

**Transition
Bewdley**

Renewable Heat for Bewdley

**MIDLANDS
NET ZERO HUB**

ICaX
TM ltd

FAIRHEAT

Bioregional



**Community Presentation
15th July 2025**

AGENDA

BEWDLEY COMMUNITY HEAT NETWORK



1

Recap

Why should we do this
Feasibility Study
Project Phases & Timescale

2

Design

Heat Mapping & Network
Household Connection
Environmental

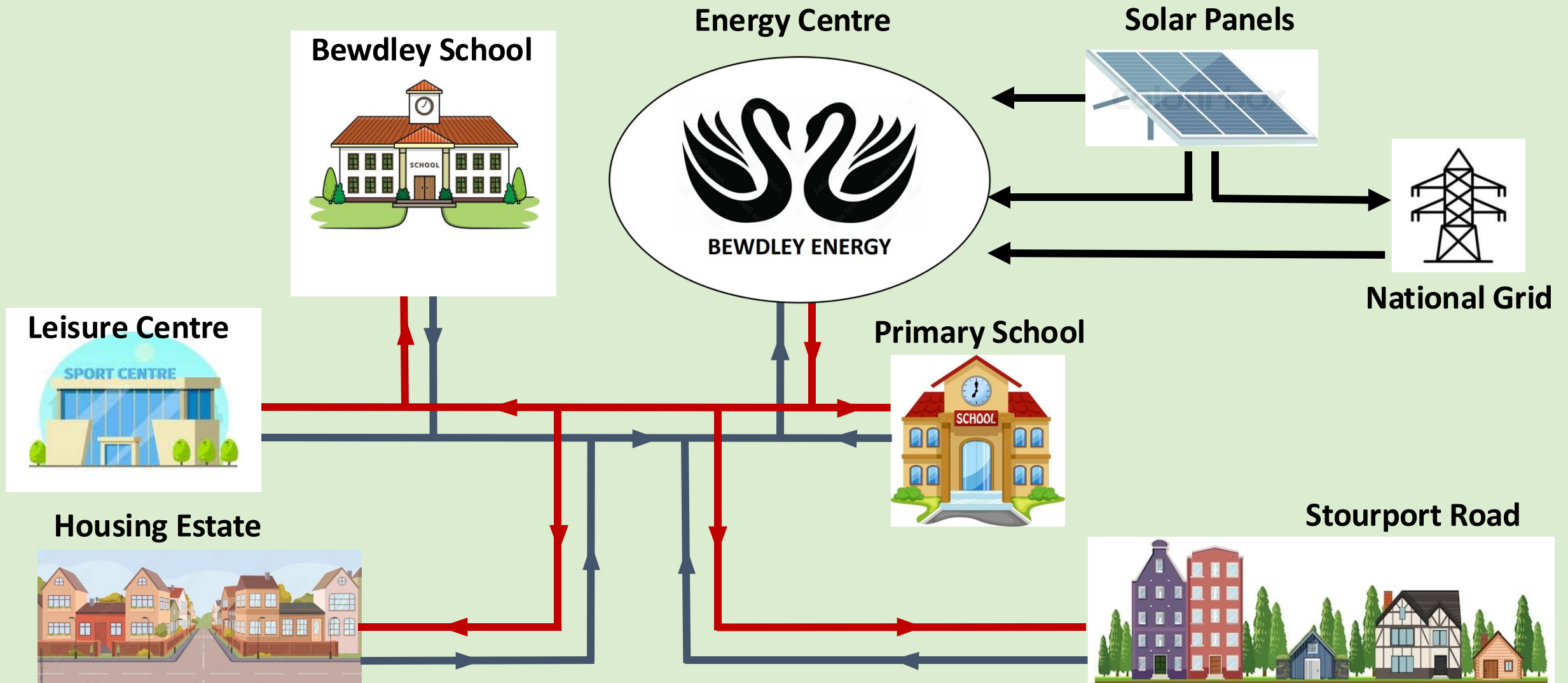
3

Delivery

Business Case
Energy Services Company
Funding & Community Shares

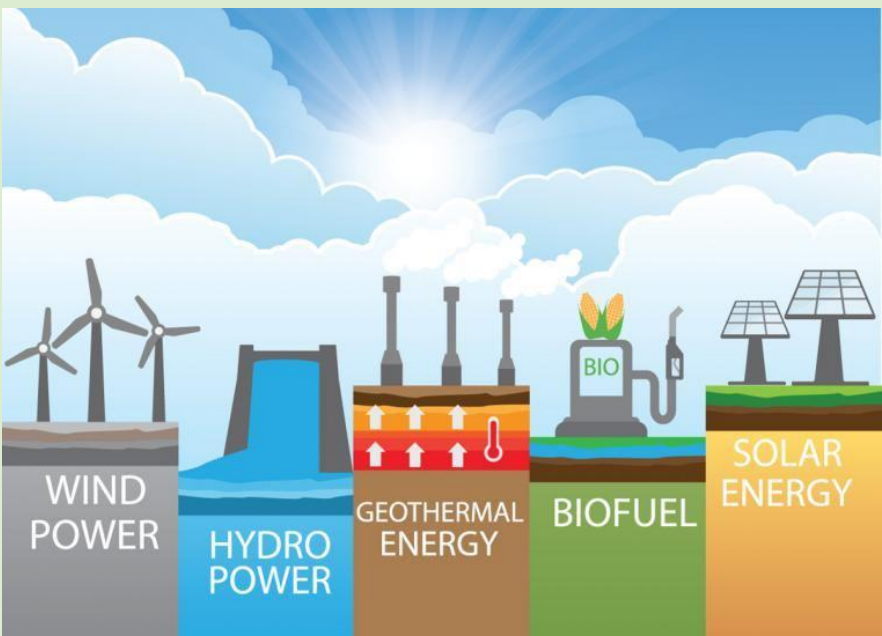
Questions from the floor

What is our Heat Network ?



Recap

- Why we should do this
- Feasibility Study
- Project Phases & Timescale



Why we should do this

Renewable Energy will be needed in the future

Presently 20,000 homes a year converting

20,000 homes a week needed to meet 2050

River Severn is a source of heat

Efficient with 3.2kW of heat for input of 1kW

Large scale replacement v individual

Benefits to local people



What are the Community benefits ?



Mission

To provide Bewdley with a renewable source of heating and hot water locally controlled to stabilise prices and establish long term energy security whilst being focused on benefits to the community

Secure and stable supply

Affordable heat and hot water

Prices tied to rate of inflation

Community-owned solution

Community investors

Dividend used in the community



Are there other community energy projects ?

RENEWABLE ENERGY GENERATION

TOTAL RENEWABLE ELECTRICITY CAPACITY

398 MW capacity

TOTAL RENEWABLE ELECTRICITY GENERATION

617 GWh produced in 2023



Equivalent to powering 228,530 domestic households

FINANCE & INVESTMENT

TOTAL ORGANISATIONAL TURNOVER

£43.2 million turnover

TOTAL INVESTMENT SECURED

£24 million investment secured in 2023
£225 million investment secured since 2017

LOCAL ECONOMY

FINANCIAL CONTRIBUTION TO LOCAL ECONOMY

£12.9 million contributed to local economies from organisational expenditure and community benefit funds

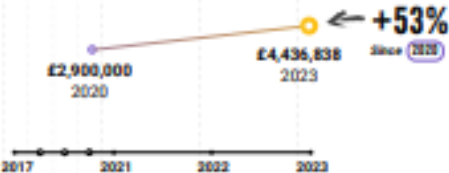
INVESTMENT RAISED FROM LOCAL COMMUNITIES

£6.4 million investment raised from communities in 2023

ENERGY EFFICIENCY & FUEL POVERTY

BILL SAVINGS FROM ENERGY EFFICIENCY & ADVICE

£4.4 million bill savings



Queens Quay, Clydebank



- River Clyde in Glasgow
- Operational Plant
- 5.3MW capacity similar to Phase 1
- Uses 2no water source heat pumps
- Ammonia as refrigerant requires chimney
- Bewdley uses CO₂ so no chimney required

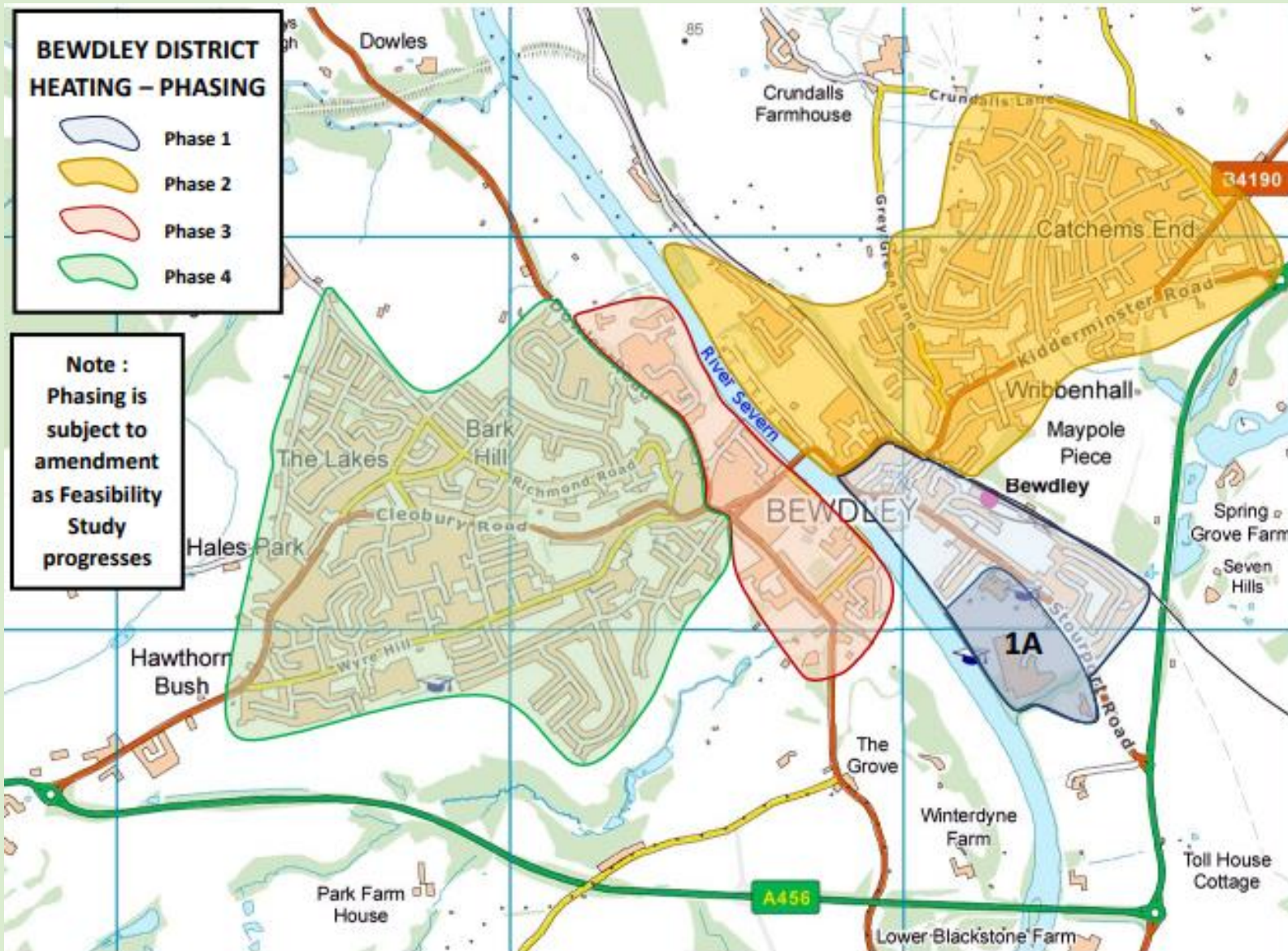




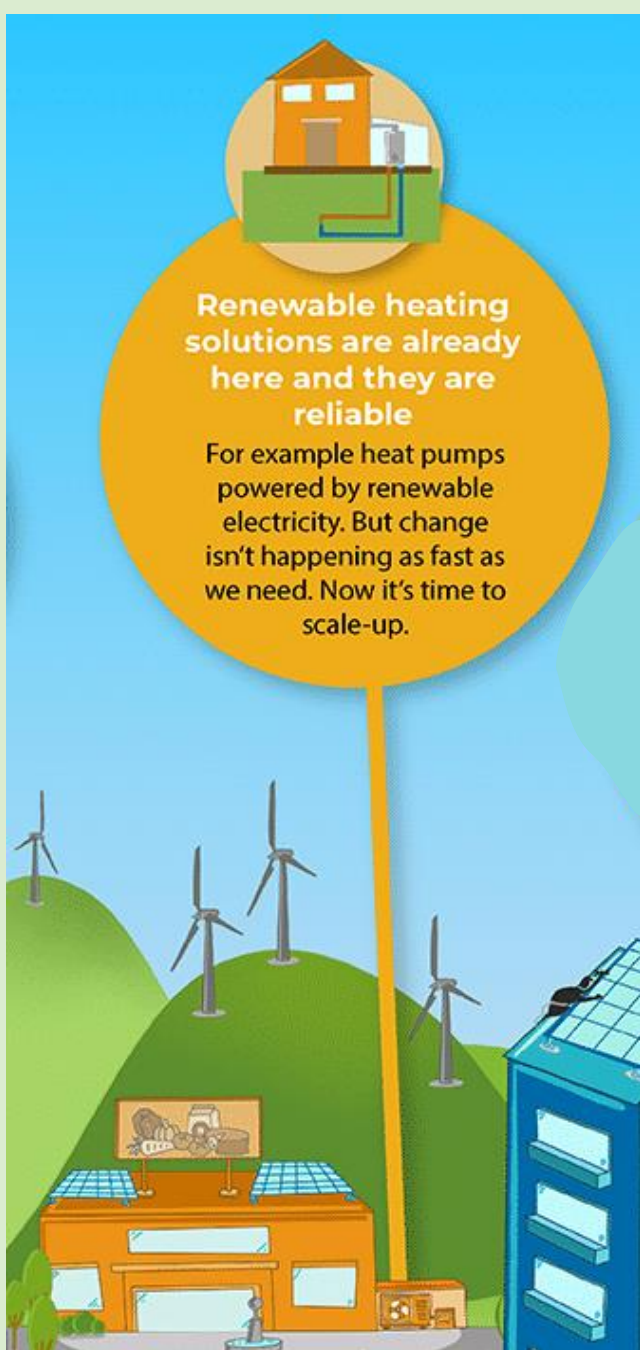
Present Status

- Community Benefit Society preferred
- Tariffs and standing charges for heat and hot water will be proposed
- Stage 1 shows potential technical and economic viability
- Stage 2 funding secured early 2025
- Stage 2 Report to be completed by end 2025
- Stage 2 includes basis for ESCo

Project Phases



- Phased plan
- Economic viability on standalone basis
- Phase 1A - Schools
Phase 1B - up to Beales Corner
- Phases built in sequence



Renewable heating solutions are already here and they are reliable

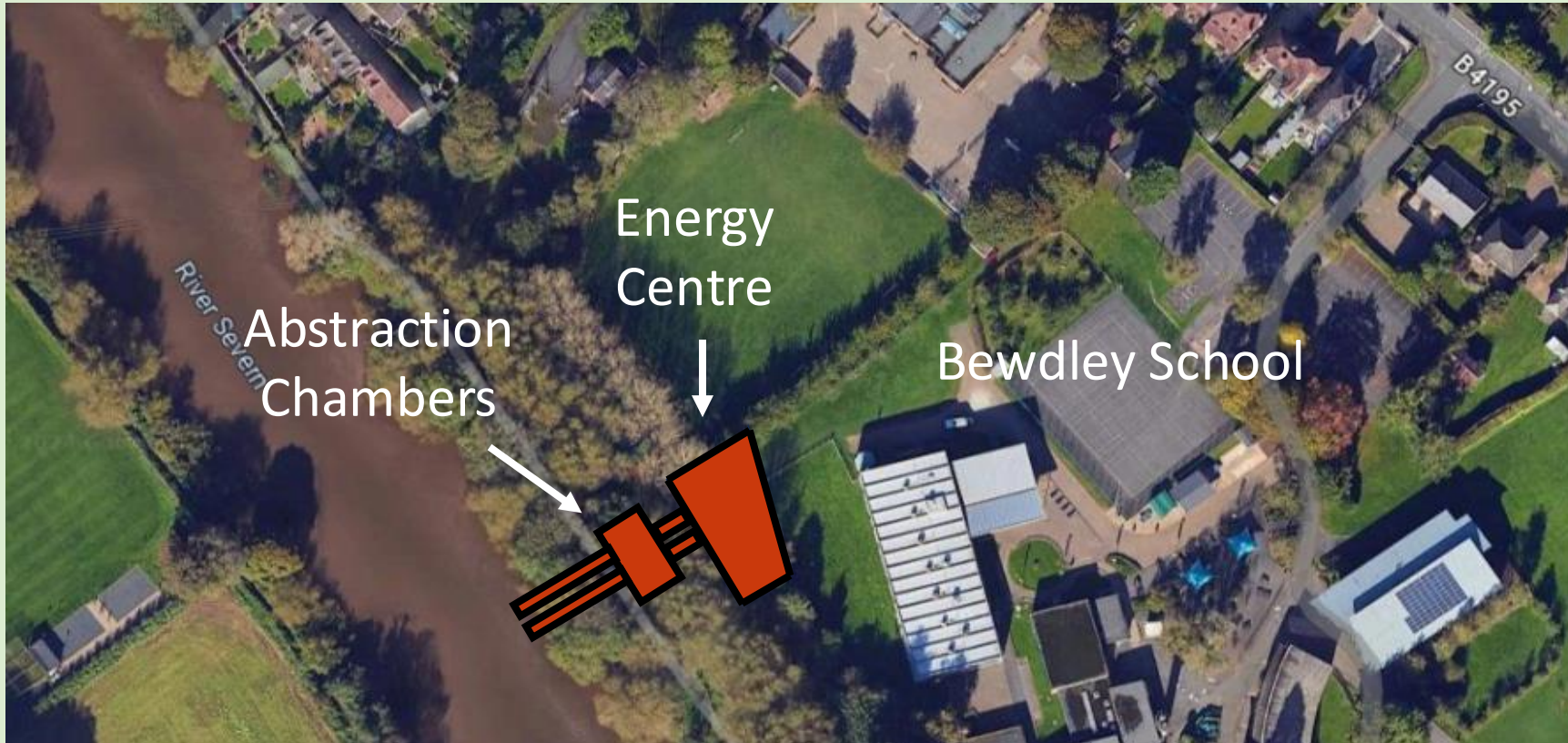
For example heat pumps powered by renewable electricity. But change isn't happening as fast as we need. Now it's time to scale-up.

Project Timescale

	Phase 1	Phase 2	Phase 3	Phase 4
2025	Feasibility			
2026	Market	Feasibility		
2027	Build	Market	Feasibility	
2028	Commission	Build	Market	Feasibility
2029		Commission	Build	Market
2030			Commission	Build
2031				Commission

Site Visit

Location for Energy Centre and Abstraction Chambers in School grounds



Design

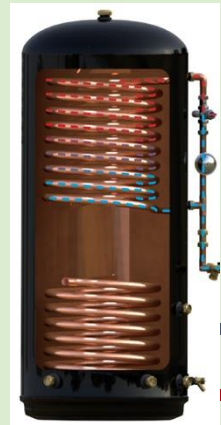
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Heat Mapping

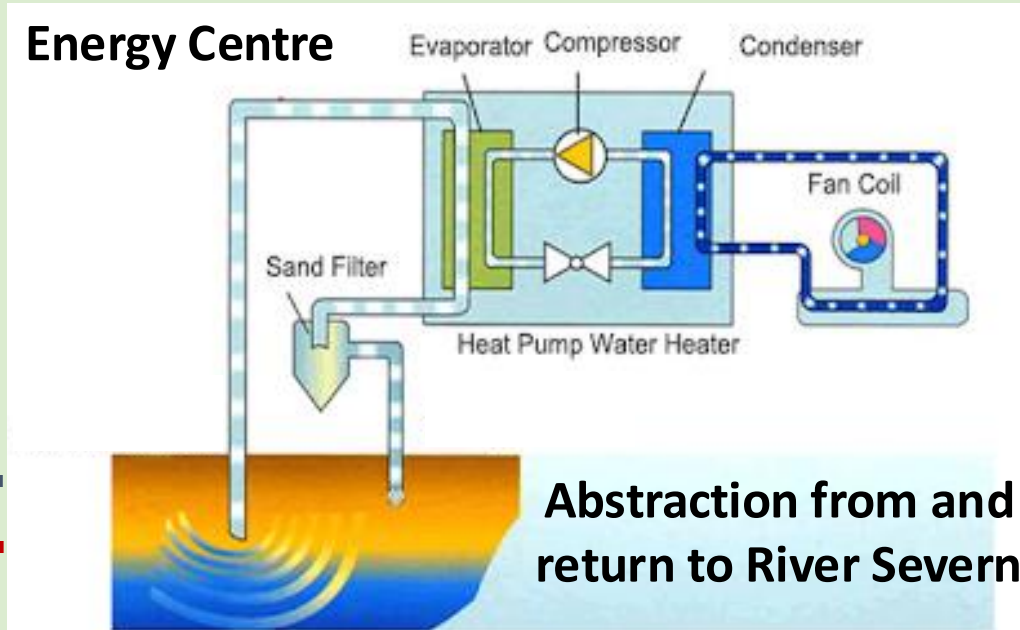
- Basis for assessing heat demand
- Basis for viability
- Heat network pipework major cost



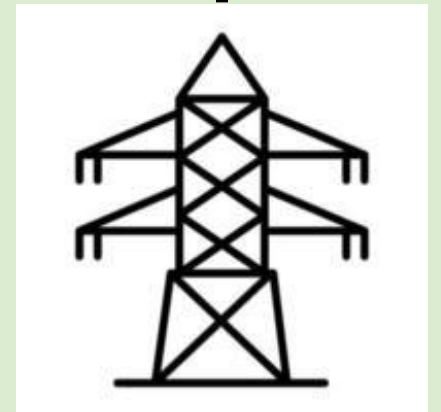
Heat Network – Phase 1



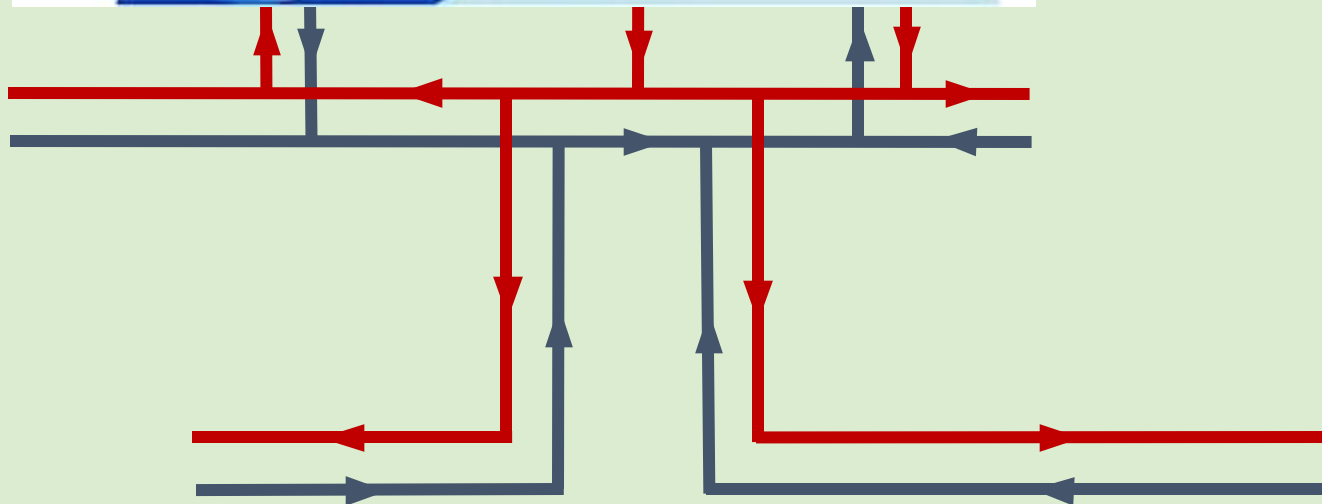
Thermal Storage



Solar Panels

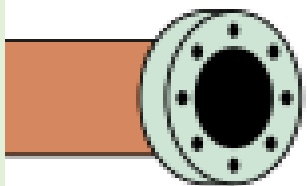


National Grid



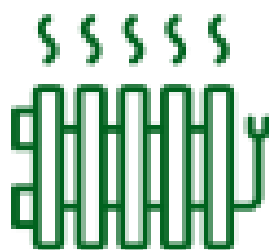
Pipes

An insulated pipe network delivers hot water to connected homes and businesses



- Uses existing pipework and radiators
- Usage measured by smart meters

Household Connection



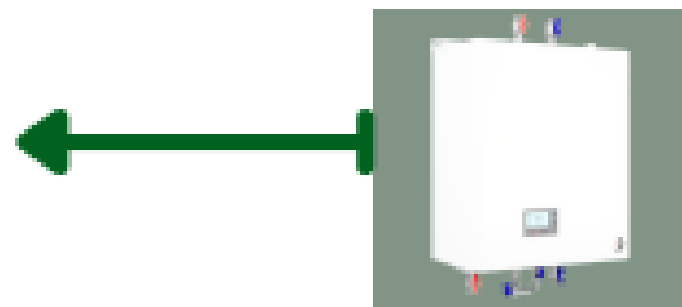
Warm homes

Hot water is fed into taps and radiators

HOME/BUSINESS

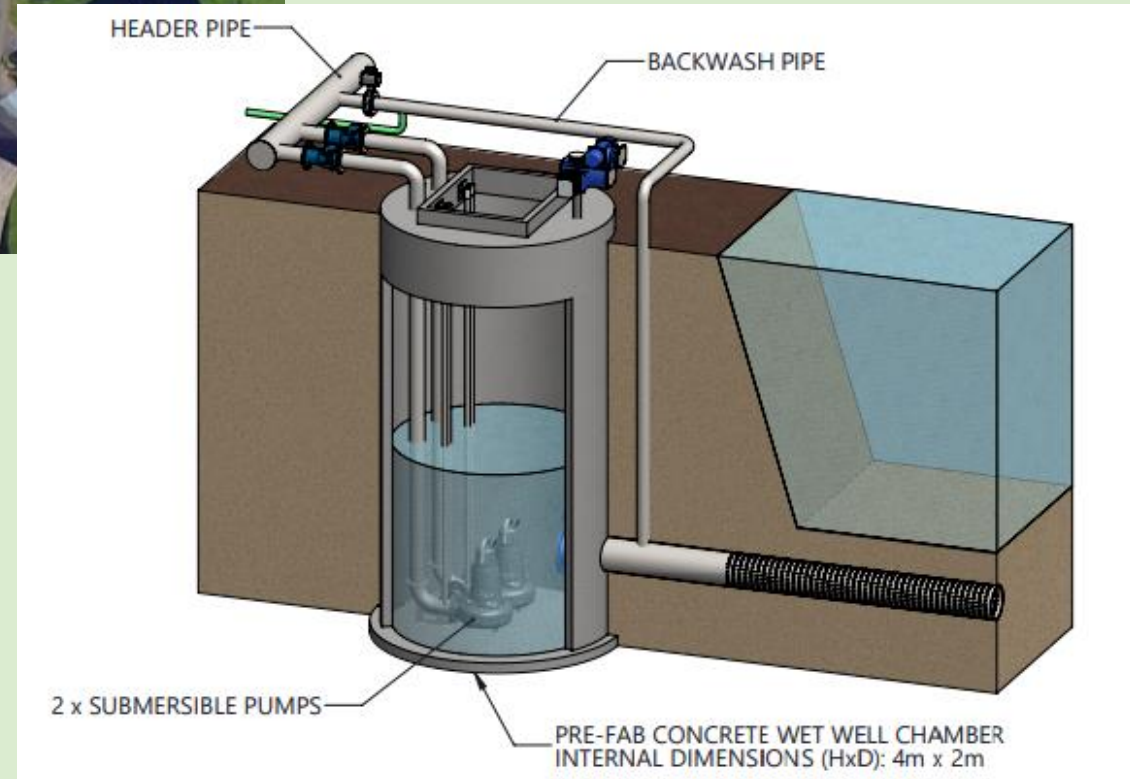
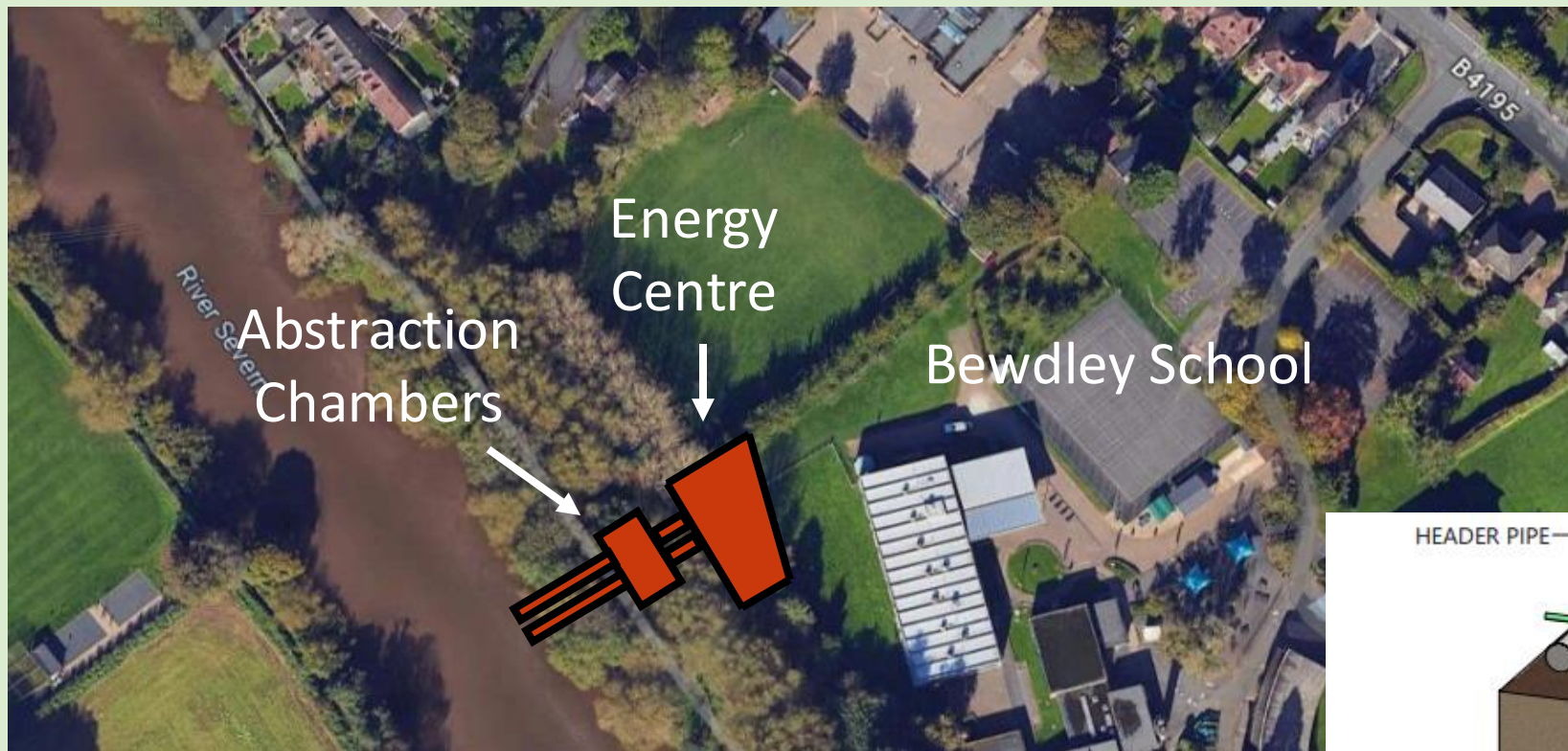
Heat interface unit

An HIU replaces existing gas boilers and transfers heat from the network to the building's heating system



Environmental

Chambers built under flood plain



- Water abstracted and returned through gravel laid under river bed
- Return temperature approx 3° C less than intake

Questions from the floor

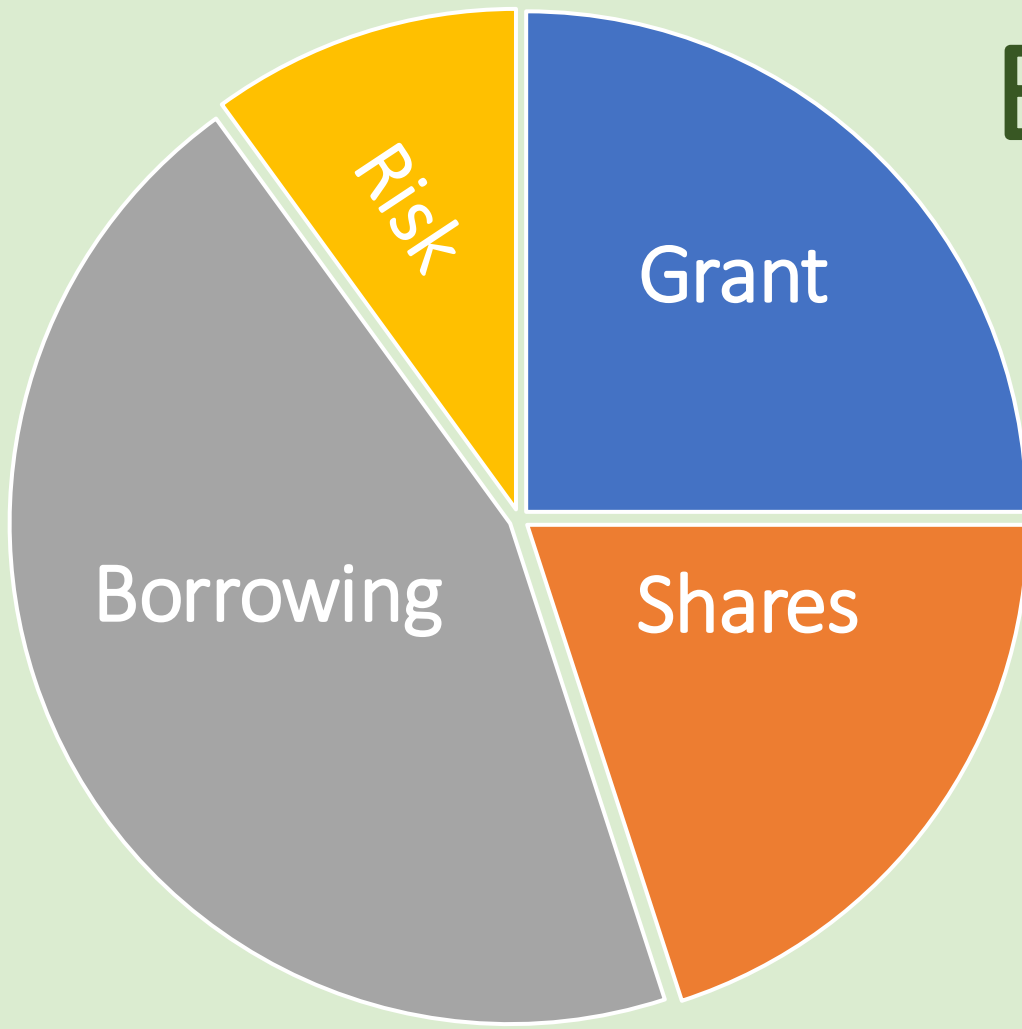


Delivery

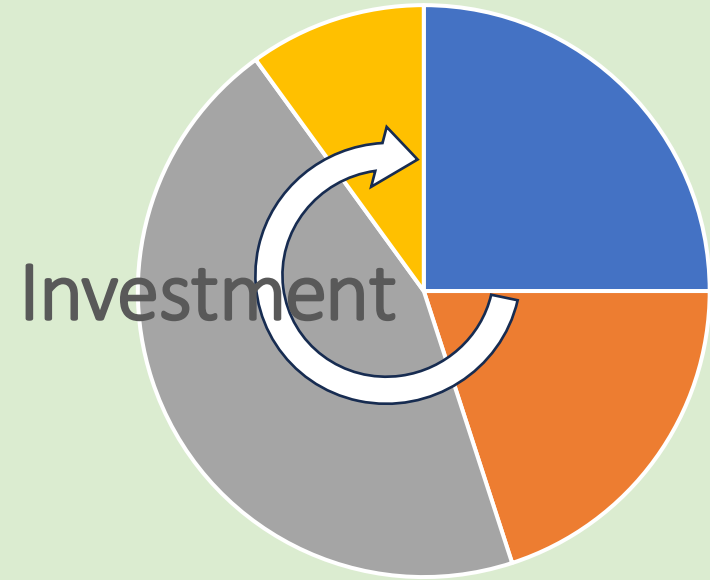
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Business Case Summary

Annual Revenue = Customer Sales



Capital Cost of Design,
Construction and Commissioning



Annual Costs = Return on
Investment + Operation

Business Case - Government



**ASHP £12,000 with
£7,500 grant**

**Not enough Grid capacity
for whole of Bewdley**



**Would it be better for the
Government to spend this on
renewable alternatives ?**

Energy Services Company = Community Benefit Society

A **group** of people working together to meet their common **needs**

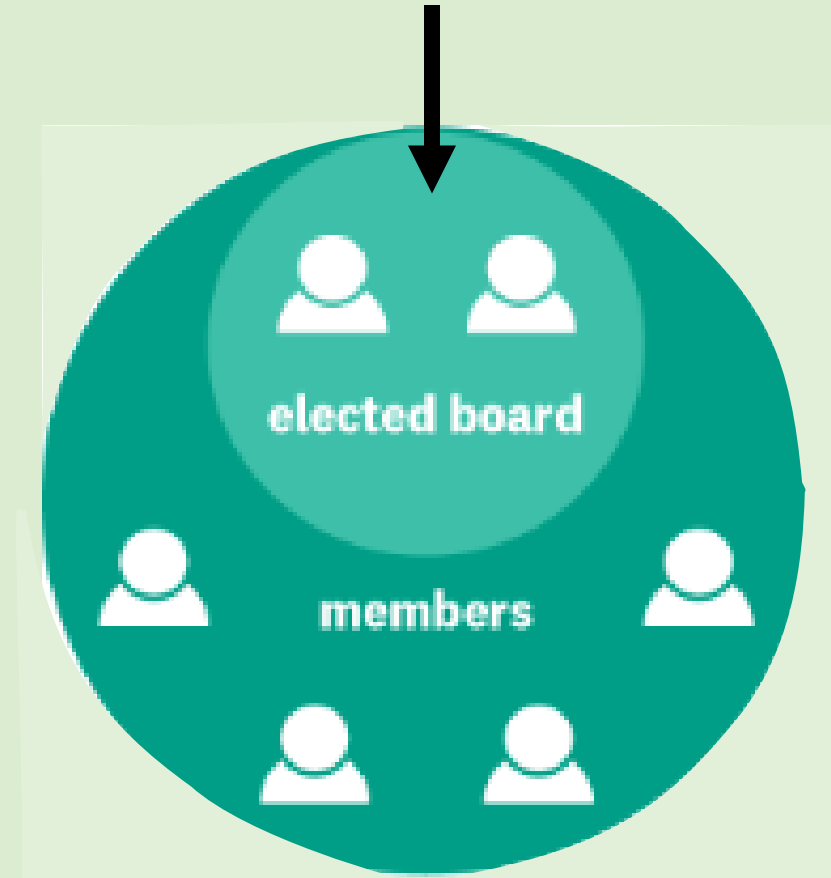
A business **owned, controlled**, and primarily for the benefit of its **members**

Versatile model allowing **membership** from **all interested parties**

Buying **shares** makes you a **member** and **part owner**

Any excess **revenue** to **community** fund

Funded from
operational income





10 BENEFITS OF ENERGY COMMUNITIES

1

They provide local and clean energy



2

They mobilise local capital



3

They strengthen local development



4

They contribute to the protection of the environment



5

They help save energy



6

They address the environmental crisis



7

They fight energy poverty



8

They contribute to the social acceptance of renewables



9

They strengthen social cohesion



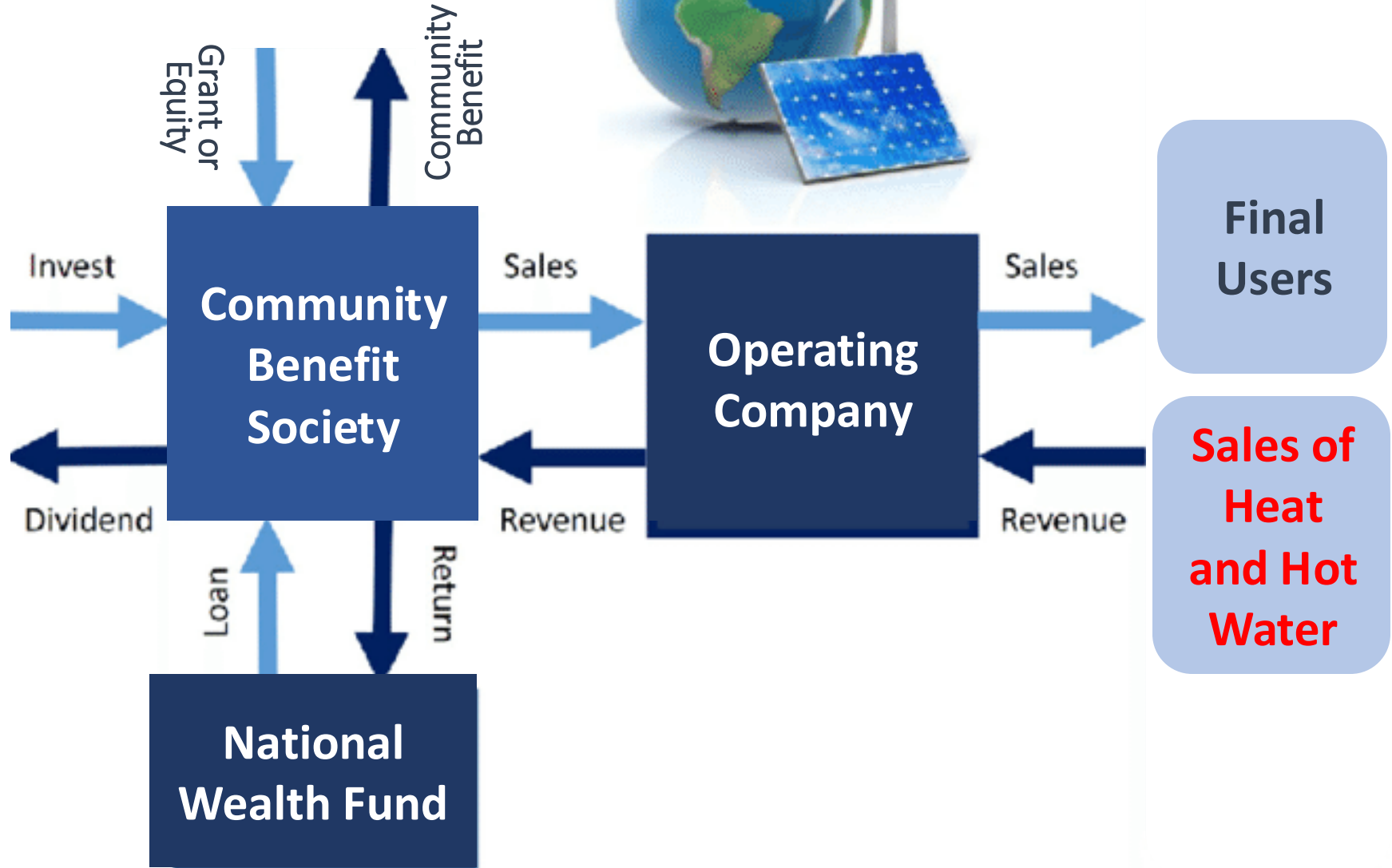
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They reinforce democracy





Shares raised
from the local
and wider
community



Funding

Community Shares

- More than £1m funding being sought through a wider community than Bewdley
- Shares have a fixed value and return in line with ethical investments
- Shares can be withdrawn subject to CBS approval
- Should be considered as a long term investment

Community Shares | Booster Fund

"The community knew that if they were part of this offer, they could help make something good happen."

York Supplies, Birmingham



Community Shares

STANDARD

Next Steps

- Complete Stage 2 Feasibility
- Community Benefit Society
- Further Community Meetings
- Register customers & investors



**BEWDLEY
NEEDS
YOU**

With your support we can make this happen