An energy efficient council in a low carbon region

Councillor Archie Dryburgh
14 March 2019





'Neither a wise man nor a brave man lies down on the tracks of history to wait for the train of the future to run over him.'

- Dwight David Eisenhower

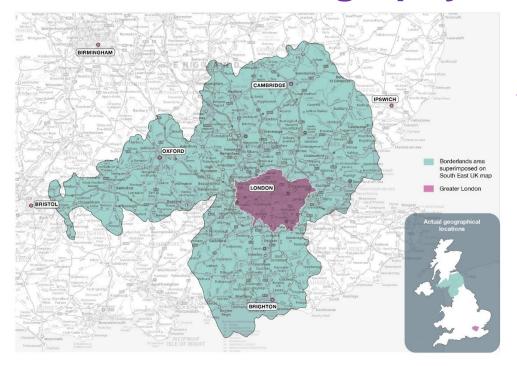


Our Borderlands Geography

1 City

19 towns over 10,000 people

80 towns between 1,000 – 5,000 people



Population just under 1.1 million

Land area covering 23,000km²

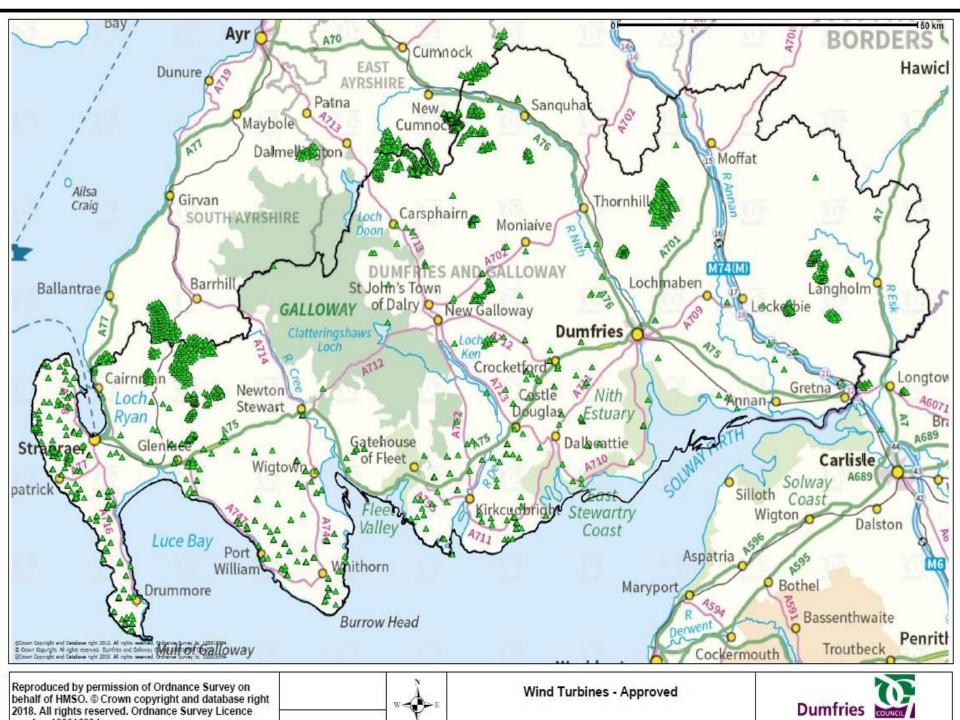
Larger than Wales



Dumfries and Galloway Region

- 6,427 sq km- 8.2% of the land area in Scotland
- 4,200km of roads- 3rd largest Roads Authority
- Large Council Fleet
- 3 major train lines- West Coast line (Lockerbie), Glasgow to Stranraer, Glasgow- Carlisle- Newcastle
- 7 Rail stations, Stranraer, Lockerbie, Kirkconnel, Sanquhar, Dumfries, Annan, Gretna
- Ferries from Ireland to Cairnryan and beyond
- Significant coastline
- 150,000 people, 47,000 Households, 79 communities
- 1500 Council Buildings across the region





Opportunity to do things differently

- 'Think Global Act Local' Patrick Geddes
- Local solutions, local communities, resilience
- Stevens Croft example
- Lockerbie
- Heat and Power
- Wood chips from local business





Council Priorities

- Building our Economy
 - Well skilled people
 - Invest in key infrastructure- low carbon street lighting
 - Create a zero carbon region
 - Provide an attractive location to do business
- Provide the Best start of life for our children
 - Ensure our children have access to quality learning in 21st century facilities
- Protect our most vulnerable people
 - Combat Fuel poverty
- Be an inclusive Council

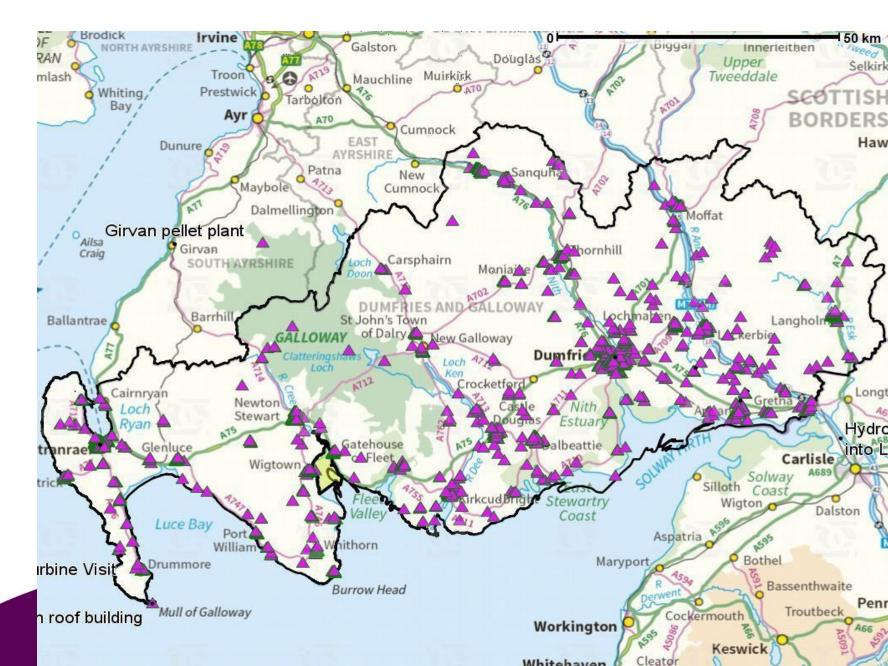


Dumfries and Galloway Energy Efficiency

- Increased onsite production of power
- Desire to use local energy sources
- Need to ensure resilient local supply chains
- Focus on demonstrating proven low carbon technology – whilst supporting innovation as an economic opportunity
- Embedding a low carbon approach in logisticsmove to a lower carbon fleet



Council Assets



Council Use

Year	Electricity (kWh)	On-site generated electricity (kWh)	Gas (kWh	Calculated emissions (tCO2)
2014/2015	37,210,886	1,464,598	40,127,603	27,997
2017/2018	33,548,036	1,511,952	36,169,512	19,997
reduced consumption	3,662,850		3,958,091	8,000
% reduced consumption	10%		10%	29%



Dumfries and Galloway Energy Opportunity

- 1.6GW installed capacity- Transmission (0.6MW)
- 90 MW of distributed generation
- An additional 200 MW of generation- aim to use an Active Management Network
- Planned reinforcement
- Potential scale projects
 - Glenmuckloch Wind Farm an 8 turbine 25.6 megawatt (MW) wind farm
 - Glenmuckloch Pumped Hydro Storage 400MW
 - North Lowther Energy Initiative (NLEI) a proposed 35 turbine wind farm with an installed capacity of 147MW
 - Chapelcross
 - Pipeline Projects



Opportunity to do things differently

- Demonstrate Low Carbon Leadership,
 Decarbonisation and real Community Benefits
- Energy as a form of investment
- Chapelcross opportunity:
 - Waste into community value





Master Planning

Starting point is the baseline of information and strategic planning already available

Ensure strategic fit with the carbon reduction, climate change and clean energy strategies and policies Scottish and UK Government policies

Borderlands Energy Master Planning will address

- Business growth and Productivity
- Addressing fuel poverty
- Capitalising on our assets
- Green transport



'If you always do what you've always done You will always get what you've always got' - Henry Ford

