



ENERGISING 
COMMUNITIES

Gary Coull



Nicholas Gubbins, CES Chief Executive
Community Energy Scotland



Community Energy Scotland

Cumhachd Coimhearsnachd na h-Alba

Opportunities for Communities in Community Energy – an Overview

Nicholas Gubbins, CES Chief Executive

CES: Scotland's Community Energy Development Charity

<http://www.communityenergyscotland.org.uk>

Scottish Charity Number: SC039673

CES Mission: To

- **strengthen and empower** local communities by
- helping them to **own, control and benefit** from their local renewable energy resources,
- **control and reduce** their energy costs,
- **regenerate** their communities and
- play their part in the **low carbon** transition.
- Scottish Charity, voluntary board, community group membership (about 400)

Outline

What is Community Energy?

The Policy & Incentive Context Now

The Big (and small) Picture

Building Community Capacity

What is ‘community energy?’

- Organised community-based groups
 - Sharing of benefits
- Focus on social and env outcomes: not private financial gain

Reducing energy use
Managing energy better
Generating & selling energy
Using local energy, locally
Local ownership, local finance

Reducing energy use

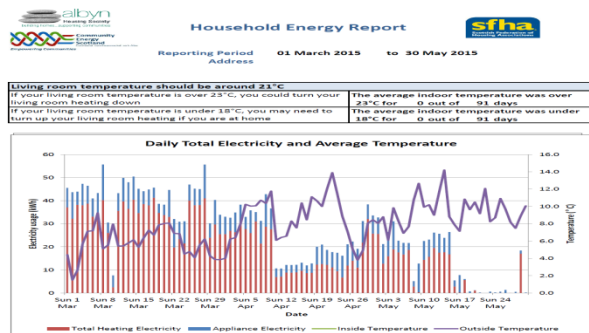
Energy Efficiency

Eriskay hall



Managing energy better

- Applecross household energy reports



This graph shows the electricity consumption for each day over the past quarter as a bar chart - the red bar shows electricity used for heating and the blue bar electricity used for other electrical appliances.

Average Inside Temperature (green) and Average Outside Temperature (purple) each day are shown as line graphs.



Generating energy



Tarbert, Harris



Tiree

Micro-generation

Solar Water heating



OHA - Orkney



Sir E Scott School, Tarbert



Wind 2 Heat – Unst & Tiree





Westray



Tiree



Corrimony Windfarm

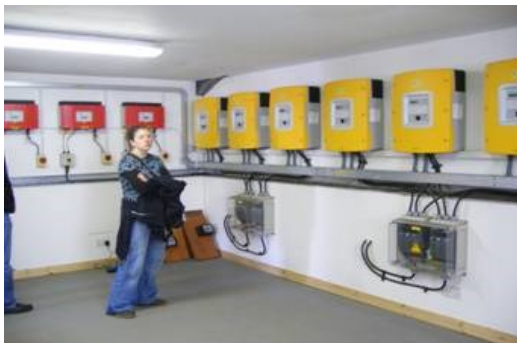
Soirbheas
Investing in the communities of Glen Urquhart & Strathglass

Using local energy, locally

KEW
DEVELOPMENT

Heat Smart Orkney





Isle of Eigg – Eigg Electric

Local ownership – local finance



Tiree
Development
Trust

315 people 60% vote
(1528)
No 16.5%
Yes 43.5%
(1503, 2 more votes)





FiT....

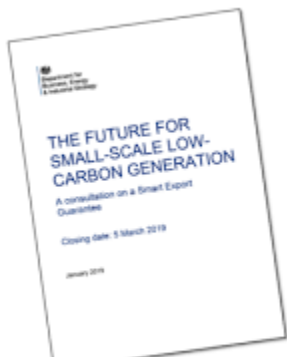
ROCs...

CfDs....

Grants....

Grid....

The policy and incentive context now



Smart Export Guarantee

The future of small-scale low-carbon generation

The Studio, Glasgow
7 February 2019



Scottish Energy Strategy: The future of energy in Scotland



‘Open networks’





Scottish Government
Riaghaltas na h-Alba
gov.scot



CARES Enablement Grant – up to £25k

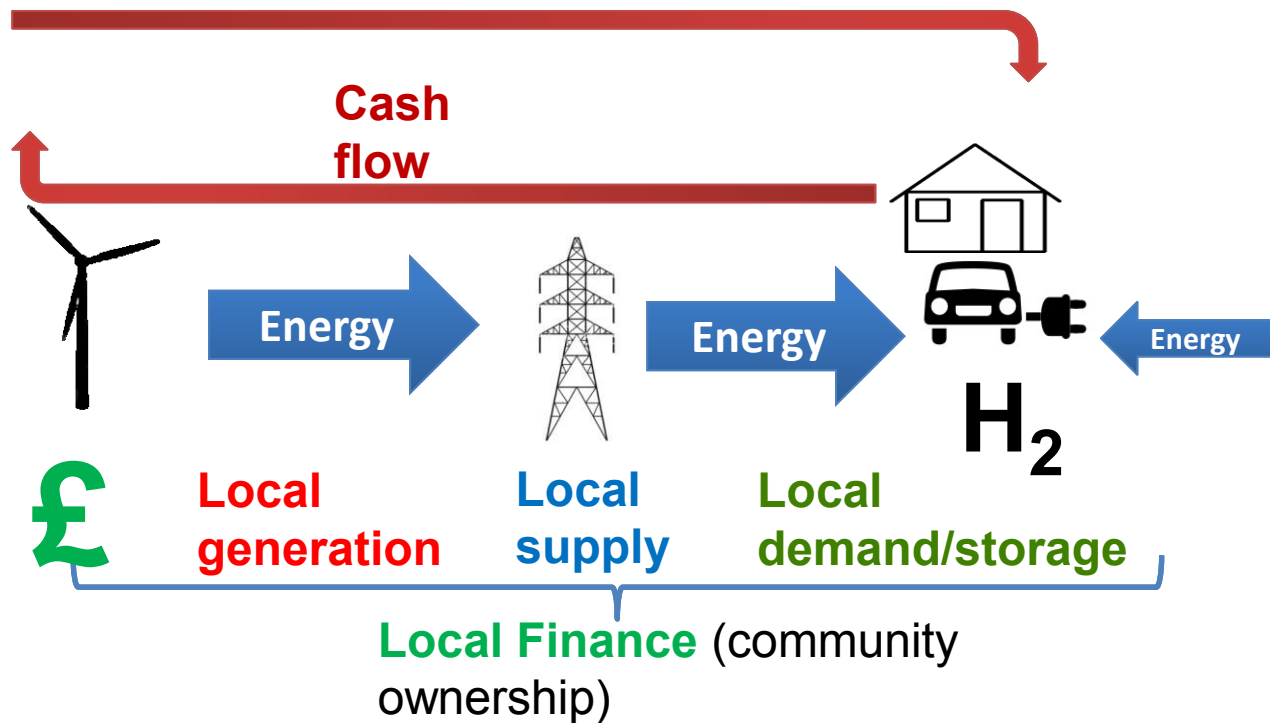
CARES Development Loan – up to £150k

CARES Innovation Grant – up to £150k
(rounds only)

Shared Ownership support

“We have set an ambitious target: to install and complete 1 gigawatt worth of community and locally owned projects by 2020, with a further additional 1 gigawatt targeted for 2030.”

The Big (small) Picture



Transmission

Smart appliances

Smart appliances can support consumers to reduce their peak consumption. They also illustrate an effect similar to direct load control. Battery storage has the potential to enable consumers to avoid peak consumption almost entirely.





Building Capacity – CES' Community Energy Futures Programme

Workshop Sessions

Community energy futures

- Intro to Energy system changes
- New options for Community Energy

Smart homes and buildings

- Smart meters
- Smart controls
- Smart appliances
- Flexing domestic demand

Low carbon transport

- Electric vehicles
- Hydrogen vehicles
- Community vehicles and shared travel

Smart networks

- Grid constraints
- Active Network Management
- Linking demand and generation

Making it happen

- Identifying community priorities
- Creating an energy project strategy and plan

Individual Support

Finding Out Your Needs,
Tailoring the Sessions

Consultation Event,
Research & Developing
Ideas

Funding Options & Where
Next....



Elgin Energy solar farm, Errol, Perthshire

“Massive solar farm in Moray will be Scotland’s biggest..”

Elgin Energy – 50MW



Community Energy Scotland

Cumhachd Coimhearsnachd na h-Alba

Nicholas Gubbins
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Community Energy Scotland
Highlands and Islands Social Enterprise Zone
67a Castle Street
Inverness
IV23DU

nicholas.gubbins@communityenergyscotland.org.uk

<http://www.communityenergyscotland.org.uk>

Scottish Charity Number: SC039673



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Donald Boyd

Huntly & District Development Trust



Our Community Energy Journey

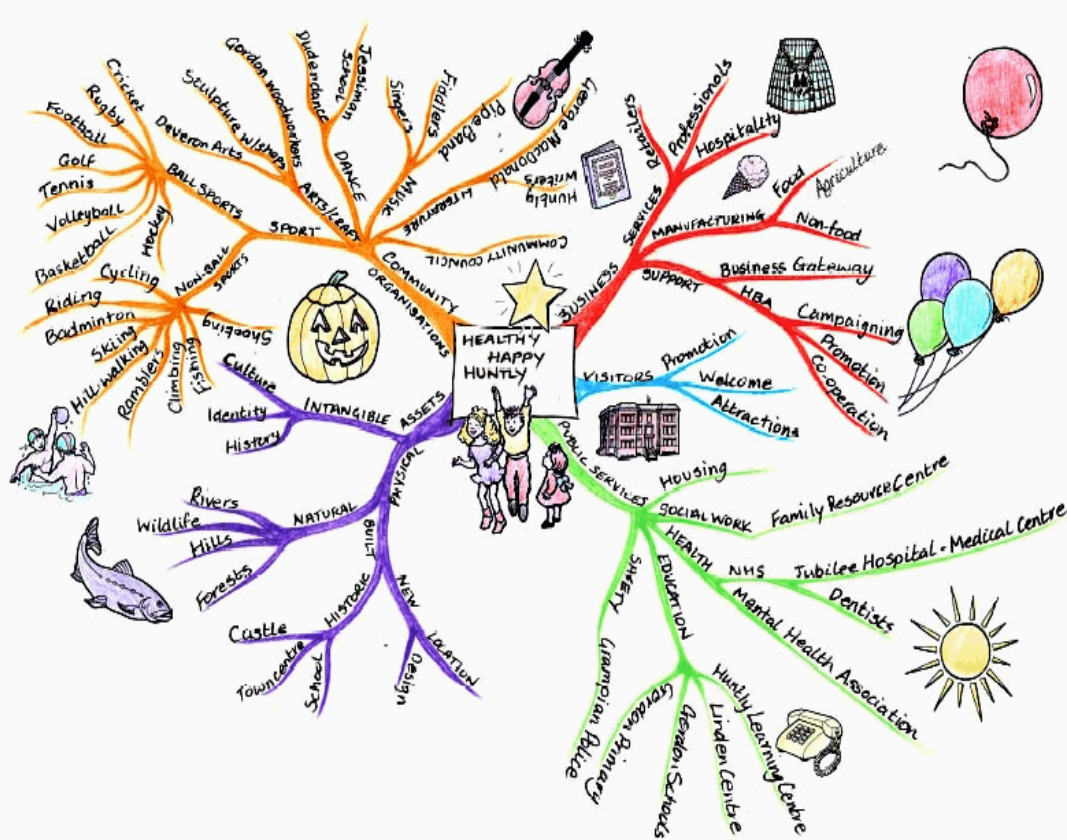
Donald Boyd, General Manager
Huntly & District Development Trust

Moray Energising Communities Conference, May 3rd 2019

Scottish Land Fund
Ionmhas Fearainn Na H-Alba



“Working with others to build a resilient, inclusive, enterprising community capable of dealing with ongoing change.”



Back to your future



ATP Huntly has helped develop and deliver projects to make Huntly's 2020 vision a reality. These projects, some of which are shown here, could not have happened without the active involvement and goodwill of numerous partners. We are now looking for a way to keep the momentum going in a new form – to be decided by you.

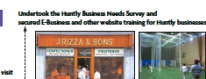


COLLECT & SAVE

Acted as intermediary between the town and the 'Collect & Save' scheme



Organised street scene clean-up operation



Helped arrange the visit of the Highlanders Regiment to Huntly

Undertook the Huntly Business Needs Survey and second (Business and other) visits training for Huntly businesses



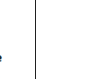
Implemented the Huntly Shop Enhancement Scheme



Co-funded the Openway Cam at Huntly Heritage Walkway



Brought a national town centre seminar to Huntly



Assisted the Christmas Lights Appeal Group



Working with Gordon Highlanders Museum on a Huntly event for Remembrance 2008



Investigating a loyalty scheme to encourage local shopping



Linking with Dufftown and Hunt for joint promotion of the whole area



Working with the Tour of the Islands Cycling Project

WHO'S WHO...

ATP Huntly is all of us who live, work in or visit the town of Huntly and its hinterland. At its heart is the ATP Huntly steering group which makes sure that ATP Huntly delivers what you asked for.

- DEBORAH MARR: MARR AREA MANAGER, ELLENDALE AND CHAIR, SCOTTLAND AND MARR AREA (WILKIE JONES)
- HEARTY COMMUNITY: HEARTY COMMUNITY
- JUDITH BULLY: MARR AREA PARTNER, GUTHRIE
- WENDY HARRIS: COMMUNITY LIAISON
- MORRIS HUGHES: COUNCILLOR FOR 1
- PAUL LAMBERT: CHAIR, HEARTY GROUP
- ALISON BELL: GORDON ROAD & ALANAR BOB
- DAVID JENNIE: CHAIR, HEARTY 15
- JOSHUA STEW: COUNCILLOR FOR 1
- RICHARD STEW: COUNCILLOR FOR 1
- JOSHUA STEW: ATP HEARTY TEAM

LOOKING AHEAD...

ATP Huntly ends in December 2008. Most people regard it as a success for the following five reasons:

- It is a full-time organisation
- It has geographic focus on Huntly
- It works to a vision and project plan
- It has funds to make things happen
- It employs someone whose job it is to 'shout for Huntly'

Based on these views, the ATP Huntly steering group has developed a proposal to keep ATP-type work going in Huntly...

Where we've come from – the start of our journey

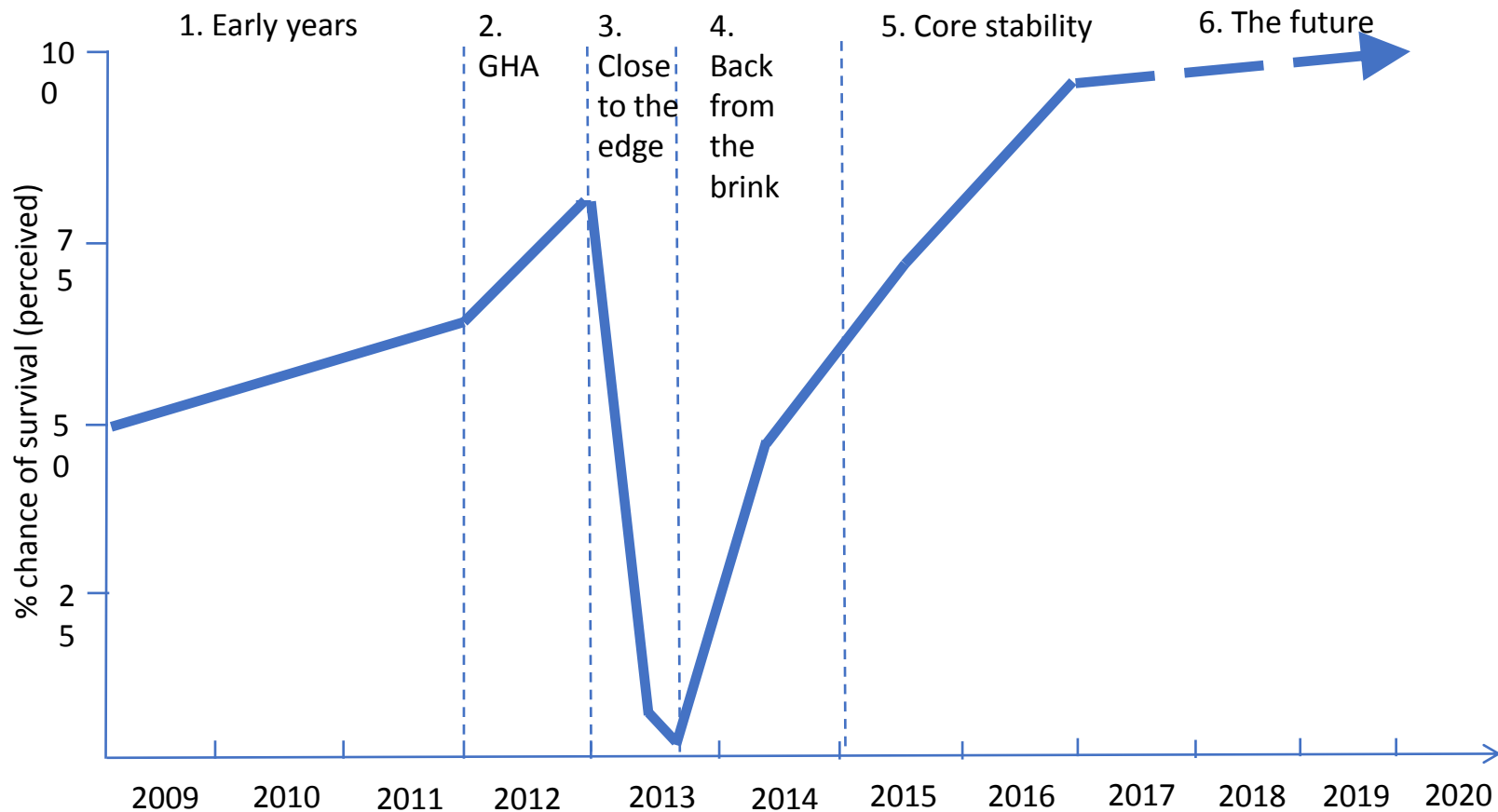
efficiency | quality | accountability

Local Government Finance and Demand 2009/10 - 2016/17 (% real terms)

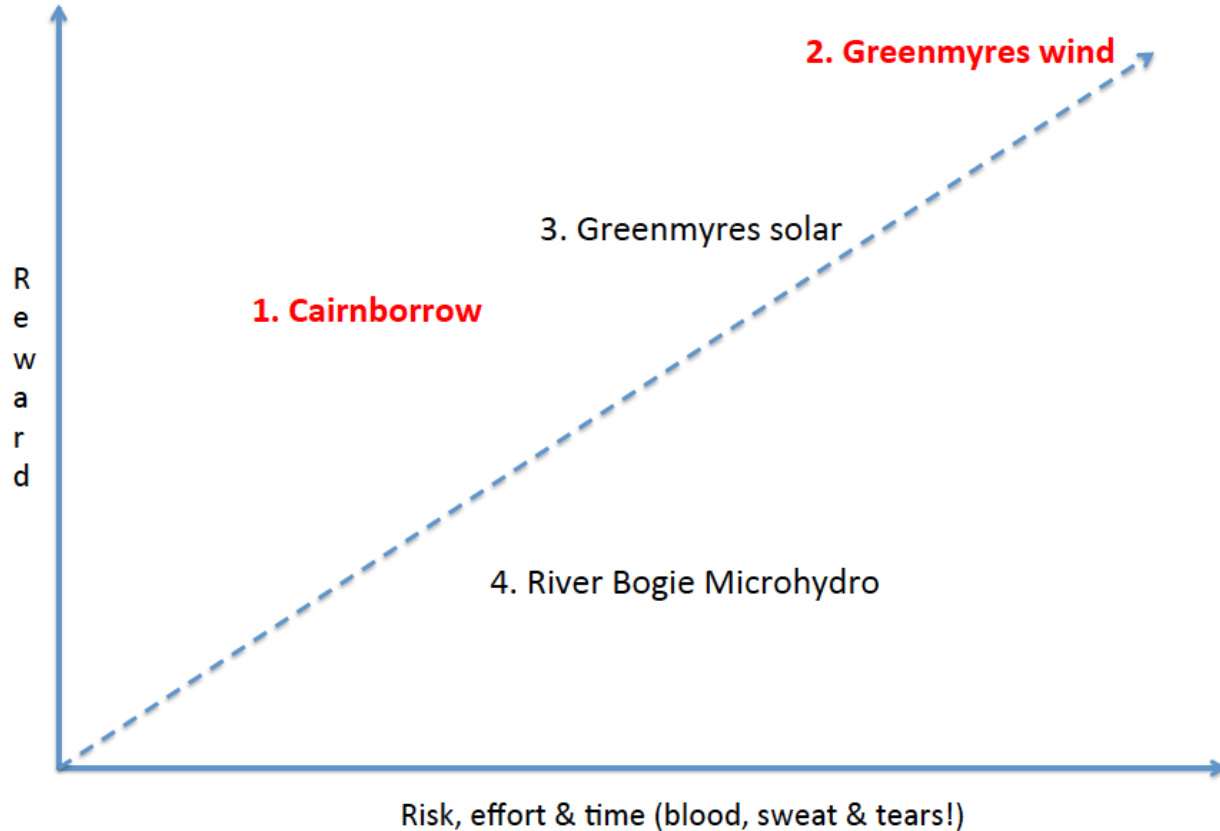


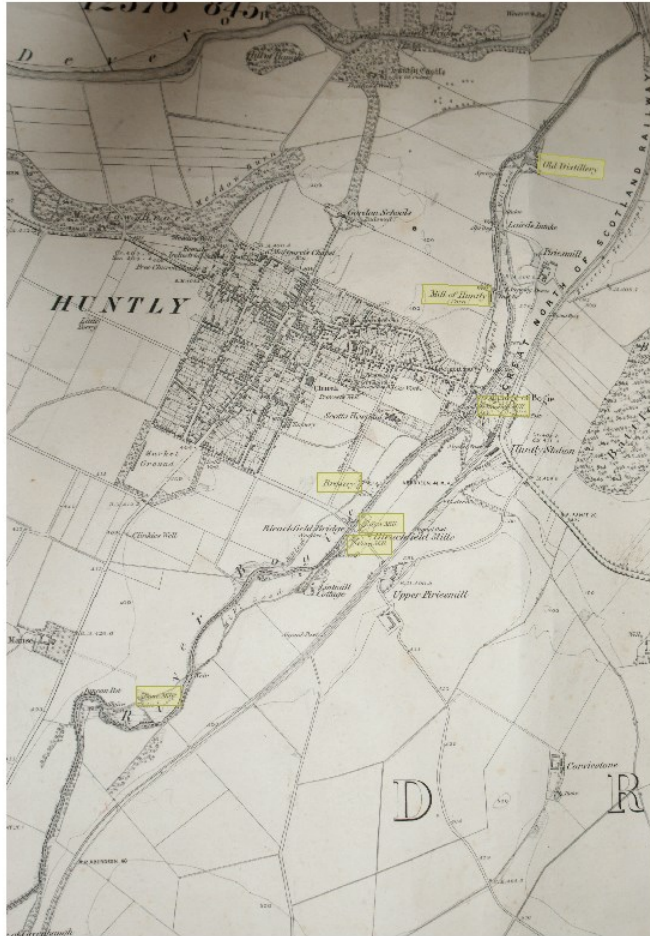
Post budget 2012

The not always smooth path....



HDDT Renewable Energy Projects

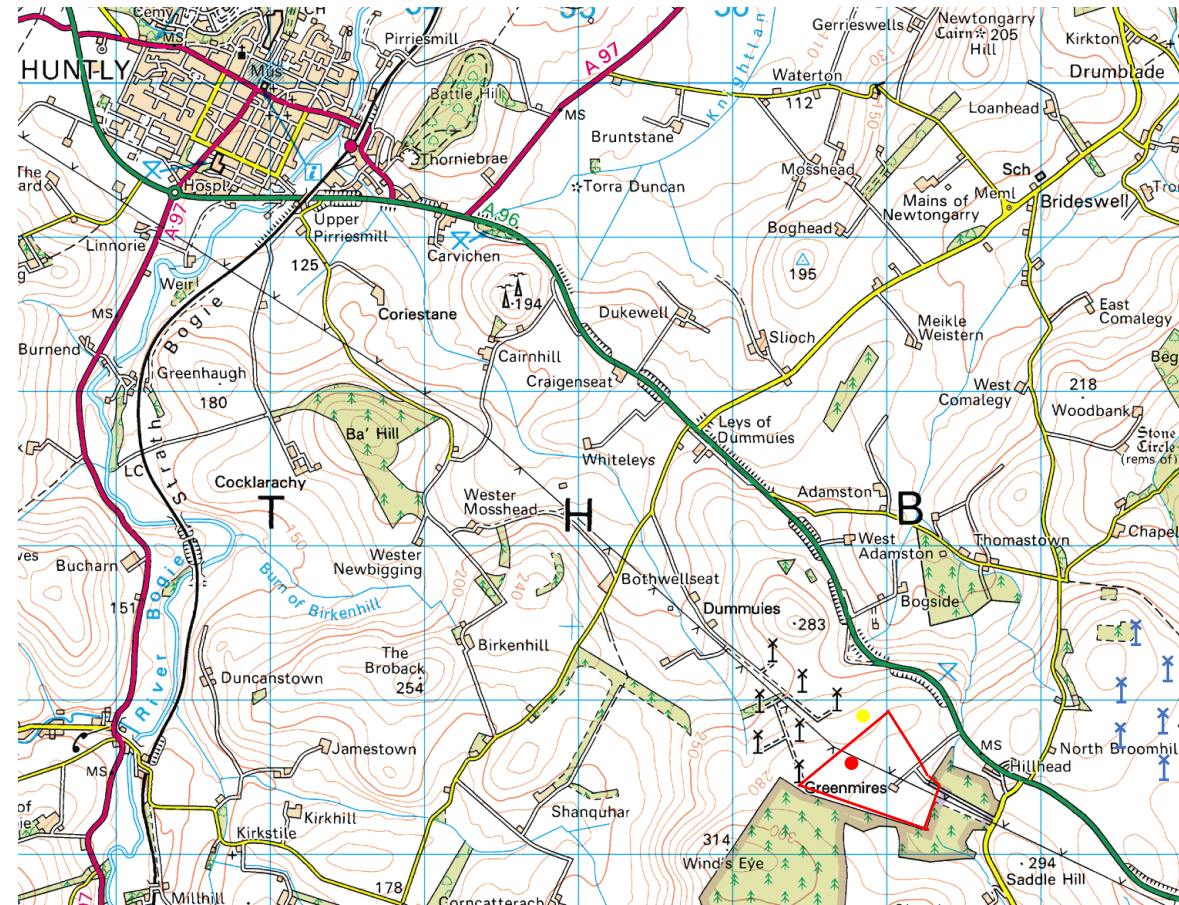




Cul-de-sacs en route....



The Turning Point....





Parish Boundaries within AB54



Printed on: 08/06/2011

Aberdeenshire Council, Woodhill House, Westburn Road, Aberdeen AB16 5GB.



Where we are now

Assets:

- Greenmyres farm
- Greenmyres wind turbine
- Revenue streams from Cairnborrow & Wheedlemont wind farms
- 12 E-bikes
- 4 staff (2.7 FTE), 30 volunteers, inc Board, 475 members
- Growing track record
- Total net value of wind income over next 20 years ca £7,000,000
- Total net value of wind income over next 4 years ca £350,000

Liabilities:

- Loans of £500,000+ as HDDT
- Loan of £1.5 million as GRE
- Local perception?

Next destinations.....

1. Energising our community
2. Growing Greenmyres
3. Room to Roam Green Travel Hub
4. Town development
5. Walking/cycling/paths development
6. Heritage development
7. Sports & wellbeing development
8. Marketing and promoting Huntly and District
9. (Managing the organisation)







What we've learned so far...

1. Always expect the unexpected
2. Stay positive: work with what & who you've got
3. Do your groundwork – plan, feasibility study, community consultation
4. Keep an eye on what's happening in the outside world
5. Have an 'emergent strategy' – have a plan, but be flexible
6. Be brave and ready to take (calculated) risks
7. Develop a high 'yes factor': Yes we can! Yes we need help!
8. Be prepared: it all takes longer & costs more than you think
9. There is a lot of support out there – use it
10. Don't give up!



Huntly & District Development Trust

Brander Building

The Square, Huntly, AB54 8BR

donald.boyd@huntly.net

www.huntlydevelopmenttrust.org



Huntly, Scotland

Scottish Land Fund
Ionmhas Fearainn Na H-Alba





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COMMUNITIES

Michelle Howell

Team Leader Energy Investment Management

Scottish Investment Bank



Michelle Howell
Energy Investment Fund
The Scottish Investment Bank

Energising Communities
Conference, Elgin Town Hall, Friday
3rd May 2019

The Scottish Investment Bank

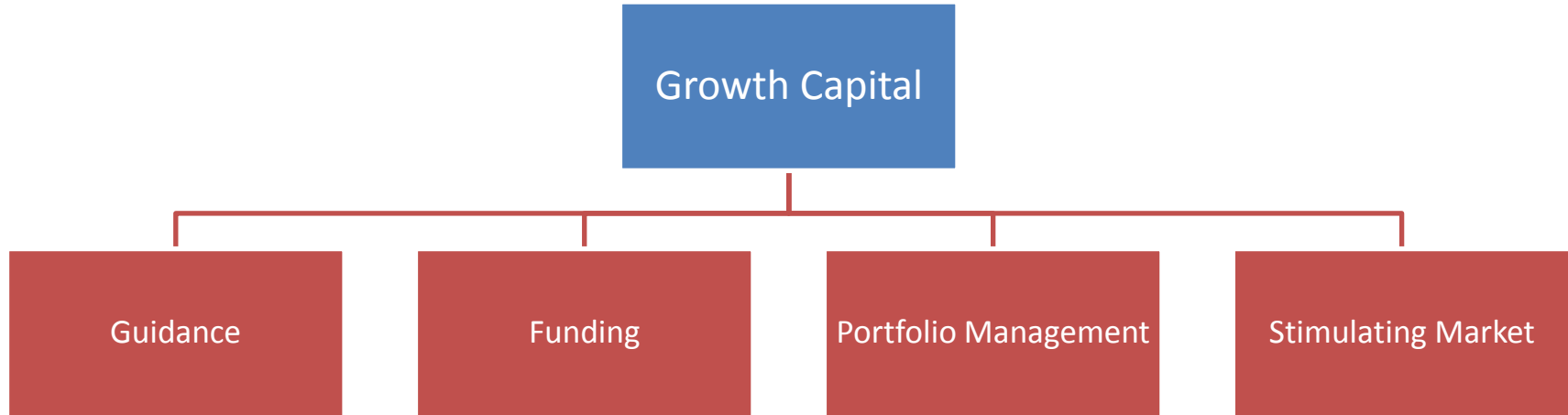
Raising finance is an essential part of company growth. SIB is the investment arm of Scottish Enterprise and operate across Scotland in partnership with HIE, we are here to help.

We do this by:-

- Building strong partnerships between companies and investors is key to securing Scotland's economic future.
- Working with business angels, angel syndicates, venture capital funds and corporate investors internationally
- Supporting growth plans by working with dynamic management teams.
- Aim is to grow Scotland's private sector funding market for early stage and expanding SMEs with growth and export potential



Supporting Growth Companies



Funds & Programmes

Internally Managed

SCOTTISH CO-INVESTMENT FUND
IV

SCOTTISH VENTURE FUND IV

ENERGY INVESTMENT FUND

SCOTTISH-GROWTH EUROPEAN CO-
INVESTMENT PROGRAMME (SEGCP)

Externally Managed

THE SCOTTISH LOAN FUND (closed
to new business)

EPIDAREX CAPITAL

LENDING CROWD

Maven UK Regional Buyout Fund

Energy Investment Fund

Energy Investment Fund


Community Energy projects

Shared Ownership – a
priority

Commercial
debt or equity

Flexible approach to fit with Developer, Community and/or
other lenders requirements

Community – Next Steps

- 
- Align your position and work together
 - Right advisors/right time/right scope
 - Engage with lenders early
 - Lender and developer relationship

Case Study – Stewart Energy

- SPV created to deliver a three turbine 2.3MW wind farm project.
- A joint venture between a local farmer and Lesmahagow Development Trust (LDT).
- REIF's provided debt directly to the SPV which secured a 25% stake in the project for LDT.
- Income to LDT may reach £3.8m which will enable the community to deliver their ambitious community plan.



Image courtesy of Stewart Energy Ltd

Case Study – Broadland and Lochgoil

- SPV created to deliver a 1.35MW Hydro scheme.
- A joint venture between Broadland Energy Ltd and Lochgoil Community Trust (LCT).
- REIF provided debt directly to the SPV which secured a 20% stake in the project for LCT.
- Income to LCT may reach £1.2m which will enable the community to deliver their ambitious community plan.



Thank You

Michelle Howell
Team Leader, Energy Investment Fund
Michelle.howell@scotent.co.uk
Tel – 0141 468 5913

www.Scottish-enterprise.com/eif



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Mark Brennan
Shared Ownership Manager
Local Energy Scotland

Mark Brennan
Shared Ownership Manager

Shared Ownership

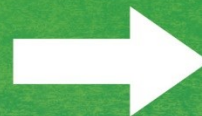
About us

**LOCAL
ENERGY
SCOTLAND**

THE SCOTTISH
GOVERNMENT'S



COMMUNITY AND
RENEWABLE
ENERGY SCHEME
(CARES)



IS DELIVERED BY:
LOCAL ENERGY
SCOTLAND

This consortium is between



LOCALENERGY.SCOT
0808 808 2288
FUNDED BY THE SCOTTISH GOVERNMENT



Shared Ownership

- What is Shared Ownership?
- The Good Practice Principles
- What SO means for Project Owners and Communities
- The SO Process
- CARES Support for SO

What is Shared Ownership?

“ - any structure which involves a community group as a **financial** partner over the lifetime of a renewable energy project.”

.... from “Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments”

The Good Practice Principles

- Investment opportunity for host plus wider community – usually defined by community council areas
- Commercial basis
- SO “models”
 - Split Ownership
 - Joint Venture (Shares/ Equity) - Regulated
 - Shared Revenue
- Legacy
- Additional to “Community Benefit”

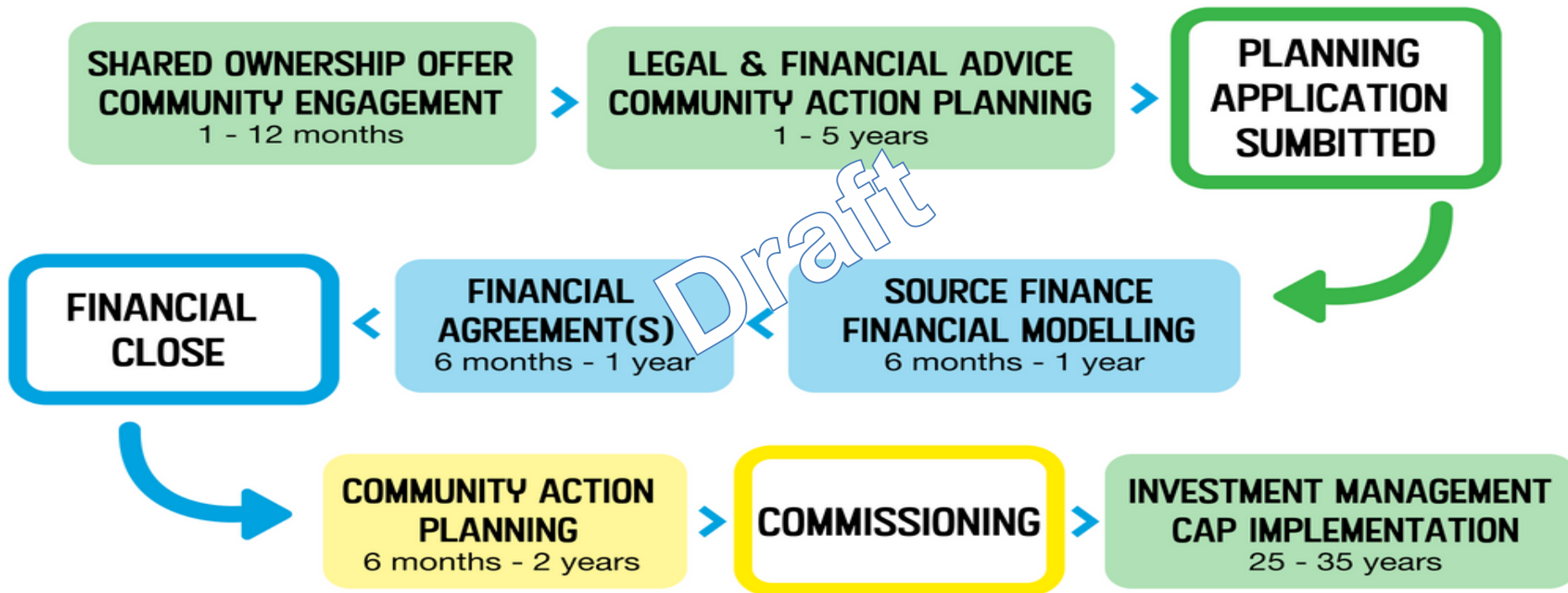
What SO means for Communities

- “Earned” Income
- Core Funding
- Sustainability
- Self Determination
- Innovation

What SO means for Project Owners

- Improved relationship with the local community
- A better understanding of the community and community development issues
- A more tailored response to local needs through Shared Ownership (and Community Benefit)
- Overall, a better project

SHARED OWNERSHIP: TYPICAL JOURNEY



SO Ambition

“Our ambition remains to ensure that, by 2020, at least half of newly consented renewable energy projects will have an element of shared ownership.

.... from “Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments”

CoLo Targets

“Shared ownership will form a key part in helping to meet our targets of 1 GW of community and locally owned energy by 2020, and 2 GW by 2030. We expect community involvement in onshore wind development to continue to play a vital role in reaching these targets”

.... from “Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments”

SHARED OWNERSHIP: CARES SUPPORT THROUGHOUT THE JOURNEY

- Development Officer support throughout the journey
- Shared Ownership Manager support throughout the journey

- Professional Advisors - legal, technical etc
- Project management
- Community engagement
- Community Action Planning

CARES
SUPPORT

CARES
TOOLKIT

- Technology options
- Business planning
- Setting up an organisation
- Project development
- Downloadable tools

ENABLEMENT
GRANT

CARES
FUNDING

- Enablement Grant
- Development Loan
- Innovation Grant
- Energy Investment Fund (SIB)

CARES
TOOLS

- Shared Ownership Indicative Financial Model
- Project Plan
- Invitation to Tender templates
- Investment Ready Tool
- Contractual templates

CONTACT US



0808 808 2288

Local Development Officers
contact details on our website



Local Energy Scotland | Energy
Saving Trust | Ocean Point 1 | 94
Ocean Drive | Edinburgh | EH6 6JH



www.localenergy.scot
info@localenergyscotland.org



@localenergysco



/localenergyscotland

Want to stay up to date with all of our latest news? Email:
info@localenergyscotland.org to sign up to our newsletter





**ENERGISING
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Nick Mackay & Andrew Smith

Force 9

Clash Gour Wind Farm Community Ownership Opportunity

Clash Gour Wind Farm

Community Shared Ownership
Opportunity

May 2019



Presentation Contents

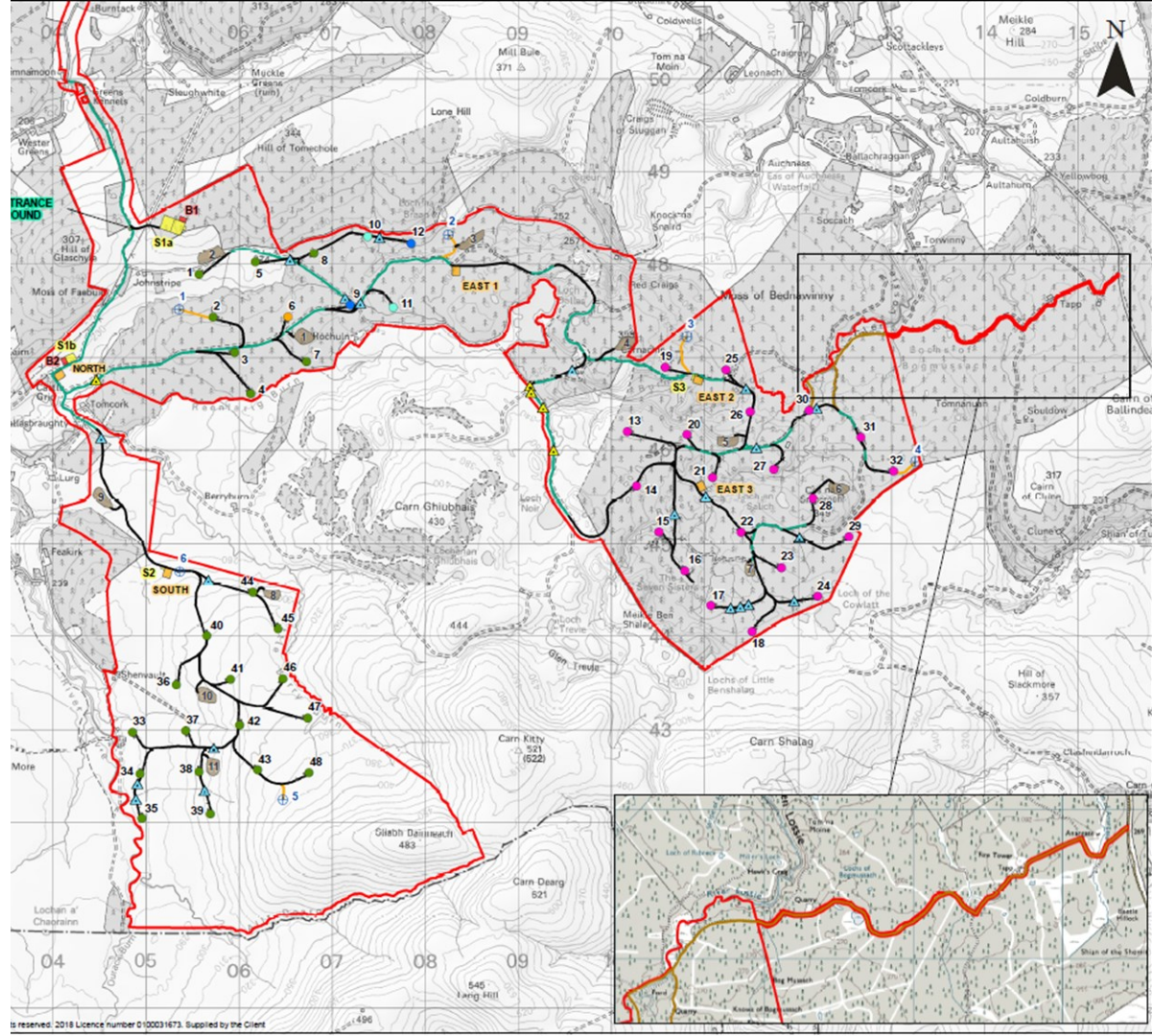
Clash Gour Wind Farm

Clash Gour Shared Ownership
Opportunity

Where are we now?

Site Location

- 10kms south of Forres
- 15kms north of Grantown
- Centered on the existing Berry Burn wind farm
- 48 turbines between 136.5m to Blade Tip and 176m to Blade Tip (with option for shorter turbines)
- Detailed consultation and design process taking account a wide range of technical, environmental and financial matters



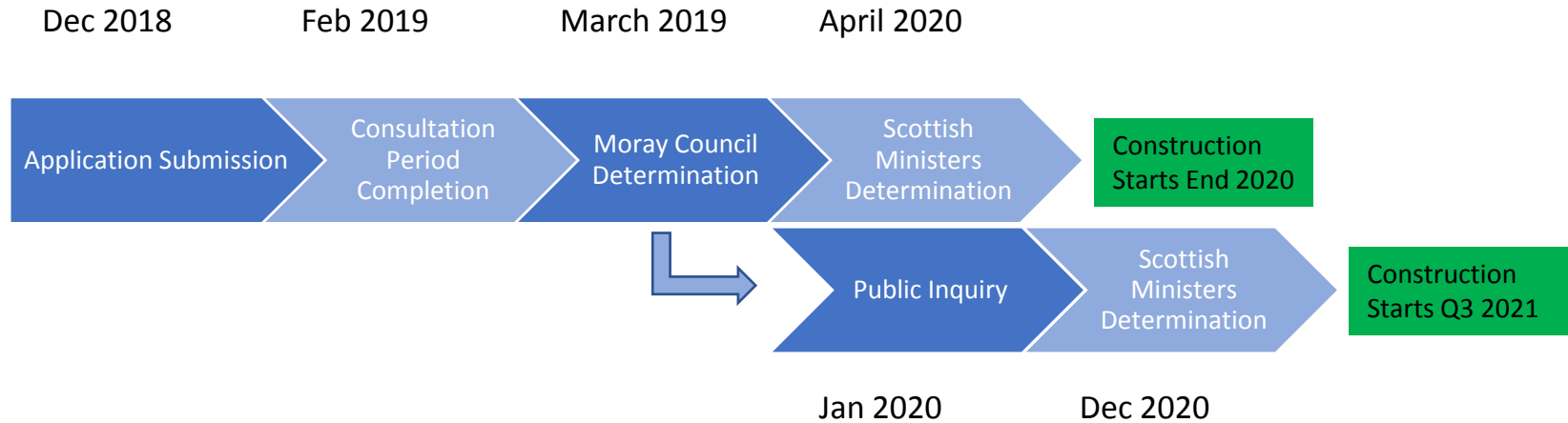
Proposed Development	Scenario B
<ul style="list-style-type: none"> • 164.2MW to 225MW • 570 – 710 GWh generation per year • 150,268 – 187,664 homes powered • Carbon Payback period 2.3 years • Could be up to 256MW 	<ul style="list-style-type: none"> • 164.2MW to 225MW • 543 – 675 GWh generation per year • 144,942 – 178,281 homes powered • Carbon Payback period 2.4 years

Construction		
Areas	Net Person Years Employment	Net GVA (£m)
Moray	391	26.7
H&I	592-820	40.7-56.7
Scotland	1,181-1,320	81.7-91.4
Operation		
Areas	Net FTE Jobs	
Moray	14-19	

Study of Community Benefits and Shared Ownership	
Topic Area	Net Additional Jobs in Moray
Environmental Focus	11-15
Local Amenities/Community Focus	6-9
Local Economy Focus	28-38
Spread of Projects	15-20

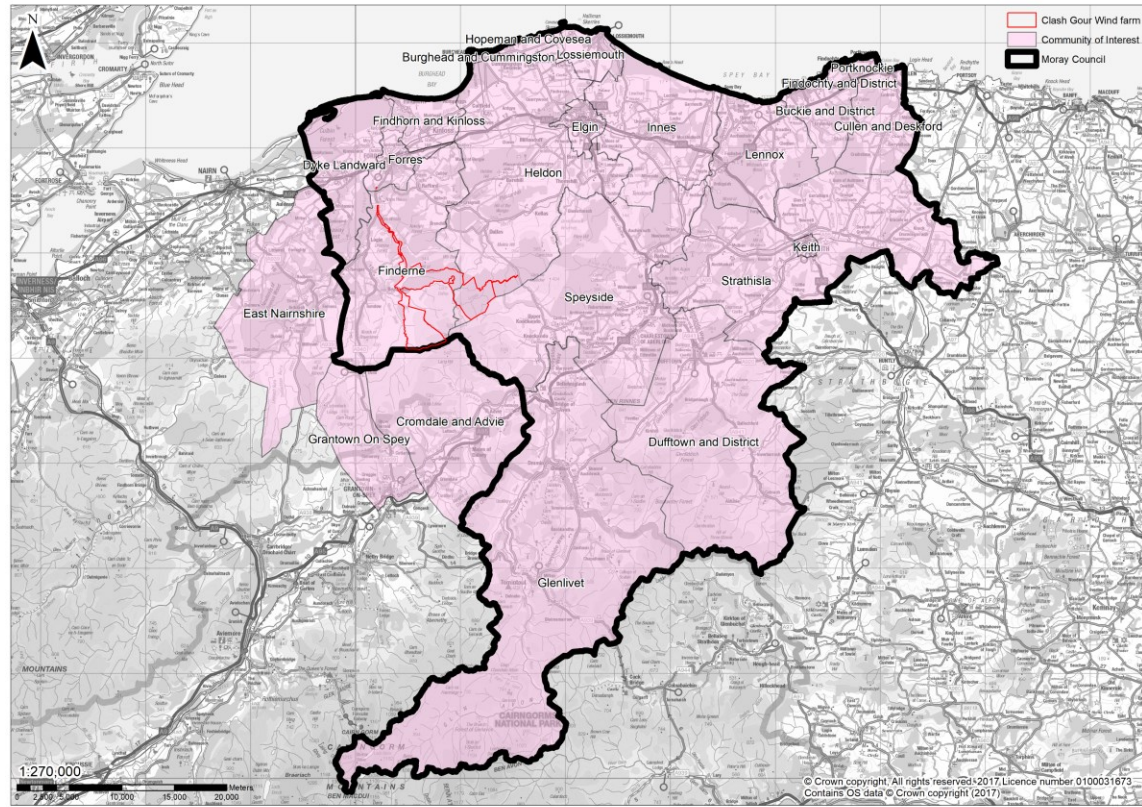
Wind Farm Benefits

Timeline

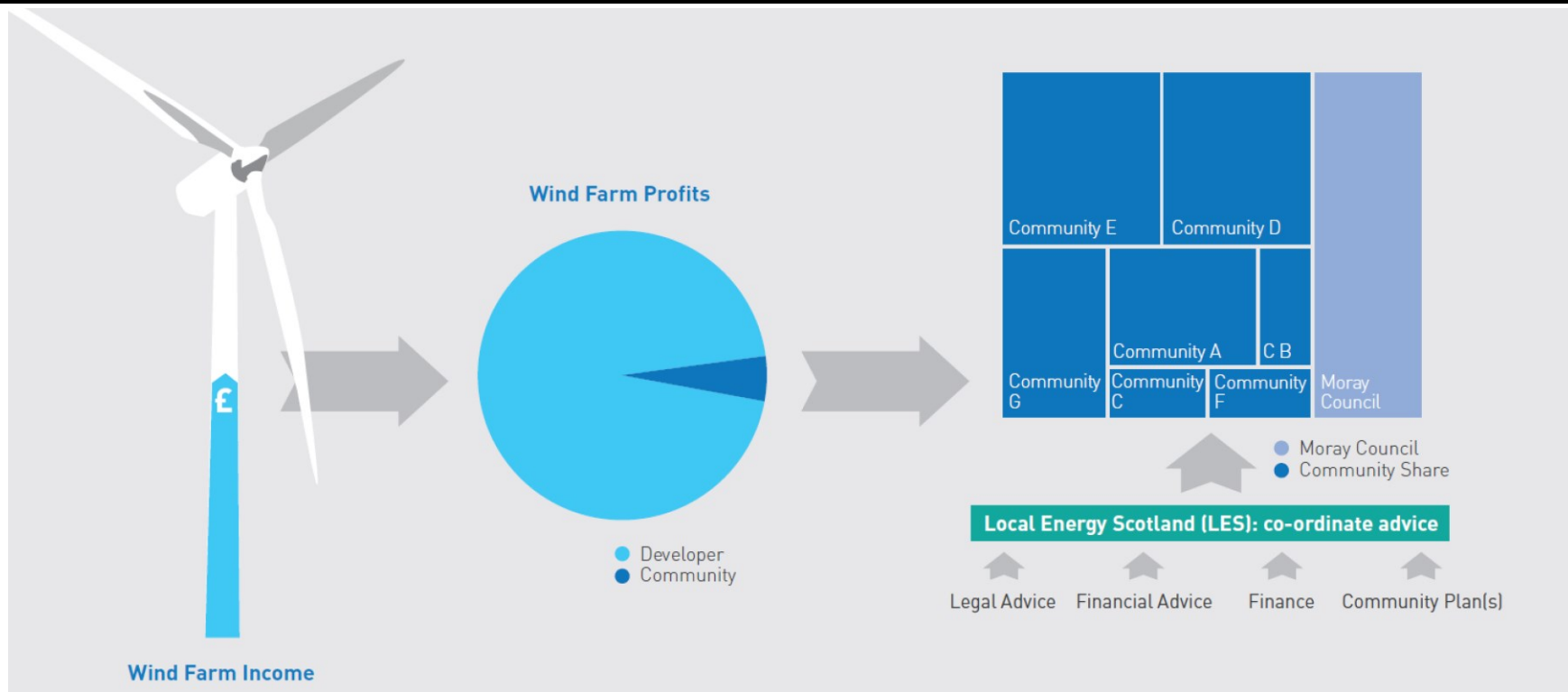


Clash Gour Wind Farm Shared Ownership Opportunity

- An inherent part of the project development
- Local Energy Scotland Involvement
- Scottish Government target: 50% of all renewable energy projects to have a credible element of community ownership by 2020



Shared Ownership



Shared Ownership Timeline

Timeline

	Prior to Planning Application	From planning application to determination	After Planning Consent	Project Construction phase	Post Construction
Developer key activity	Consultation	Further consultation	Provides detailed information & draft Revenue Share Agreement	Ongoing dialogue with interested communities	Provide final Cost Statement
Communities suggested key activities	Community Groups Look over draft MoU / support from Local Energy Scotland	Information gathering and independent advice Develop Community Plans? Support development?	Investigation of potential funding sources	Formation of single Community Trust Company to represent all participating community groups	Decision to invest (or not) If yes, finalise financial arrangements and sign Revenue Sharing Agreement

Key Issues raised by Communities



- (How) can the risks be managed?
 - All investment carries a level of risk
 - Specialist independent advice prior to any final decision to invest
 - Investment post construction
- How will communities raise the money?
 - Key issue is accessing funding at sufficiently competitive rates
 - Local Energy Scotland and The Energy Investment Fund are there to help

Clash Gour Wind Farm

Community Shared Ownership
Opportunity

May 2019





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John Garson

Rousay, Egilsay & Wyre DT

Heat Smart Scotland



*From the community
For the community*

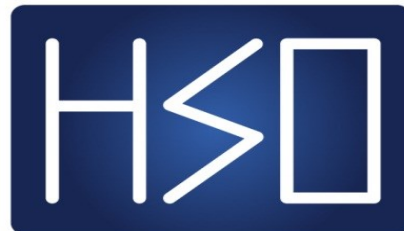
Rousay, Egilsay & Wyre Development Trust

REWIRED Ltd



Meeting our current and future needs

Heat Smart Orkney Ltd

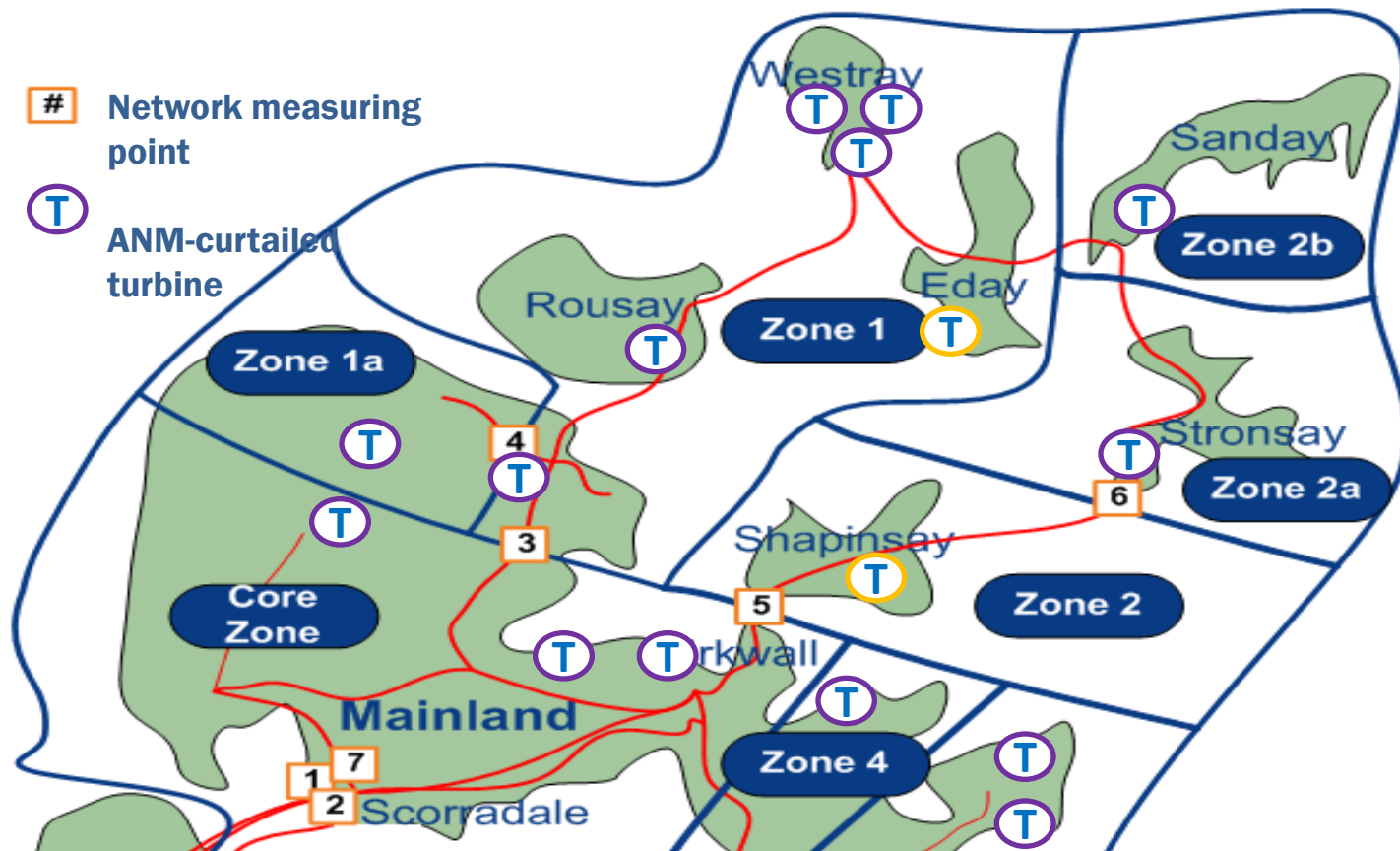


Heat Smart Orkney Ltd

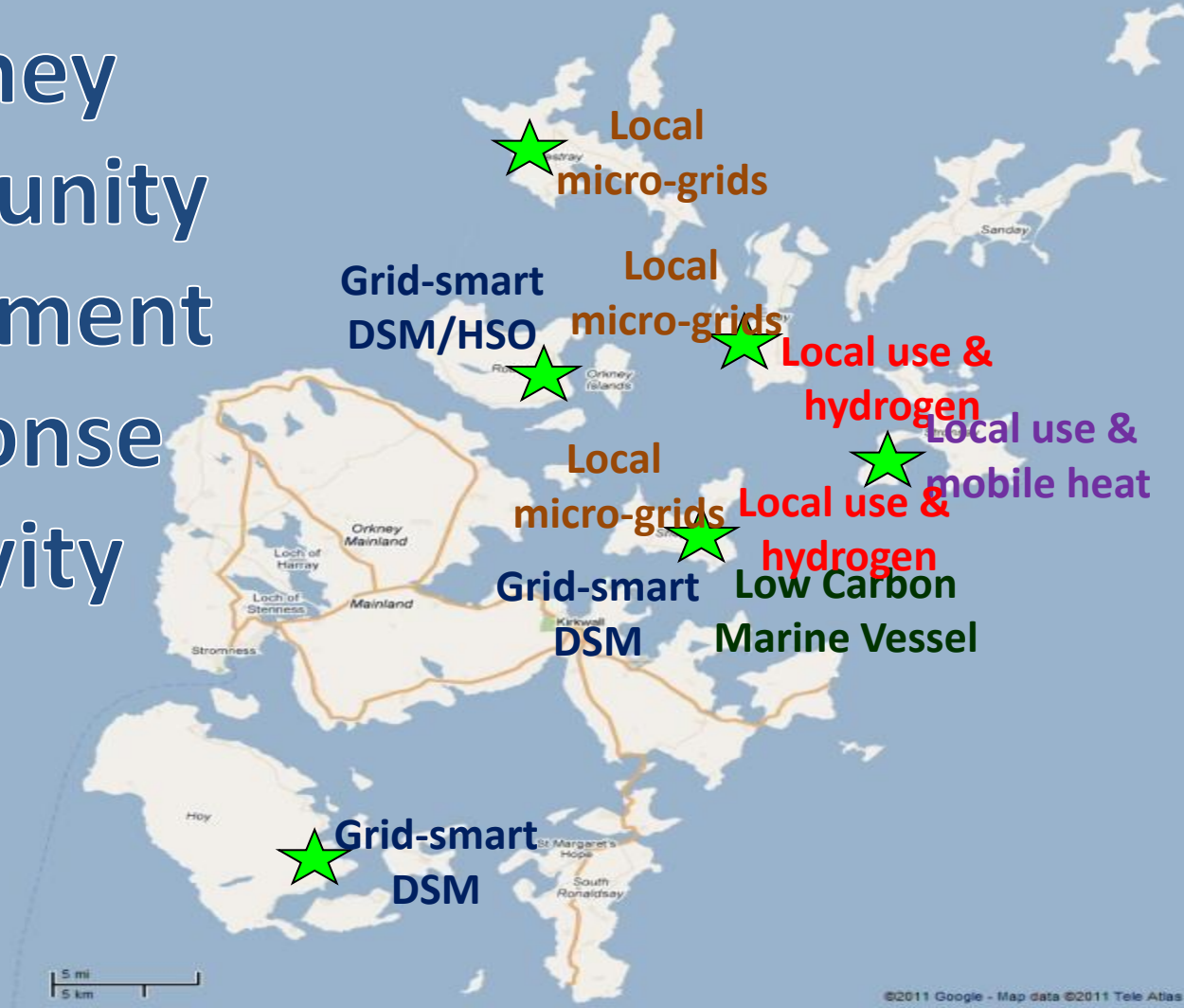
Productivity vs Curtailment

- Productivity – sale of FITs can be as low as £50K or as high as £280K (good years are rare)
- Curtailment – SSE agreement is maximum of 7%
- 37% is our target figure for curtailment
- Curtailment has been over 50% in the past
- Orkney generates 140% of the power the islands use.
- Over 50% of all homes are in Fuel Poverty & over 80% of retired people are in Fuel Poverty.

Orkney Smart Grid zones



Orkney Community Curtailment Response Activity



Heat Smart Orkney

Building intelligent community power

Funded £1.2M by Scottish Government
under the Local Energy Challenge Fund

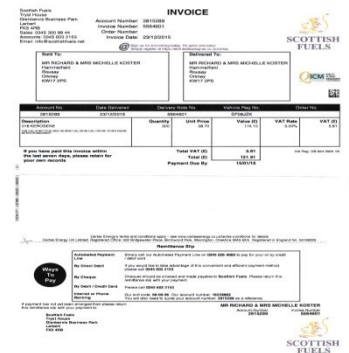


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#



Heat Smart Orkney Homes are here



Analysis and technical trials conducted over the last 5 years



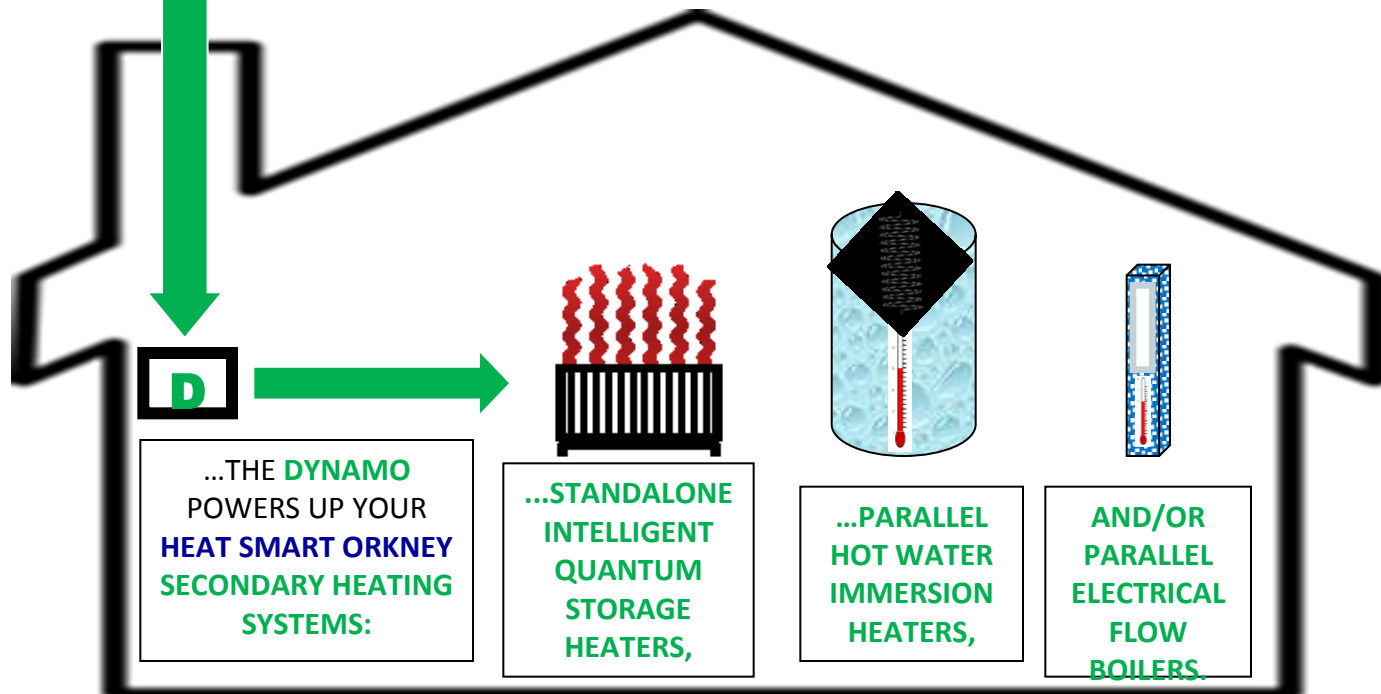
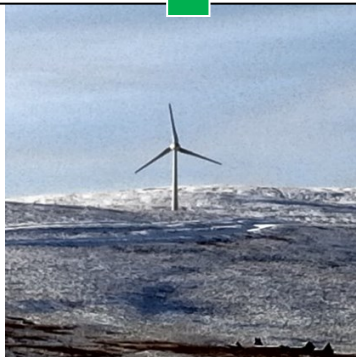
...WHICH SENDS A SIGNAL
TO A “**DYNAMO**”
INSTALLED IN YOUR
HOME...



Heat Smart Orkney Ltd

Diverting unused renewable energy into affordable heating

THE **TURBINE** SENDS A SIGNAL
TO A “CLOUD-BASED CONTROL
PLATFORM” RIGHT BEFORE IT
IS SET TO POWER DOWN DUE
TO TOO MUCH ENERGY BEING
GENERATED...





Heat Smart Orkney Ltd

Legacy:

-  ***Protecting and increasing value for our turbine***
-  ***One of the first local supply models UK-wide***
-  ***Community-owned***
-  ***Self sustaining...***
-  ***A Community solution***
-  ***Helping the private sector***
-  ***A model for wider challenges***

How REW DT has used Turbine Funding

Since 2011 the REW DT has used funds generated from the 900kW turbine to...

- Offer various Grant Awards for residents
- Supporting Here2Help for older residents
- Installation of satellite dishes on the dark side of the island
- Heritage
- Maintaining island services e.g. shop fuel pumps etc.
- THAW & Affordable warmth project
- Allotments & Electric Vehicle Hire car
- 6kW turbines for all three islands

New Projects for 2019/20 include...

- Pier Restaurant purchase for a Community Hub
- Trumland land purchase
- New Housing development



*From the community
For the community*

Thank You





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COMMUNITIES

Gary Coull

Energising Communities in Moray