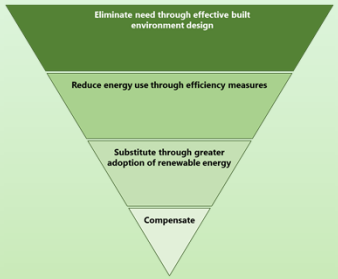
# Renewable energy & climate change

## Introduction

The village proposes an ambitious, but necessary, objective in relation to climate change and renewable energy:

**To become a 'zero carbon' village by 2035.**

Our overall approach to climate change is based on a hierarchy of objectives (see figure below) and reflects the policy set out in the Northumberland Local Plan.




## Planning policies

**Embedding energy efficiency and renewable energy into building design**

New buildings, and extensions requiring planning permission, should be designed to minimise the use of energy and clean water. Proposals must be supported by sufficient information to demonstrate how they:

(a) incorporate passive design measures to improve the efficiency of heating, cooling, ventilation and lighting, with passive solar gain, ventilation and energy efficiency maximised;

(b) include measures to reduce the waste generated during construction and ensure that there is appropriate storage space and segregation facilities for recyclable and non-recyclable waste;

(c) ensure that energy and water efficiency measures are incorporated into the development;

(d) incorporate on site energy generation from renewable sources; and,

(e) reduce energy demands of historic buildings.

**Modifications to listed buildings**

The installation of energy saving measures, if sensitive to the reasons for the listing, will be strongly encouraged.

**Environment & landscaping**

Applications for planning permission will be required to show a landscaping scheme that encourages the use of planting and meadows and compensates for the footprint of the proposed development.

**Sustainable drainage**

Applicants for planning permission will be expected to investigate sustainable drainage from buildings, driveways and landscape features to mitigate the water flowing into surface water drainage.

**Footpaths and cycle paths**

New developments will be required to demonstrate how they reflect and support the policy to promote cycling and walking.

## Community action

**Renewable energy**

Renewable and low carbon energy generation development that are led by or meet the need of the local community will be encouraged. Proposals for individual and community scale energy will be supported subject to the following criteria:

- the siting and scale of the development is appropriate to its setting and position in the wider landscape;
- the proposed development does not create an unacceptable impact on the amenities of local residents or on features of natural or biodiversity importance.

**Goal: sustainable net zero – and beyond?**

| Objectives | Methods | Local aims | Planning policies |
|---|---|---|---|
| Eliminate energy use through design | Design code/ building regulations | All new homes to be zero carbon | Overarching low energy policy for new homes |
| | Reduce embodied carbon | | |
| Reduce (current) energy use | More & better insulation | Encourage home improvement | Overarching low energy policy for new homes & planning applications, including listed buildings |
| | More efficient space & water heating (incl. heat pumps) | Address constraints preventing improvements to listed buildings | |
| | | Encourage home improvement | |
| | Green(er) travel | More walking & cycling | Require provision in developments |
| | | E-bikes | |
| | | EV charging points | Require provision in new homes |
| | | Coordinate supermarket deliveries | |
| | Reduce, reuse, recycle | | |
| Generate (and utilise) green energy | Solar thermal/ photovoltaic | More solar panels | Require provision in new homes |
| | | | Support proposals for renewables |
| | Hydro | Explore scope for community energy generation | |
| | Wind | | |
| | Electric power storage/ heat storage | | |
| Compensate | Carbon capture | Tree planting | Require provision in developments |

**Goal: mitigate effects of climate change**

| Objectives | Methods | Local aims | Planning policies |
|---|---|---|---|
| Predict local effects | Geographical survey eg of flood plains and hillside water drainage | | |
| | Gather climate data | Predict likely risk of damage (tall buildings in high winds, isolated trees etc) | |
| | Look at similar areas | | |
| Prevent future problems | Consider "worse than worst case" scenarios (height of flood plain etc) | Design code/ building regulations | New developments to demonstrate water management/ heat management |
| | Urban planning (drainage/shade) | Water management policy | |
| | Design new houses to be cool and dry in summer and warm in winter | | |
| Alter to withstand | Flood management/drainage | | |
| | "Rebuild better" after eg storm damage | | |
| | Tree planting to ensure species adapted to predicted weather | | |
| | Add wind breaks | | |
| Compensate | Reduce need to travel | Better broadband to allow working from home | |