



SURF Workshop

10th April 2012

Community Power Orkney

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Anthony Withers – Stronsay Development Trust/Renewables Limited

Brian Clegg – Island of Hoy Development Trust/Hoy Energy Limited

Max Collop – Island of Hoy Development Trust/Hoy Energy Limited

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Ute Clackson – Sanday Development Trust

Gareth Ellis – Sanday Development Trust



Community Power and Partnership in Orkney

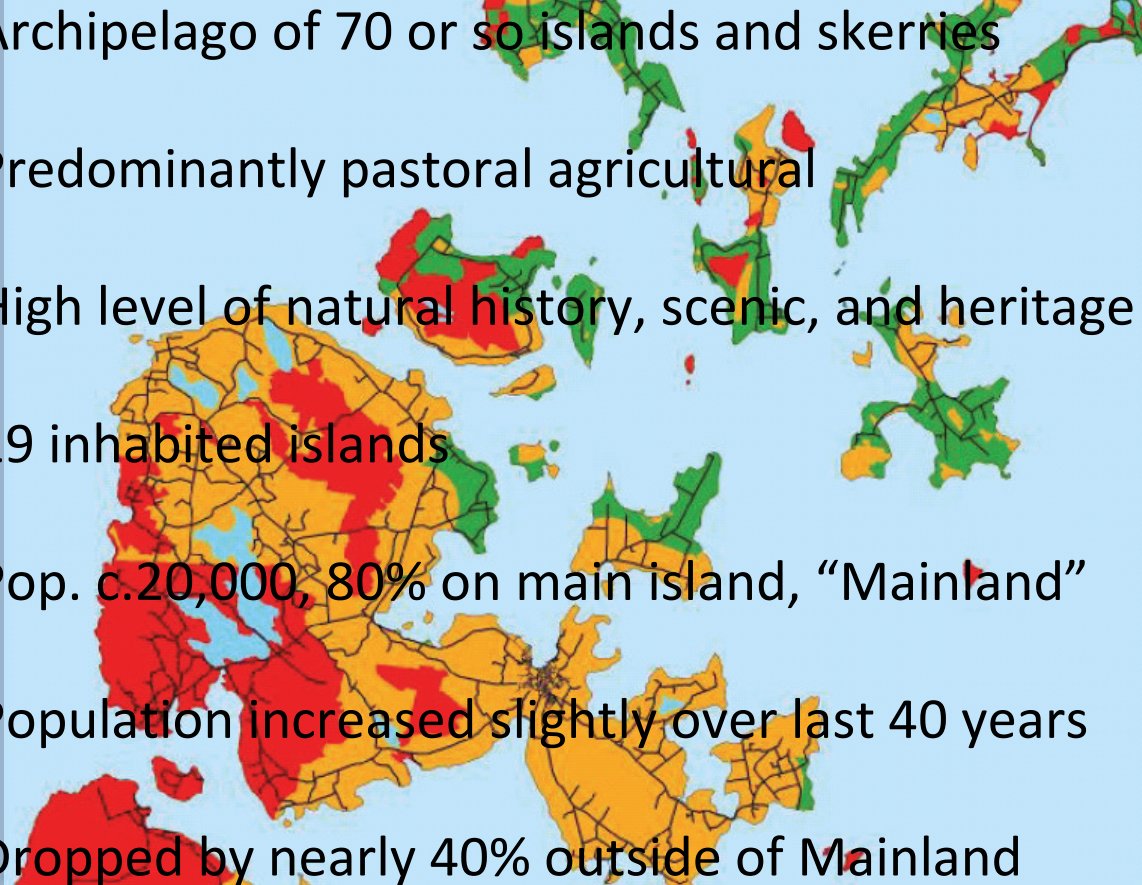
XXXX=Orkney?

XXXX=Community Owned Power?

XXXX=Why are we doing this

XXXX=What we are doing

XXXX=How we work together

- 
- Archipelago of 70 or so islands and skerries
 - Predominantly pastoral agricultural
 - High level of natural history, scenic, and heritage
 - 19 inhabited islands
 - Pop. c.20,000, 80% on main island, “Mainland”
 - Population increased slightly over last 40 years
 - Dropped by nearly 40% outside of Mainland

Map 3

- Areas of Significant Protection
- Areas of Potential Constraint
- Broad Areas of Search
- Roads



Other Isles split into North and South Isles



North Isles divided into inner and outer



All have internal ferry, outer have air service



All suffer significant depopulation



Drastic demographic “gaps” esp. 18-40 and 65+



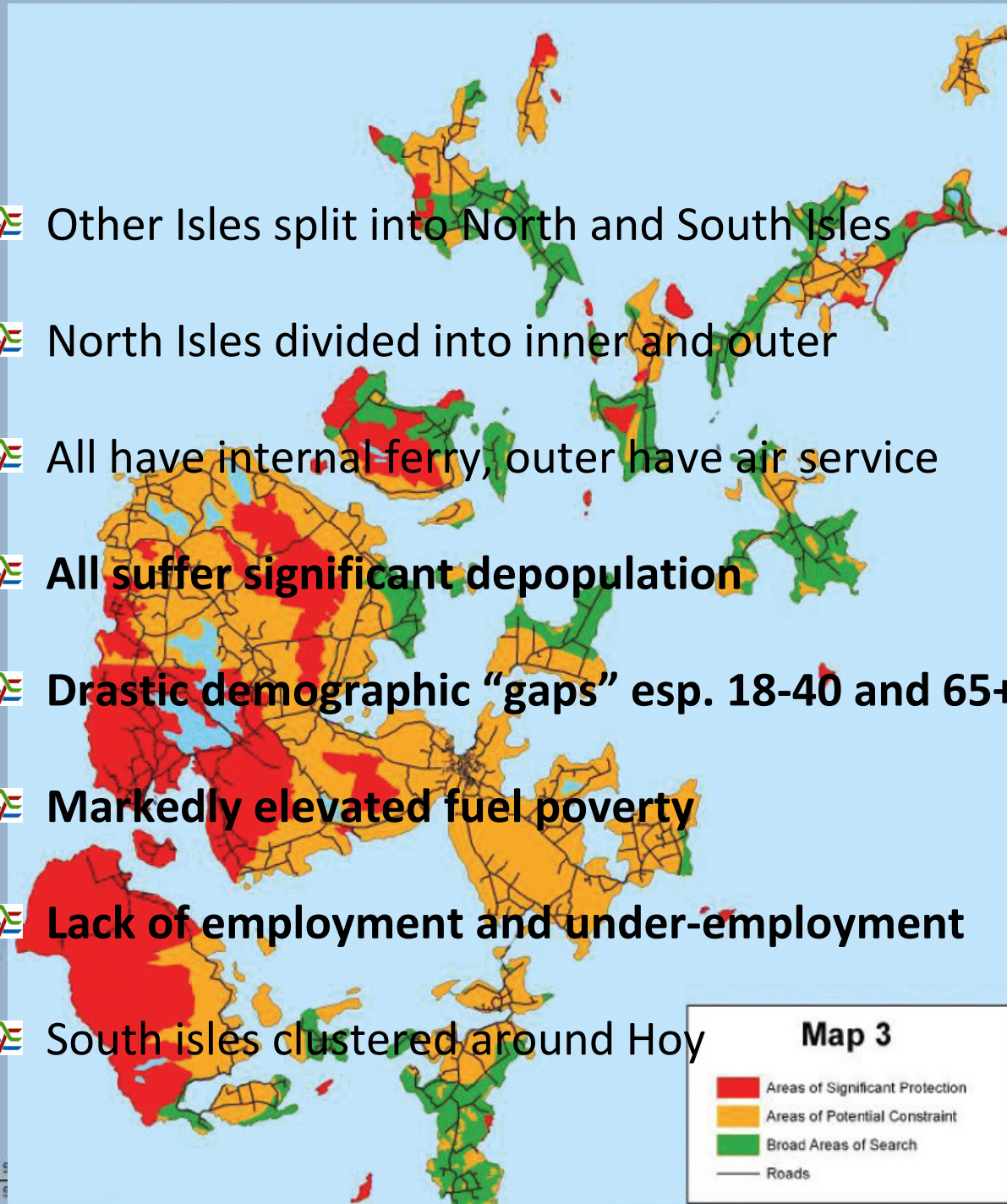
Markedly elevated fuel poverty



Lack of employment and under-employment



South isles clustered around Hoy



Map 3

■ Areas of Significant Protection
■ Areas of Potential Constraint
■ Broad Areas of Search
— Roads

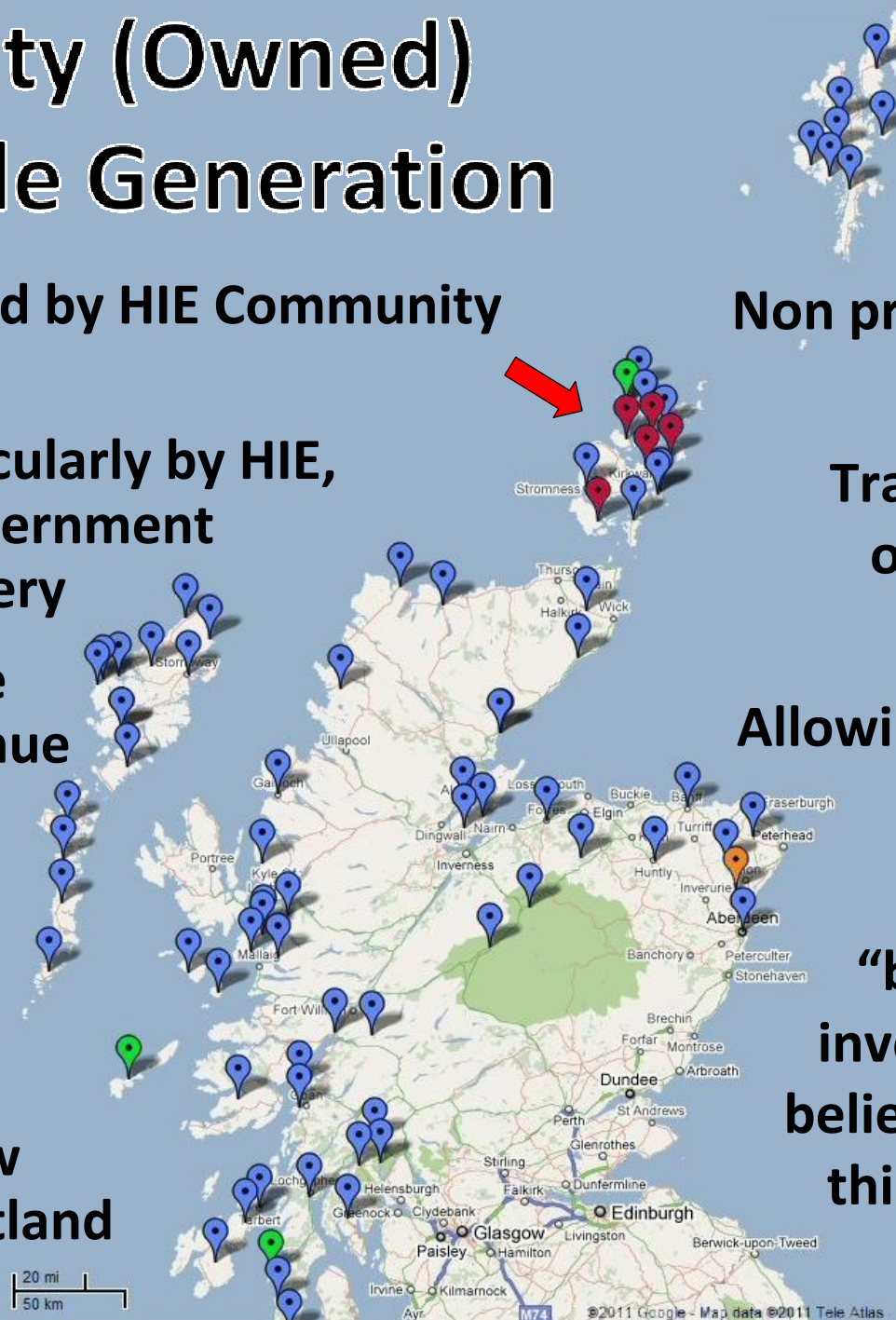
Community (Owned) Renewable Generation

Model developed by HIE Community
Energy Unit

Supported particularly by HIE,
the Scottish Government
and the Big Lottery

Social Enterprise
delivering revenue
to fund local
Community
Development
Plans

More than
150 projects now
across all of Scotland



Non profit- distributing
company

Trading as a wholly
owned subsidiary
of a charity

Allowing local financial
independence

Creating true
“bottom-up” local
investment and self
belief that we can do
things to help steer
our own destiny



Why are we doing this? - Opportunity

Resource

Wind (Wave and Tide)

Revenue

Incentives - Was Grants + ROCs now FiTs

Community Will



Why are we doing this? - Need

 Depopulation

 Fuel Poverty

- Heating
- Transport

 Skill shortage and under employment

 Resilience



Why are we doing this? - Benefit

Money!

- Independent Community Controlled Fund
- Local Community Development Plans
- Pump priming

Enabling

- Competence/Confidence
- Self Determination



Westray did it!

- **Commissioned Oct 2009**
- **Enercon E44 on a 45m tower**
- **At least 7 years in development**
- **Very good wind resource**
- **Producing 3GWh per annum**
- **More than £4million community fund**
- **Wholly community owned**



Orkney



Papa Westray

Westray

Sanday

Rousay

Egilsay
& Wyre

Eday

Stronsay

Shapinsay

Stromness

Deerness

Hoy

S Ronaldsay & Burray



Others followed...

New Communities:

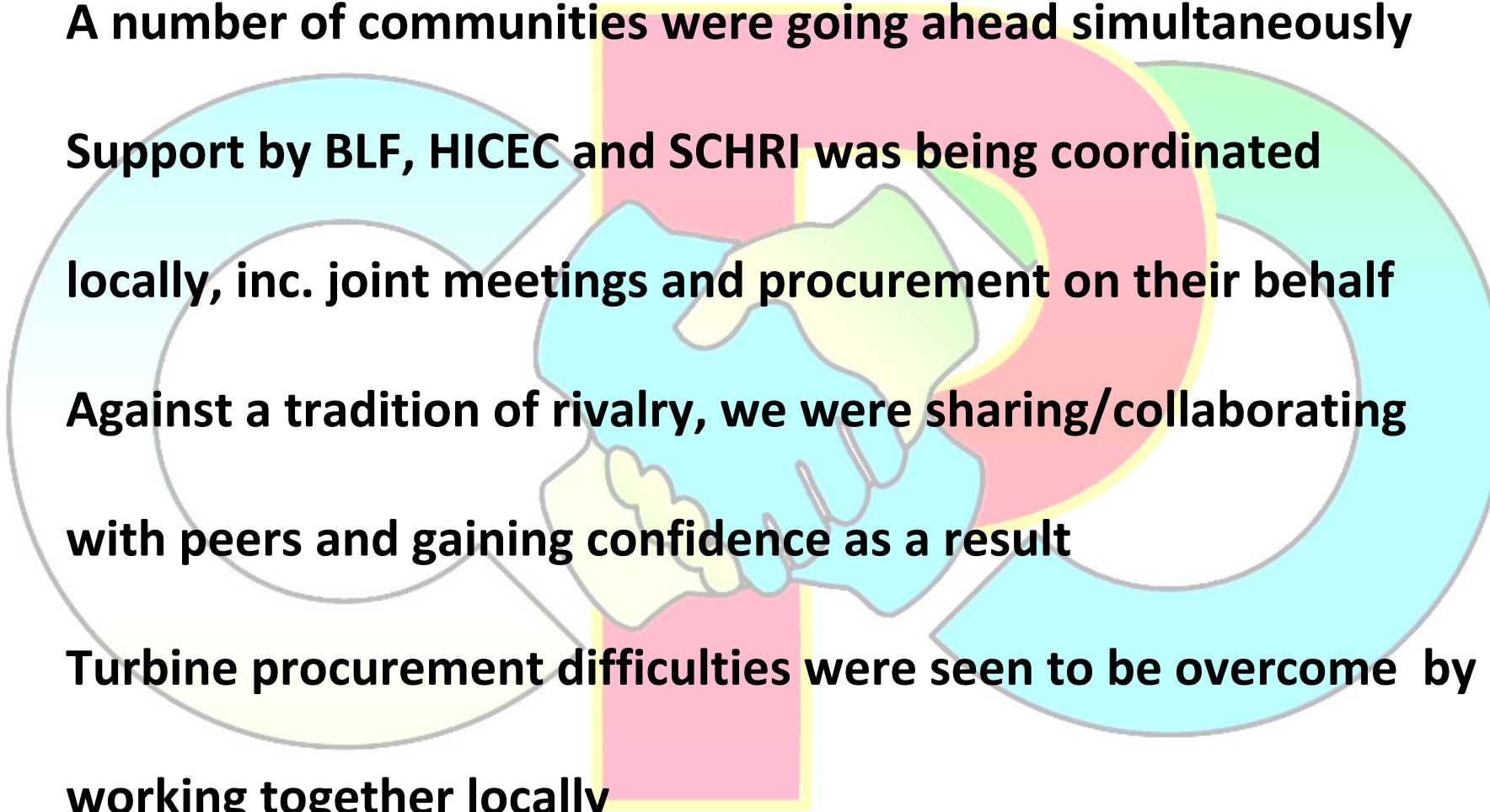
Hoy, RE&W, Shapinsay, Stronsay, Eday, Sanday

New challenges:

**Smaller communities, less organised, shorter
timescales, more technical challenges**



Origin of CPO

- **A number of communities were going ahead simultaneously**
 - **Support by BLF, HICEC and SCHRI was being coordinated locally, inc. joint meetings and procurement on their behalf**
 - **Against a tradition of rivalry, we were sharing/collaborating with peers and gaining confidence as a result**
 - **Turbine procurement difficulties were seen to be overcome by working together locally**
- 

Origin of CPO

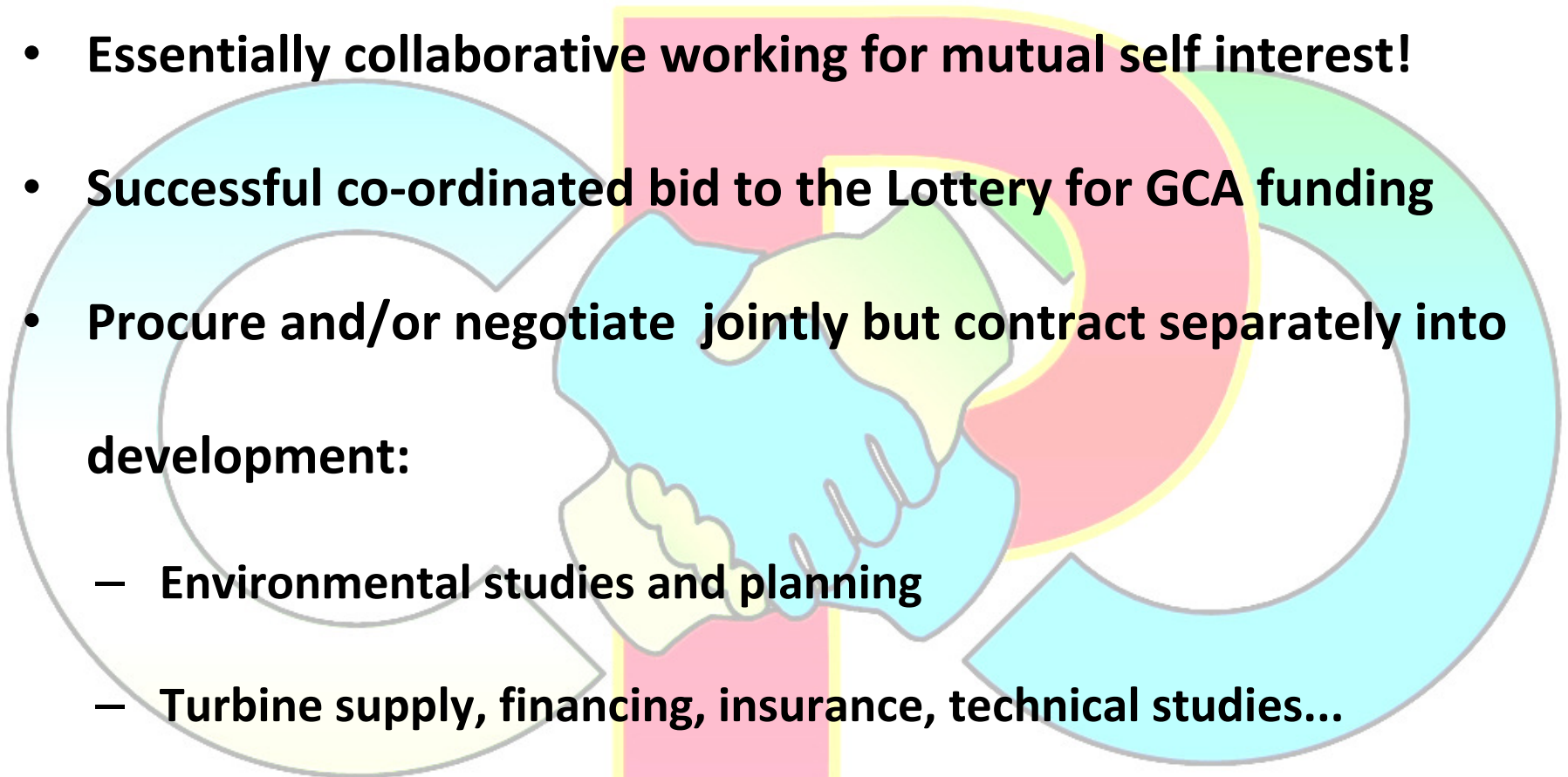
Recognised:

- The added support each community gained working together
- The scope for collective bargaining power
- Further cost savings achieved by avoiding duplication of effort
- The need for co-ordination of activity, and avoidance of conflict during construction and installation due to our location and limited specialist contracting resources available



CPO in Action during development

- Created and agreed terms of engagement to formalise CPO.
- Essentially collaborative working for mutual self interest!
- Successful co-ordinated bid to the Lottery for GCA funding
- Procure and/or negotiate jointly but contract separately into development:
 - Environmental studies and planning
 - Turbine supply, financing, insurance, technical studies...
 - Joint project management, civil engineering etc.



CPO delivered...

Construction:

Project operational

Hoy,
RE&W,
Shapinsay,
Stronsay,
Eday,
Sanday

WEST SIDE ROAD 19/10/2011

| | |
|--|---|
| | WHEEL TRACK LINE CRACKING DUE TO SUB-BASE SETTLEMENT |
| | CRACKING ADJACENT TO VERGE DUE TO SUB-BASE SPREAD INTO SOFT VERGES AND RESULTANT SETTLEMENT |
| | VERGE AND CENTRELINE CARRIAGEWAY CRACKING DUE TO SUB-BASE SETTLEMENT BELOW WHEEL TRACK LINE |
| | ROAD CENTRELINE CRACKING DUE TO SUB BASE SETTLEMENT ON WHEEL TRACK LINES |
| | INTERMITTENT CENTRELINE CARRIAGEWAY, WHEELTRACK AND VERGE CRACKING DUE TO 'FLOATING ROAD' GROUND CONDITIONS |
| | SPECIFIC DEFECT LOCATION AND REFERENCE PHOTO NUMBER SHOWN THUS |

20/10/2011

21/10/2011

17/11/2011

August 2012

Spring 2013

Continued collaboration

Since completion of commissioning of the majority of the turbines emphasis for CPO activity has developed along two fairly distinct activity streams:

- Trading /Operational Issues
- Fund distribution and investment

To continue to best provide strength and evolve, CPO now has alternating meetings to address these two streams

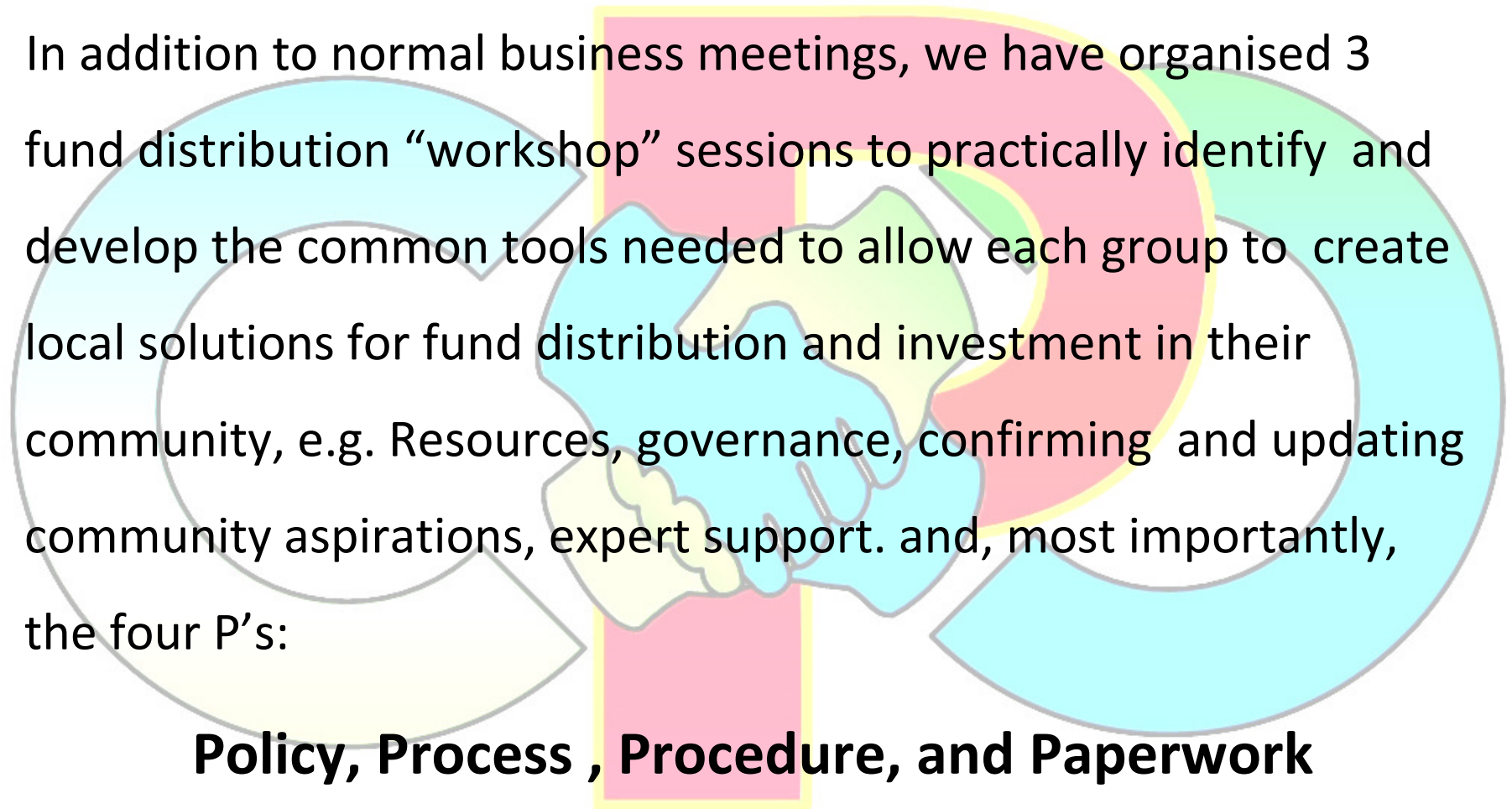


Continued collaboration

Delivering community value and investment

In addition to normal business meetings, we have organised 3 fund distribution “workshop” sessions to practically identify and develop the common tools needed to allow each group to create local solutions for fund distribution and investment in their community, e.g. Resources, governance, confirming and updating community aspirations, expert support. and, most importantly, the four P’s:

Policy, Process , Procedure, and Paperwork





Rousay, Egilsay and Wyre Development Trust

Making it happen locally

Delivering community value and investment

Affordable warmth

Sustainable facilities

Reducing food miles

Increasing skills and confidence

Spot 13.1

°C

15.8

Box

Max. 14.2

Min. 12.4

Difference

Sp - Sp 0.0

Affordable warmth

Overall Orkney has some of the highest levels of fuel poverty in the country, with 44% fuel poor and 21% in extreme fuel poverty (>20% of income spent on fuel) in 2009 SHCS

In 2010 4 isles groups surveyed their communities and found between 80-90% of households believed they were fuel poor

In one community a basic programme of survey, loft insulation, energy efficiency and behaviour change education reduced this by 40%, and identified 5% of properties eligible for Stage 4 of the Energy Assistance package



Dist = 0.5 Trefl = 20.0 ϵ = 1.00

10.6

Reducing food miles

- Travel and haulage costs create hidden fuel poverty
- Four isles have built community gardening facilities
 - Allotments
 - Covered growing
 - Linked with schools and cooperatives



Sustainable facilities

- **Energy self sufficiency and reduction**
- **Low carbon transport**
 - (Dial a) Minibuses
 - Car share
 - Water taxis
- **Infrastructure for the future**
 - Increased within community care
 - Public Wifi hotspots/clouds
 - Fibre Optic “ring road”



Increasing skills and confidence

- E.g.
- Modern Apprenticeships
- Training bursaries/local events
- Microgeneration installation and maintenance
- Enterprise/Business start-up schemes





Stronsay Development Trust

Making it happen locally

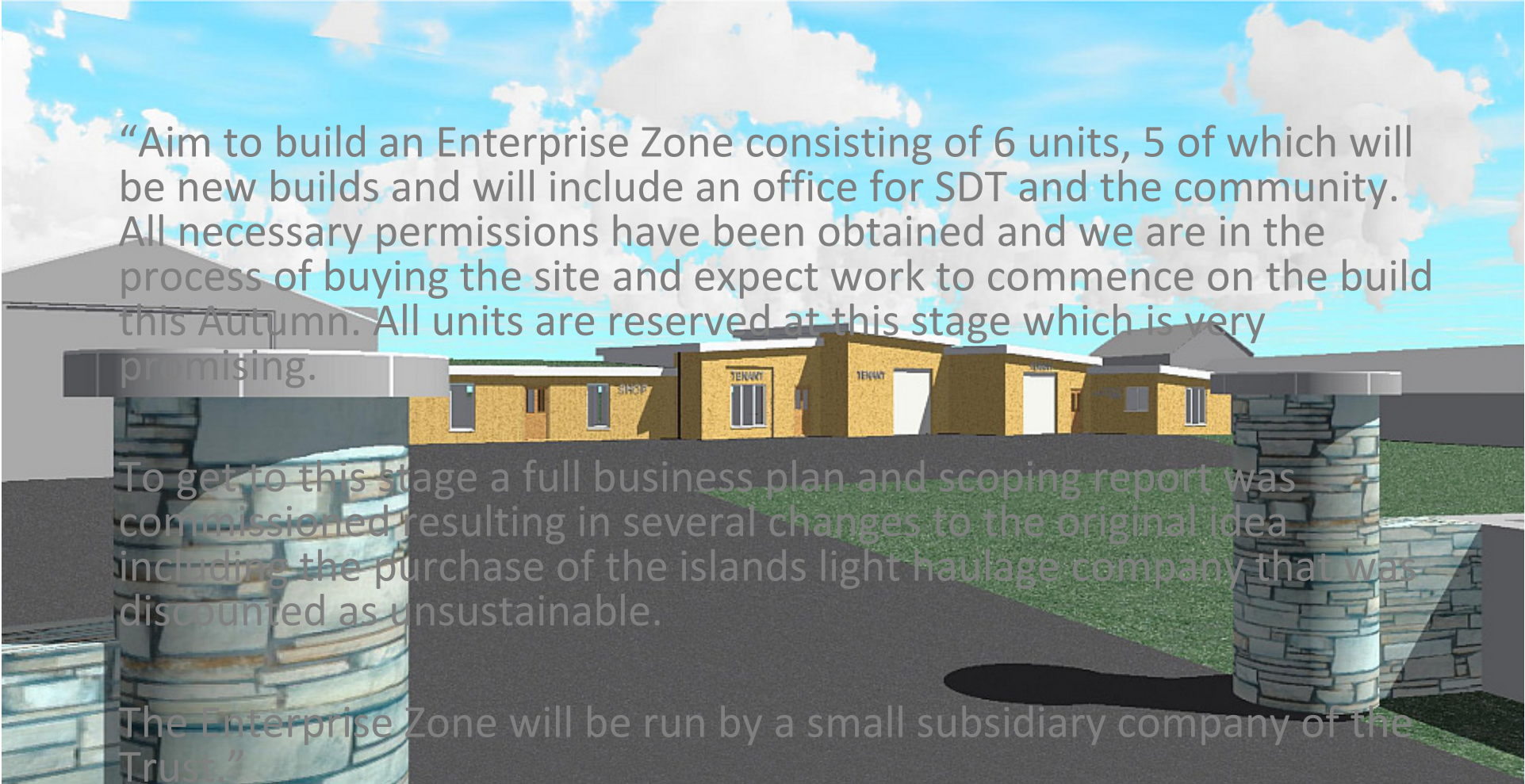
Delivering community value and investment

Affordable warmth – training for solid wall insulation

Sustainable facilities – energy efficiency for hall

Increasing skills and confidence – Enterprise Zone

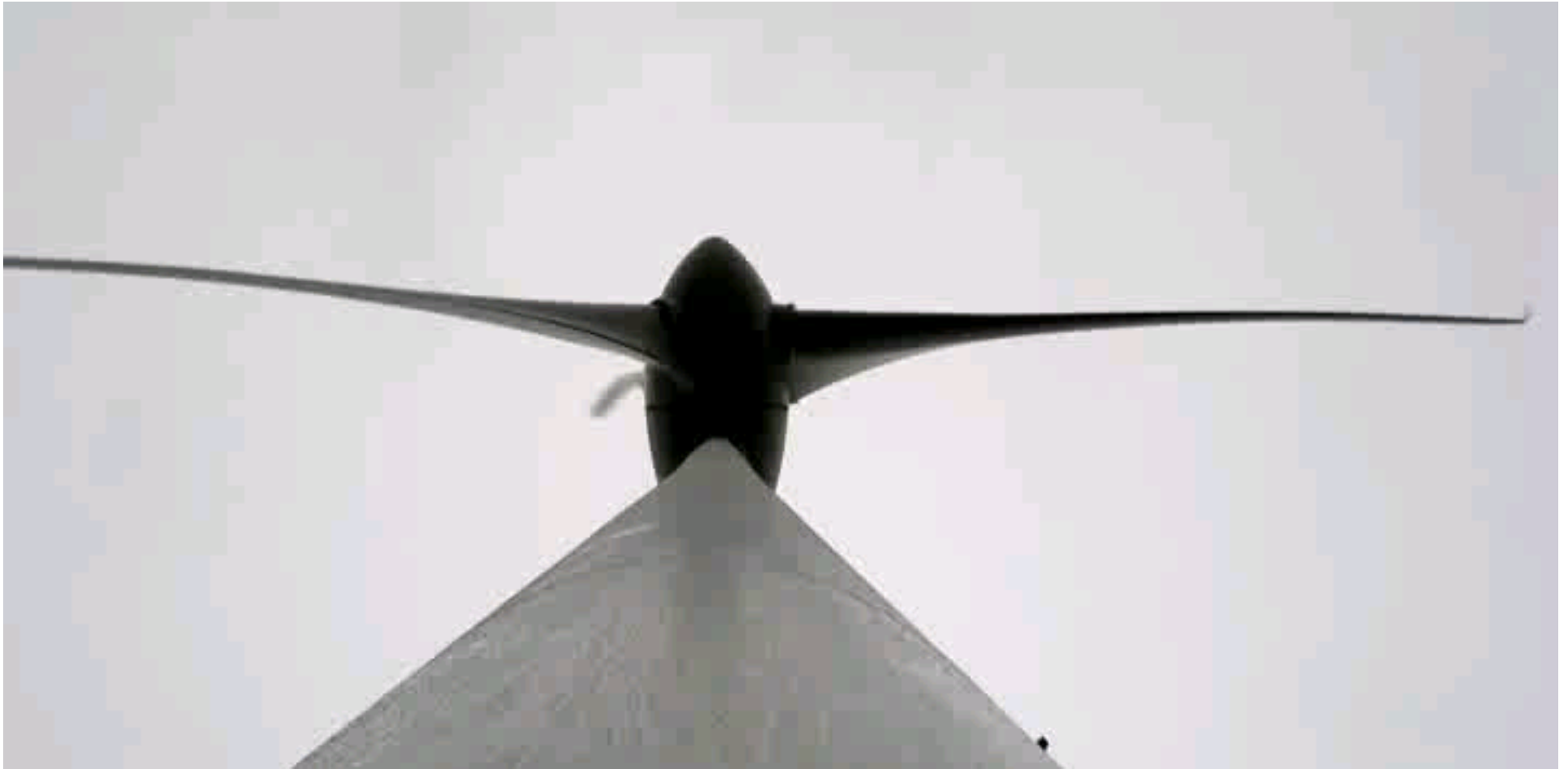
Stronsay Enterprise Zone



“Aim to build an Enterprise Zone consisting of 6 units, 5 of which will be new builds and will include an office for SDT and the community. All necessary permissions have been obtained and we are in the process of buying the site and expect work to commence on the build this Autumn. All units are reserved at this stage which is very promising.

To get to this stage a full business plan and scoping report was commissioned resulting in several changes to the original idea including the purchase of the islands light haulage company that was discounted as unsustainable.

The Enterprise Zone will be run by a small subsidiary company of the Trust.”



**Now we're
getting there**

