



Hadstock

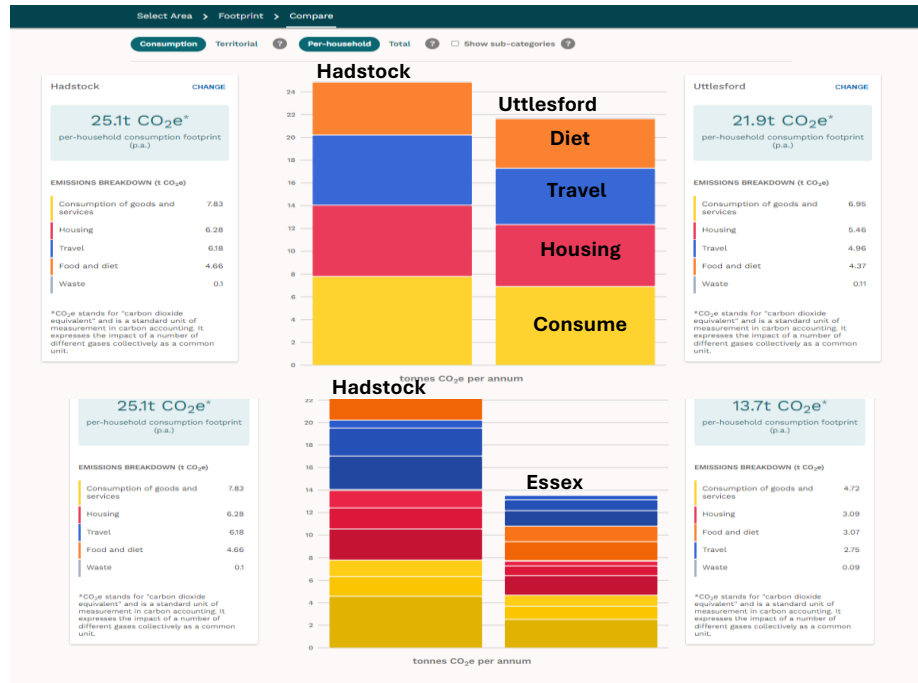
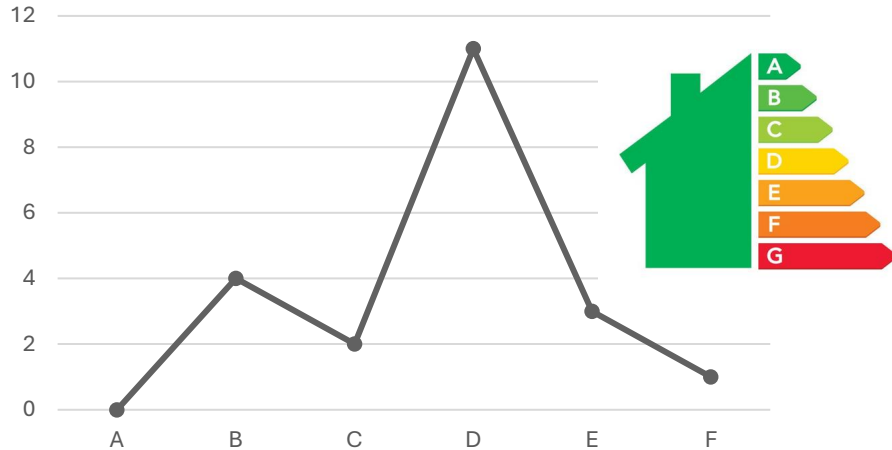


A review of the first year of Sustainable Hadstock

Sustainable Hadstock – why?



EPC values for Hadstock homes



- Ever more climate change events around the World
- Warnings from Nature and Government bodies – can't be ignored
- What evidence locally?
- EPC – Domestic Energy Consumption – for Hadstock a 'D'
 - Lower than UK target of a 'C'
- The Village carbon consumption by household – higher than Uttlesford or Essex (IMPACT figures)
- *'We don't see the birds and animals we used to – where are they?'*

Sustainable Hadstock – focus & actions

Low Carbon, High Biodiversity



**Think
Globally,
Act Locally**



Make it as personal as possible – our own Logo (Sonia/Jim)



A short pamphlet delivered to all houses – ‘why, what, where, how?’



A Village wide Survey – delivered and picked up by named volunteers



Communications – on-going; monthly; web site; Hadstock Magazine



Co-ordination – SH Working Group and focused teams



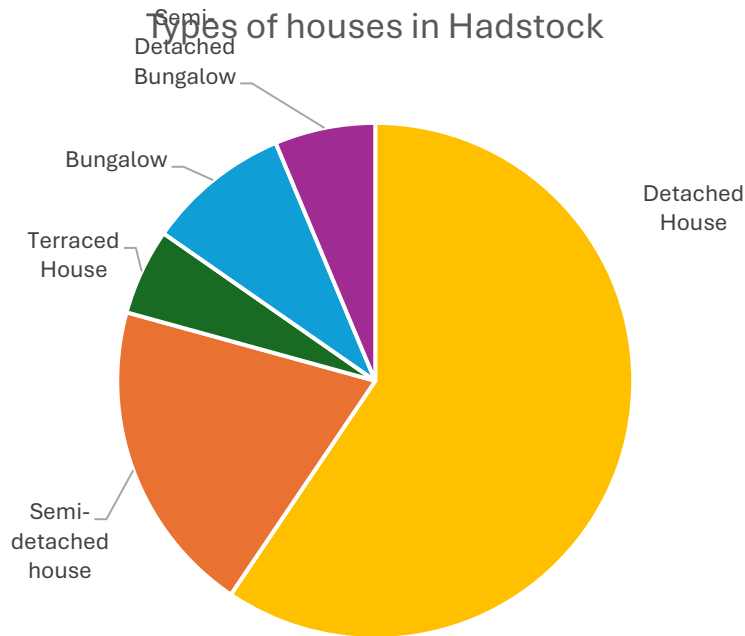
A Nature & Biodiversity focus team



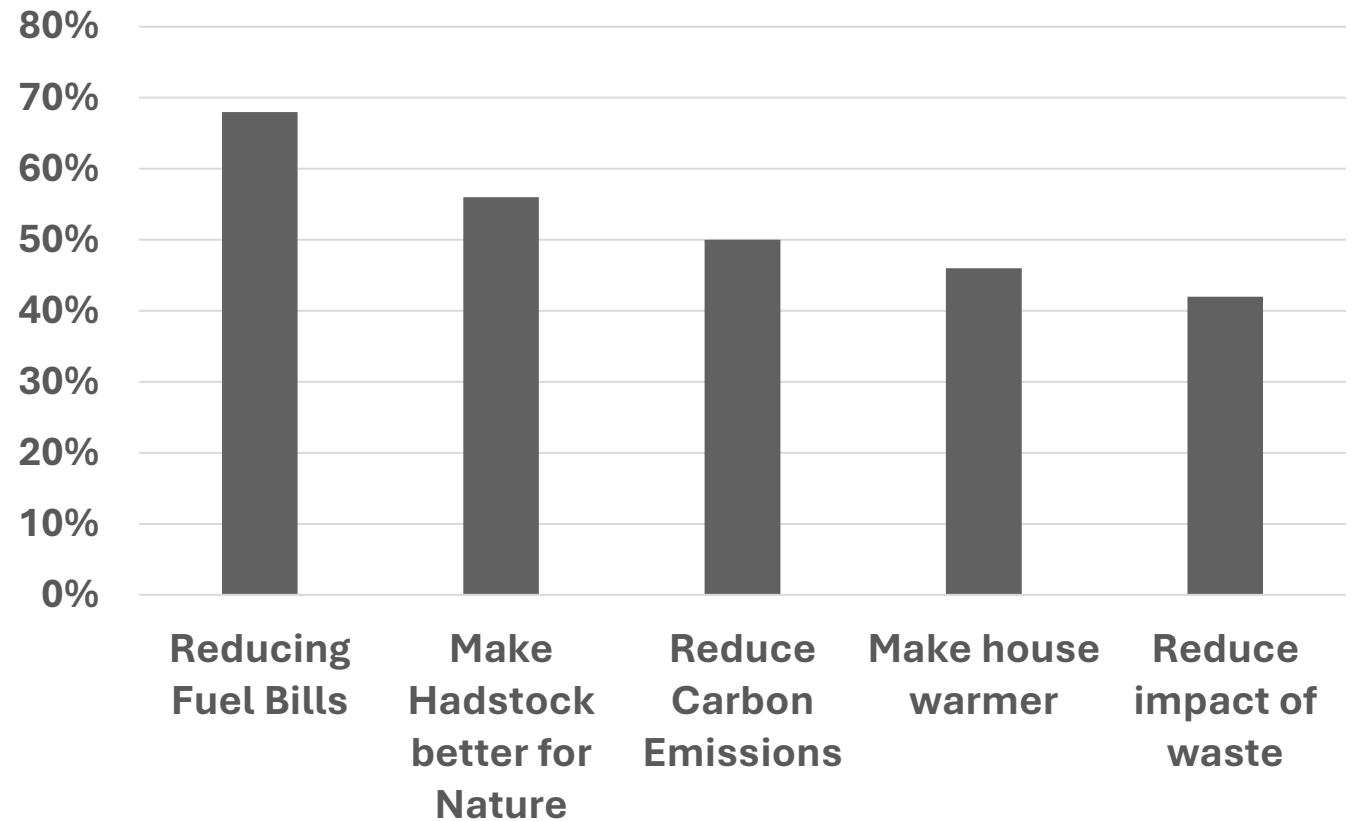
A Home & Energy focus team

Our Survey: amazing response rate

- **80% questionnaires returned**
- **Representing all types of houses**



What's important for Hadstock Residents?



Thanks – Brendan, Jonathan and all the collectors

Vital support ...



Hadstock Parish Council – an HPC initiative

The Hadstock Society and the Village Hall

Lots of local Volunteers – especially our Working Groups

Local Energy experts



A Zero Carbon Community
Grant



Support for our Home
Energy Surveys



Essex
Wildlife Trust

Volunteers from the
Uttlesford EWT team

Sustainable Hadstock – Nature & Biodiversity

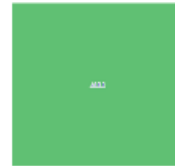
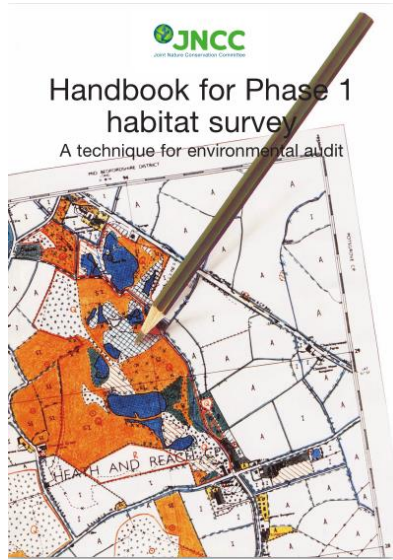
- What have we got now
..... and where are the
opportunities to increase
Biodiversity?

By:

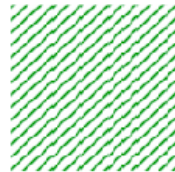
- Habitat mapping across the
Parish
- Nature Surveys – birds,
wildflowers, bats and moths
- Survey of our Ancient Hadstock
Wood
- Detailed survey and rewilding
parts of our Recreational ground



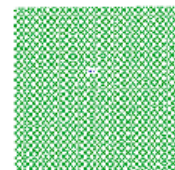
Habitat Mapping across the Parish



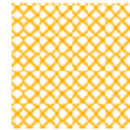
Woodland broad leaved



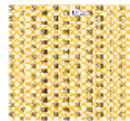
Woodland Plantation



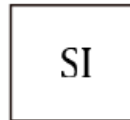
Scrub



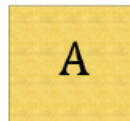
Unimproved Grassland



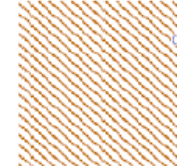
Grassland Semi-improved



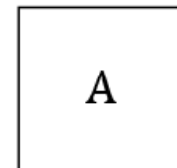
Improved grassland Paddocks



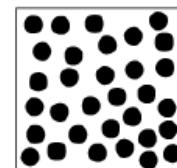
Amenity Grassland



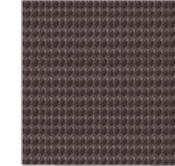
Weeds/grass on unused land



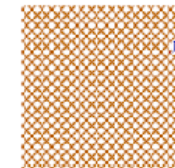
Arable crop land Market gardens



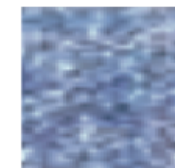
Bare Ground



Industrial parks



Introduced shrub Gardens



Ponds, Streams and Ditches

JNCC Habitat Classes
Joint Nature Conservation Committee
Statutory Advisor to England, Scotland, Wales and N Ireland



Hedge Natives species rich



Hedge Native species poor



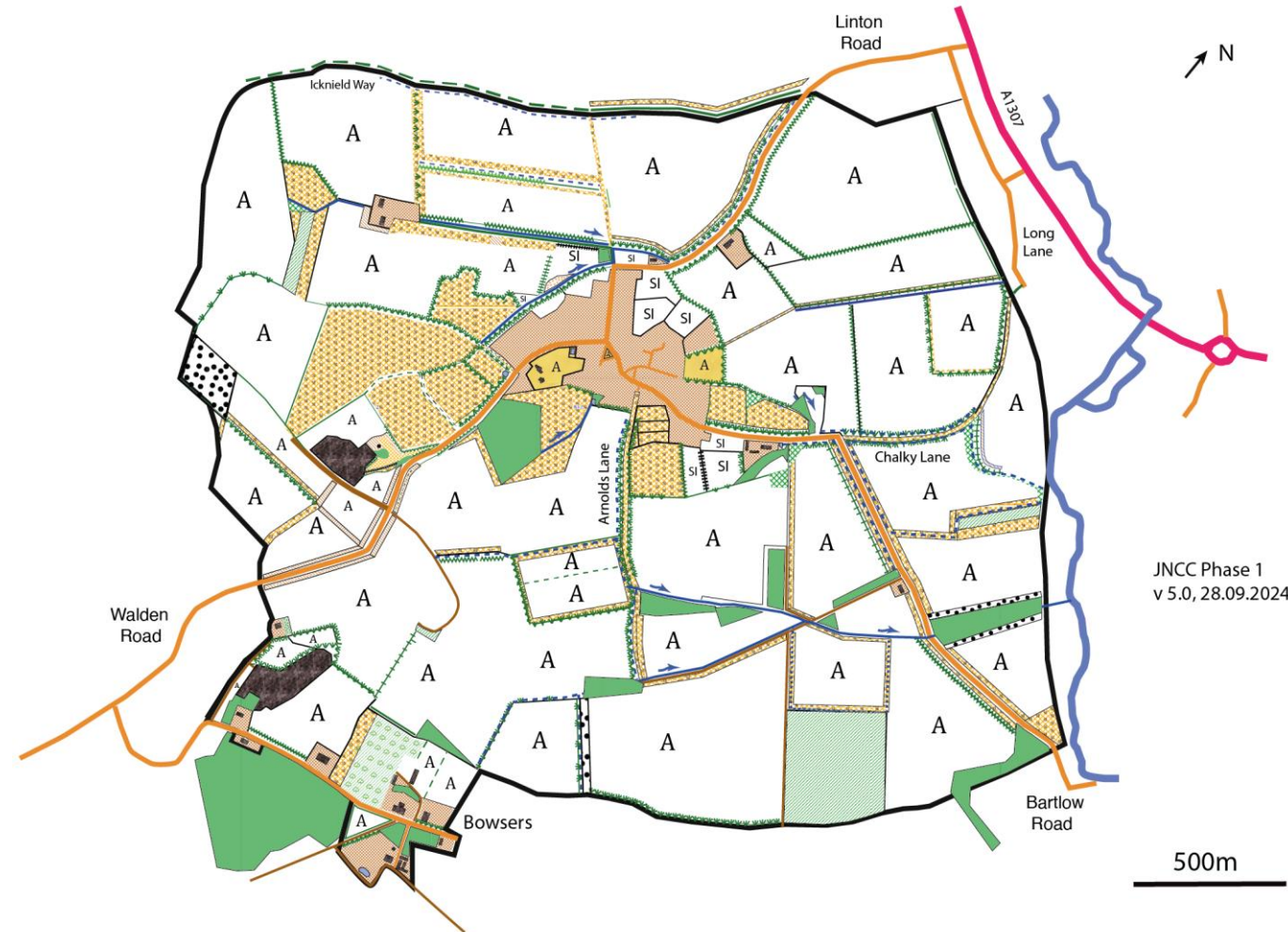
Hedge with Trees Native species rich



Hedge with Trees Native species poor

Thanks – Russell, Tony, EWT, Richard and all the surveyors

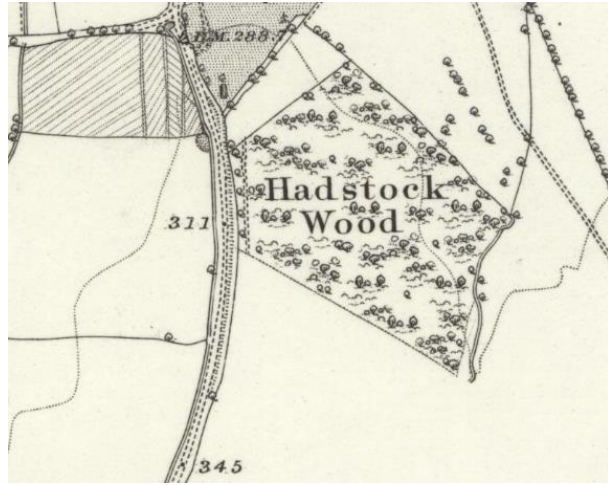
Habitat Mapping – the results



What have we learnt?

- A rare chalk meadow in our Harrison Sayer nature reserve
- 80 acres of woodland – with an Ancient Hadstock Wood
- Over 15 miles of natural hedges – but large gaps
- 100 acres of gardens
- 1000 acres of farmland – some farmed for nature but very varied
- A wilding opportunity on the Rec.

Hadstock Wood - an Ancient Wood in trouble



1877 – remains of a larger wood



Today

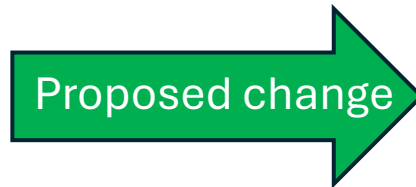


- EWT Wood health survey
- BCN Ancient Wood assessment
- Wildflower review



- Veteran trees – Oak, Ash and Elm
- Old coppiced Hazel & pollarded Oaks – once managed
- Many dead, fallen, diseased Ash & Elm
- Wildflowers of ancient woods
- *No undergrowth* – devastated by deer

Wilding our community ground (the 'Rec')



The Rec now

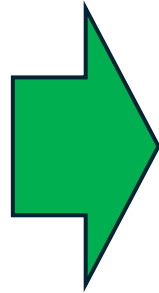


The 'Vision'

- Nature trail & education area
- More 'wild grassland'
- Clear copse of brambles – encourage undergrowth
- Plant a new tree copse
- Bird / bat boxes – Tawny Owl first ¹⁰

Wilding the Rec - underway

Letting in the light on the copse...



Bill supervising



Thanks – To all the 'Green Team'

Nature Surveys – encouraging; could be better!

Our surveys in 2024:

- Hadstock Nature Reserve: 72 wildflower species (of 120)
- Road grass verge (uncut): 31 wildflower species
- Hadstock Recreation ground: 21 wildflower species

- Bird surveys: 36 different species – with over 60 species reported in and around Hadstock

Now being put on the Web Site – go and have a look!

Nature & Biodiversity: next steps



Wilding the Recreation Ground and creating the nature walk



Repeating the Nature Surveys – including Hadstock Wood



Expert talks on Wilding Gardens and our surrounds



Calculating our Biodiversity level (BNG) – and where to improve



Engaging the farmers and landowners – linking to a ‘farm cluster’



.... and what else emerges!

Sustainable Hadstock: Home & Energy

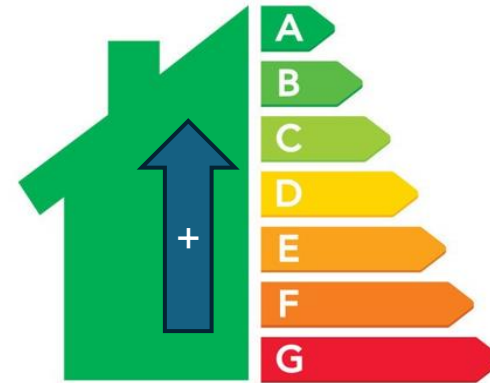


- **How can the Village move from an EPC 'D' to an EPC 'C'?**

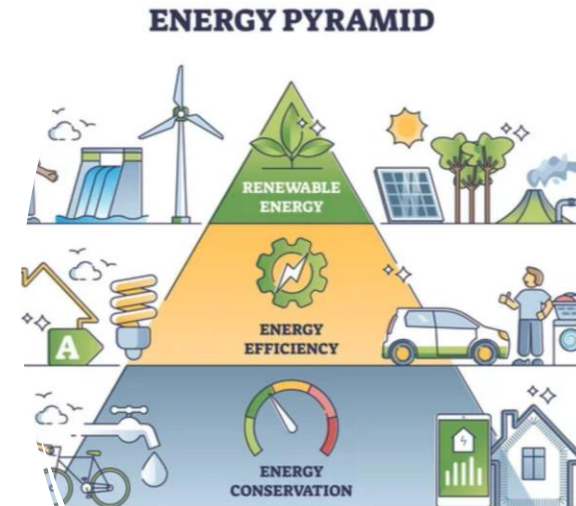


By:

- Enabling householders to identify where and how they could improve their own homes
- Individual home energy assessments – an 'EPC+' process
- Use of a Thermal Imaging Camera to 'spot those cold spots'
- Inviting experts to give guidance



- EPC reflects
- Effectiveness of energy use (insulation..)
 - Efficiency of energy generation



Thanks – Ian, Peter, Rick and the Energy team

Thermal Imaging Camera : on loan

- Give a ‘sixth sense’ – see temperature variations
- Primarily qualitative
 - See where heat may be leaking from the house
 - Try and understand what’s going on!
 - Basis for further investigation, fixing or retrofit



20 households

‘my radiators were terrible’

‘all my doors were leaking heat’

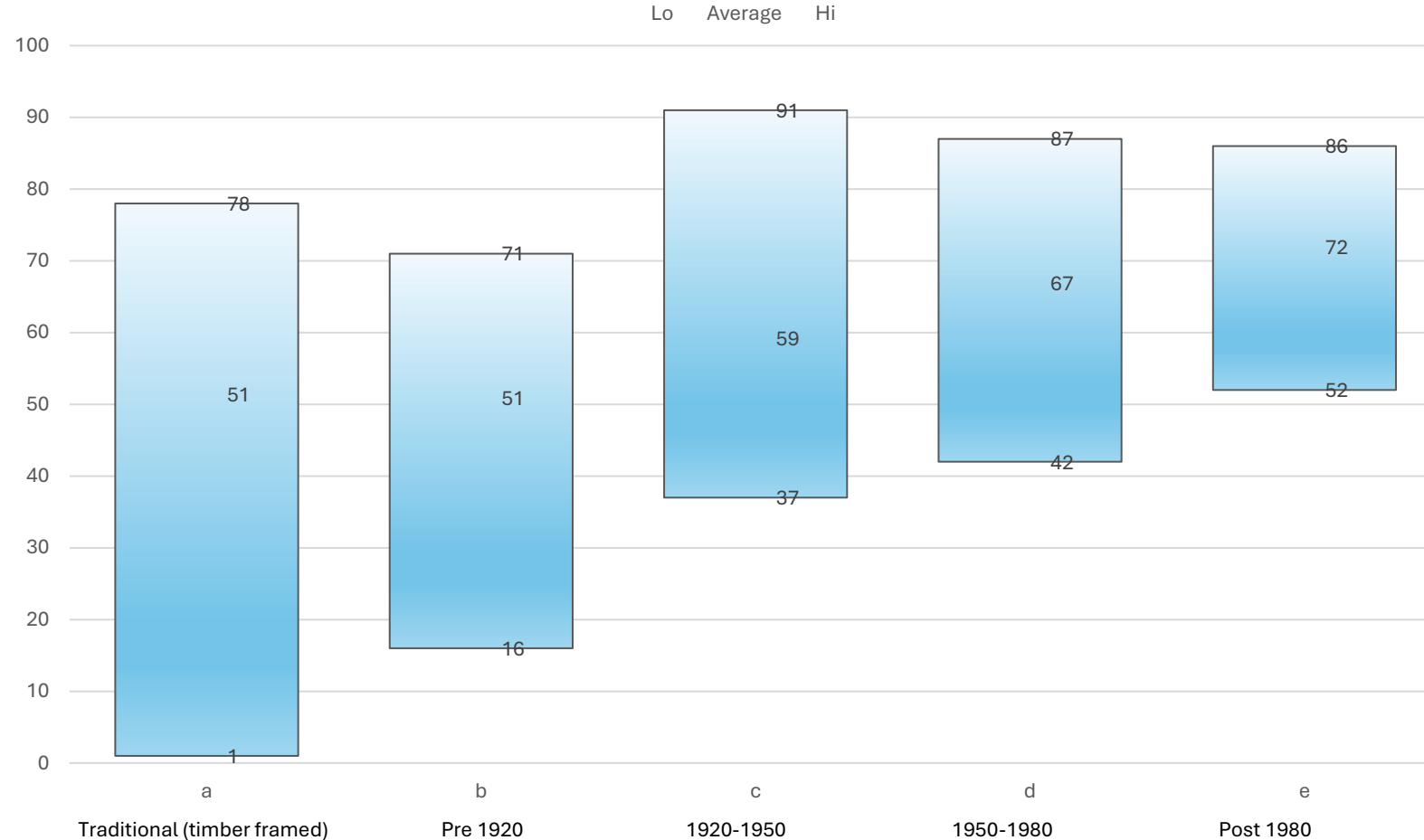
‘the walls and ceiling were fine – but the connecting space was very cold’

‘showed the different type of wall structures’



Our Village Energy Efficiency using the EPC

Energy Rating by Building Age



94 houses have an EPC or equivalent

Across all ages

Values from an E to a B – no A's

Average of 'D' (61.5) - UK 'D' (60)

Target is 'C' (69+)

Rating	E	E	D	D	C
Houses	11	21	12	32	18

Thanks – Rick

Home Energy Reviews : 40 completed



34 'EPC+'; 2 Listed House Retrofit; 1 Full Retrofit; Village Hall; 2 Energy discussions

	EPC	Plan	By House																														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Energy use																																	
Draught proofing	7	5	Y									Y						Y				Y					Y	Y		Y			
Insulation																																	
Room in roof	7	2		Y					Y					Y				Y	Y		Y					Y							
Suspended floor	5			Y		Y														Y								Y				Y	
Solid floor	23	2	Y	Y	Y	Y	Y		Y	Y		Y	Y	Y	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Cavity wall	12	4			Y	Y				Y						Y				Y	Y		Y	Y	Y		Y	Y	Y	Y	Y		
Wall (in or out)	9	2	Y				Y									Y				Y			Y	Y	Y	Y	Y	Y	Y	Y	Y		
Loft	10	6			Y				Y			Y				Y				Y			Y	Y	Y	Y	Y	Y	Y	Y	Y		
Secondary glazing	6	2	Y														Y									Y	Y	Y	Y	Y	Y		
Double glazing	2	1	Y																				Y										
Energy generation																																	
Solar water heating	22	0		Y	Y	Y			Y		Y	Y	Y	Y		Y	Y		Y		Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	
Solar PV system	20	10	Y	Y	Y	Y		Y	Y	Y					Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Condensing boiler	7	2						Y		Y		Y										Y	Y					Y	Y				
Heating controls	3	1							Y															Y					Y				
Cylinder thermostat	2	2														Y				Y													

21 of 31 households are considering an investment over the next 3 years

Insulation & draught proofing are rightly a key focus for quick and cost-effective results

... a significant interest in **Solar Panels**

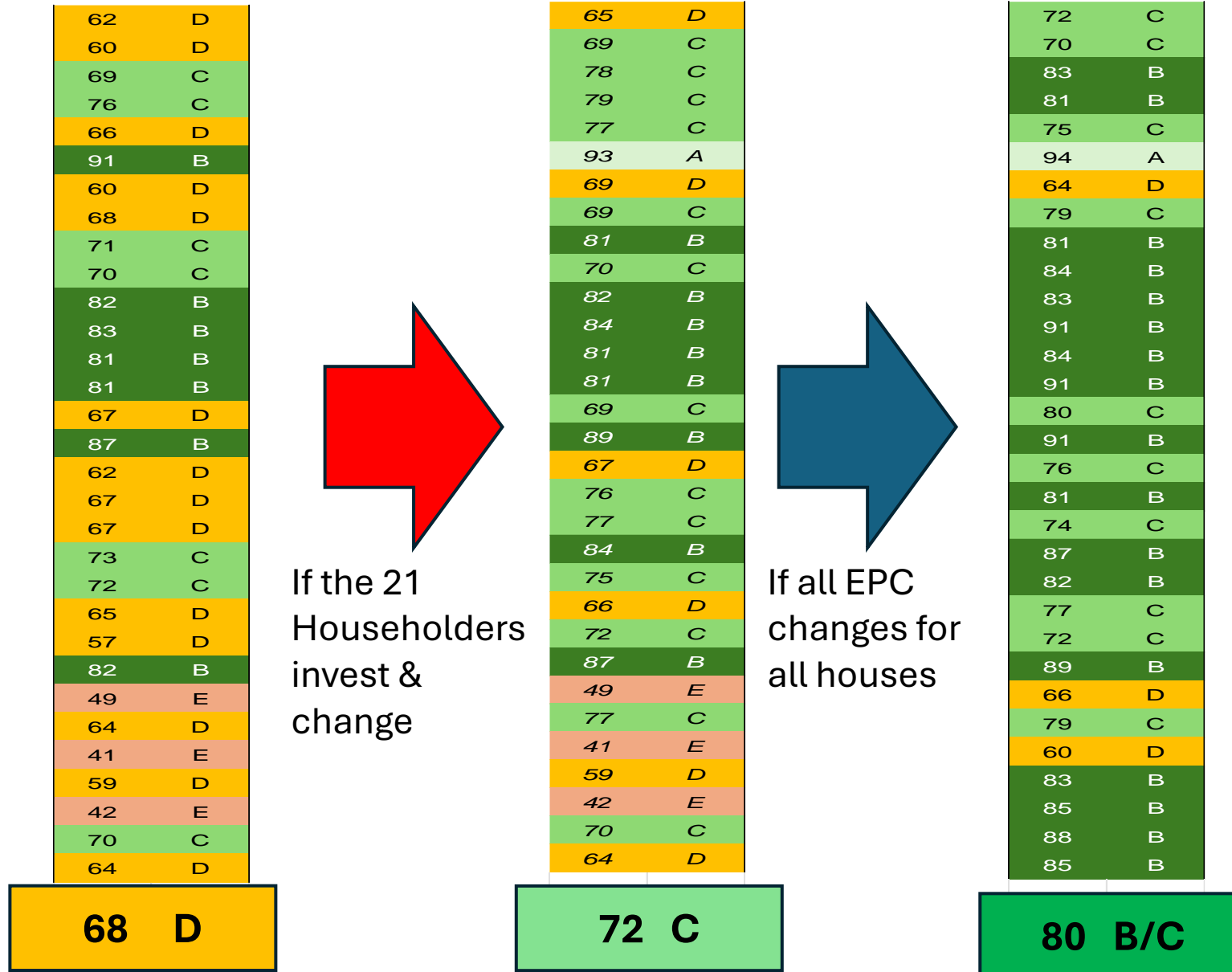
Y EPC Report recommendation
Y Householder 'considering' investment

Thanks – Ian

Hadstock can move from an EPC 'D' to a 'C'



EPCs for the 31 houses



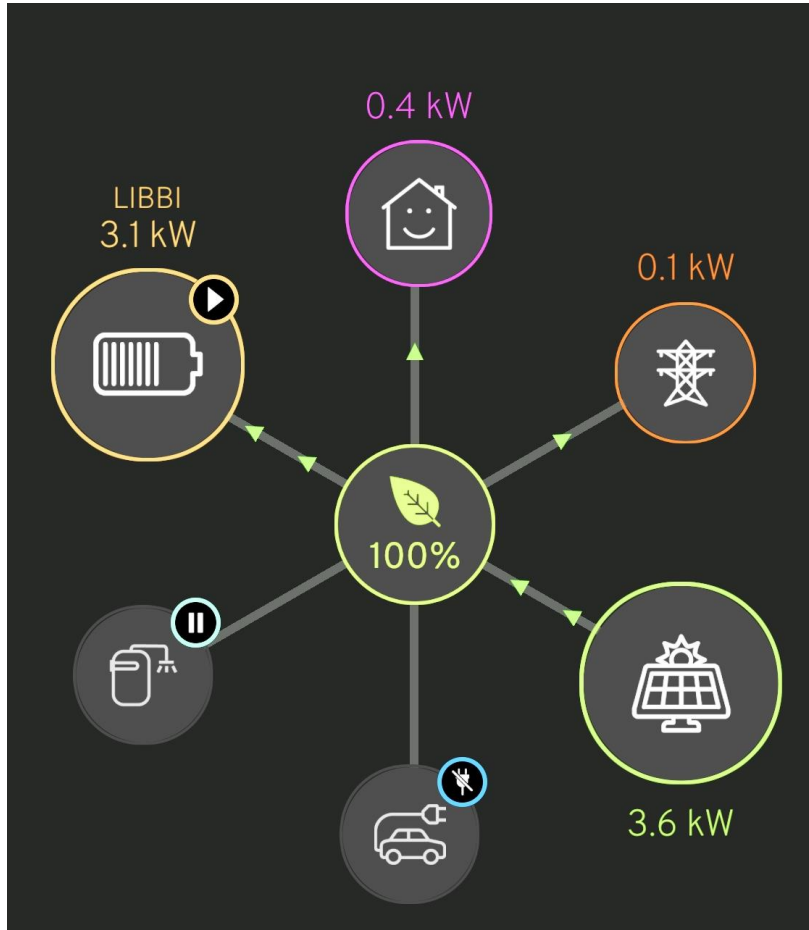
If the 21 Householders invest & change

If all EPC changes for all houses

Additional opportunities – **household batteries and heat pumps** (excluded from EPC)

What would it cost to move the whole Community to a Greener and more efficient / cost effective energy solution?

Gaining significant benefits from Solar + battery



Morning
PVs provide house needs and
charge battery

Afternoon
PVs provide house needs and
export for £

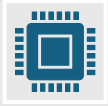
*All electricity generated
by Solar Panels*

*Excess stored in a
battery for night use*

Water always hot

*Make money – export
excess*

Home & Energy: next steps



Green the Village Hall!

UDC Zero Carbon Grant awarded for 2025
An Energy Blueprint for the future
– remove oil



Analyse the EPC+ Home Surveys

What will give the largest benefit for individuals and the Community?



Continue with support: Thermal Camera and EPC+ reviews



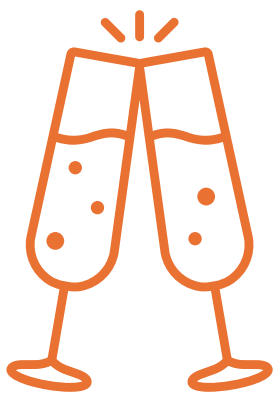
Bring in local expert advice – can we show the benefit using real examples?



More guidance on the Web Site



**What would help you?
Tell us!**



Thank you all



Ian Alan Maggie Sonia
Peter Rick Lynne Jacob
Russell Brendan Derek Sally
Matt Denise Jonathan Keith Stuart
Jane Mel Jim Bill Sue Richard Kerry Will
David Susan
Stacey Conrad EWT volunteers John Peter .. all others!

Our experts: Adrian, Chris, Jonathan, Alicia, Will, Clare, Kirsty, Tony

Many local Villages that provided guidance and their learnings

Everyone that had a House Energy Survey

Everyone that used the Thermal Imaging Camera

All who completed our Village Survey and came to an Event

Comments & Questions?

