Smart Grids A DNO/DSO perspective

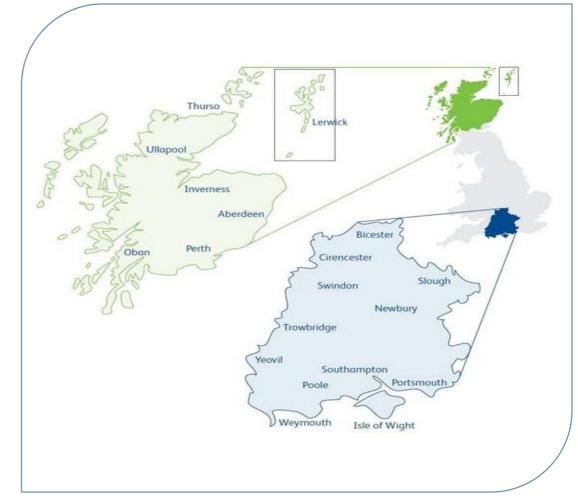
Laura Hawkins

July 2019



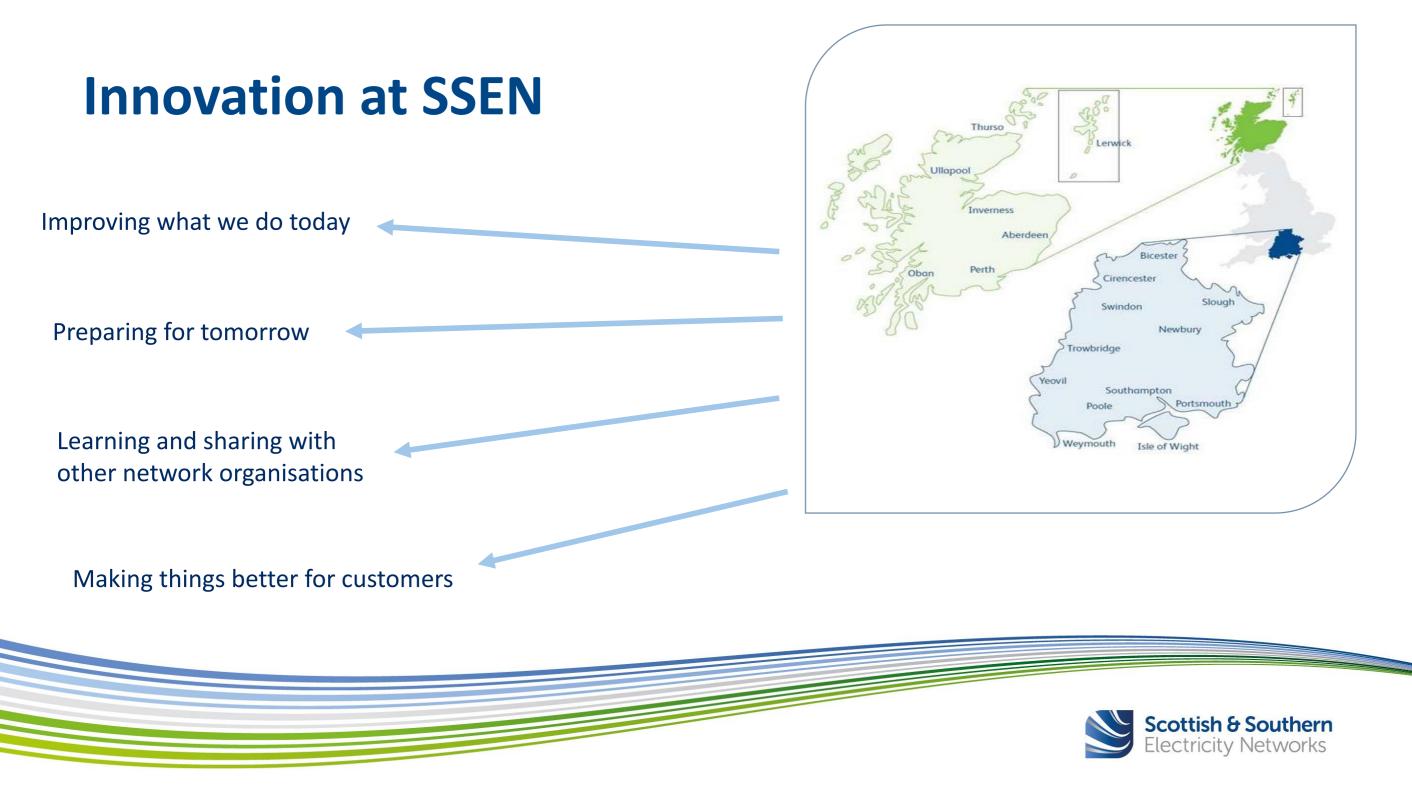
Who are SSEN

- Scottish and Southern Electricity Networks owns:
- two electricity distribution networks
- one electricity transmission network
- +100,000 substations
- +130,000 km of overhead lines and underground cables
- +100 submarine cable links



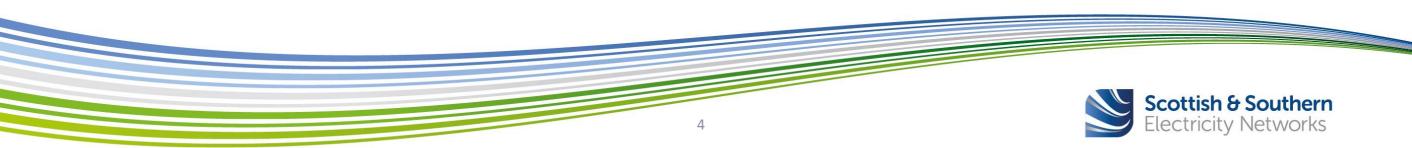
• We serve 3.5 million customers across one third of the UK's landmass.





What are they anyway

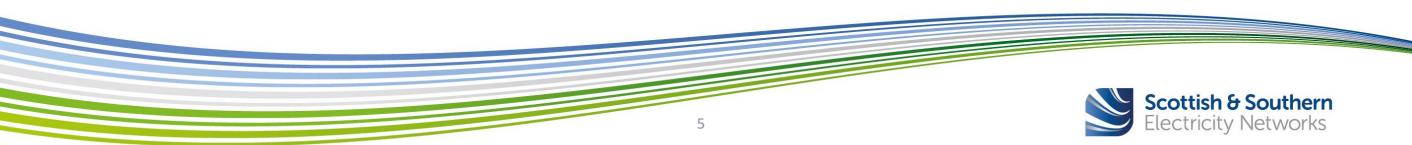




What are they anyway







What are they anyway







6



What are they anyway



dvancior

7

AES

AES







What are they anyway





AES

AES

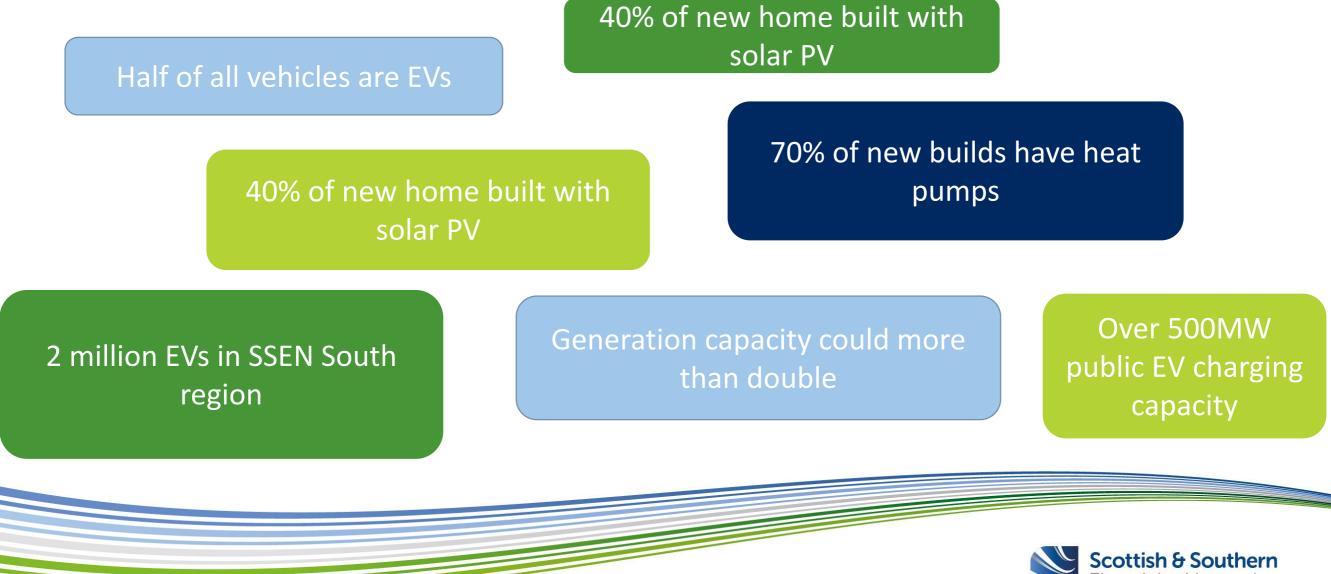






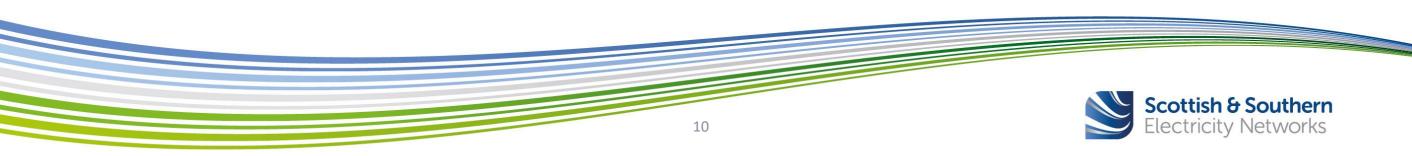


Electrification – demand trends and forecasts for 2032 (South)



Innovation - DNO to DSO Transition

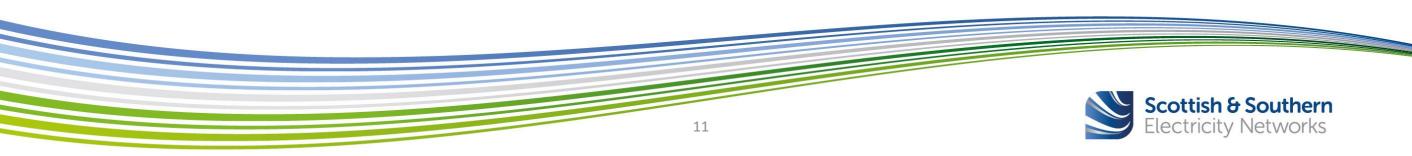
- EV Load
- Customer/Community Flexibility
- Small Scale Generation
- Cyber Security
- Managing Network Investment



Innovation - DNO to DSO Transition

- EV Load
- Customer/Community Flexibility
- Small Scale Generation
- Cyber Security
- Managing Network Investment

• Not just the power cut people anymore!



Don't forget innovation

- Finding faults
- Asset Monitoring
- Live Line working
- Accessing remote areas
- Making street works less intrusive

