

Initial Challenges

1.1 Overview

The first step of creating your Community-led Local Energy Plan (LEP) is to prepare an outline of the energy challenges facing your local area. This can be done by a representative from the local community, whether that's an individual, a community trust, community council, renewable energy development organisation, local community co-operative, or someone else. The review should include short details such as:

- The proposed study area that would be included in the plan
- Energy supply and use (power and heat) challenges within that area
- Details of specific housing, fuel poverty or transport related issues within the area
- A list of relevant previous studies/reports that have been done in the area
- A summary of characteristics relevant to the area:
 - Settlement type (urban, semi-rural, rural, island)
 - Environmental designations (e.g. SSSI, Special Protection Area, Special Area of Conservation)
 - Cultural and historic designations (e.g. ancient monuments, listed buildings)
 - Infrastructure (major/minor roads, air, bus, ferry links, grid infrastructure)
 - Residential
 - Business and public bodies (commercial premises, NHS and local authority buildings)
 - Whether the document has been discussed with local community representatives

This isn't a prescribed list, because your local situation will be different to others. When compiling the list, it helps to remember that the purpose is to support discussion around what could be achieved. Here are some examples of notes that could be included:

- Details of renewable energy generation in the local area (wind turbines, solar PV panels, biomass boilers, etc.). For coastal communities, this can also include offshore resources (e.g. wind, wave and tidal)
- Large energy users in the area (e.g. businesses, local authority offices, transport companies)
- Energy efficiency projects that have taken place (e.g. local authority-led insulation programme for houses, supply of low-energy lightbulbs from utility company)
- Future development that might change the energy requirements (e.g. replacement school or care home, new-build housing or commercial premises)

1.2 Template structure and guidance for completion

Over the next few sections, we'll show you how to structure your outline and the details included within it. Each section is accompanied by some notes to help you think about the information you could include, and its relevance to creating an LEP.

The goal at this stage is to create a summary that can later be discussed further. It doesn't need to be extremely detailed, nor provide any answers. Each section can be a single paragraph, and the whole document shouldn't be longer than a single page.

A Local Energy Plan for [your local area name]

1.1 The Local Area

Provide a description of the proposed area covered by the Community-led LEP. This could be a map, rather than a written description.

Tips

- A simple map showing the proposed boundary of the LEP is plenty
- The boundary should define a community that has shared characteristics and energy systems
- If the community is a remote settlement, the area should be straightforward to define
- If the community consists of a number of settlements, it's worth reflecting on how they're connected (e.g. as part of an island, within a community-council area, or by natural features such as lochs, forests or rivers)

1.2 About the Location

This section should cover short details about the area proposed for inclusion in the LEP.

The aim is to give a clear understanding of the local area and its energy and transport systems. This can then be explored in more detail later in the process.

The checklists below show information that's useful to consider.

Area characteristics relevant to the LEP development							
Urban		Sub-urban		Semi-rural		Rural	
Isolated		Island		Coastal		Wild lands	
Regional park		Country parks		Nature reserves		Conservation areas	
Scenic areas		Places of SSSI		Forestry		Agriculture	
Rivers/Lochs		Mountains		Harbour port marina		Beach/Seafront	

Label each item with one of the following:

- Y – Exists in local area
- N – Not present in local area
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Tips

This information sets the scene for the local area. Good questions to ask:

- Is the community in an urban or rural location?
- What natural features are in the local area?

This helps to summarise some of the challenges around access to the community (e.g. fuel supplies harder to achieve for rural locations than urban) and environmental features that need to be preserved (e.g. maintaining agricultural land rather than using it for energy development, protection of views within SSSI areas).

1.3 Infrastructure

This section should cover transport and infrastructure details relevant to the LEP area.

Initial questions:

- What does the local road network look like?
- What public bus services, ferries, rail or air services currently operate?
- Is the community served by mains electricity, mains gas or other energy supply networks?
- What telephone, mobile and broadband services exist?
- How are drinking water, wastewater and wider waste/recycling services provided?

Infrastructure relevant to the LEP development							
Major roads		Minor roads		Train routes		Local buses	
Intercity coaches		Street lighting		Mobile signals		Broadband	
Mains gas		Mains water		Sewerage		Waste/Recycling	
Mains electricity		Off grid		Islanded grid		Managed grid	
Minor airport		Major airport		Local ferries		International port	

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Tips

This section describes existing energy and transport systems.

Notes about energy should include how easily the community can currently access them. For example:

- What fuels do homes and businesses use for heating?
- Are there restrictions on the use of grid electricity?

Notes about transport should include how easily the community can get in and out of the area. For example:

- Is community travel dominated by private car use?
- How accessible are existing public transport services?
- Does tourism or business travel mean large volumes of traffic at different times of the year?

Wider services can also be important. For example:

- Is broadband access limited? (This impacts how the community can engage with smart control systems)
- How is waste management provided by the local authority? (e.g. scheduled collections or local processing plant)
- Are there local water treatment works?

1.4 Resources

This section should note any known existing renewable energy generation in the LEP area, and any other existing resources that could be used to support energy needs.

This can include feasibility studies that have previously been carried out.

Local resources relevant to the LEP development							
Wind		Hydro		Solar		Marine	
Biomass		Biological (anaerobic digestion)		Heat		Waste heat	
Local generation		Local storage		Pipeline projects		Community income	

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Tips

This section describes existing knowledge of renewable energy and resources in the local area. Good questions to ask:

- Are there any existing community energy generation schemes in operation? (e.g. wind turbine, hydro scheme or solar PV array)
- Have any feasibility studies previously been conducted?
- What do householders/local businesses know about renewable energy use?
- Are there larger renewable energy schemes in the area operated by third parties? (e.g. wind farms)

1.5 Residential

This section should note what's already known about residential property in the area.

Landlords and property owners need to agree to any changes made to housing to improve energy efficiency or change the way in which energy is supplied, so it's useful to know whether social landlords provide accommodation, and the extent of current owner-occupation.

The measures carried out to improve energy efficiency depend on the types of building and their design. Knowing the mix of housing, detached/semi-detached, flats, etc. helps understand what measures might be most appropriate for the area.

There may already have been works done in the area targeting particular groups (e.g. hard to insulate homes). It's helpful to know what was done and the community's thoughts about how successful this was.

Residential information relevant to the LEP development							
Owner-occupied		Private landlord		Social landlord		Care homes	
Multi-occupancy		Tenements		Low-rise		High-rise	
Detached		Semi-detached		Terraced		Pre-1900	
Hard to insulate		In fuel poverty		Camping & caravan		Holiday homes	

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Tips

This section describes existing knowledge of residential energy use in the local area. Good questions to ask:

- Have there been any programmes delivering improved insulation and other building-fabric works to housing?
- Is the community aware of any surveys about existing residential housing in the area?
- Are there any housing units owned and operated by the local authority or registered social landlords?
- What's known about fuel poverty levels in the area?

1.6 Business

This section should note the scale of businesses operating in the area, and any work they do that will impact on local energy needs.

For example, national retailers in the area may have their own energy efficiency targets or renewable energy plans managed by a central management team. Hotels and B&Bs will have seasonal peaks in energy needs (related to occupancy rates) and transport access.

Some local businesses may already have used grant funding or government support schemes to get energy efficiency advice or implement efficiency measures or renewable generation. These experiences are useful to know about.

Business information relevant to the LEP development					
Local retail		National retail		Manufacturing	Distribution
Trades		Banks/Financial		Services	Offices
Local industrial		Major industrial		MOD sites	Visitor attractions
Major hotels		Local hotels/B&Bs		Restaurants/Pubs	Farm businesses
Estates and parks		Fishing industry		Forest industry	

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Tips

This section describes existing knowledge of business energy use in the local area. Good questions to ask:

- What types of business operate in the local area?
- Have any local businesses used government-backed support schemes for energy efficiency?
- Are there any clean water or wastewater treatment works in the local area?
- Are there any energy-generating assets (power or heat) operated by businesses in the local area?

1.7 Services

Local authority-operated services often make a significant contribution to a community's base energy demand. Leisure centres, schools and community centres all have significant energy needs over a long period each day, and for a large part of the year.

These sites may also help support changes to local energy supply systems (e.g. as large sources of heat demand that can support a district heating scheme).

Services information relevant to the LEP development

Libraries		Community centres		Leisure centres		Swimming pools	
Sports grounds		Parks		Nature trails		Tourism	
Higher education		Training centres		Secondary schools		Primary schools	

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Tips

This section describes existing knowledge of wider non-domestic energy use in the local area. Good questions to ask:

- What local authority, educational or leisure facilities exist in the area?
- Are there any renewable energy generation assets at these sites?

1.8 Healthcare

Healthcare services are often significant users of energy. They also often have high transport needs around moving patients, staff and goods/services.

It's useful to note any such facilities in the local area, and anything known about the scale of the services they provide.

How local residents access these facilities is also relevant. For example, where local hospitals aren't available, residents will rely on private or public transport to travel to the nearest facilities.

Healthcare information relevant to the LEP development							
Major hospital		Local hospital		Day centres		Local practices	
Rescue services		Medical transport		Supply chain		District services	

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Tips

This section describes existing knowledge of healthcare facilities in the local area. Good questions to ask:

- What facilities are in the area?
- Do residents need to travel outside the local area to access some services?
- What's known about transport (for patients and staff) to these facilities?

1.9 Environment

Respecting the character of a community is an important consideration of planning and development.

It's useful to note large numbers of historic monuments, listed buildings, etc. within the local area.

This aids understanding of three important things:

- a) The cultural heritage features to consider when assessing the potential for community renewable energy generation (e.g. ensuring a wind turbine isn't sited where it would spoil views of historic monuments)
- b) How Historic Environment Scotland and other cultural stakeholders could assist thinking about energy efficiency or renewable energy generation opportunities
- c) The transport impact of visitors to local heritage sites (or similar)

Environment information relevant to the LEP development							
Historic monuments		Listed buildings		Conservation area		Special interest	

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This section describes existing knowledge of local environment in the local area. Good questions to ask:

- What are the known cultural heritage sites or other sites of interest due to environmental or historic value?
- What previous issues have arisen where special interest sites have been adversely affected by proposals for wind farms or similar?

1.10 Community

This section reflects on existing community groups and how they might be involved in the LEP. Some organisations will simply have energy and transport requirements to consider in the plan. Others will have existing assets or projects that are relevant to the LEP.

Existing experience and knowledge of project development, grant funding applications and/or implementation is also useful information to get from local groups.

Community information relevant to the LEP development							
Community council		Development trusts		Local charities		Existing energy remit	
Interest groups		Sports clubs		National groups			

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Tips

This section describes community groups in the local area. Good questions to ask:

- What community groups and organisations exist in the area?
- Do these groups have any prior experience of project development, grant funding applications, etc.?