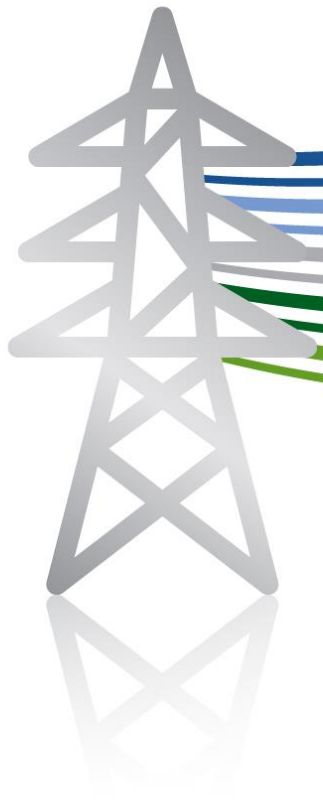


SAVE Project

June 2019



Scottish & Southern
Electricity Networks

Starting with the end in mind

Imagine a world where...

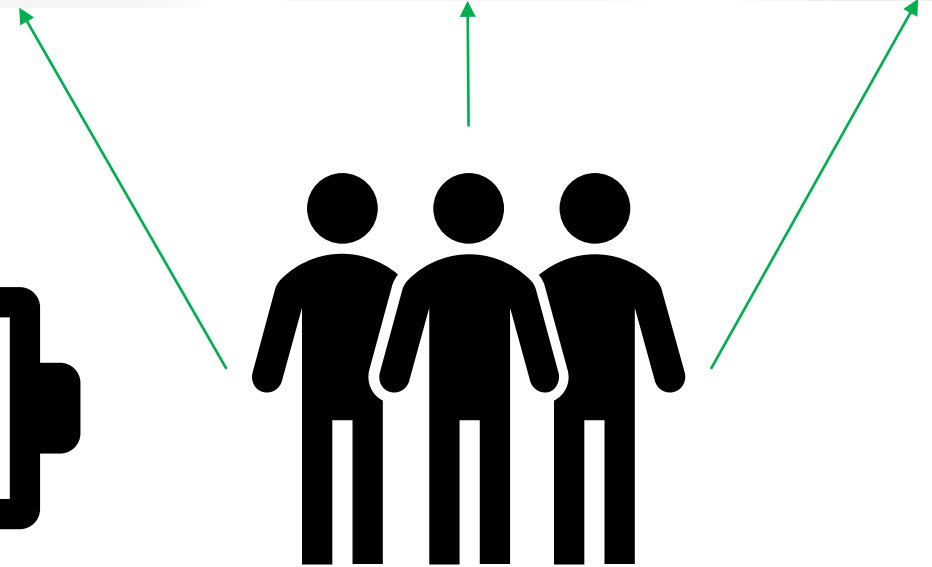
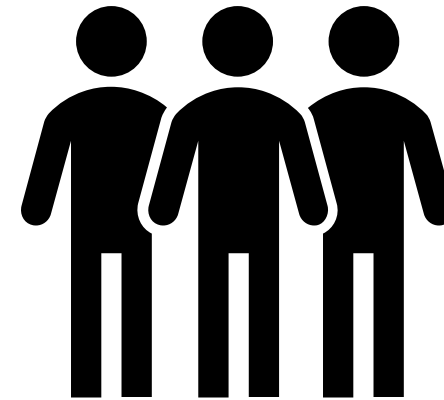
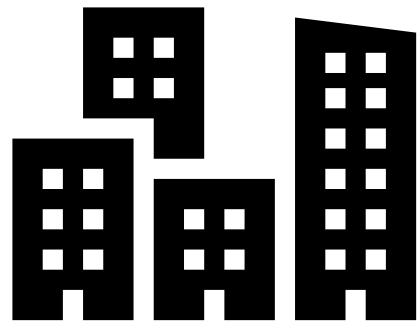
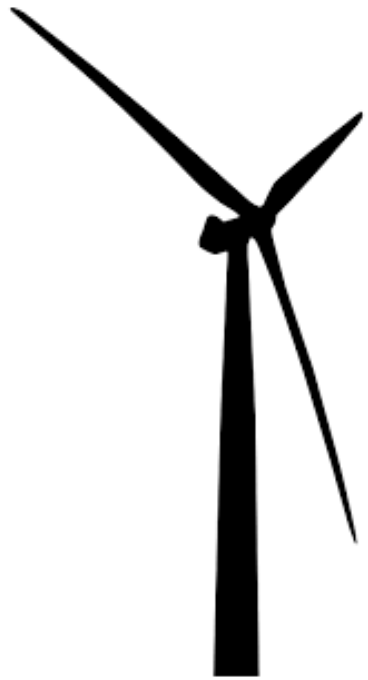
- Customers don't just know who their utilities are but have a positive relationship with them
- DNO's top broader measures scores and customer satisfaction scores
- Worst served circuits are minimised and addressed with wider engineering and social benefits
- DNO's work closely with stakeholders to deliver load reduction on our networks
- Instead of reinforcing we use current assets smarter saving money and carbon
- DNO's can see and procure the most cost-effective and socially optimal means of network management
- DNO's are the facilitators of domestic energy efficiency supporting the governments transition to a low carbon economy and zero carbon buildings
- DNO's have perfect records of vulnerable customers and can readily engage and support those most in need

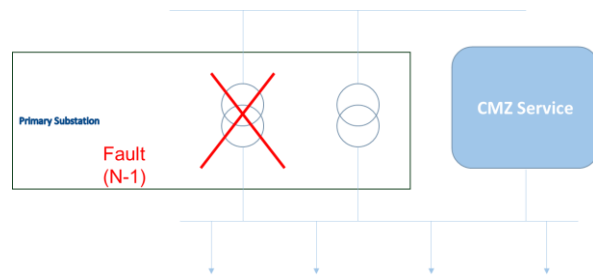


Key takeaways- trials

- DNO led energy efficiency can reduce domestic peak demand in excess of 7%
- A blueprint for cross-industry stakeholder engagement to support both communities and the business case in domestic DSR
- Price signals where run as opt-out may reduce peak demand by the same amount as energy efficiency (44W)
 - Effect however is unlikely to be enduring
 - More enduring impacts for opt-in customers and very little sensitivity to price points
- Price signals have no additional effect to data informed events alone
- Nudge- Salience works and think how messaging actually works in household
- Regulatory barriers point to third-party delivery if deployed as BAU.

Flexibility to now





Social CMZ

- Anything that reduces demand can provide flexibility- energy efficiency, behaviour change, batteries, price signals
- SSEN wants to offer £££ in return for kW
- We will provide the resource to turn your initiative into kW savings and £££
- SSEN will facilitate partnerships and work with NEA to identify key stakeholders
- Additional and geographic funding stream- build a business case, expand existing works or target planned schemes
- Incentivised to address other issues such as carbon and fuel poverty



Key takeaways- modelling and reporting

- The three largest determinants of difference in consumption patterns were: no. of bedrooms, no. of occupants and heat source
- Half-hourly consumption data linked to customer demographics
- The Network Investment Tool suggests energy efficiency can be cost effective to defer reinforcement based on FES scenarios
 - Typically this provide 1-2 years optionality
 - This could have a value of 10-20k on each applicable substation
 - If cost can be socialised then it's a clear winner
- Major reinforcement still materialises most cost-effective when EV/electric heating uptake peaks
- Essential consumption- future proofing network charging in presence of LCT's

Network Investment Tool Training

SAVE@SSE.COM

SAVE



Solent Achieving Value from Efficiency

Starting with the end in mind...

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- Your DNO tops broader measures and customer satisfaction scores
- Worst served circuits are minimised and addressed with wider engineering and social benefits
- DNO's work closely with stakeholders to deliver load reduction on our networks
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Questions

- Should DNO's lead on future rollout of energy efficiency
 - If so to what degree
- Can you as a stakeholder organisation see ways in which you could improve efficiency through working with the DNO?
 - If so, how?
- How should DNO's be engaging communities?
 - As a sole lead, as a lead partner, as a partner, DNO's shouldn't be engaging communities
 - Who should be engaging communities (with the DNO)
 - Other utilities, local councils, housing associations, SME's, Multinational, government, other.
- Does the Network Investment Tool offer important functionality for network investments?
- Should all DNOs use similar tool in the future?
- Would you like to learn more about the tool and its functionality?



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