursley Greenway' that connects the railway station in Cam to the local centre and Dursley town centre. This will provide residents with a largely segregated cycle route helping reduce car dependency in this rural area. Cam Parish is considering whether they can allocate parts of the route within their Neighbourhood Plan.

Supporting evidence

Remember, anything you propose must be supported by an evidence base. Below are some possible sources of information:

ONS data: **www.ons.gov.uk**

Local authority level consumption statistics for fuels used in road transport: **www.bit.ly/road-transport-energy**.

Your council will have further data on traffic or pedestrian flows and patterns and also in respect of air quality levels.

You can see what Sustrans cycle paths are in your area here: **www.sustrans.org.uk/ncn/map**

You could undertake a survey of travel in your community, looking at modes of transport (to work, school, shops) and highlighting key issues and changes your community would like to see. You could also talk to the schools in your community – parents, students, staff – to better understand school travel patterns, and barriers to increased walking and cycling, whether or not the school has an active Travel Plan. Schools are increasingly interested in reducing congestion outside the school gates, as the harms from air quality become clearer. As noted before, mapping your findings can be a really effective way of communicating and displaying the transport picture in your community.

Flooding in Castle Douglas

8 Flooding, extreme weather and water conservation

The latest predictions are that climate change will result in more extreme weather events in the UK, with heavier rainfall events and an increased risk of flooding, more and longer-lasting heat waves and higher sea levels[42]. We are already seeing increasing numbers of heavy rainfall events, and expect this increase to continue, with greater risk of river and flash flooding[43]. Already in England and Wales an estimated 2.4m properties are at risk of flooding[44]. Changing rainfall patterns will also affect water supplies. Too much rainfall in some areas and not enough in others will contribute to both flood and drought conditions.

The Met Office[45] predicts that at global temperature increases of 2 degrees, summer temperatures in the south east may increase by another 3 to 4°C relative to present day. In a business as usual (high emission) scenario, summer temperatures could be as much as 5°C hotter by 2070 as a result of climate change, with a 50% chance of summers being as consistently hot as the 2018 summer by 2050.

The Environmental Audit report "Heatwaves: adapting to climate change[46] records that in the August 2003 heatwave, where temperatures reached 38.5°C in England there were 2,193 heat related deaths across the UK in just 10 days. The report predicts that the average number of heat-related deaths in the UK could more than triple to 7,000 a year by the 2050s.

Exploring local vulnerability

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 you could ask to explore this area are:

- If your neighbourhood is urban, what's it like in summer heat waves? Does it suffer from the "urban heat island effect" (urban or metropolitan areas being significantly warmer than surrounding rural areas), and do street trees provide respite from the heat? 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?

- Does your area suffer from local flooding problems, and is it clear what the root causes are? (e.g. houses built on a flood plain, rivers 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 your area suffer from water stress and over-abstraction? Do streams and rivers disappear in the summer?

- If your area is coastal, will it be vulnerable to sea level rise in the coming decades?

- Does new development incorporate sufficient landscaping?

- Could new developments incorporate green roofs and walls?

- What could new developments do to reduce water use and reduce surface water flooding?

Neighbourhood plan policy: flooding, extreme weather and water conservation

Potential topics your policies could cover are:

- Maximising the use of "natural" SuDS features, including swales, streams, storage ponds and reed beds. These natural systems manage flood risk and can also secure other objectives, such as providing additional public open space integrated with cycling and walking routes, providing additional habitat, and contributing to the character of the new "place". Too often, SuDS schemes consist of underground concrete boxes to store rain water. These do reduce flood risk by releasing rainwater slowly, but deliver none of these other benefits.

- Promoting water efficiency in new development by incorporating rainwater harvesting technology.

- Promoting tree planting, street trees and green roofs through new development.

Remember that Community Infrastructure Levy funds can be spent on local infrastructure, such as creating or enhancing existing flood management. For more information on the CIL, see page 81.

Below are some examples of how other communities have integrated policies within their neighbourhood plans on addressing flooding through sustainable urban drainage systems (SUDS) and water conservation.

East Preston Neighbourhood Plan (2015)

Policy I7: Sustainable Urban Drainage System

New developments must incorporate Sustainable Urban Drainage Systems (SUDS) to reduce the run-off of surface water in line with the requirements of Buckinghamshire County Council… The SUDS must (where the feature is communal rather than building specific) be designed as an integral part of the green infrastructure and street network, so that SUDS are positive features of the development. The system should effectively mitigate any adverse effects from surface water run-off and flooding on people, property and the ecological value of the local environment. A surface water sewer should be seen as a last resort and no surface water will be permitted to enter the public foul sewage network.

This 'ditch' in a built up area is a functional drainage channel, a wildlife corridor and an attractive addition to the street. Photo: Google

Harpenden Neighbourhood Plan, Final Version for Referendum (2018)

ESD18 – Flood Risk

Proposals must incorporate a sustainable and integrated approach to the management of flood risk, surface water (including run off) and foul drainage. These proposals should be robust to the expected impacts of climate change …

All development involving the loss of permeable surfaces, loss of trees, loss of soft landscaping or loss of any other feature that reduces flood risk is required to use appropriate mitigation measures to prevent an increase in flood risk within the site or elsewhere. This should be proportionate to the scale of the proposal, with small interventions (such as planting or use of impermeable surfaces) acceptable for minor developments in areas of low flood risk.

Sustainable Drainage Systems (SuDS) should be used proportionately to mitigate any predicted increase in flood risk. These may include:

i.   Planting, particularly trees.

ii.   Introduction of permeable driveways, parking or other 'hardstanding' areas.

iii. Rainwater water harvesting and storage features (including butts).

iv.   Green roofs.

v.   Attenuation tanks.

vi.   Soakaways.

vii. Attenuation ponds.

SuDS must be designed as an integral part of the green infrastructure and street network. The system should effectively mitigate any adverse effects from surface water run-off and flooding on people, property and the ecological value of the local environment. A surface water sewer should be seen as a last resort and no surface water will be permitted to enter the public foul sewage network. Major developments must provide a SuDS Strategy and drawings showing all SuDS features. This must be supported with calculations showing how surface water flood risk will not increase.

Harpenden Neighbourhood Plan, Final Version for Referendum (2018)

ESD19 – Water Conservation

All developments must be designed taking into account best practice in water efficiency, such as water efficient fittings and appliances, water harvesting and storage features, and green roofs. All major developments must provide evidence of anticipated internal water use at or below 120 litres per person per day.

Very few local plans contain policies addressing the vulnerability of new development to overheating, despite the vulnerability of our housing stock to these impacts and the predictions of more severe summer heat. If your council's local plan lacks policies you could fill the void, although the policy wording shown may require further development.

Overheating - suggested policy wording - Centre for Sustainable Energy

Adapted from wording used in the Knightsbridge Neighbourhood plan and wording under consideration by Bath and North East Somerset Council

Climate change is already increasing the impacts of overheating and this is likely to worsen over the lifetime of new development. Major development should demonstrate how it has been designed to mitigate and adapt to climate change and natural hazards. In particular, such development should demonstrate how it would minimise overheating and reliance on air conditioning systems, including:

1. Minimise internal heat generation through energy efficient design

2. Moderating external temperatures through the use of green walls and roofs, tree planting, landscape and drainage design.

3. Reducing the amount of heat entering the building in summer: For example, through orientation, use of carefully designed shading measures, including balconies, louvres, internal or external blinds, shutters, albedo, fenestration and insulation

4. Use of thermal mass and high ceilings to manage the heat within the building: Increasing the amount of exposed thermal mass can help to absorb excess heat within the building.

5. Passive ventilation: For example, through the use of openable windows, shallow floorplates, dual aspect units (with openable windows on at least two sides), designing in cross ventilation and the 'stack effect'

6. Mechanical ventilation: Mechanical ventilation can be used to make use of 'free cooling' where the outside air temperature is below that in the building during summer months.

7. Minimising internal heat generation through energy efficient design: For example, heat distribution infrastructure within buildings should be designed to minimise pipe lengths, particularly lateral pipework in corridors of apartment blocks, and adopting pipe configurations which minimise heat loss e.g. twin pipes.

Case Study

Pickering's 'Slowing the Flow' catchment management project

In 2007, Pickering in North Yorkshire suffered flooding that caused extensive damage estimated to have cost the community around £7m. It was one of four floods in a decade - albeit the worst - and the trigger in 2009 for a new water-magement initiative, 'Slowing the Flow'. Costing around £0.5m (paid for by central government),

the scheme involved the planting of 40,000 trees, the building of around 300 "leaky" dams and the restoration of heather moorland to slow the run off of water from the hills into Pickering Beck. Analysis of the project following the Christmas 2015 floods concluded that the measures reduced peak river flow by 15-20%.

Read more at www.bit.ly/1Q9Ro06.

Neighbourhood plan actions and projects: flooding

Outside of the neighbourhood plan, your community could explore the following actions to reduce the vulnerability of your community to flooding and increase its resilience. You could:

- Promote tree planting to increase water infiltration levels.

- Appoint and train a community flood warden.

- Encourage residents to register with the Environment Agency's Floodline which provides flood warnings by phone, text or email: **www.gov.uk/sign-up-for-flood-warnings.**

- In high risk areas, develop a community flood plan that you can put into action in the event of a flood. You could develop this in co-ordination with the Environment Agency and with the emergency planning officer in your local authority: **www.bit.ly/flood-guidance-groups**.

- Work with landowners and statutory bodies to promote the management of upland areas in your catchment to slow down the flow of flood waters before they reach vulnerable communities downstream. This from the Wildlife Trusts will help: **www.bit.ly/WT-water**.

Supporting evidence

Remember, anything you propose must be supported by an evidence base. Below are some possible sources of information:

- Maps of the flood zones in your area can be obtained from the Environment Agency website: **https://flood-map-for-planning.service.gov.uk**. The Flood Zones show the annual probability of flooding in a particular location.

- The Environment Agency has also published River Basin Management Plans, covering all the river catchments in England. These set out the pressures facing the water environment, including flooding issues, water abstraction, water quality and ecology, plus the actions that they will take to address them. These can provide useful context for your Neighbourhood Plan: **www.gov.uk/government/collections/river-basin-management-plans-2015**.

- This website has searchable maps which highlight the areas that are the likely to be most affected by the impacts of extreme weather, including flooding and extreme heat, and discusses which people might be most affected. It also examines fuel poverty and inequalities in energy policy. **www.climatejust.org.uk**.

- Your local planning authority will also have a Strategic Flood Risk Assessment, which shows finer detail about areas at risk, sources of flooding, likely flood depths and speed of flooding.

- Local Communities can often provide invaluable local knowledge about historic flood events to add context and detail to data held by the Environment Agency and your local council.

9   Green infrastructure and biodiversity

Biodiversity and wildlife across the world and in the UK is under unprecedented pressure. According to a 2018 report by WWF, in nearly 45 years, humanity has wiped out 60% of global wildlife populations and more than 4,000 species were in decline between 1970 and 2014[47]. A similar report has found that more than 40% of insect species are declining and a third are endangered[48].

One way to address this crisis is to make our neighbourhoods more wildlife-friendly. In the UK, this means creating more habitats for our native insects, birds, reptiles and mammals. Skylarks, turtle doves, dormice, bumble bees, grass snakes and hedgehogs are among the much-loved creatures that are fast disappearing.

And whilst we're quite good at creating nature reserves and designated wildlife sites, it is the links between different habitats, also known as green infrastructure, which allow wildlife populations to move around and thrive.

Green infrastructure is the network of green spaces and waterways threading through cities and the countryside and includes woodlands, parks, streams and rivers and recognised nature reserves, but also less obvious assets such as allotments, hedgerows, street trees, cemetaries, canals, back gardens, railway cuttings or embankments, drainage ditches, road verges and disused land.

Green infrastructure is also vital to human health and wellbeing and a crucial element of adapting to climate change in both rural and urban areas. Green spaces can (and 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' signficant contribution to cooling urban areas in heatwaves).

- Increased flood water retention and infiltration, and reduced surface water runoff (which then requires expensive and space hungry, hard-engineering solutions).

Supporting healthy green infrastructure is vital for the resilience of wildlife, which is under increasing stress from habitat loss. Providing habitat corridors and linking up fragmented green spaces supports the movement of wildlife through our urban and rural landscapes. Supporting the health and resilience of wildlife is essential in maintaining and enhancing its ability to provide the wealth of ecosystem services that we rely on: air purification, water retention, climate regulation.

There is strong and growing evidence that green spaces are also to our physical and mental health. Researchers from Exeter University, using data from 5,000 households over 17 years, found that people reported lower levels of mental distress and higher degrees of life satisfaction when they lived in greener areas[49]. A New York study[50] found that asthma rates among children aged 4-5 fell by a quarter for every extra 343 trees per km^2.

The Government has committed itself to halt and reverse the overall decline in biodiversity, most notably in the recently published 25 year environment plan[51] which proposes to embed an 'environmental net gain'

principle for development, including housing and infrastructure. It will also enable authorities to develop locally-led strategies to enhance the natural environment.

The revised NPPF places a renewed emphasis on the need for developments to not just protect existing wildlife and biodiversity, but contribute to a net gain in nature conservation:

- "Planning policies and decisions should contribute to and enhance the natural and local environment by … minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures." (Paragraph 170)

- "To protect and enhance biodiversity and geodiversity, plans should … identify and pursue opportunities for securing measurable net gains for biodiversity." (Paragraph 174)

These two statements serve to highlight the role which local and neighbourhood plans are expected to play in helping to secure environment net gain benefit, and can support you in drafting more ambitious policies.

Exploring green infrastructure and biodiversity

Neighbourhood plans offer significant opportunities to understand better local biodiversity and how it can be protected and enhanced.

Questions you could ask to explore this are:

- 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?

- Does your local planning authority have a green infrastructure strategy?

- 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? Are any habitats rare in your region, and therefore in need of greater protection?

- If you have a wildlife reserve within or adjoining your neighbourhood, what changes in the management of the surrounding land could increase its value for wildlife?

- Does your area suffer from water stress? Do rivers and streams dry up in the summer? What impact does this have on wildlife?

- How might climate change affect habitats over the period of your neighbourhood plan and the coming decades? For example sea level rise can result in important intertidal habitats being squeezed out, as the natural change is constrained by fixed flood defences. (See Coast in Crisis, Protecting wildlife from climate change and sea level rise, RSPB: **www.bit.ly/rspb-coasts**)

- 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?

Neighbourhood plan policy: green infrastructure

Potential topics your policies could cover are:

- Support development which integrates new multi-functional open space within it – it is also beneficial in such cases for a management plan to be established which outlines how the open 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-solar-biodiversity**.

- 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**.

There's particular potential within your neighbourhood plan to identify local landscape features within your neighbourhood which reinforce local identity and offer wildlife habitat, and which should be protected and planned into new developments, for example Cornish or Devonian banks or hedges or in London Green roofs or walls.

Below are some inspiring examples of how communities have integrated green infrastructure and biodiversity objectives into their neighbourhood plans.

Sunninghill and Sunningdale Draft Neighbourhood Plan - Made 2014

Our area is surrounded by three significant and distinct areas of habitat: Chobham Common, Swinley Forest and Windsor Great Park. A built up area in the middle of these spaces creates a barrier to the free movement of flora and fauna, potentially creating species isolation which can result in in-breeding and a breakdown in ecological resilience. While we have a good network of green spaces in our NP area, these are generally not linked. Identifying and securing wildlife or green corridors is essential to ensure the necessary replenishment and maintenance of species diversity for healthy ecological functioning.

Policy EN51 Green Corridors

Development proposals should seek to maintain and enhance the connectivity of all green corridors where possible.

EN5.2 Proposals for development on or adjacent to primary green corridors, as defined by map 8, must maintain and if possible enhance the function of the corridor. Planning applications for new dwellings must clearly demonstrate how they have incorporated appropriate measures to secure the connectivity of the corridor and the freedom of movement for species on and through the site.
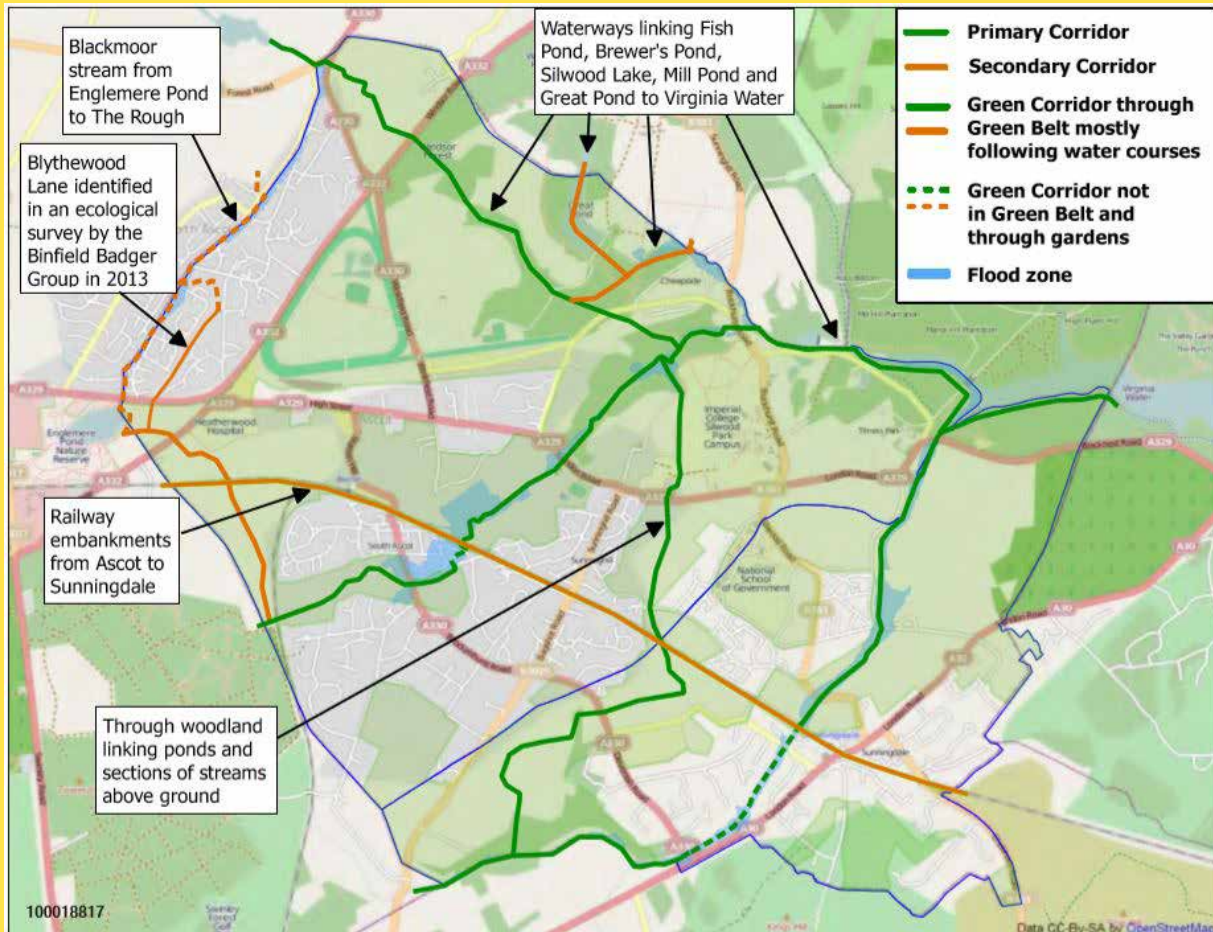
Bridport Draft Neighbourhood Plan - Regulation 15 Submission

Policy L2 Biodiversity

1. Development proposals will be expected to demonstrate how they will provide a net gain in biodiversity and, where feasible, habitats and species, on the site, over and above the existing biodiversity situation.

2. If significant harm to biodiversity resulting from a development cannot be avoided (For example through locating on an alternative site with less harmful impacts), adequately mitigated, or as a last resort, compensated for, then planning permission will not be supported.

Knightsbridge Neighbourhood Plan – Adopted December 2018

Urban Greening

A. In order to enhance the environment and biodiversity, proposals for new development or the replacement of existing development should incorporate sustainable planting where practical and viable and provided that it is in keeping with the character of the local area. This includes landscaping, tree and shrub planting, the creation of multi-functional roof gardens and the use of 'green walls'.

B. Design of green infrastructure on roofs or walls will be considered to enhance biodiversity where it is shown to create new links to facilitate the movement or dispersal of wildlife, provide additional habitats for rare, protected or otherwise important species or replicate natural habitat conditions ...

Harpenden Neighbourhood Plan - Final Version for Referendum - 2018

ESD14 – Trees and Hedges

Proposals should be designed to retain ancient, veteran and mature trees (particularly in ancient woodland) or trees or hedgerows of ecological, arboricultural or amenity value and should be accompanied by a tree survey that establishes the health and longevity of any affected trees. Development proposals must not result in unacceptable loss of – or damage to – existing trees or woodlands or hedges or significant landscaping during or because of development. Where trees must be lost as a result of development, these must be replaced at a ratio of at least 2:1 within the site, with a preference for native trees and for fruit and nut trees. The responsible planting of additional trees that reduce or absorb air pollution from traffic will be supported throughout the Neighbourhood Plan Area.

Hough on the Hill Neighbourhood Plan – Made 2015

Policy HoH9 – Local Green Space

The Neighbourhood Plan designates the area at and above the 50M contour line of Loveden Hill as a Local Green Space as shown on the map in Appendix 2.

Neighbourhood plan actions & projects

Outside of the neighbourhood plan, your community could explore other actions to improve the green infrastructure and biodiversity in your neighbourhood. You could:

- Explore opportunities to plant more trees, for example by creating a community wood or orchard.

- Look at how the management of existing public open spaces in your community could be improved to offer biodiversity gains. Could mowing frequencies be reduced in specific areas and appropriately timed to encourage wildflowers and the establishment of field and shrub layers under trees? Can deadwood be left to rot on the ground, encouraging invertebrates? Could the use of leaf blowers be discouraged?

- Explore opportunities for turning derelict spaces or underused public land into new green spaces, such as new allotment space, or a community garden.

Worth Neighbourhood Plan - Made 2014

Community Objective 14 - Parish Council Land

Creation of a Nature Reserve on Parish Council land will be investigated in partnership with other nature conservation bodies.

Anslow Neighbourhood Plan (2014)

Policy CL 2: National Forest
The Parish Council will work with the National Forest Company to:

Identify opportunities for new tree and woodland planting in the parish, including that associated with planned large-scale development in adjoining areas through the application of National Forest Planting Guidelines.

Encourage the management of mature and growing woodlands in the area for timber, recreational access and nature conservation and support proposals for small-scale development associated with woodland management, local timber processing, the use of wood for heating and the use of woodland for small-scale recreation, leisure and tourism purposes.

There are various sources of funding for tree planting. The Urban Tree Challenge Fund is a £10m government pot to promote tree planting in urban or peri-urban areas and provides up to 50% of published standard costs for planting large and small trees: **www.gov.uk/guidance/urban-tree-challenge-fund**. The Woodland Trust also provides funds for community tree planting: **www.woodlandtrust.org.uk/plant-trees**.

Community Infrastructure Levy funds can be spent on addressing local needs – such as creating, or enhancing the green infrastructure across your neighbourhood plan area.

Supporting evidence

Remember, anything you propose must be supported by an evidence base. Below are some possible sources of information:

- MAGIC (Multi-Agency Geographic Information for the Countryside) has mapping of statutory designations such as Local Nature Reserves, Sites of Special Scientific Interest etc. **www.magic.defra. gov.uk**.

- Your planning authority may have a green infrastructure strategy. They may also have data on the rare or priority habitats and protected species within your neighbourhood. They may also have developed a local biodiversity action plan, setting out actions to preserve these habitats and species.

- Natural England retain data on the condition of designated wildlife sites: **www.gov.uk/guidance/ how-to-access-natural-englands-maps-and-data**.

- You could additionally involve local wildlife groups in putting together your plan and contact your local Wildlife Trust. These groups may be able to provide data and information on the condition of local wildlife assets and give guidance as to how they should be managed to increase their resilience and condition. **www.wildlifetrusts.org/your-local-trust**

For further guidance and advice:

- Green Infrastructure Guidance (Natural England and Land Use Consultants, 2009) advises how to promote and support green infrastructure strategic planning and delivery and gives case studies for how this might look on the ground: **http://publications.naturalengland.org.uk/publication/35033**.

- Cities Alive (Arup, 2014) sets out the benefits of adopting a Green Infrastructure approach in a city context: **www.arup.com/perspectives/cities-alive**.

- Health Benefits of Street Trees (Forestry Commission, 2011) **www.forestresearch.gov.uk/research/ health-benefits-of-street-trees/**.

- The Woodland Trust's microsite on neighbourhood planning: **www.bit.ly/woodland-trust- neighbourhood-planning**.

Street markets are great ways to revitalise town centres and boost the local economy. Above is the hugely successful monthly market in Frome. Below is the newly rennovated covered market at Preston.

10 Transitioning to a low carbon economy, and service provision

Why promote a low carbon economy?

Resources: promoting a circular economy in order to reduce resource use and pollution, and using resources more efficiently.

Renewables and high value jobs: capture more energy spending in your local economy, promote high value employment in growing sectors.

Lower energy bills and energy efficient housing: design out fuel poverty and limit flows of money out of the local economy.

Climate change mitigation: decarbonising our energy supply, our transport system and economy to mitigate climate change.

Resilience: improve the self-sufficiency of your economy, meet people's needs near where they live, foster community, active travel and good health.

If we are to meet the climate challenge whilst preserving quality of life and meeting people's needs, it's clear that there is a need to decouple economic growth from carbon emissions. (We acknowledge and set to one side the wider debate as to whether pursuing infinite economic growth for a growing population in a finite world is possible, or even a reasonable objective.)

Achieving clean growth and promoting a low carbon economy is central to the government's industrial strategy and we have started to see this decoupling take place. Since 1990, the UK has cut emissions by 42% while our economy has grown by two-thirds[66], although de-industrialisation and the export of emissions from production to other countries may help to explain this (and the figures also exclude emissions from shipping and aviation).

Undeniably, there is a need to move faster to achieve zero carbon economy and reduce our consumption generally, by sharing, reusing, repurposing or recycling resources. The problem of plastic pollution has brought us up against the reality that throwing things "away" is really just throwing them into our environment; there is now no environment on earth that is unaffected by human activity.

So what can your neighbourhood plan do to promote a low carbon economy, and draw the links between environmental and economic objectives?

Firstly many changes to improve the sustainability of your community and reduce carbon emissions can support your local economy and benefit residents' quality of life. The emergence of a distributed energy system based on renewable energy, brings with it a major opportunity for communities to own part of their energy supply, and capture their energy spending in their local economy.

In market towns, improvements which support town centre health can help reduce the need for residents to out-commute for shopping or employment, and can help recirculate money in the local economy.

These sort of changes can help make walking and cycling more attractive, and can help make the use of unused upper floors for housing and employment more attractive too, putting housing and employment in sustainable positions close to services.

It may seem strange to discuss town centres in the context of a guide about planning for climate change, but we'll struggle to de-carbonise our society without significantly reducing the distances we travel, even if all our vehicles are electric. Even if online shopping continues to advance, we'll still need places to meet, work and socialise. Vibrant, healthy town and city centres are therefore essential for delivering the services people need close to where they live, and if struggling urban centres are to survive they need to diversify and attract people for reasons other than just shopping. In the words of urbanist Jan Ghel, "If you asked people twenty years ago why they came into the city, they would have said it was to shop. But if you ask them today, they would say it was because they wanted to go into town." [69]

Exploring your low carbon economy

To get people thinking about ways in which you could promote the transition to a low carbon economy through your neighbourhood plan, here are some questions you could ask:

- How is the balance between employment and housing in your community and how far do people travel to work? Could allocating additional land for employment in accessible locations reduce the need to out-commute? Are there vacant or under-used upper floors of your town centre buildings that can be made into sustainable, accessible locations for employment uses or housing?

- What is the demographic profile in your neighbourhood, and how does the mix of housing available fit with this? Are there smaller houses available for older people to downsize to, and enough family housing? Is the future projected intake of your school high enough to keep it open?

- What services or uses are vital in supporting your neighbourhoods' self-sufficiency (think the village shop or pub). Could you register them as assets of community value? Are facilities missing which would make your neighbourhood more self-sufficient and reduce the need to travel – e.g. shops, community meeting places, a cashpoint?

- Do you have a good range of local shops to meet people's needs in walking distance of where they live? If not, could you allocate a site for retail use, accessible by walking and cycling?

- What would encourage people to spend more time in your town centre? Is there somewhere pleasant for people to sit down and something interesting for them to look at? Are there trees to provide shade? Are there toilets? Could some of the space be reallocated to other uses temporarily or permanently - e.g. children's play area, boules court, a market for local food producers?

- If you have vacant shops, derelict land or land awaiting development in prominent locations, could you encourage temporary or "meanwhile" uses to increase footfall, for example pop-up shops, art venues, theatre, growing veg in raised beds?

- What could you do to support your local food economy? Incredible Edible (**www.incredibleedible. org.uk**) encourage people to plant up derelict land for food, to support community development, increase the proportion of food grown locally and support the local food economy.

- How can you help re-localise your economy? As a parish or town council, could you procure services from local firms, and lobby your district council to do the same? See case study below.

Neighbourhood plan policy: low carbon economy

Potential topics your policies could cover are:

- Reducing the need to travel to meet every day needs by resisting the loss of local facilities and services such as pubs or post offices, possibly through the Community Right to Bid (called Community Right to Buy in Scotland) - see https://mycommunity.org.uk/resources/understanding-the-community-right-to-bid/

- Allocating sites in rural communities to be used for start-up or micro-businesses (where you might rent a desk or a meeting room by the hour), to support home working, and reduce the need to out-commute.

- Ensuring new developments provide dedicated space for the storage and sorting of recycling.

- Exploring innovative ways to reinvigorate your town centre if it is struggling, and exploring what its purpose is (or could be). Is your town centre just for buying things, or could it also be for employment, cultural activities and having fun?

Below are some inspiring policy examples:

Frome Neighbourhood Plan (2016), Policy TC1 – town centre re-modeling

Re-modelling the Town Centre should provide improvements to the public realm. Re-modelling of the Town Centre within the area shown on Figure 18 which accords with the following principles will be permitted:

- Improve the Town Centre environment for pedestrians.

- Reduce the impact of traffic movement from vehicles and re-order the priorities between motorised vehicles, cycles and pedestrians.

- Enhance the character and appearance of the Town Centre, taking into account guidance in the Frome Town Design Statement (October 2015) relating to this area.

- Provide an improved setting and location for the markets.

- Demonstrate that it will cause no deterioration in air quality.

In the drawing above, the light beige area is the carriageway in the town centre, reduced in width with the pavements widened and level crossings placed on 'desire lines' (note that these improvements are to be funded by s106 and CIL). The alterations are intended to reduce traffic speeds and prioritise pedestrians and to change the character and purpose of this space, from that of a road (for movement) to a market place (for a number of uses, including movement, shopping, leisurely conversation and community events such as fetes or festivals). This and other actions by the town council have created numerous benefits and in 2018 it was voted as the best place to live in the south west. For further details, visit: **www.bit.ly/2tFLHIO** (opens pdf of plan).

Harpenden Neighbourhood Plan, Final Version for Referendum (2018)

Policy ER1 - Supporting Harpenden's Economy

In order to support the Harpenden economy, the following proposals will be supported in suitable locations:

1. Appropriate improvement, enhancement and redevelopment of existing employment and retail sites for such uses.

2. Provision of smaller commercial units suitable for use by local businesses.

3. Appropriate facilities for the use of flexible workers.

Policy ER2 – Designated Employment Locations

The locations set out in Table 5.1 ... are designated as protected employment locations. At these locations, change of use to a non-B Class use will not be supported unless it can be demonstrated that the premises are no longer suitable for business use or there is clear evidence that there is no prospect of a new commercial occupier being found.

This policy could be improved by requiring evidence that the premises have been actively marketed for a period (e.g. a year) at a realistic price, to demonstrate that the property or land is no longer required.

Wirksworth Neighbourhood Development Plan (2015)

Policy NP13 Provision for new and small businesses

… Planning permission will be granted for developments on the sites of ... which provide for: 1. start-up businesses by enabling low cost facilities in cooperative clusters; 2. businesses to operate from integrated home/work locations; 3. working from home, enabling extensions and small new buildings; 4. enabling micro-businesses.

Neighbourhood plan actions and projects: promoting your low carbon economy

Outside of your neighbourhood planning policies, your community could explore the following actions:

- Lobbying your local authority to procure goods and services locally to support your local economy.

- Look at whether existing community facilities could expand what they offer. Could lending libraries lend out tools and toys as well as books? Could your struggling pub also accommodate a shop in a shipping container in the pub car park? (We realise that it's easy to suggest this, much more difficult to actually do it!)

- How could cultural events could support and broaden the appeal of your tourism offer?

- Use the Right to Challenge to take over the delivery of public services (see case study below) or use other localism powers to enable necessary development to take place or support local service delivery.

Case Study:

Renewable energy for growth

Portland is a peninsular in Dorset, linked to the mainland by Chesil beach. The island has a stunning natural environment, but the population of 12,000 experiences social and economic deprivation, with high unemployment levels, low levels of educational attainment, and poor health. Many residents are dependent on the Weymouth area for shops, services, education and employment, with fewer opportunities on the Island itself.

Their neighbourhood plan sees the development of renewable energy and the as central to their economic strategy, with the potential to create jobs, generating revenue for community organisations and reduce energy poverty.

The plan comments:

> "Portland as an ideal environment for renewable energy companies to thrive. There are opportunities to take careful and responsible advantage of tidal power as well as geo-thermal, solar and wind power development. Portland has the potential to become a leading location to test and develop renewable energy development as well as supporting the development of community renewable energy. "

Through workshops the community is considering the potential for Portland to become an "Energy Island", following in the footsteps of Eigg in Scotland, generating 100% of its energy needs from renewable energy.

Case Study

The 'Preston model' of procurement and local wealth building

Preston in Lancashire is a town that has been hit hard by austerity. Plans for a huge shopping mall stalled in 2011. Since then, Preston City Council's approach has been to procure goods and services locally, and to lobby other local public sector organizations to do the same. For example, in 2015, Lancashire council put a contract to provide school meals out to tender. That was impossibly large for local firms, so officers broke it into bite-size chunks. There was a tender to provide yoghurt, others for sandwich fillings, eggs, cheese, milk, and so on. One contract was split into nine different lots. It meant officials actually shaping a market to fit their society – and it worked. Local suppliers using Lancashire farmers won every contract and provided an estimated £2m boost to the county.

Preston City Council's baseline analysis[54] found that only 5% of total spend was with local suppliers, with over £450m of procurement spend leaking out of the Lancashire economy. By 2016-2017 this had increased to 18.2%, despite an overall reduction in spending.

This is all possible because of the General Power of Competence[55] (introduced through the Localism Act 2011), which allows councils (including district, county and unitary councils and some parish and town councils) to do anything which an individual could legally do. This power supports local authorities and parish councils to innovate for the common good. In particular there is no requirement for councils to always take decisions on the basis of lowest cost if they have other objectives.

11 Ensuring your neighbourhood plan is implemented

You've written your neighbourhood plan, built support for its policies, negotiated with the council and your inspector, and managed to get your plan made. Well done! Congratulations are in order.

But what next?

Neighbourhood plans are somewhat unique, in that they are often written by non-planning professionals and then rely on the local planning authority to interpret and implement through decisions on planning applications. It can be hugely frustrating therefore, to have taken the time and effort to produce a plan, and have it adopted, only for its policies to be misinterpreted or misapplied. Equally, from the planning authority's side, it can be very easy to misinterpret a planning policy; it is often only when seemingly straight-forward policies come to be applied in a real-world situation that uncertainties arise (and developers can be keen to find uncertainties).

It's important to understand that local planning authorities are heavily constrained in the decisions they make. Their decisions are subject to appeal (and possible to overturn) by the planning inspectorate, they are capable of being over-ruled by central government, and their decisions are required to be in accordance with national policy priorities which are constantly changing. Additionally, emerging case law from other planning cases around the country can require them to change their interpretation of policy. Therefore monitoring of the success of your policies in achieving their aims is essential, as is ongoing constructive communication between the NPG and the local authority. In some cases it is necessary for policies which are unworkable or flawed to be revised.

Our advice would be to see the adoption of your neighbourhood plan as just the start; your plan is a tool to deliver your community's objectives. You should build the structures and processes to help your council to interpret and apply your plan correctly in line with your wishes, including:

- Building a constructive working relationship with your local council and developers, including commenting on pre-application queries on emerging planning proposals, so that the council incorporates your community's view into its thinking in early discussions with developers.

- Building structures for commenting on planning applications to ensure that your policies are quoted and applied in your comments on applications.

- Setting up structures to review the number of times your neighbourhood plan policies are referred to in decisions and whether the policy outcomes are achieved.

This Youtube video by Planning Aid (**www.youtube.com/watch?v=hs7jBlglJpg**) discusses the approach taken to neighbourhood plan implementation and monitoring by Thame council in Oxfordshire.

Other localism powers

Using Community Infrastructure Levy funds

The Community Infrastructure Levy (CIL) is a levy on new development (with some exemptions) to contribute towards the cost of local infrastructure, and charged according to the floor area of the development at a rate set by your local planning authority. Your local planning authority will publish a list of the infrastructure that is intended to be funded by the CIL on their website, and will consult prior to adopting their approach. You can comment on the infrastructure they intend to fund.

When CIL is paid, 15% of the money must be reinvested in the local plan area, and where there is a neighbourhood plan in place, 25% of the levy receipts will be passed on to the local community to spend on its priorities. Where there is a parish council, it will decide how to spend this money; elsewhere, the money will remain with the local planning authority to decide how to spend it (in consultation with the community). In all cases, where there is a neighbourhood plan, the priorities outlined in this should guide how the money is spent.

The "neighbourhood portion" of CIL receipts can be used by Parish or Town Councils to fund the provision, improvement, replacement, operation or maintenance of infrastructure. Parish and Town Councils are also able to use CIL to fund anything else that is concerned with addressing the demands that development places on an area.

Whilst in any area, the size of the Community Infrastructure Levy "pot" will be limited, and proportionate to the amount of new development hosted within that community, it is possible to direct CIL funding to infrastructure and initiatives which will support local climate change mitigation and adaptation, such as:
- Public realm improvements (e.g. townscape improvements within a high street or town centre).
- Renewable energy projects.
- District Heating infrastructure.
- Fuel poverty alleviation projects.
- Transport infrastructure, in particular cycling and pedestrian infrastructure provision and EV charging.
- Flood defences.
- Open space provision.

Further guidance on the Community Infrastructure Levy can be found in the Locality publication (in particular on how the neighbourhood element of CIL is spent and taking into account local views and aspirations) **www.bit.ly/locality-CIL**, in the RTPI Planning Pack **www.bit.ly/rtpi-planning-pack** and on the Government's website **www.bit.ly/gov-CIL**.

Neighbourhood Development Order

Neighbourhood Development Orders (NDOs) can be used to allow a specific development or a specific type of development to go ahead iwithout needing planning permission, for example the installation of solar panels in Conservation Areas). NDOs are confirmed following public consultation and a referendum, in a similar way to a neighbourhood plan and the basic conditions are the same as those for a Neighbourhood Plan. Other important things to note:

- An NDO doesn't have to be taken forward at same time as Neighbourhood Plan.

- Only parish councils or neighbourhood forums can progress NDOs and they must relate to land within the approved neighbourhood area.

- NDOs can be used to grant outline or full planning permission for specific development and can include planning conditions.

Note that an NDO grants consent for the development proposed, irrespective of the developer. Therefore if the intention of your NDO is to permit community owned renewable energy projects, you should take steps to legally secure the land for the purposes of the intended community project prior to finalising the NDO.

Community Right to Build Order

A Community Right to Build Order is a type of Neighbourhood Development Order, and once again, enables communities to undertake small developments without having to go through the normal planning application process. As with an NDO, the order is put to a referendum following a formal consultation process.

Gaining a Right to Build Order is not an easy process and will not necessarily be any easier than going down the traditional planning route for development.

The key differences between a Community Right to Build Order and an NDO are:

- A Community Right to Build Order can be submitted by any community organisation, which is defined as being established for the purpose of furthering the social, economic and environmental well-being of individuals living in a particular area.

- It can only be used to grant permission for a specific development on a specific site, not to grant consent for classes of development.

- Any profit generated by the project must stay within the community.

- In contrast to NDOs, a Right to Build Order cannot be used to allow development that would require Environmental Impact Assessment.

A more detailed summary of the legislation is available here: **www.bit.ly/community-right-to-build**.

The Right to Bid or Buy

This gives community organisations the chance to buy valued local assets when they go up for sale. Local authorities are required to maintain a list of assets of community value, nominated by community organisations and residents. Many buildings or amenities eligible for Community Right to Bid may be owned by your local council. Further information is here: **www.mycommunity.org.uk/resources/understanding-the-community-right-to-bid**.

The Right to Challenge

This allows community groups to take over public services that they believe can be run differently, so that they are cheaper or better at achieving their objectives. Further information is here: **www.bit.ly/community-right-to-challenge**.

Footnotes

1   NASA. Carbon dioxide hits new high, https://climate.nasa.gov/climate_resources/7/

2   Intergovernmental Panel on Climate Change. Global Warming of 1.5°C: Summary for Policy Makers, https://www.ipcc.ch/sr15/chapter/spm

3   Carbon Brief (11 March 2019). Mapped: How climate change affects extreme weather around the world, www.carbonbrief.org/mapped-how-climate-change-affects-extreme-weather-around-the-world

4   Schaller, N. et al. (2016) Human influence on climate in the 2014 southern England winter floods and their impacts. Nature Climate Change, 6(6), p.627.

5   Met Office (2018) Chance of summer heatwaves now thirty times more likely, www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2018/2018-uk-summer-heatwave

6   Mitchell D. et al. (2016) Attributing human mortality during extreme heat waves to anthropogenic climate change. Environmental Research Letters, 11(7), 074006.

7   Met Office (August 2018). Was summer 2018 the hottest on record? www.metoffice.gov.uk/news/releases/2018/end-of-summer-stats

8   National Oceanic and Atmospheric Administration. 2019 was 2nd hottest year on record for Earth say NOAA, NASA www.noaa.gov/news/2018-was-4th-hottest-year-on-record-for-globe

9   National Snow and Ice Data Center, reported in Committee on Climate Change (May 2019). Net Zero: The UK's contribution to stopping global warming, www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf

10 Met Office. UK Climate Projections 2018, www.metoffice.gov.uk/news/releases/2018/ukcp18-launch-pr

11 Intergovernmental Panel on Climate Change (2019). Global warming of 1.5°C: Summary for Policy Makers, www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15_SPM_version_stand_alone_LR.pdf

12 Climate Change Act 2008 www.legislation.gov.uk/ukpga/2008/27/contents

13 Committee on Climate Change (2018). Progress Report to Parliament, www.theccc.org.uk/wp-content/uploads/2018/06/CCC-2018-Progress-Report-to-Parliament.pdf

14 The Act actually commits the UK to reducing emissions to Net Zero by 2050, a 100% reduction of greenhouse gas emissions in the UK by 2050 compared to 1990 levels. Net Zero means that emissions will still be allowed in some sectors, such as aviation and manufacturing, where reducing emissions is either too expensive, technologically too complex or impossible. These residual emissions are allowed as long as they are offset by removing emissions from the atmosphere elsewhere, for example by planting trees.

15 Section 19 of the 2004 Planning and Compulsory Purchase Act www.legislation.gov.uk/ukpga/2004/5/section/19, as amended by section 182 of the 2008 Planning Act www.legislation.gov.uk/ukpga/2008/29/section/182

16 National planning policy framework (2018), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740441/National_Planning_Policy_Framework_web_accessible_version.pdf

PRODUCING YOUR NEIGHBOURHOOD PLAN

17 The basic conditions that a draft neighbourhood plan or Order must meet if it is to proceed to referendum. See Planning Practice Guidance www.gov.uk/guidance/neighbourhood-planning--2#basic-conditions-for-neighbourhood-plan-to-referendum

RENEWABLES

18 Committee on Climate Change (May 2019). Net Zero: The UK's contribution to stopping global warming, www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf

19 National Planning Policy Framework (2018), paragraphs 151 & 152. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740441/National_Planning_Policy_Framework_web_accessible_version.pdf

20 Guardian (23.07.2017). Drop in wind energy costs adds pressure for government rethink, www.theguardian.com/environment/2017/jul/23/drop-in-wind-energy-costs-adds-pressure-for-government-rethink

21 Deutsche Bank Market Research. Solar Grid Parity in a Low Oil Price Era, www.db.com/cr/en/docs/GRCM2015PROD033635_Web.pdf

22 Department for Business, Energy and Industrial Strategy (March 2019). Energy and Climate Change Public Attitude Tracker, https://bit.ly/2Yk7TTl

23 Cornwall Council (2016) www.cornwall.gov.uk/media/22936789/adopted-local-plan-strategic-policies-2016.pdf

24 Cornwall Council (2016) www.cornwall.gov.uk/media/18361631/cornwall-renewable-energy-planning-advice-march-2016.pdf

25 Committee on Climate Change (November 2018). Biomass in a low-carbon economy, www.theccc.org.uk/wp-content/uploads/2018/11/Biomass-in-a-low-carbon-economy-CCC-2018.pdf

26 Department for Environment, Food and Rural Affairs (2018). Draft Clean Air Strategy, https://consult.defra.gov.uk/environmental-quality/clean-air-strategy-consultation

27 Committee on Climate Change (2018). Biomass in a Low Carbon Economy, www.theccc.org.uk/wp-content/uploads/2018/11/Biomass-in-a-low-carbon-economy-CCC-2018.pdf

28 Bath & North East Somerset Council (2013). Informal Guidance Note: Renewable energy in the Green Belt, www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/Sustainable-and-Retrofitting/regb_advice_note_april_2013.pdf

29 www.energylocal.co.uk

30 Committee on Climate Change (Feb 2019). UK housing: Fit for the future? www.theccc.org.uk/wp-content/uploads/2019/02/UK-housing-Fit-for-the-future-CCC-2019.pdf

31 DECC (2012).UK Climate Change Risk Assessment 2012, www.bit.ly/NF7VkW

32 See note 30

33 Ministry of Housing, Communities and Local Government (July 2018). Government response to the draft revised National Planning

Policy Framework consultation: A summary of consultation responses and the Government's view on the way forward, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728498/180724_NPPF_Gov_response.pdf

34 Planning Practice Guidance, www.gov.uk/guidance/climate-change#can-a-local-planning-authority-set-higher-energy-performance-standards-than-the-building-regulations-in-their-local-plan

35 Intergovernmental Panel on Climate Change. Global warming of 1.5°C: Summary for Policy Makers, www.ipcc.ch/sr15/chapter/spm

SUSTAINABLE TRANSPORT

36 HM Government (2017) www.gov.uk/government/uploads/system/uploads/attachment_data/file/633503/ECUK_2017.pdf

37 HM Government (2013) www.gov.uk/government/uploads/system/uploads/attachment_data/file/295968/20140327_2013_UK_Greenhouse_Gas_Emissions_Provisional_Figures.pdf

38 Guardian (18 Sept 2019). Air pollution linked to much greater risk of dementia, www.theguardian.com/environment/2018/sep/18/air-pollution-causes-jump-in-dementia-risk-study-suggests

39 Guardian (18 Sept 2019). UK children inhaling toxic air on school run and in classroom, www.theguardian.com/environment/2018/sep/18/school-run-air-pollution-children-black-carbon

40 Guardian (4 April 2017). Thousands of British children exposed to illegal levels of air pollution, www.theguardian.com/environment/2017/apr/04/thousands-of-british-children-exposed-to-illegal-levels-of-air-pollution

41 Appleyard and Lintell. The environmental quality of streets: the resident's point of view, Journal of the American Planning Association, 1972: 84-101

FLOODING, EXTREME WEATHER AND WATER CONSERVATION

42 Committee on Climate Change (2017). UK Climate Change Risk Assessment: Synthesis Report www.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Synthesis-Report-Committee-on-Climate-Change.pdf

43 High risk of unprecedented UK rainfall in the current climate, Nature Communications 8, Article number: 107(2017) www.nature.com/articles/s41467-017-00275-3

44 Flooding in England: A National Assessment of Flood Risk. Environment Agency (2009), www.gov.uk/government/uploads/system/uploads/attachment_data/file/292928/geho0609bqds-e-e.pdf

45 Met Office (November 2018). UKCP18 Derived Projections of Future Climate over the UK, www.metoffice.gov.uk/pub/data/weather/uk/ukcp18/science-reports/UKCP18-Derived-Projections-of-Future-Climate-over-the-UK.pdf

46 House of Commons Environmental Audit Committee (July 2018). Heatwaves: adapting to climate change, https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/826/826.pdf

GREEN INFRASTRUCTURE AND BIODIVERSITY

47 WWF. Living Planet Report 2018: Aiming higher, www.wwf.org.uk/sites/default/files/2018-10/wwfintl_livingplanet_full.pdf

48 Science Direct. Worldwide decline of the entomofauna: a review of its drivers www.sciencedirect.com/science/article/abs/pii/S0006320718313636

49 Mark Kinver BBC News (2013), www.bbc.co.uk/news/science-environment-24806994

50 GS Lovasi , JW Quinn, KM Neckerman, Ms Perzanowski , and A. Rundle (2008). Children Living In Areas With More Street Trees Have Lower Asthma Prevalence

51 HM Government (2018). A Green Future: Our 25 Year Plan to Improve the Environment, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

52 HM Government (2017). The Clean Growth Strategy: Leading the way to a low carbon future, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/700496/clean-growth-strategy-correction-april-2018.pdf

53 Association of Town & City Management (2013). Successful town centres: developing effective strategies, https://thegreatbritishhighstreet.co.uk/pdf/Successful-Town-Centres.pdf

54 National Association for Local Economies (CLES). Local Wealth Building: harnessing the potential of anchor institutions in Preston, https://cles.org.uk/blog/local-wealth-building-harnessing-the-potential-of-anchor-institutions-in-preston/

55 Local Government Association (2013). The General Power of Competence: Empowering councils to make a difference, www.local.gov.uk/sites/default/files/documents/general-power-competence--0ac.pdf

If you're working on a neighbourhood plan and want detailed advice on how it could be improved, contact Dan Stone (the author of this guide) at the Centre for Sustainable Energy.

Subject to capacity, we can help with:

- Helping you plan and deliver your initial consultation events and build support for sustainability measures.

- Helping you identify relevant sustainability and climate issues in your area.

- Supporting you to developing and draft planning policies.

- Reviewing your draft neighbourhood plan.

- Supporting and delivering public events and workshops.

- Research for developing an evidence base.

We'll tailor the support we offer depending on resources available, what is needed and the progress your neighbourhood plan has already made. We also have direct experience of developing community owned renewable energy through and alongside your neighbourhood plan – a potential source of income for your community.

neighbourhoodplanning@cse.org.uk

centre for
sustainable
energy