

Energy Group – Project Update

- Welcome & Introductions
- Background
- Our Aims
- The Community project
- The Process
- The Options
- The Way Forward
- Costs

Background

The Hawkesbury Vision Project



Energy Group

Our Aims

- Increasing awareness
- Facilitating a local community project that will benefit the community
- To promote the view that:

“Sustainable is attainable”

Background

The Hawkesbury Vision Project



Energy Group

Awareness

Community
Project

Energy
Open Day

School
event

Village
show

Community Project

Village Hall Heat & Power

Scope

- Sustainable heating and power systems

Reasoning

- Boiler inefficient - end of life
- Current fuel environmentally unsustainable
- Rising fuel costs
- Opportunity to reduce CO₂

The Process so far

- Feasibility study & Grants - Encraft Survey (free)
- Tenders for project development study (CSEP)
- Review study & consider costs and options
- Review grant funding for all options
- Choose, Propose solution

The Options

Heating

- Ground Source Heat Pump (GSHP)
- Solar hot water
- Biomass boiler
- Oil fired condensing boiler

Power

- Photovoltaic (PV)
- Wind turbine

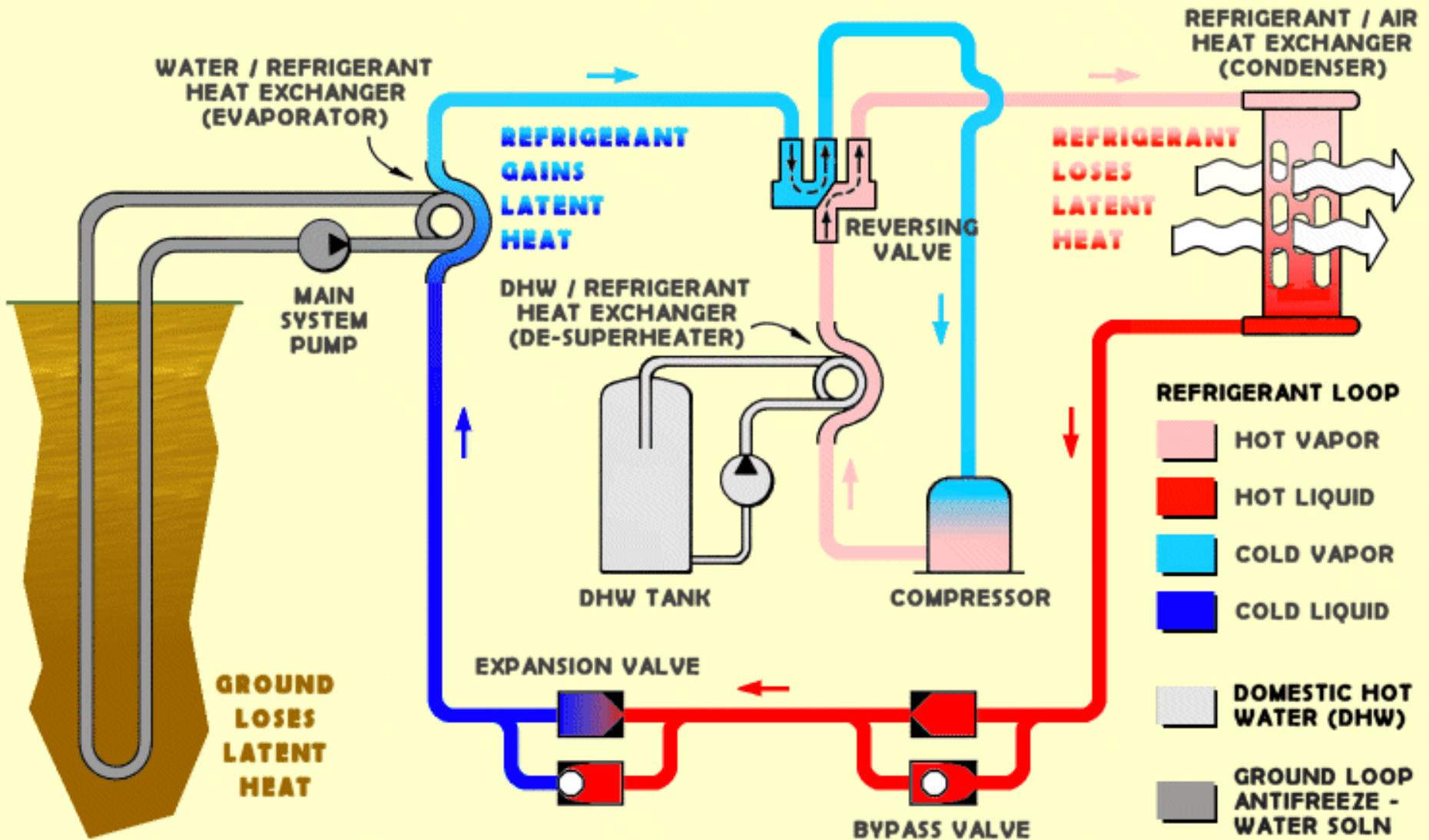
Considering the options

Criteria

- Reduce energy usage
- Reduce running costs
- Reduce carbon footprint
- Make use of renewable technologies
- Demonstration of technology

Chosen option

Ground Source Heat Pump (GSHP) - typical setup



Example of a GSHP



Chosen option - Power

Wind turbine

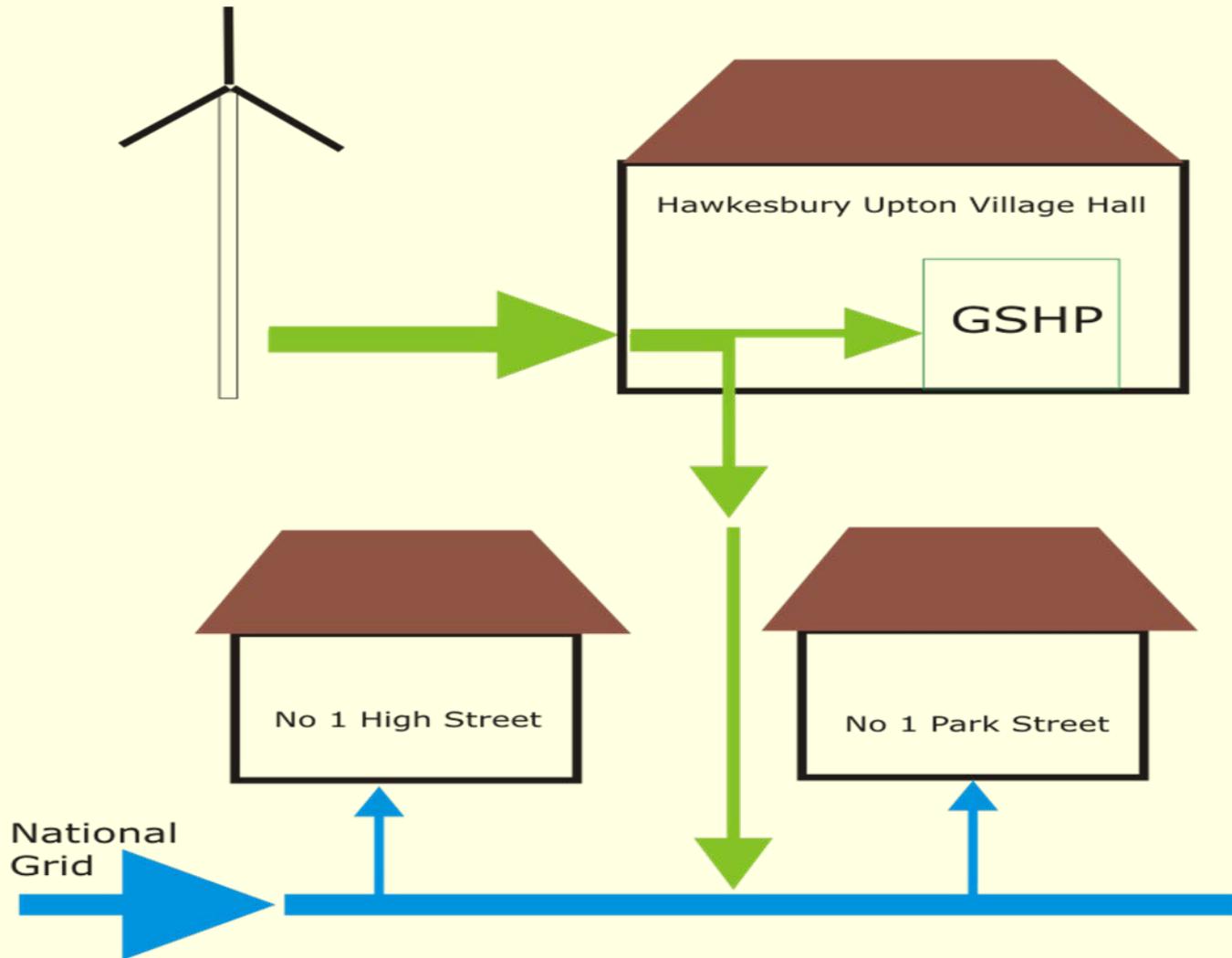
- Sustainable “free” energy
- Offsets electricity used by heating system
- Technically suitable site
- Potential for income generation
- Low maintenance

Chosen Option - Power

Wind turbine

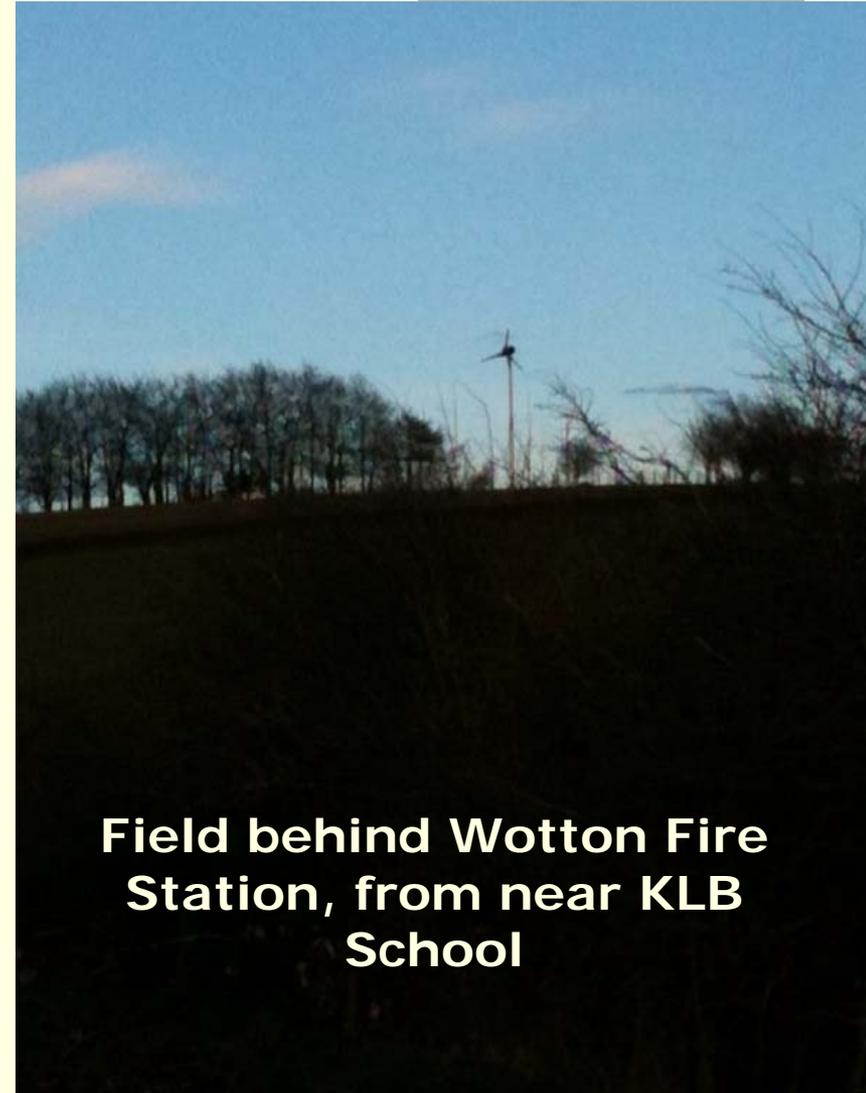
- How is the power used?
- Potential to generate income towards community projects

How the Power is Used



Chosen Option - Power

Sainsbury's at Emersons Green, at 180m



Field behind Wotton Fire Station, from near KLB School

Where will the money come from?

- Both Options & other works will cost around £123k (Turbine £66k, GSHP £50k, other £7k)
- Majority eligible for grant funding
- Some non-grant funded work

Financial Summary

Hawkesbury Village Hall Renewable Heating & Power Scheme - Financial Illustration

Capital		Annual revenue	
Capital cost	123,328	Exported power	1,940
Grant funding	(103,114)	FIT income	4,957
Other funds/grants	<u>20,214</u>	RHI income	2,903
		Maintenance (spread)	(533)
		Electricity for GSHP	(2,377)
		Other electricity used	(826)
			<u>6,064</u>

The way forward

- Build necessary level of support
- Agree strategy for non-grant funded works
- Secure grant funding
- Obtain planning permission
- Install equipment
- Measure and publicise the benefits

How can you help?

- By letting us know what you think
(energy@hawkesburyupton.com)
- Are you able to help with fund raising?
- Help with the work
- Join the energy group

Plan B

