

Community Energy is Smart Sustainable Energy

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Building for zero carbon by 2050 symposium

University of Otago Wellington Summer School

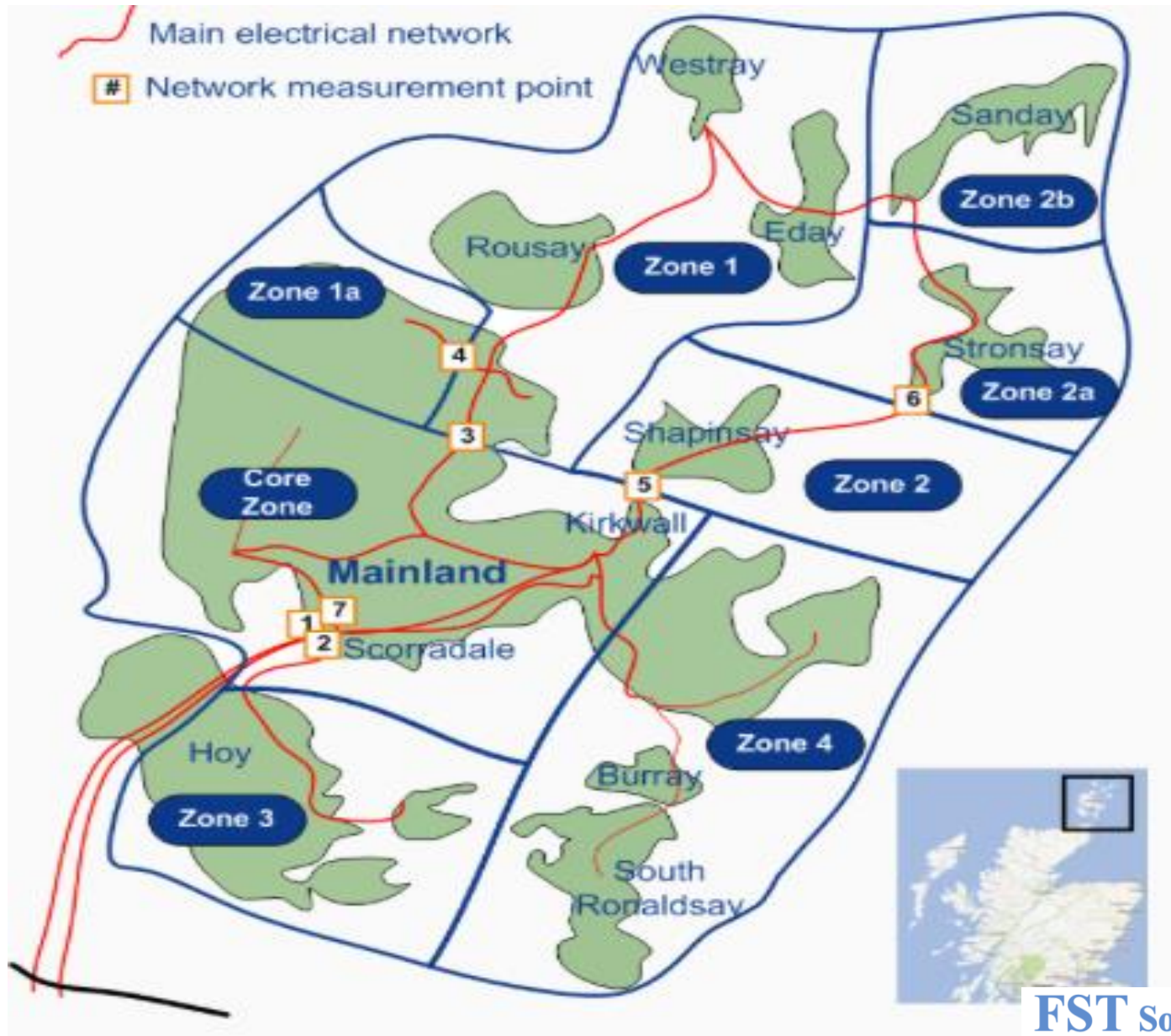
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FST Solar Technik
design deliver empower

Key Messages

- Local community energy projects are pivotal for community development & resilience
- Innovative community and local government actions are essential leadership activities
- Community owned “smart grids” are the glue facilitating communities and energy users to do things better & cheaper
- Climate change mitigation action is urgent

Community Energy on Orkney



Community energy values

- Promotes community resilience
- Promotes sustainable & cultural values
- Promotes equality & working together
- Helps build healthy communities
- Helps develop better community services

Energy efficiency is an essential component
of community energy



Community energy can be on schools, halls and churches



Installing solar is a great community development activity



.. can enhance farming activities



Grass growth under panels is not burnt off dry land in summer sun

Many animals value the shade and rain protection



Community energy is a good partner for small land-based businesses



.. can help rural diversification



.. or on homes



.. can be wind farms



.. does not have to be huge



Energise Otaki solar array

.. innovation in French Pass

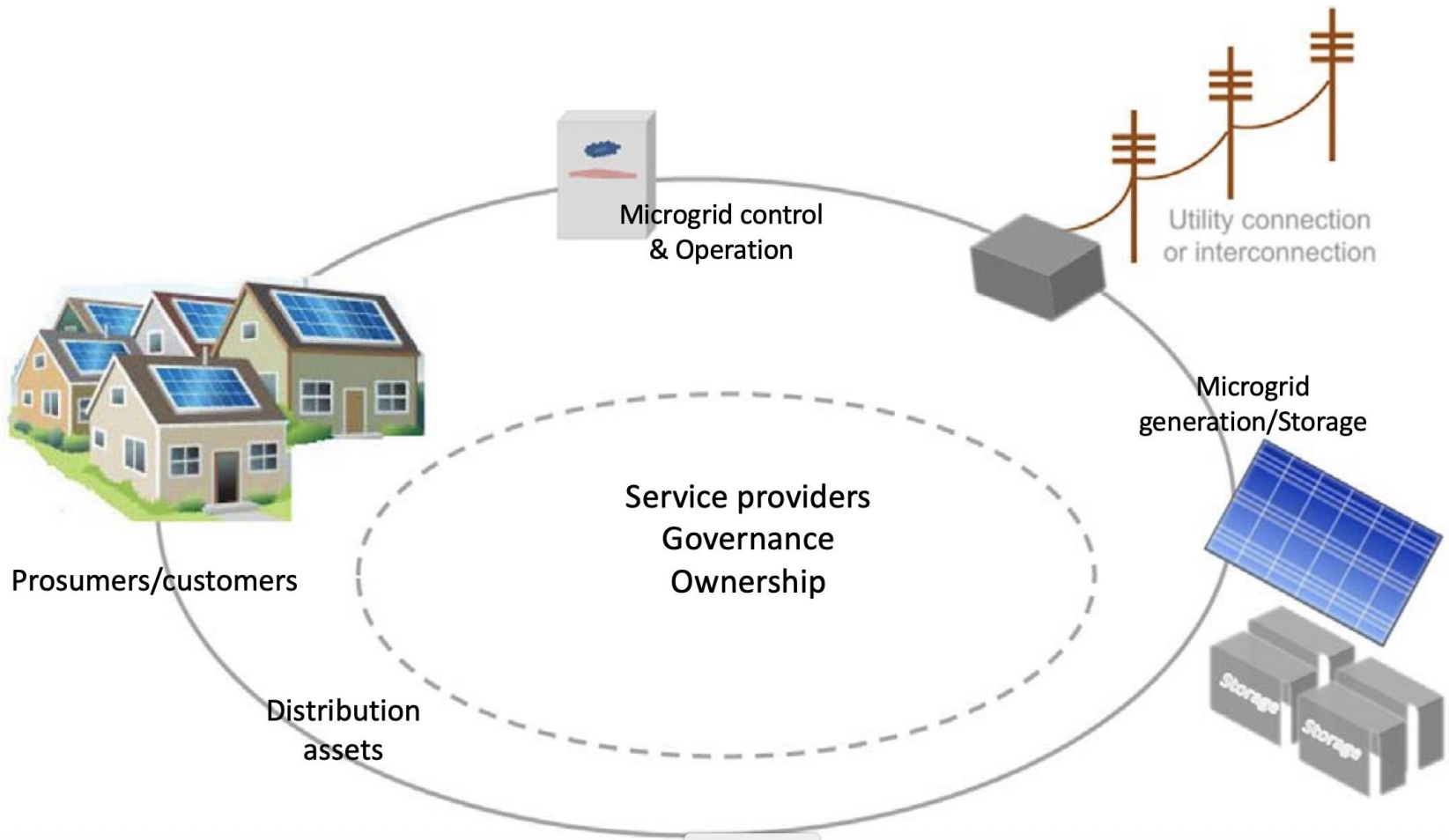


Powerhousewind
single bladed
wind turbine

... can strengthen rural communities



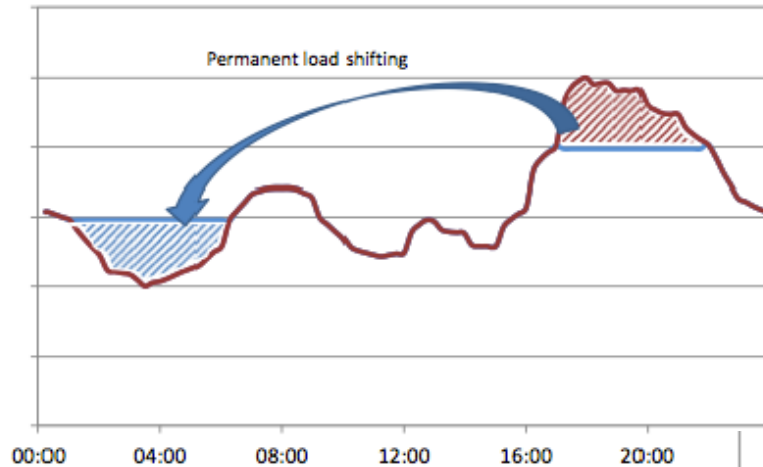
Community microgrid elements



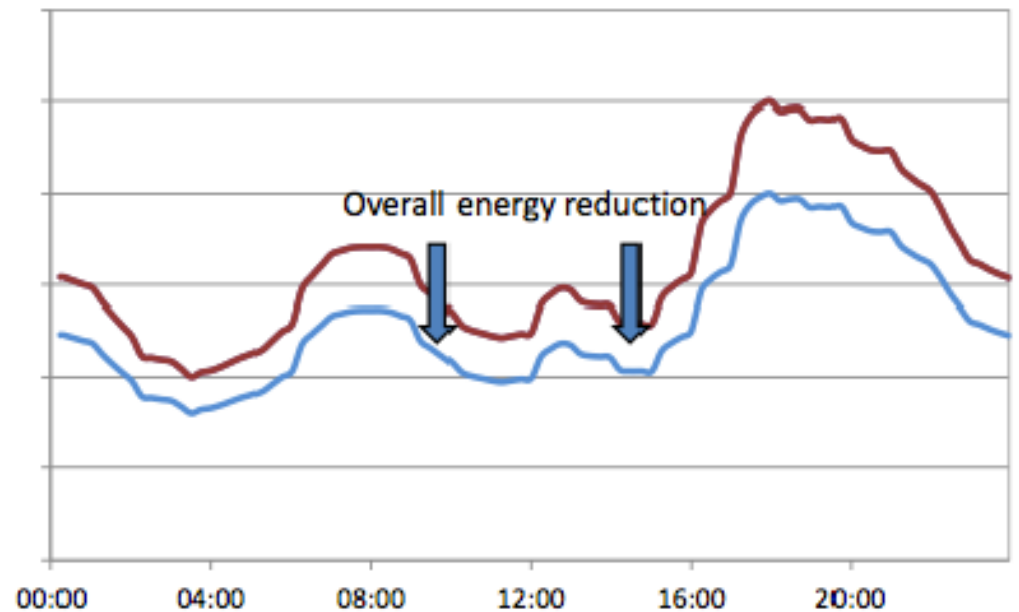
Smart Grids need Storage

- Helps maximise use of local electricity resources – smart energy storage & loads
- Improves network economics where ‘weak’ local lines are often subject to power cuts
- Facilitates different local energy storage - even simple and economical hot water storage
- Supports local community jobs and facilities, and improves the local circular economy

Smart grids balance generation



Use available renewable energy resources and reduce energy costs



Climate change actions need to happen fast
Communities need to lead ..
before it comes to this



Thank you

I welcome your questions – now or later

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