

Sustainability Statement for Ivy's Cottage, Smiths End Lane, Barley

Energy and Carbon reduction

The proposed dwelling will be heated by an air source heat pump with wood burner back up
Solar panels will be provided to the East and South facing roof pitches

Air conditioning will be provided

Insulation in excess of building regulation requirements will be provided to roof, walls and floor

High insulation purpose made timber windows and doors will be used

The applicant is a builder and plumber and will be building the house for his own occupation in retirement

Low water use cisterns, basins, baths and showers will be installed

Orientation

East / West orientation is proposed with retention and encouragement to existing hedge growth to boundaries

Energy reduction

Air source heat pump

Wood burner

No gas on site

Solar panels

Very high levels of insulation

Low Carbon

High levels of insulation

Minimal thermal bridging

High levels of air tightness

Materials

The applicant is a builder and will source local materials and labour through his existing contacts

Climate change

Minimal South facing openings

High insulation levels

Air cross flow at ground and first floor from east to West

Overheating

Very high levels of insulation

East to West cross flow of air

Air conditioning

Green infrastructure

Encouragement to boundary hedge growth

Existing landscape

Existing hedges and boundary trees to be retained and encouraged

All to be fence protected during construction

Green roofs

No flat roof areas proposed

Rear and south pitches will have solar panels