Low-carbon neighbourhood planning

A guide to creating happier, healthier, greener communities

January 2018

tcpa
Esmée Fairbairn FOUNDATION
centre for sustainable energy

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A neighbourhood plan is an opportunity to build a positive vision of how your community will look in the future. 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 plan can help achieve all of these goals.

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Foreword

Neighbourhood planning has proved incredibly popular, with hundreds of plans already adopted, and thousands 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".

However, one single issue looms large over the future of all local areas. The changes we will all experience as a result of climate change mean that any plan made now that does not consider climate change and energy as central themes 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 in a genuinely holistic sense.

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
Head of Policy
Town and Country Planning Association, January 2018

Converted warehouses, Leeds | iStock/kelvinjay

1 Introduction

Society faces significant challenges – relating to our communities, economy, health, and 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. 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 these challenges.

This guidebook has been developed to help you develop a positive and ambitious – and low carbon – neighbourhood plan.

Why create a low carbon neighbourhood?
The multiple and broad benefits of creating a low carbon neighbourhood are encapsulated below.

To improve health: e.g. by improving air quality and cycling and walking infrastructure; improving the energy efficiency of homes

To empower your community: e.g. by building community owned renewable energy projects that generate funds for your community

To improve quality of life: e.g. improving public spaces and safeguarding green spaces

To benefit the local economy: e.g. reducing flows of money out of the area through energy bills

To improve resilience: e.g. through reduced exposure to rising energy prices and better preparedness for flooding and heatwaves

To address climate change: meeting ethical responsibilities and legal duties

To reduce energy bills: e.g. through more energy efficient homes

Climate change

The Climate Change Act 2008 commits the UK to an 80% reduction in CO_2 emissions by 2050 – this is a big feat which will require everyone to be engaged, from households and communities, to businesses and local and national government. It is a UK legal instrument, seperate from any EU directive.

At an international level, the Paris Agreement sees an unprecedented consensus from 185 countries on the need to take action on climate change. This includes keeping global average temperatures "well below" 2°C above pre-industrial levels, and pursuing efforts to limit the temperature increase to 1.5°C.

The conditions we find ourselves in today are testament to the need to take action:

- The Environment Agency predicts an average sea level rise around the UK of at least a metre by 2115 from a 1990 baseline[1].
- Globally, atmospheric CO_2 now exceeds 400 parts per million, the highest in human history. The last time we had CO_2 at this concentration was 3-5m years ago, at which point global average temperatures were 4-5 degrees hotter than today[2].
- Globally, the hottest year on record (since 1800) was 2016. Before that the hottest year was 2015 and before that 2014. Sixteen of the 17 warmest years on record have occurred since 2001[3].

So how does this legal commitment translate into planning documents?

Development plan documents must (taken as a whole) include policies which ensure a contribution to climate change mitigation and adaptation. If you think your council's development plan documents (which together make up the Local Plan) don't make enough of a contribution to climate change mitigation and adaptation then your neighbourhood plan is an opportunity to fill this gap. Of course there is already a legal requirement for your neighbourhood plan to contribute to the achievement of sustainable development, with the National Planning Policy Framework (NPPF) placing climate change mitigation and adaptation as central to this.

Before you get going...

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' in the different sections of this guide). It's an opportunity for your community to express what is important to you, and what you would 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.

2 Sustainability and resilience within your plan

Sustainability issues don't just belong in the environment chapter of your plan.

It can be easy to look at sustainability issues narrowly, but sustainability is a fundamental principle underlying all of the issues of importance in our daily lives – housing, health, poverty, food, transport, community cohesion, the environment. Therefore it can be more effective to treat sustainability as a cross-cutting theme which all emerging policies are consistent with and should be tested against. The same can be said for resilience – the ability to bounce back from shocks and the ability to withstand stresses.

Take climate change. This is a key sustainability issue, and it is critical to understand how resilient we are to its consequences, such as flooding, heatwaves and drought. This is an approach that is central to the 'Resilient Cities' movement **(www.100resilientcities.org)** – a network of 100 cities who are looking at their vulnerability to various shocks and pressures, and developing strategies to improve their resilience.

The impact of climate change will vary from place to place, and different communities will be more or less resilient (or vulnerable) to these different impacts. Therefore all communities should seek to reduce carbon emissions and increase their resilience, but how they choose to do this, and the issues they concentrate on, will depend on the individual community. Two contrasting examples are set out below:

Case Study: Resilience challenges in a small market town

Frome is a small market town in Somerset. The vision in the Frome Neighbourhood Plan (made in 2016) 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 authors of the plan have identified 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 have developed policies and initiatives to address them:

- Remodelling of the town centre to improve the environment for pedestrians and cyclists, reduce the impact of traffic and improve town centre health.
- An 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 cyclists.
- Seeking to ensure that land and buildings which generate local employment are protected.
- Creation of a community renewable energy company.

For further details, visit **www.bit.ly/2tFLHIO** (opens pdf of plan).

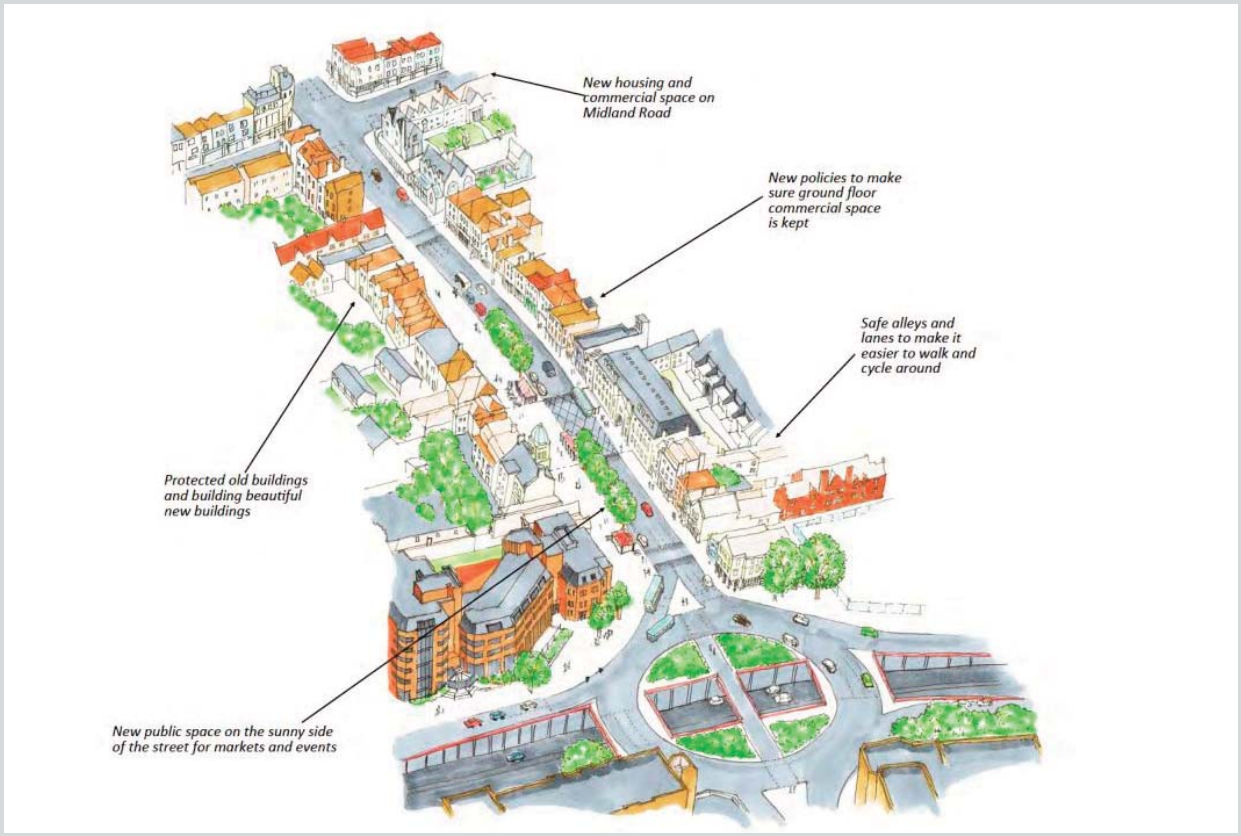
Case Study: knitting an inner city neighbourhood back together
Old Market Neighbourhood Plan, Bristol (2016)

Old Market is a historic inner city suburb of Bristol. The broad street at the heart of the neighbourhood hosted markets outside the city walls and it was a major commercial and entertainment destination up until the middle of the 20th century. But the construction of the ring road and other major roads isolated it and other neighbourhoods from the city centre. The quality of the environment was damaged and the area went into decline.

The Old Market Neighbourhood Plan (**www.bit.ly/2vPfKeg**) focusses on improving the quality of the environment and movement routes through the area. Old Market lies on the Bristol to Bath cycle track, a strategically important cycle route and one of the busiest in the country, but the end of the cycle track is poorly linked to the city centre and its route is unclear for first-time users.

Similar to Frome, the plan aims to re-balance the layout of the main shopping street to focus on people, street activities and businesses instead of vehicles. The plan 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 contributions** (negotiated between the local authority and the developer, and used to pay for anything from new schools or clinics to roads and affordable housing) and the **Community Infrastructure Levy** (payments applied to a much wider range of developments and based on a published tariff schedule).

In the long term, the plan identified areas where over-engineered road layouts could be rationalised to release additional land for housing and knit the neighbourhood back into its surroundings.



3 Renewable energy

The Government has set a target to deliver 15% of the UK's energy consumption from renewable sources by 2020 (this is a legal obligation, and stems from a Europe-wide 20% target), yet in 2016, only 8.9% of our energy was met by renewable generation[4], so there's still further to go to meet this target.

National planning policy stresses the responsibility on all communities to contribute to energy generation from renewable or low carbon sources[5]. This responsibility doesn't just apply to your local council. Your neighbourhood plan is your opportunity to develop a renewable energy strategy that your community could support and which could generate income which can be invested in community priorities.

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.

Why build 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: balancing local supply with local demand

Here is an inspiring example of how a local community has benefited from a community-owned renewable energy scheme:

Case study: the Fintry wind turbine, a community owned renewable energy project subsiding further carbon saving initiatives

Fintry is a small village, 20 miles north of Glasgow. It is not connected to the gas grid, and many households have struggled in the past to pay their high energy bills. In 2006, a commercial wind farm developer was proposing to build a windfarm on the fells behind the village. The community worked with the developer to secure a joint venture – they negotiated for an additional turbine to be built (on top of the 14 proposed), which was paid for by the community group. In return, the community has the right to a 'turbine's worth' of the income generated by the whole windfarm.

The profits from the turbine have funded further renewable energy installations in the village, an energy advice line, free loft and cavity wall insulation, energy efficiency upgrades to community buildings, an electric car club, cycle workshops, and a community garden and orchard.
www.fintrydt.org.uk

The government has substantially reduced subsidies for wind and solar energy, so 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 are falling rapidly. A recent report from Arup found that on-shore wind development is now competitive with new gas power stations without subsidy[6], 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[7].

Therefore, despite recent volatility in renewable energy subsidies, it is definitely worthwhile developing supportive renewable energy policies in your plan, as by the time your plan comes into force, the economic situation is likely to have improved even further.

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:

- Across your community, what is the balance between the electricity used and produced? Could your neighbourhood produce more of its own energy?
- What forms and scale of renewable energy would carry support in your community: roof based solar installations, large commercial solar farms, micro-hydro projects, anaerobic digestion, district heating, onshore wind turbines?
- Where could renewable energy developments happen in your neighbourhood? Are there locations in your community that would be particularly suitable?
- Would your community support energy schemes which are owned by and benefit them?
- Would your community be open to commercial renewable energy developments, or jointly owned ventures with commercial renewable energy companies? How can you make sure these bring the most benefit to the community?

- What opportunities are there for renewable heat generation in your area?
- Is there an opportunity to create a district heating network? Are there significant heat sources that could form the basis for a district heating network (e.g. power stations, heavy industry, swimming pools, a nursing home, hospital, college etc)?
- If a district heating network is planned, could you require any new developments to be capable of connecting to this system?
- How do households and businesses feel about energy costs? Are rising energy bills a problem?
- How might you use the revenue from a community owned energy project to make households and businesses less vulnerable to rising fuel costs, for example through energy efficiency schemes? Could you use the income to improve local services and build long term community resilience? Are there key local facilities and/or services missing or threatened with closure in your community that could be re-opened or supported?
- If your area is coastal or has a working port, would your community support marine energy and the onshore industries which could grow around it? For example, Hull is attracting millions of pounds of investment and up to 1,000 jobs from offshore wind farm construction: **www.bbc.in/1Chs9Uj**.
- Increasingly, 'smart' measures, such as matching energy supply with demand and energy storage will become available. Would your community want to encourage these technologies to help tackle the cost of energy? Local distribution network operators (DNOs), who manage the wires, cables and substations of regional electricty networks, are keen to explore cheaper alternatives to replacing substations and are often keen to work with communities to reduce or shift peak demand.

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. These are detailed below.

Neighbourhood plan policy

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 and/or mitigated, why limit your support to small-scale projects?

Instead through your neighbourhood plan, you should 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, for example, and has been done in Cornwall, that projects must be community led.

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 any of the following:

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 policy?

Scale of development and criteria for support

Once your community starts talking about types of renewable energy and where they might go, you'll pretty quickly find that many people have strong opinions. Would medium scale wind turbines be supported but not large scale turbines? Would a solar farm be supported in a particular field, but only if effectively screened from view and supported by a comprehensive package of ecological mitigation and enhancement measures? Is an element of community ownership crucial? This sort of detail is also really helpful for developers who will want to propose developments that already carry community support in principle.

Community energy

The NPPF states that local planning authorities "should support community-led initiatives for renewable and low carbon energy", 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 – this will make your plan pioneering!

A note on policy wording:

Adverse impacts

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.

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, as reflected in the examples we've given. The supporting text around your policy 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** ◀

Moving from generalised support 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[8], and discussing specific sites for renewable energy developments can be sensitive, so CSE has produced detailed workshop resources to help you do this: **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 your community explore 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 here: **www.bit.ly/2eKFDbb**). 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 facilited by CSE at cost. Contact **dan.stone@cse.org.uk** for details.

To give you an example of potential wording for a renewable energy policy, here are some good examples from plans which have been made. These policies identify potential renewable energy resources, express support for specific forms of renewable energy, identify suitable sites or detail assessment criteria for applications.

Much Wenlock's policy (box, below) sets out criteria for support for individual and community scale projects, but also goes further to express 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.**

Biomass, micro-hydro and solar farms

Below are three examples of how these technologies have been explicity included in neighbourhood plans. First, Fernhurst in West Sussex:

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.

Faringdon's policy (extract in box below) essentially allocates a site at Radcot on the Thames for the purposes of a micro-hydro scheme. Whilst a planning application would need to be assessed in detail, the policy nevertheless confirms that an application would be supported in principle. We would have suggested that an extra policy was written setting out the criteria by which other renewable energy projects would be assessed.

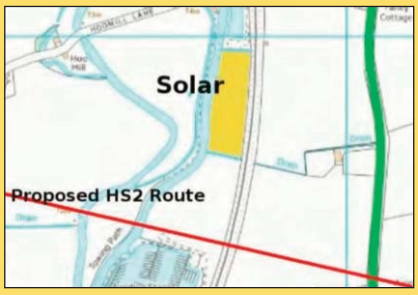
Faringdon Neighbourhood Plan (2016)

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

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.

Wind power

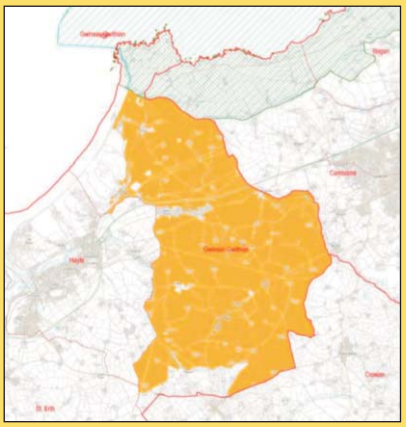
In 2015 the government announced that planning permission could only be granted for onshore wind turbines if the development site had been clearly identified as being suitable for wind development in a local plan or neighbourhood plan. This means that if your community intends to develop its own onshore wind turbine or wind farm, or is supportive of commercial wind projects going ahead, you will need to identify areas as being suitable for onshore wind in a policy in your neighbourhood plan. Without such a policy clearly identifying areas as suitable in your neighbourhood plan, or in the local plan, the project will not get planning permission.

The process of identifying suitable sites for onshore wind is complicated, so CSE has produced a guidance note setting out a process communities might follow to identify suitable locations, including advice on identifying constraints to onshore wind, suggestions as to how to get your community behind you, stakeholders to consult and suggested policy wording. See **www.cse.org.uk/news/view/2109**.

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:

(a) Residential amenity through noise generation, shadow flicker or overbearing visual impact.

(b) Safety of highways and public rights of way.

(c) Landscape and visual impact, having particular regard for the sensitivity of landscape to wind turbines within Landscape Character Areas CA05 and CA06; and the potential for cumulative impact from concentrations of wind turbines. Applicants should use Cornwall Council's draft SPD on Renewable Energy Annexes 1 & 2 to inform their impact assessments.

(d) Within the setting of the AONB and Heritage Coast, turbines should be no higher than 25m to tip height and should be located so as not to affect the setting of the AONB or Heritage Coast.

(e) Proposals for individual wind turbines or wind farms will not be permitted where they, together with existing and approved turbines or wind farms, would lead to a concentration of wind turbines on a scale which would significantly change the character of the wider landscape.

(f) Once the development reaches the end of its operational life it must be removed and the site remediated to its previous quality for future agricultural activity.

Locality has confirmed that, theoretically, a Neighbourhood Development Order could be used to grant planning permission for onshore wind developments, even if a project needed Environmental Impact Assessment. For community energy groups wanting to develop onshore wind projects, this could be a simplified alternative to having to develop a whole neighbourhood plan in order to identify suitable sites for onshore wind. However, this approach has yet to be trialed, and therefore before proceeding, you should take further expert advice. See section 11 for further detail on Neighbourhood Development Orders.

District heating

Your council is *usually* best placed to develop a district heating policy as it inevitably requires the submission of a great deal of technical evidence. However, that's not to say that communities shouldn't consider developing a policy for this kind of low carbon infrastructure in their neighbourhood plan, particularly if any of the following apply:

- There are major residential developments coming forward within your neighbourhood.
- There are obvious sources of waste heat nearby (for example from a power station or major industrial user), existing or proposed.
- There is a an existing or proposed 'anchor load', e.g. a large and consistent user of heat such as a swimming pool.
- The area you are looking at has a high heat density - e.g. a high heat demand per unit area. A good rule of thumb is to prioritise areas with an average demand density at or above 3MW/km^2, equivalent to approximately 25GWh/km^2/year. CSE can help you identify if there are any areas like this, using the National Heat Map (**http://nationalheatmap.cse.org.uk**). This is just a starting point though; 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 as the cost of a network is mostly in the pipework, not the boilers, so the more spread out your heat demand is, the more costly the network will be.

Woverton near Milton Keynes included a policy for disctrict heating in their neighbourhood plan:

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.

There are two potential options for heat network policy development that can be used, together or separately. The first 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.as".

The policy wording below (adapted from a 2016 RegenSW discussion paper: Model policies for energy in neighbourhood plans, 2016) could be adapted to be a heat priority area policy with the inclusion at the start of it of the words "In heat priority are

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**

Community Infrastructure Levy: funds for renewable energy

The Community Infrastructure Levy (CIL) is a levy on new development to contribute towards the cost of local infrastructure. The levy is charged according to the floor area of the development, at a rate set by the council (with some exemptions for certain types of development). The council will also publish a list of the infrastructure that is intended to be funded by the CIL in their area, which should be available on your council's website. The council will consult prior to adopting their approach and 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, or 25% in areas where there is a neighbourhood plan. 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. There is also the potential for CIL funding decisions to be devolved to the community level, with the local planning authority giving the final sign-off – as was the case in Bristol, were CIL decisions were devolved to Neighbourhood Partnerships.

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 Lawrence Weston has done:

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

For more information on the Community Infrastructure Levy and planning obligations see the RTPI Planning Pack (**www.bit.ly/1KNxg2X**) and the Government's webpages at **www.bit.ly/1j67kQr**.

Neighbourhood plan actions

Within your plan you can include objectives, actions or initiatives that your community is keen to pursue but which are not planning issues – so these are statements of intent for what your community will do, or would like to see happen (it's important that these are clearly labelled 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. There are at least 5,000 community energy groups undertaking energy initiatives in the last five years and they are a critical force for driving ideas and activities forward. Their activities may relate to renewable energy, but also energy efficiency, behaviour change and just raising general awareness. Inclusion of statements supporting a local community energy group in a plan will raise the profile of the group and help to secure support from the local authority for the groups activities. An energy group could write a sustainable energy plan for their community or develop locally owned renewable energy projects.

The West Sussex community energy group Repower Balcombe emerged from a public meeting held in 2013, and was set up with the following mission statement:

> *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. 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 inspire other communities by demonstrating and promoting the benefits of community renewable energy as a positive, viable alternative to the current energy production model.*
- *To unite the local community in support of these goals.*

These aims were included in the Balcombe Neighbourhood Plan, adopted in 2016 (**www.bit.ly/2v41n8t**).

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:

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).

There is support for your community to do this too. There are lots of resources on CSE's website to enable communities to do basic feasibility exercises themselves: **www.cse.org.uk**.

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 tested which allow suppliers to create their local own 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 – see **www.energylocal.co.uk**.

c. Establish 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. 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 alternative option (see the Fintry case study). This would enable you to benefit from the professional skills and knowledge of the commercial developer, whilst still 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.

If this is of interest to you, CSE can put you in touch with commercial development partners, as can Community Energy England (**www.sco-res.uk**).

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. DNOs are keen to work with communities to reduce or move peak demand so as to use the electricity network more efficiently, as a cheaper alternative to digging up the streets or replacing grid-substations. As new smart grid technology develops, there are likely to be opportunities for communities to create savings on their bills or even earn financial benefits by working together to manage demand.

Case study: community energy at scale

Bath and West Community Energy was founded in 2010, and initially developed a number of solar PV schemes in schools, funded by community share offers. The group has successfully scaled up activity, and to date has raised more than £9m through share offers and bond offers. This has allowed them to develop a series of larger ground mounted PV projects, now totaling more than 12MW, that generated £40,000 of funding to support local projects in 2017. The group has also supported the establishment of a number of other community energy groups and projects in the region, for example the Frome Renewable Energy Coop.

Supporting evidence

Anything you propose must be justified by an appropriate evidence base, for example:

- Local need and support for the proposal. Photographs, maps, documentation and feedback from residents and workshop outputs should all be kept as evidence of community involvement.
- Available renewable resource e.g. average wind speed, potential for hydro-power, local supplies of biomass fuel.
- 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 as they undertake the development of local policies with regards to wind power and renewable energy in general. It relies heavily on academic peer reviewed publications, expert reports and government studies.

Resources to help you

Wind? Solar? Biomass? CSE has produced a range of short films (**www.bit.ly/2tMHkeW**) to introduce most forms of renewable energy that could be deployed in your neighbourhood. These could be used to assist you in weighing up the pros and cons of different technologies.

The following CSE resource is helpful for starting to build a picture of available renewable potential in your area: **www.cse.org.uk/thesource/download/renewable-energy-technical-potential-and-evidence-515**.

And more generally, there are lots of resources about community engagement and renewable energy at **www.cse.org.uk/thesource**.

The national heat map **www.bit.ly/1COsyB9** shows heat demand from buildings across England, which might form the basis for thinking about the potential for a district heating network in your neighbourhood. It also shows water source heat potential (in rivers and canals), and sources of heat such as power stations, public buildings and commercial uses.

Any evidence your council 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 local authorities have commissioned renewable energy capacity studies.

Brightly painted external wall insulation, Bristol

4 Energy efficiency

The Carbon Plan 2011[9] (which sets out the government's plans for achieving our emissions reduction commitments) states that by 2050, all buildings will need to have an emissions footprint close to zero'.

Why energy efficient buildings?

Sustainability: reducing reliance on finite fossil fuel reserves

Warmer homes: improved comfort and better health

Lower energy bills: reducing fuel poverty and limiting flows of money out of the local economy

Climate change mitigation: decarbonising energy supply

Resilience: reducing reliance on imported oil and gas

It is already technically possible to build new carbon neutral housing, and you can include policies in your neighbourhood plan to encourage carbon zero homes and high levels of energy efficiency in new development.

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; at the current replacement rate, around 70% of buildings that will be in use in the 2050s already exist.[10] 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 UK has one of the least energy efficient housing stocks in Europe, with housing accounting for around a quarter of all UK energy use and CO_2 emissions.

The poor quality of the housing stock also exacerbates existing health and social problems. Around 20% of UK households are fuel poor and so can't afford to heat their homes adequately.

Exploring energy efficiency

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

- 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 and how comfortable are people in their homes?
- What proportion of 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)
- If new housing developments are likely to come forward in your neighbourhood, could you require them to provide a proportion of their energy demand from on-site renewable energy, for example from roof mounted solar panels? If major new residential development is proposed, could it incorporate a district heating network or combined heat and power system?
- Could you set out policies encouraging high levels of energy efficiency and sustainability in new buildings? Has your local council already developed these policies, and are they ambitious enough?

So, how can communities improve the energy efficiency of buildings, both new and old, and can your neighbourhood plan help? This is explored further below.

Neighbourhood plan policy: sustainability and energy efficiency of new buildings

The energy efficiency standards for new housing are set out in building regulations, which are becoming increasingly stringent. Some councils have in the past adopted planning policies requiring new housing to be more energy efficient than building regulations require, using the Code for Sustainable Homes or, for non-domestic buildings, the Building Research Establishment Environmental Assessment Model (BREEAM).

In 2015 the government streamlined the requirements set by different councils in respect of housing development and cancelled the Code for Sustainable Homes assessment regime, so that developments just need to comply with the national Building Regulations, meaning that neighbourhood plans could not require more stringent standards in respect of the energy efficiency of new housing than are required to meet Building Regulations.

The intention previously was that building regulations would be modified so as to require all new dwellings to be carbon neutral, but the government announced that it did not intend to proceed with the zero carbon homes scheme. It is still not clear what will replace this or how this will affect neighbourhood plan making.

Despite this, some communities are still including supportive statements in their neighbourhood plans in relation to the energy efficiency of new developments. The following excellent policy from Long Ashton Neighbourhood Plan covers both the energy efficiency of new dwellings and sustainable design and construction issues. (Elements of the policy which could no longer be adopted following the government's streamlining of regulations, have been omitted.)

Meanwhile, you may find this suggested wording a useful basis for the an Innovative Low Carbon Homes policy in your neighbourhood plan:

> *"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."*

Long Ashton Neighbourhood Plan (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.**

Energy efficiency standards for additional development

Local planning authorities must identify sufficient housing sites to meet the needs of their population over a rolling five-year period (this is often identified as the five-year housing supply). Whilst residents can, through commenting on the local plan, influence how and where homes are built, once this is adopted the neighbourhood plans cannot challenge these allocations and must not seek to apply additional technical standards to these sites e.g. regarding energy efficiency.

If they wish however, neighbourhood plans can decide to allocate additional housing sites, over and above that needed to meet their local authority's five-year housing supply.

For these additional sites, there is significant scope to seek to work together with landowners and developers, to agree ways of bringing forward land allocations over and above those required by the district-wide plan, subject to them delivering exceptional sustainability benefits for the community. This reflects the significant scope afforded by neighbourhood planning powers to communities.

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 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".

Neighbourhood plan policy: energy efficiency improvements to historic and traditional buildings

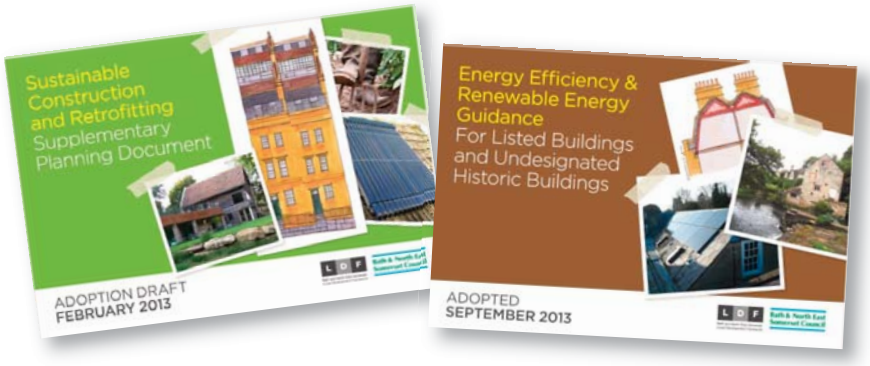
Traditional and historic buildings, including listed buildings and those within conservation areas, are often expensive to heat and can be draughty and cold. Greater care is needed in planning energy efficiency improvements to this type of building to avoid harm to their historic fabric and character. 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 have 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 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, but the text below, based on planning policy CP1 in Bath & North East Somerset council's local plan, would be a good start:

> *"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."*

Creating planning guidance for retrofitting historic buildings

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/2i9Ryju**).



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 encourage 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**.

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 potential energy efficiency measures that could be adopted by homeowners of traditional buildings.

Historic England have a lot of information on their website about energy efficiency and saving energy in older houses, consents and regulations and installing renewables. See **www.historicengland.org.uk/advice/your-home/saving-energy**.

Planning Responsible Retrofit (**www.bit.ly/1MU8uDw**) is a guide, published by the Sustainable Traditional Buildings Alliance, which gives advice on how to retrofit historic buildings without causing harm to their historic character or fabric.

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. If your local council 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 (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.

Whatever the mandatory policy requirements, there is a widespread enthusiasm amongst developers and self-builders to build sustainable, innovative low carbon homes. You could include a policy encouraging innovative approaches to low carbon building in your community. These are often different in appearance to normal properties, but can be of very high design quality and are designed to be highly energy efficient or even carbon neutral in use.

RegenSW's suggested policy below has yet to be trialed, but might well be suitable in neighbourhoods with large amounts of commercial development coming forward and no heritage designations.

> *"All new non-domestic buildings must have solar PV on their roofs. Where a developer is unable to deliver the solar PV installation, they need to demonstrate that they have worked in detail with a 3rd party (commercial or community) to assess the opportunity. Where the opportunity is not currently viable due to market conditions, the developer must ensure that the roof is built to a standard that could accommodate PV in the future."*

Neighbourhood plan actions

As outlined in Chapter 3, 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 homes and buildings in your community is one such initiative, and there are many activities you can do to address this, as detailed in the following videos all of which are hosted on CSE's YouTube channel:

- An energy efficiency walk-around (video, 6 mins): **www.bit.ly/1GGA2bv**.
- Running an open homes event (video, 5 mins): **www.bit.ly/1RqGmXA**.
- Providing energy advice in your community (video, 5 mins): **www.bit.ly/1EA6INQ**.
- Rolling out an area-wide retrofit programme (video, 5 mins): **www.bit.ly/1QcO8C4**.

CSE has lots of practical information on how to begin and run energy efficiency projects in your community. See **www.cse.org.uk/thesource**.

It is worth noting that revenues from community renewable energy projects can be a significant source of funding for projects like those described above.

Supporting evidence

As a 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 council'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 that can be used to inform your approach to energy efficiency.

If not, you may wish to access the following data sources:

- Electricity and gas consumption at the community scale: **www.bit.ly/1PQ6YEh**
- Local authority and regional CO_2 emissions: **www.gov.uk/government/statistics/local-authority-emissions-estimates**
- Fuel poverty sub-regional statistics: **www.gov.uk/government/collections/fuel-poverty-sub-regional-statistics**
- A substantial range of 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: **www.cse.org.uk/opendata**
- Non gas map, 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**

Or alternatively, you might consider doing your own surveys. Data on energy use in your community can be collected through household questionnaires, energy audits of a sample of homes, and through modeling typical houses in your community to estimate their typical energy consumption. Two options include:

- WWF's environmental footprint: **http://footprint.wwf.org.uk/**
- Chester University's Community Carbon Calculator, hosted by Ashton Hayes (Going Carbon Neutral) **www.goingcarbonneutral.co.uk/community-carbon-calculator-un/**

Backseat driver | iStock/filadendron

5 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, more hospitable public spaces 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[11], and 23% of CO_2 emissions[12], so reducing car usage can bring significant savings.

Why sustainable transport?

- Reduced reliance on imported oil
- Lower carbon emissions
- More choice of travel modes
- Improved air quality and reduced traffic noise
- Improved access to services and employment
- More popular public spaces and improved community cohesion
- Improved health and quality of life
- Reduced congestion

Health impacts of transport

What has also come to light in the past year is the serious health consequences of the air pollution caused by our transport system as it currently operates. Ninety percent of urban areas have experienced nitrogen dioxide levels at illegal levels since 2010[13], with air pollution causing 40,000 premature deaths a year, according to the Royal College of Physicians.

As well as lowering the health risks of air pollution, increasing walking and cycling would also improve our health through increasing activity levels. The travel habits developed in childhood are hugely influential for our travel habits (and activity levels) across our lifetimes. Nearly half of all children want to cycle to school but currently only 4% do.[14]

Open spaces and transport

High quality public spaces are a vital component of the 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[15].

Carbon savings and transport

Significant carbon savings are required in our 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 and tackle air pollution, 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. Volvo has announced that all new cars launched by Volvo from 2019 onwards will be partially or completely battery-powered. 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.

Looking to the future therefore, our transportation system can be expected to change. 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).
- Increased electricity demand to power electric vehicles.
- A reduction in the need for personal vehicle ownership, if self-driving cars really take off. One publication[19] suggests that if "taxi-bots" (i.e. ride sharing) were to replace all conventional cars and buses, the number of vehicles on the roads each day would be reduced by 90% (or 65% during peak hours). This could free up huge areas of land currently taken up by parked cars for more positive uses. The wider consequences for our traffic infrastructure and patterns of development are unclear.

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?
- 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 to get to work, to school, and to the shops, and how far do people travel? Is there a choice of different modes of transport, or does everyone depend on access to a private car? What would be the consequences if fuel costs doubled?
- Is your community well connected to areas of employment, or does everyone commute by car?
- Are there safe and well-linked walking and cycling routes? Are they clearly signposted?
- Are there opportunities to create new walking and cycling routes?
- Is there a train station in or near your community, and are there walking and cycling routes to it? Are there bus services radiating from it?
- What barriers are there to increasing walking and cycling? Are there danger "hotspots" which could be improved or dysfunctional cycle lanes which should be improved (a UK specialism!)
- 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?
- Are there shops and services which if closed down would reduce your community's degree of self-sufficiency, or 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?
- 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 / is there enough family housing? Is the future projected intake of your school high enough to keep it open?
- Could you provide facilities for home-workers or start-up companies, or employment hubs where you can rent a desk or meeting room?
- What proportion of people use, or would like to use electric or hybrid vehicles? Is the charging infrastructure available to support this?
- What makes a welcoming public space where people will linger and interact? How does the presence of traffic influence the usage of public space?

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.

Neighbourhood plan policy

Potential topics your policies could cover are:

- Ensuring new development does not fragment the existing walking and cycling network, and instead improves existing walking and cycling paths and adds critical links to better 'join' up networks.
- Improving the walking and cycling environment around key destinations, such as the train station, schools or your high street. In these key areas you could pay particular attention to prioritising the needs of cyclists and pedestrians over the needs of motorists.
- Providing safe and convenient cycling and walking routes to employment centres.
- 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 commute.

Below are some inspiring examples of how communities have integrated sustainable transport objectives into their neighbourhood plans:

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.

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 interction 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.

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.

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

As outlined elsewhere, you can include objectives, actions or initiatives in your plan that your community is keen to pursue but which are not necessarily planning issues. 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 space and reducing the dominance of cars, and improving the appearance of your neighbourhoods. This can be done through bigger initiatives, such as improving the street layout, linking walking and cycling paths, and reinstating a railway station, to much smaller measures which encourage people to use public space, such as adding cycling parking, street planters and public artworks.

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

- ONS data on transport: **www.bit.ly/1SXH04x**.
- Local Authority level consumption statistics for fuels used in road transport: **www.bit.ly/1RLB9II**. Your council will have further data on traffic and pedestrian flows and patterns and also in respect of air quality levels.
- You can see what Sustrans cycle paths there are in your area here: **www.sustrans.org.uk/ncn/map**.

You can also do your own surveys. You could undertake a survey of travel in your community, looking at modes of transport (to work, school, shops), 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, whether or not the school has an active Travel Plan, and barriers to increased walking and cycling. As noted before, mapping your findings can be a really effective way of communicating and displaying the transport picture in your community.

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.

Case study: the Bearpit, Bristol

With community leadership and involvement, a surprising amount can be done to re-animate previously threatening public spaces and encourage walking and cycling.

The "Bearpit" is a series of underpasses at the centre of an extremely busy multi-lane roundabout close to the centre of Bristol, and a legacy of car-focussed planning of the 1970s. It is the only pedestrian route to the main city centre from several neighbourhoods and, with a reputation for crime and antisocial behaviour, a threatening barrier to pedestrians and cyclists. The city council's past efforts to improve the space had been ineffective.

The community undertook to restore the Bearpit as a positive shared space, through public art, landscaping and the introduction of small scale commercial activity including a café in a converted double decker bus and vegetable stall in a converted shipping container. A table-tennis table was installed and musical and cultural events (including dance and outdoor cinema screenings) are encouraged. Funding has now been secured to create a people's garden to support biodiversity and attract wildlife, and in 2016 a larger permanent project was completed re-surfacing the space and introduce surface crossings to improve pedestrian and cycle access.

The homeless and street drinkers are still there (there was a deliberate policy not to displace them, to become somewhere else's problem), but many people now using the Bearpit or even just passing through can enjoy the transformation of this space.

This project was carried out independently of neighbourhood plan preparation.

Text adapted from "Transforming the Bearpit Organically and Incrementally" (**www.bit.ly/2vfrit9**). Further information, see **https://bearpitimprovementgroup.co.uk**.

Flooding in Castle Douglas | iStock/JohnFScott

6 Flooding and extreme weather

The latest predictions are that climate change will result in more extreme weather events in the UK, with heavier rainfall, an increased risk of flooding, more and longer-lasting heat waves and higher sea levels[17]. Already in England and Wales an estimated 2.4m properties are at risk of flooding[18]. 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.

If global emissions are not reduced, average summer temperatures in the south east of England are projected to rise by over 2˚C by the 2040s (hotter than the UK 2003 heatwave which was connected to 2,000 extra deaths) and by up to nearly 4˚C by the 2080s.

Community Infrastructure Levy funds can be spent on local infrastructure, such as creating or enhancing existing flood management.

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:

- Does your area suffer from local flooding, 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, such as paving over of front gardens leading to an increase in surface water run-off; increasing frequency of storm surges).
- 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?
- If your neighbourhood is urban, what's it like in summer heat waves? Does it suffer from the "urban heat island effect", and do street trees provide respite from the heat?
- 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? How could existing residents reduce water use and water stress?

Neighbourhood plan policy

Having policies on flooding and extreme weather in your neighbourhood plan is a great way of communicating your community's ambitions. Potential topics your policies could cover are:

- Opposing new development in areas of high flood risk.
- Promoting the use of Sustainable Drainage Systems (SuDS) that aim to reduce the need for hard, engineered drainage systems, manage water at or near the surface, maximise infiltration into the

ground, and deliver ecological benefits. SuDS features include 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 integrating with cycling and walking routes, providing additional habitat, and contributing to local character.

- Promoting water efficiency in new development by incorporating rainwater harvesting technology.
- Promoting tree planting, street trees and green roofs through new development.

Below is how East Preston's neighbourhood plan has included policies to address flooding and extreme weather:

East Preston Neighbourhood Plan (2015)

Policy 8: Sustainable Drainage
Development proposals will be supported provided they are able to demonstrate that they include one or more of the following sustainable drainage design features to manage the risk of surface water flooding within their boundary and elsewhere in the parish.

i. permeable driveways and parking areas;
ii. water harvesting and storage features;
iii. green roofs and/or
iv. soakaways

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.

Neighbourhood plan actions

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 government's flood warning service and recieve warnings by text, phone 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 council: **www.bit.ly/1IdCk2C**.
- 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: **http://bit.ly/1ORb630**. Analysis of the Slowing the Flow catchment management project in Pickering (which saw the planting of 40,000 trees, the installation of 300 "leaky" dams and the restoration of heather moorland) concluded that the measures reduced peak river flow by 15-20% during the Christmas 2015 floods: **www.bit.ly/1Q9Ro06**.

Case study: South Cerney's community-led flood defence plan

In 2006, South Cerney parish council developed a community led plan for flood defence. They worked alongside other agencies, highlighting a number of issues in order to address the village's ongoing flooding problems. The community-led action plan together with ongoing pressure from the parish, district, and county councils, led to the following outcomes:

- The Environment Agency installed a flood monitoring station on the River Churn.
- Gloucester County Council completed a survey of the vital storm water drainage pipes and cleared major obstructions.
- Thames Water installed a new pumping sewer pipe – costing £5m – to replace the old pipe that previously leaked raw sewage during flooding.
- The development and implementation of an emergency action plan for flooding.

South Cerney council continues to work with The Environment Agency and Thames Water, and have recently devised a plan to prevent flooding by removing a gravel deposit at some nearby sluices.

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 inequities in energy policy. **www.climatejust.org.uk**.
- Your local planning authority will also have a Strategic Flood Risk Assessment, which shows finer grained 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.

Cycling in a UK park | iStock/Tom Merton

7 Green infrastructure and biodiversity

'Green infrastructure' is the network of green spaces and waterways threading through cities and the countryside. It includes: parks, woodland, waterways and recognised nature reserves, and also less obvious assets such as hedgerows, trees, canals, back gardens, railway corridors, drainage ditches, road verges and disused land.

Green infrastructure is vital to health and wellbeing. At the same time, it is a crucial element of adapting to climate change in both rural and urban areas, as well as protecting and improving biodiversity. The key understanding behind the concept of green infrastructure is that green spaces can (and should) perform multiple functions which contribute to both climate change mitigation and adaptation, providing:

- Provision of wildlife habitat.
- Routes for walking and cycling.
- Space for food growing.
- Enhanced regulation of microclimates (i.e. meaning there are less extremes of weather, such as very hot conditions in urban areas in the summer months).
- 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 a key element of people's 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 were living in greener areas.[19] A New York study found that asthma rates among children aged four and five fell by a quarter for every extra 343 trees per km^2. The presence of street trees was linked with a 29% reduction in early childhood asthma.[20]

Exploring green infrastructure and biodiversity

The Government has committed itself to halt and reverse the overall decline in biodiversity. Neighbourhood plans offer significant opportunities to understand better the assets you have and how they could be protected and enhanced. Questions you could ask to explore this area are:

- What are the current biodiversity or green infrastructure assets, and what is the range of habitats within your neighbourhood? Could you map these assets to see how they join up and show any gaps or weak links between them? Are any habitats locally rare, and therefore in need of greater protection?

- Does your local council have a green infrastructure strategy? This could be a good starting point from which to work up more detail for your neighbourhood.
- What is the condition of the wildlife assets that you have? What actions would increase biodiversity or improve the condition of habitats that are present?
- 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 disappear 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/2uMWgbZ**)
- 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 which should remain open, but which aren't currently protected?

Neighbourhood plan policy

Potential subjects for your plan could include:

- Supporting 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.
- Supporting development which improves the connectivity of green infrastructure and enhances biodiversity (and not supporting development which further fragments green infrastructure and impacts negatively on biodiversity).
- Supporting development which increases the number of street trees.
- If you are supporting standalone renewable energy developments, 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/1yhwB5s**. The RSPB has joined forces with a renewable energy company to create natural habitats at a solar farm to demonstrating their wildlife potential. Wild flower meadow areas and seed-rich planting in the "unused" margins of the farms and where tracks go between the panels will help boost insects such as bees and butterflies and provide food and nesting areas for birds. Further details are available here: **www.bit.ly/1X6nYFB**.
- If your neighbourhood is prone to heat stress or flooding, oppose the loss of front gardens to paving and parking and lobby your council to bring in extra controls to ensure that these changes need planning permission.
- Oppose the complete loss of back garden space, and 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/2f12mjb**.

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

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.

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.

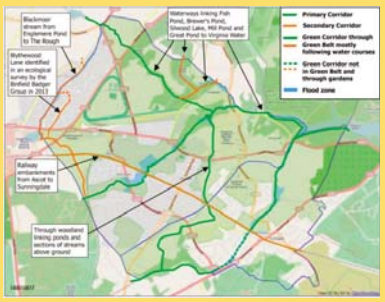
Sunninghill and Sunningdale Draft Neighbourhood Plan - Made 2014

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.



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

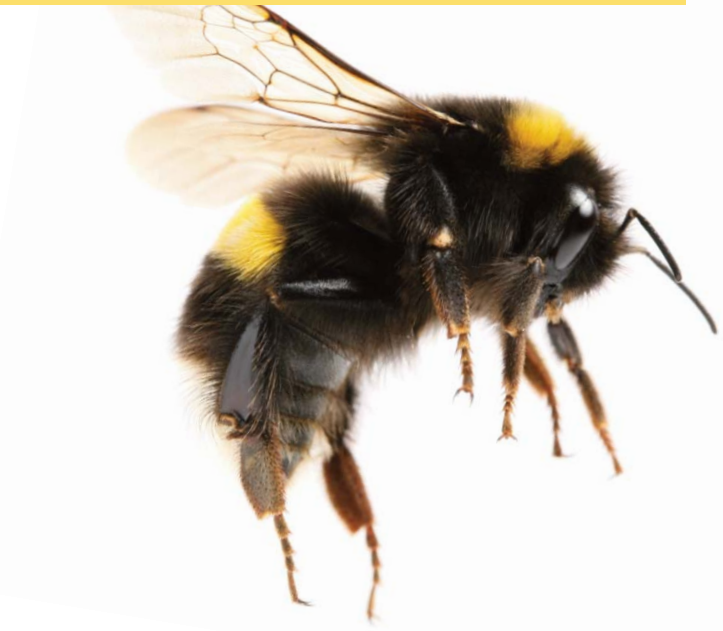
Neighbourhood plan actions

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

- Create a community wood or orchard.
- Explore opportunities to plant more trees.
- Look at how the management of existing public open spaces in your community could be improved to offer biodiversity gains. The management responsibilities for public spaces fall with your local council, but you can influence them to do things differently – for example, 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?
- 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.



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 council may have a green infrastructure strategy. They may also have data on the rare or priority habitats and protected species within your neighbourhood. Your council 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.bit.ly/2uQikR7**.
- 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, see

- 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: **www.bit.ly/1eXZYVF**.
- Cities Alive (Arup, 2014) sets out the benefits of adopting a Green Infrastructure approach in a city context: **www.bit.ly/2CVxh7U**.
- Health Benefits of Street Trees (Forestry Commission, 2011) **www.bit.ly/1dsELBt**.
- The Woodland Trust's microsite on neighbourhood planning: **www.bit.ly/1T1kFhK**.

Volunteers at a city farm | iStock/SolStock

8 Producing your neighbourhood plan

Let's get started!

The previous sections concentrated on the content of your neighbourhood plan, but practically, how do you go about getting started?

Community engagement and consensus building

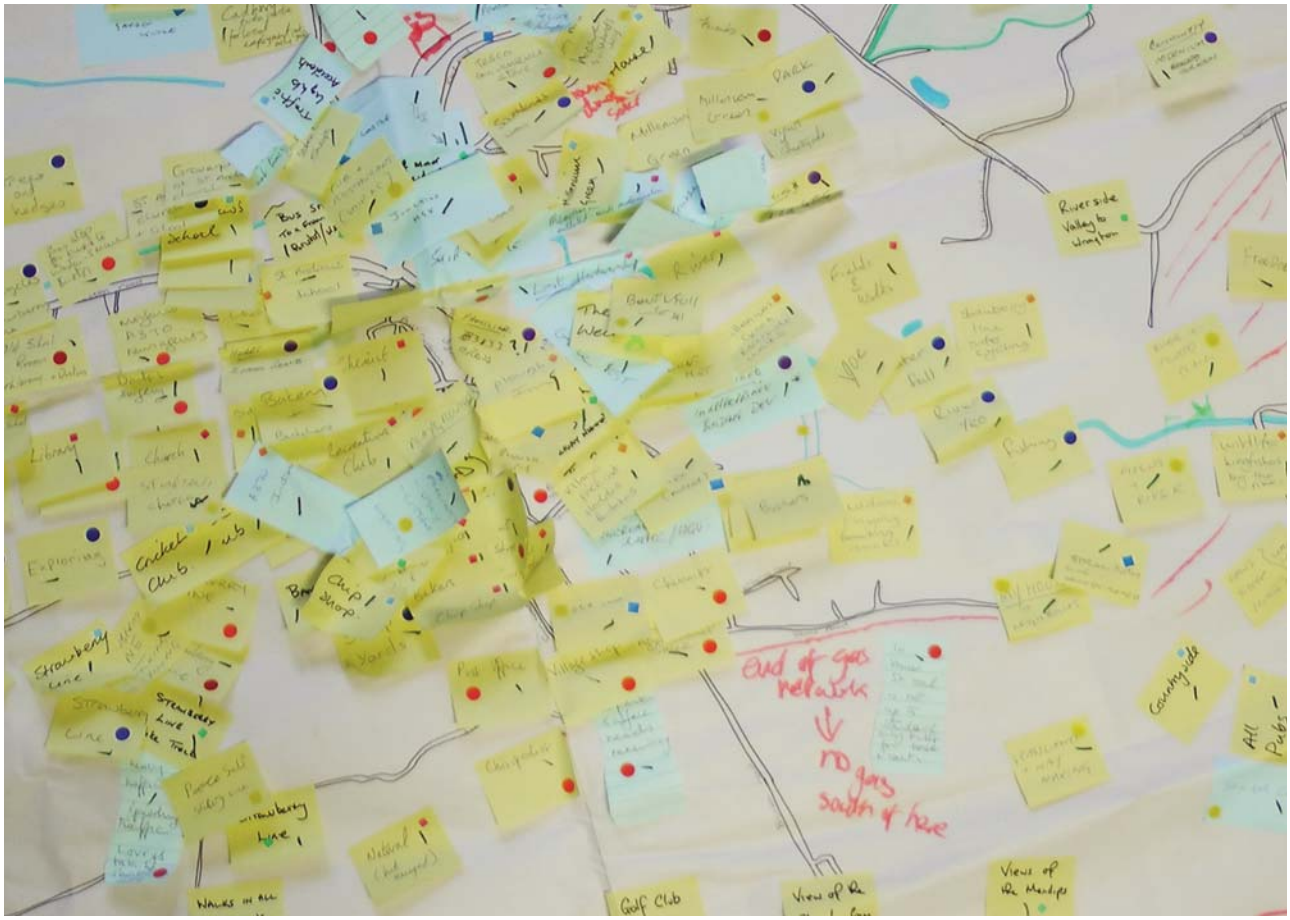
At the heart of localism and neighbourhood planning is community engagement – understanding what the local priorities and problems are, tapping into local knowledge, expertise and capacity. Before writing any policies, therefore, it's important to consider how to engage and enthuse the whole of your 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 your objectives.

You'll struggle to engage people if you only use the consultation methods normally used in the planning system (formal letters quoting legislation, thick consultation documents, formal evening meetings). Whilst formal consultation methods are needed at points 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:

- Encourage people (including children!) to use smartphones to capture images or video of what they like and dislike in their neighbourhoods and what they'd like to see changed. Map the responses and see if there are themes.
- Organise a group walkabout of your neighbourhood plan 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 one another's views.
- Use social media to its fullest extent to organise and publicise events, to access younger generations and also to capture ideas on the go. Facebook, Twitter but also Linkedin, Instagram, Tumblr.
- Get away from the formality and tedium of formal meetings. Add cake and tea, bunting, music, and children. Hold initial events as fetes or picnics.
- Link your neighbourhood plan events with the cultural life of your community: drama, music, film, art.
- 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.

The referendum will be a simple 'yes' or 'no' vote on whether to accept the neighbourhood plan. Therefore it is essential to properly engage people from the beginning on the content of the plan, rather than just leaving them the option to reject the plan as a whole.



CSE has useful resources on how to involve your community: **www.cse.org.uk/thesource/browse/neighbourhood-and-low-carbon-planning-358/involving-the-community-361**

More information on the statutory requirements community engagement and consultation can be found in the Locality Roadmap guides: **www.locality.org.uk/resources/neighbourhood-planning-roadmap-guide**

Mapping Tools

This free online tool – **https://community21.org/toolbox** – allows you to communally create online maps, share surveys to assist with your consultation, and share experiences with other neighbourhood planning groups. It could host your plan and reduce the cost of having to develop your own website.

This free mapping resource - **www.magic.gov.uk/MagicMap.aspx** - shows many ecological and landscape designations relevant to planning.

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 council 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.

Structuring your plan and writing policies

Useful guidance from Locality on how to structure your neighbourhood plan is available here: **www.bit.ly/2vNLqTZ**. An excellent guide to policy writing is available on the MyCommunity website: **www.mycommunity.org.uk/resources/writing-planning-policies**.

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 here: **www.ourneighbourhoodplanning.org.uk**.

Engaging with your local council

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

Your main council contact for the neighbourhood plan should be with the council's planning policy team, sometimes called the 'forward planning team', who are in charge of preparing the local plan. Most council's will have a neighbourhood planning champion, a designated officer responsible for assisting neighbourhood planning groups. If one exists, this person should be your main point of contact.

Try to remember the following four principles when engaging with the council:

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 councillor 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 and how they might support you.

Council department	Useful for
Planning – Planning Policy, Strategic Planning, Forward Planning Role: 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 Role: 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 Team Role: 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 Role: embedding sustainability and climate change considerations within local council services.	• 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 and Communities Role: responsible for coordinating projects within specific community areas.	• Useful for finding out and understanding what community groups and activities are happening in your area.
Environment Role: the environment team 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 Role: 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 Role: 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, Economic Growth Role: 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 Role: 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 will 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 Role: 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.

It should be noted that 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, although increasingly funding cuts may restrict their ability to look beyond their statutory responsibilities.

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**).

Birdseye view | iStock/fotoVoyager

9 Alternatives to a neighbourhood plan

Producing a neighbourhood plan is a lengthy and expensive process, and is not the only way to influence the planning process in your area. Therefore before getting started you should ask yourselves the following questions:

What plans already exist for your area, and could they deliver your objectives? (e.g. your local plan, an energy plan, a community plan?)

Does your community have the desire, resources and capacity to develop a plan?

Now is the time to carry out a skills audit, and to see what skills are already available within your community to help with developing a plan and whether there are other people or community groups who could assist. It may be that your local authority can also offer support.

If you don't wish to prepare a neighbourhood plan, you can get involved through your local council in influencing their planning policies and decisions at various different levels.

Influencing the planning system

You don't have to prepare a neighbourhood plan to engage with the planning system – there are many ways to do this!

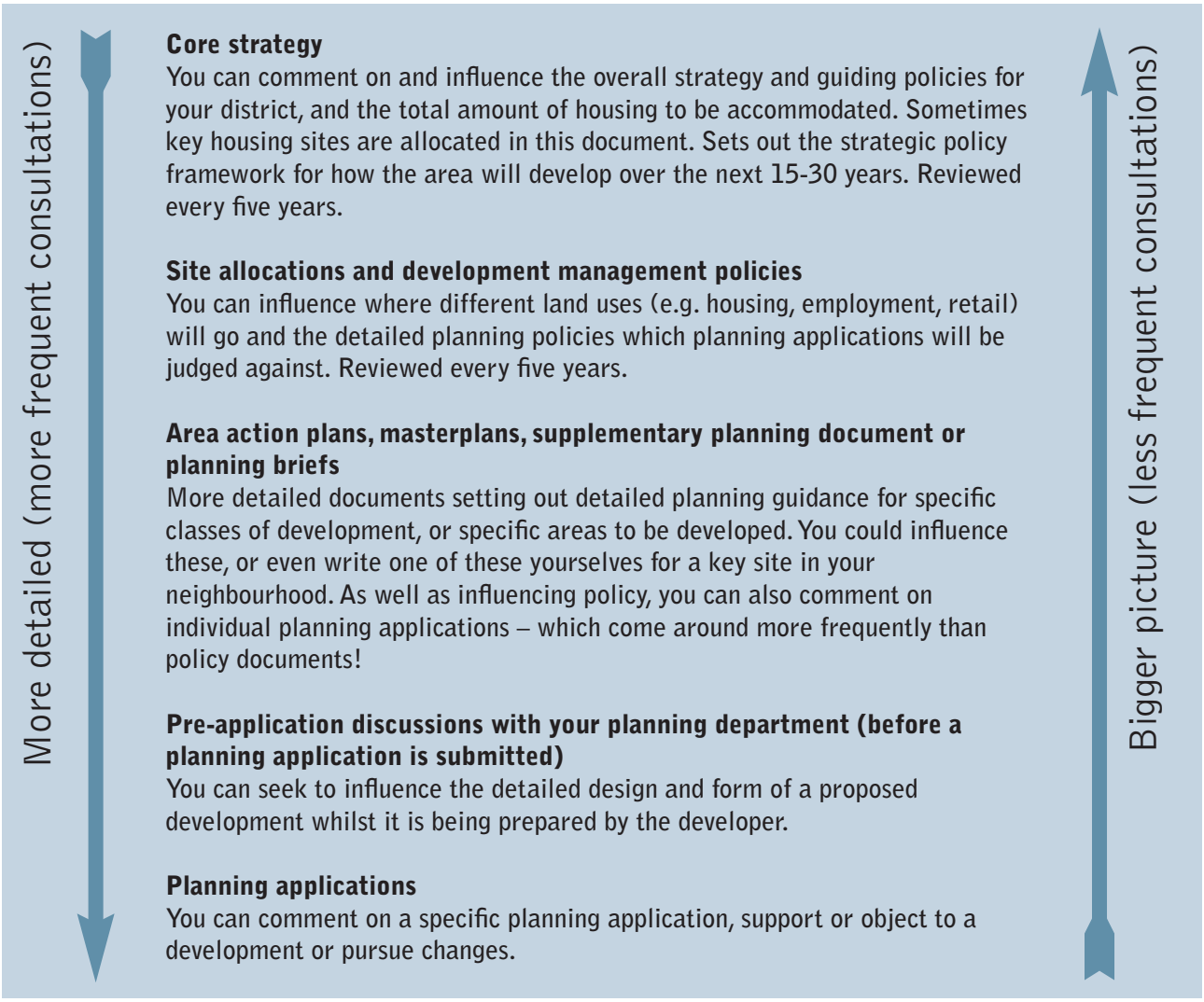
Listed below are the key policy documents that your council will produce and which you can influence. Your council should have a Local Development Scheme which sets out your council's programme for the production of these policy documents so you can know what is coming up and when.

As the big arrows make clear, engaging effectively with the planning system is often about timing. The further up the list you engage the more you can influence the overall direction of development in your district, and the more open the questions you are being asked:

- What should the overall strategy for the district be?
- How much housing and employment should we plan for?
- Where should it go?
- What should the local planning policies be?

The further down the diagram that you engage, the more detailed, concrete and localised (and less strategic) will be the questions you are being consulted on, e.g. should this development go ahead? Is this development in accordance with the policies? Is this use or design acceptable?

How and where you should concentrate your efforts will depend on what your group wants to achieve. A good idea is to call the planning policy team within the council to understand where the council is in terms of preparing its plans and policies, how these would affect your community, and what the opportunities are to comment on these.



Commenting on planning applications

If you do not want to shape all new development in your area, responding to individual planning applications could achieve your objectives with less time and effort. You could contact the council and request that they consult your community group on all planning applications that occur in your area of interest, much as they would with a parish council.

Bear in mind however that by the time a planning application is submitted, the developer has invested significant amounts of money on professional fees, and may be resistant to re-designing their scheme and incurring further cost and delays. In general the earlier in the process a community group engages with a developer (and vice versa), the more flexibility there is to make changes. A more effective strategy therefore can be to seek to engage in the council's pre-application negotiations with developers on planning proposals before they are submitted.

Pre-application involvement

Government guidance encourages developers to engage in pre-applications negotiations with communities, but too often it is done badly:

- Councils negotiate with developers "behind closed doors", without knowing what the community wants and thinks.
- Councils rely on developers to make contact with the community and no record is kept of what is said: "The community said it was great!"
- Some developers go through the motions of consulting the community, organising exhibitions of their plans once they are almost fully developed, but in reality there is limited or no willingness to make changes.
- Residents make comments, but their comments aren't acted upon by the developers, and they have to make the same comments again when the application is submitted. This can set up an antagonistic relationship and make residents feel they are wasting their time.

It can be worth grouping together with other community groups in your area to ensure that mechanisms are in place in your council to enable productive community involvement to take place at the pre-application stage. Such openness and early engagement is encouraged in National Planning Practice Guidance. Read below for an example of good practice.

Case study: Bristol council and the Neighbourhood Planning Network

Planning Network (an umbrella body for community groups in the city) have gone a long way to put processes in place to enforce effective pre-application involvement with communities:

- Pre-application inquiries are public, except where there are genuine issues of commercial confidentiality.
- Community groups and elected politicians are consulted on pre-application enquiries, before the council formulates its response. On very major applications, the developer (in consultation with the community group and council) prepares a timetable of community involvement processes (including workshops on different topics). The timetable is agreed with the community group.
- Transparent records are kept of who says what. The developer prepares a "Statement of Community Involvement" summarising the discussions, their community involvement events, and how the developer has responded (or if not, why not). This document is signed by the community group, if they agree with it, or they prepare their own response setting out their concerns and views.
- On very major applications, a community briefing takes place prior to the submission of an application; the developer briefs committee members and invited members from community groups. They can ask the developers questions in response, in a public forum.

Further details can be seen in Bristol council's Statement of Community Involvement (see Ground Rules on p6).

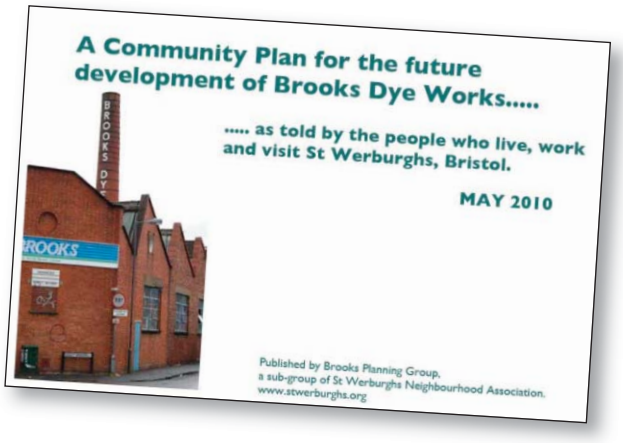
Case study: Brooks Dye Works, Bristol

In this case the community knew a disused former industrial site was to be redeveloped in their community and welcomed this in principle. An action group was formed which consulted nearby residents and the wider community to form a consensus as to what they wanted from the development.

On the basis of their own consultation process, the action group produced a written "Planning Brief" indicating what their wishes and aspirations were for the site, and the planning issues that need to be addressed to get their support. The document, whilst carrying no formal weight, set out the community's aspirations clearly:

- Retention of historic buildings.
- No through roads, to avoid problems with 'rat running' (e.g. through-traffic taking short cuts through quiet residential streets).
- Mixed-use development preferred.
- The adjoining park should be expanded into the site.
- The potential for walking and cycling routes through the site.

Pre-application negotiations are currently underway between this community, a developer and the city council.



Documents like the Brooks Dye Works Community Plan may have little formal status in the planning process, having not gone through a formal consultation process, but nevertheless move the starting point of negotiations with developers forward hugely.

Such work helps to build a consensus as to what "the community" is and what it wants. It has the potential to create a community leader or representative who has the mandate to negotiate with a developer on behalf of that community, and makes it more likely that this community will achieve some of its objectives. From a developer's perspective, this is hugely helpful in providing clarity as to what they need to do, even if they may not be able to agree to everything. From the council's perspective, it can strengthen their ability to negotiate for a higher standard of development that is more responsive to the needs of the community around it.

10 Ensuring your neighbourhood plan is implemented

If you're reading this section, then congratulations may be in order; 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!

So, 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 go through the great 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!

Our advice would be to see the adoption of your neighbourhood plan as just the start; your plan is just 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, for example:

- 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 discussions with developers (see chapter 9 for more detail).
- Building structures for commenting on pre-apps and planning applications and carrying out training 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.

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 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.

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.

See also Bristol Neighbourhood Planning Network, which has been relatively successful in achieving constructive engagement in ongoing planning decisions **www.bristolnpn.net**.

Bolton Town Hall | Austen Redman at English Wikipedia

11 Other localism powers

Neighbourhood development orders

Neighbourhood development orders (NDOs) can be used to allow developments to go ahead in your neighbourhood without needing planning permission. NDOs can be drafted to allow a specific type of development to go ahead across your neighbourhood without needing planning permission (for example the installation of solar panels in conservation areas) or; to allow a specific development to go ahead on a specific site, again without the need for planning permission.

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 the neighbourhood plan.
- Only parish councils or neighbourhood forums can progress NDOs.
- The NDO must relate to land within the approved neighbourhood area.
- NDOs can be used to grant outline or full planning permission for specific development - can include planning conditions.
- There is a prohibition on schedule 1 Environmental Impact Assessment (EIA) development (so no nuclear power stations!), but none against schedule 2 EIA developments, which would typically include wind farms or wind turbines over 15 metres in height, provided that the correct EIA procedures are followed.

It should be remembered that a Neighbourhood Development Order 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 doesn't have to be submitted by a parish council or Neighbourhood Forum, but 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/2hKe0Ac**.

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/1T1qMTi**.

Footnotes

1 Flood risk assessments: climate change allowances (2017) Environment Agency http://bit.ly/2w5Zo4o

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

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4 Digest of United Kingdom energy statistics 2017 (DUKES), Department for Business, Energy and Industrial Strategy, www.gov.uk/government/uploads/system/uploads/attachment_data/file/632574/DUKES_2017.pdf

5 National planning policy framework, paragraph 97: www.gov.uk/government/collections/planning-practice-guidance

6 Drop in wind energy costs adds pressure for government rethink – Guardian 23.07.17, www.theguardian.com/environment/2017/jul/23/drop-in-wind-energy-costs-adds-pressure-for-government-rethink

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

8 Though in fact 77% of the population support the use of renewables, with only 1% strongly opposed, Energy and Climate Change Public Attitude Tracker, Department for Business, Energy and Industrial Strategy, http://bit.ly/2hqZX2k.

9 www.gov.uk/government/publications/the-carbon-plan-reducing-greenhouse-gas-emissions--2 The Carbon Plan is expected to be replaced by an Emissions Reduction Plan in 2018.

10 UK Climate Change Risk Assessment 2012, DECC: www.bit.ly/NF7VkW

11 www.gov.uk/government/uploads/system/uploads/attachment_data/file/633503/ECUK_2017.pdf

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

18 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

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

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

Contact us ...

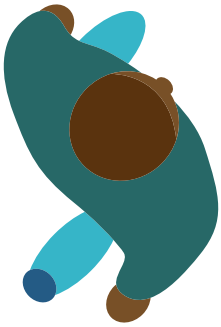
For more detailed advice on how your plan could be improved, contact Dan or Ellie at the Centre for Sustainable Energy. Subject to capacity, we can help with:

- 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 the delivery of public events.
- Research for developing an evidence base.

We will tailor the support we offer depending on the resources we have 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.

For contact details, see back cover.



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