

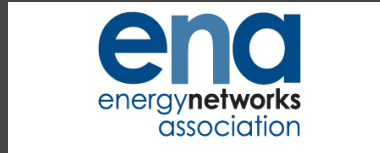
# Distributed ReStart



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**Randolph Brazier**

Energy Networks Association  
& Strategic Telecoms Group



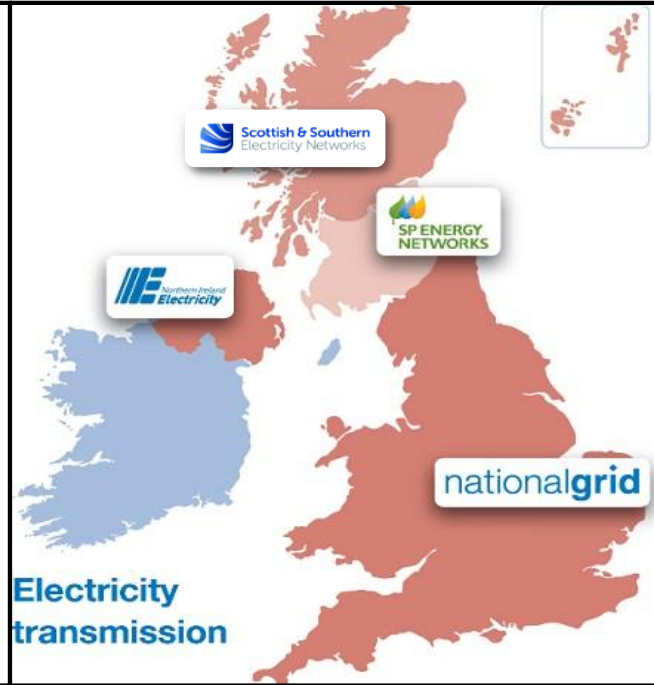
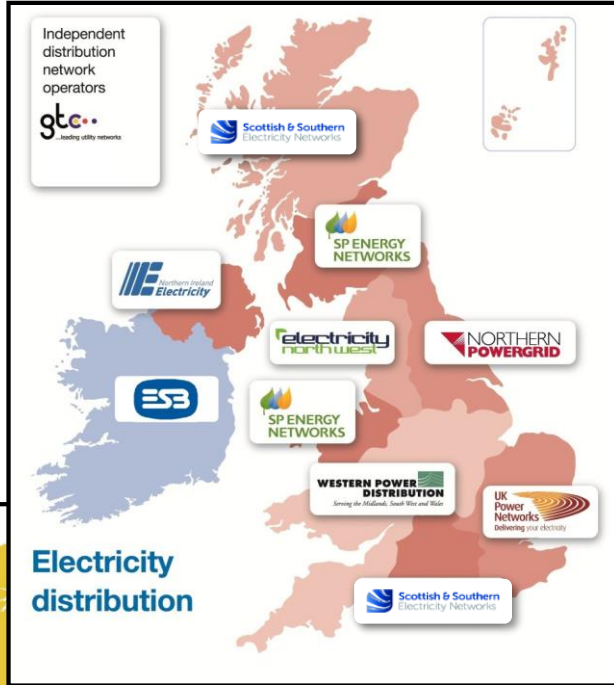
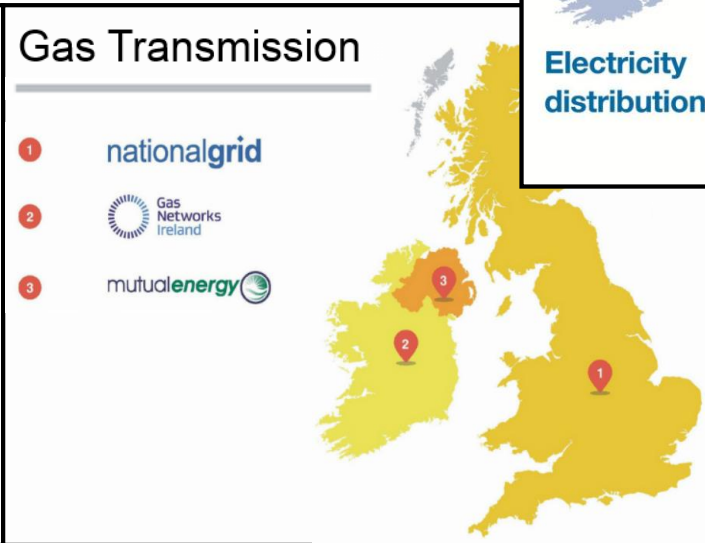
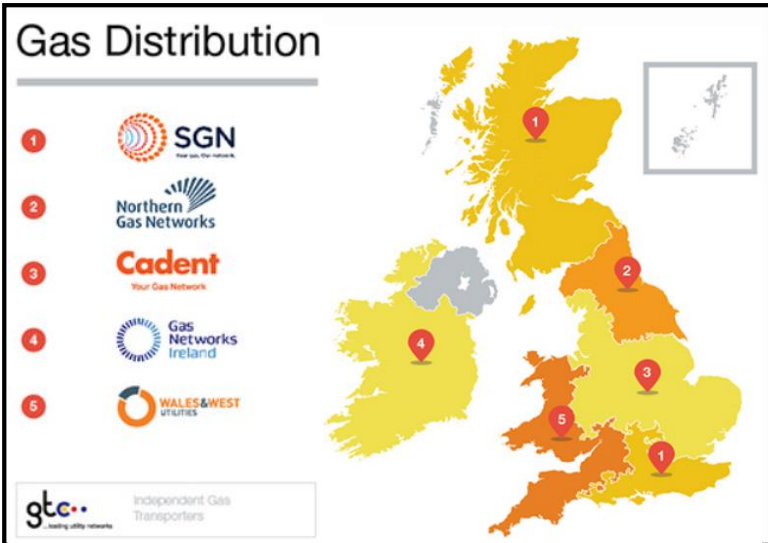
# **Energy Networks Association**

## **ENA Update: Open Networks, Strategic Telecoms and Innovation**

**Randolph Brazier, Head of Innovation  
January 2020**

# Introduction to ENA

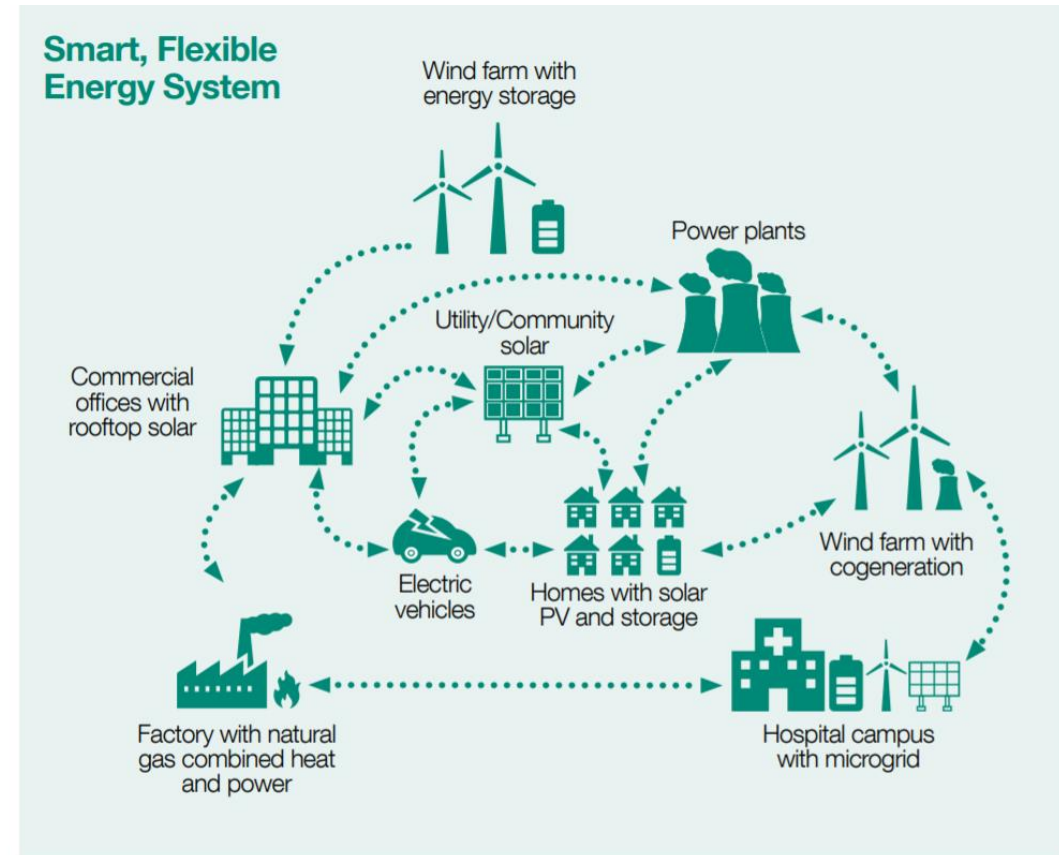
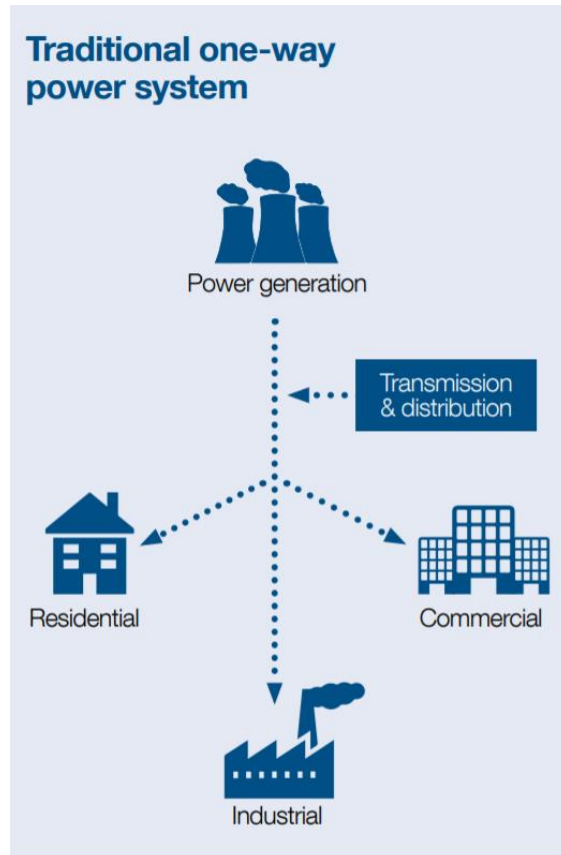
- 29 million electricity customers
- 21.5 million gas customers



- 180,000 miles of gas network
- 519,304 miles of electricity network

# Electricity Networks – The Challenge

- The Electricity Networks are facing unprecedented change as a result of decarbonisation, digitisation and decentralisation



# Open Networks – Delivering a Smart Grid



ENA's Open Networks Project is a major energy industry initiative that will transform the way that both local Distribution Networks and national Transmission Networks will operate and work for customers. This is being driven by the 3Ds; digitisation, decentralisation and decarbonisation



The Open Networks Project will help customers connect and realise value; as well as reducing cost for consumers through more cost effective planning

**ofgem**

Making a positive difference  
for energy consumers



HM Government

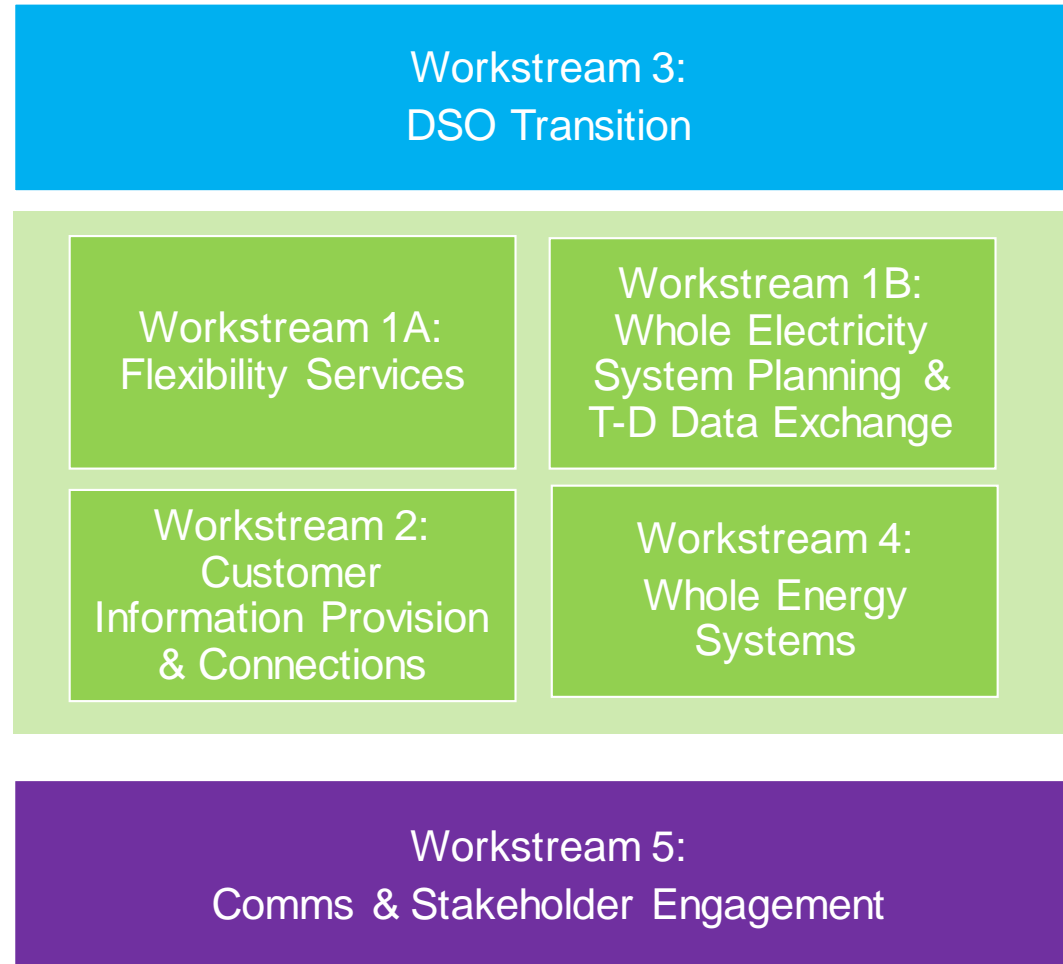
The Open Networks Project is a key initiative to deliver Government policy set out in the Ofgem and BEIS Smart Systems and Flexibility Plan, the Government's Industrial Strategy and the Clean Growth Plan



We are taking a 'learn-by-doing' approach; we are using innovation funding to trial and test aspects of the various future electricity system options

Short Animation that can be found at: [https://www.youtube.com/watch?v=te\\_d34zldJ8&feature=youtu.be](https://www.youtube.com/watch?v=te_d34zldJ8&feature=youtu.be)

# Open Networks Workstreams



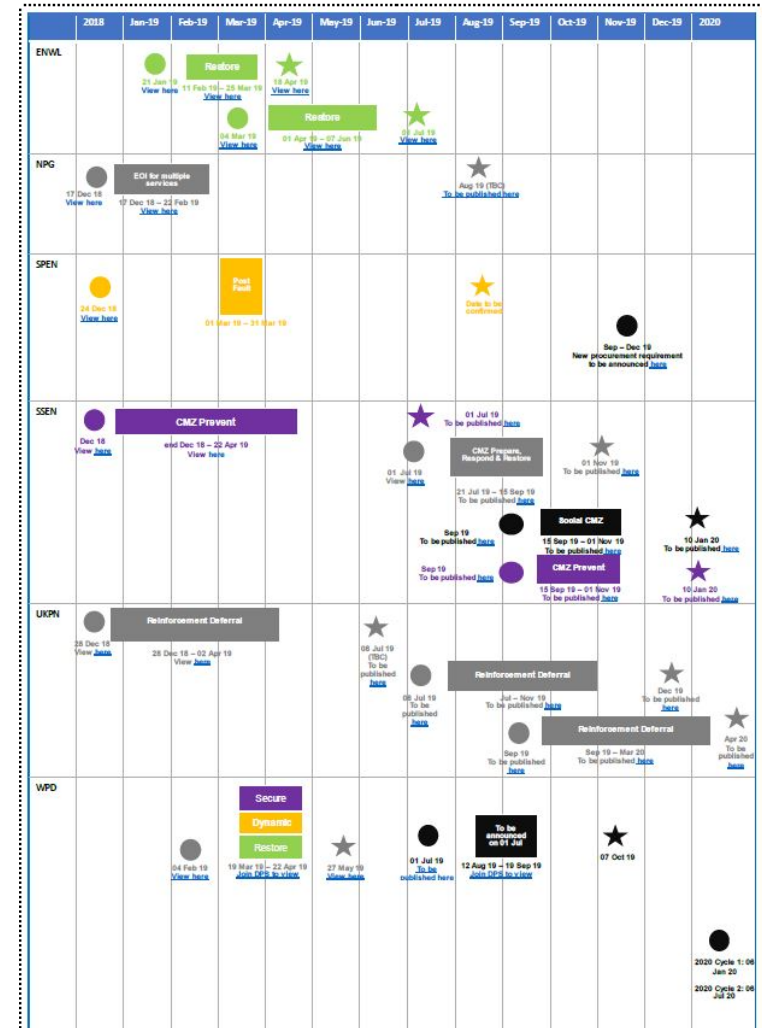
# Flexibility Commitment

- DNOs have made the commitment to openly test the market to compare relevant grid reinforcement and market flexibility solutions for all new projects of significant value
- *Our Six Steps for Delivering Flexibility Services* outlines how Electricity Networks are committing to making these emerging flexibility markets work in practice
  1. Champion a level playing field
  2. Visibility and accessibility
  3. Conduct procurement in an open and transparent manner
  4. Provide clarity on the dispatch of services
  5. Provide regular, consistent and transparent reporting
  6. Work together towards whole systems outcomes



# Flexibility in GB – Information Source

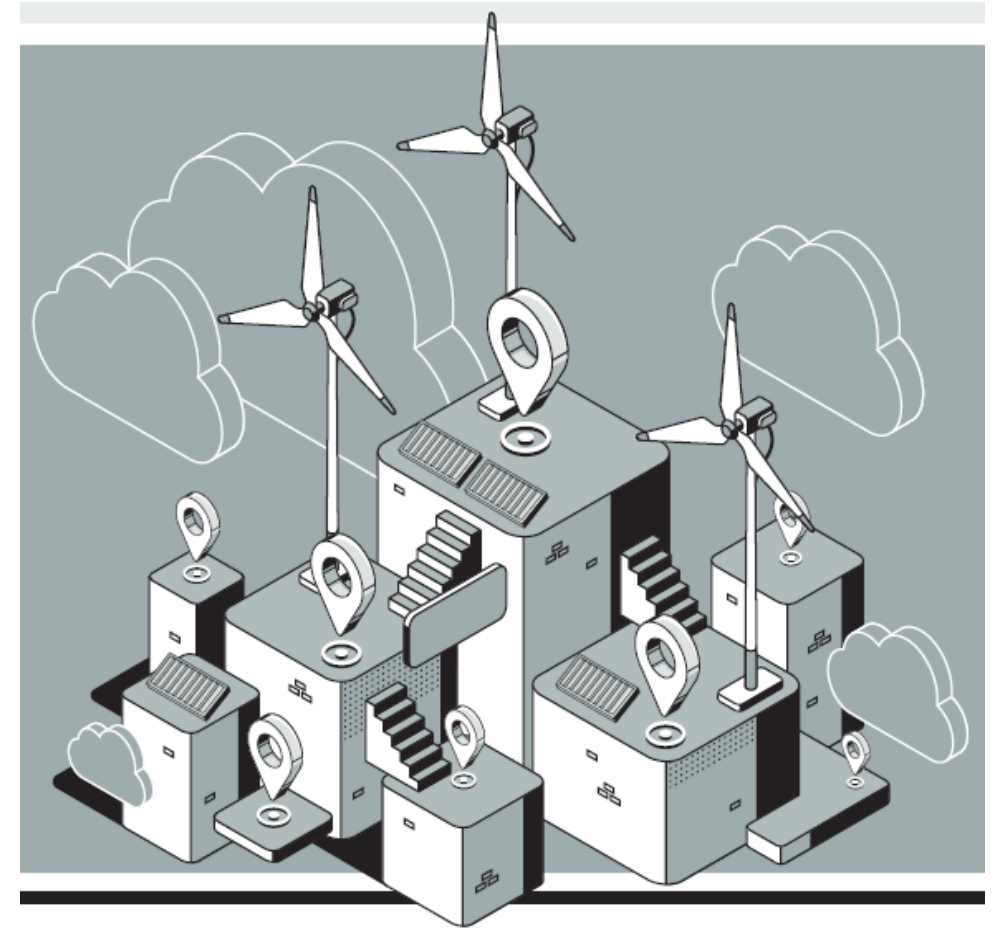
- <http://www.energynetworks.org/electricity/futures/flexibility-in-great-britain.html>
- Single entry-point for providing Flexibility Services in GB. Includes:
  - Flexibility Commitments
  - Flexibility Figures
    - 304MW contracted to date (2018 and 2019) by DNOs
    - 947MW being tendered out in 2019 by DNOs
    - National Grid Flexibility also on website
  - Flexibility Timeline & Links
  - Flexible Connections figures and contacts





# Flexibility in GB – 2020

- Same page and same sections +
  - Forecasts for 2020 (and beyond)
  - Improved interactive timeline
  - Updated figures including National Grid
  - Reporting against 4 standard active services products:
    - Sustain
    - Secure
    - Dynamic
    - Restore
  - Other WS1A outputs



# More Liquidity?

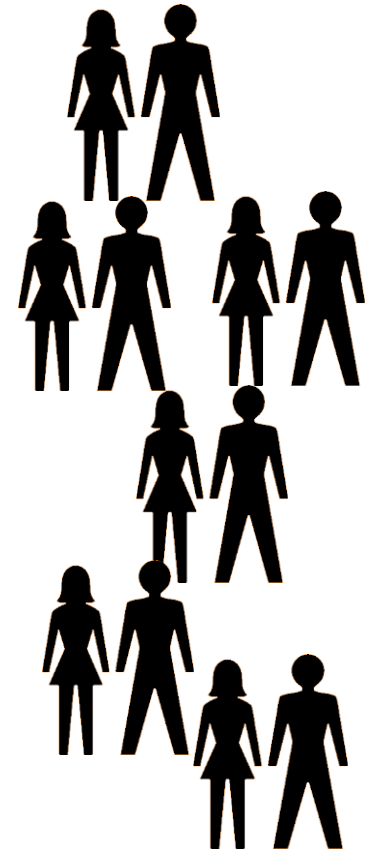
Constraints are geographical but.....

- Common products
- Better visibility and ease of access
- Standardised contractual terms
- Non exclusivity
- More stakeholder engagement
- Consistent reporting and monitoring
- Lower barriers to entry (eg: size)
- .....
  
- What else?



# Stakeholder Engagement is Key

- **Opportunities for engagement:** We hold dissemination events, workshops, forums and webinars, along with ongoing engagement with the Advisory Group
- **Public Consultations:** We hold public consultations to focus on key priorities – this year we will include one consultation on Flexibility
- **Transparency & Access:** We have regular social media activity, public events and Open Networks Project newsletters. We uploaded all project materials to the ENA website and ensure regular contact
- Should you want further information about the Open Networks project, please don't hesitate to get in touch with us at [opennetworks@energynetworks.org](mailto:opennetworks@energynetworks.org)



# ENA Strategic Telecoms Group

**Aim:** The Group will oversee the creation of strategic aims, agree management solutions and support standards to be used in the development of systems necessary to support enhanced network communications at all voltages and the management of smart networks.

Split into two key areas:

- **Futures:** Provide a forum for ENA Members to review current understanding and approaches and to facilitate the development of ongoing and future telecommunications initiatives through internal and external expert involvement and collaboration
- **Resilience:** Understand and provide direction on operation telecommunication resilience issues and provide guidance on mitigation measures.

# ENA Strategic Telecoms Group (2)

- The STG liaises with key industry stakeholders including: DCMS, BEIS, Ofcom, Ofgem, E3C, Cabinet Office, Central Management Office and to internal and external industry stakeholders
- Undertakes horizon scanning and review of new technology and commercial solutions in order to best serve and develop operational telecommunications systems
- Much like Open Networks, take a learn-by-doing approach, both using existing systems and new smart grid related systems as a result of innovation projects and wider industry best practice



# Learn-By-Doing Approach

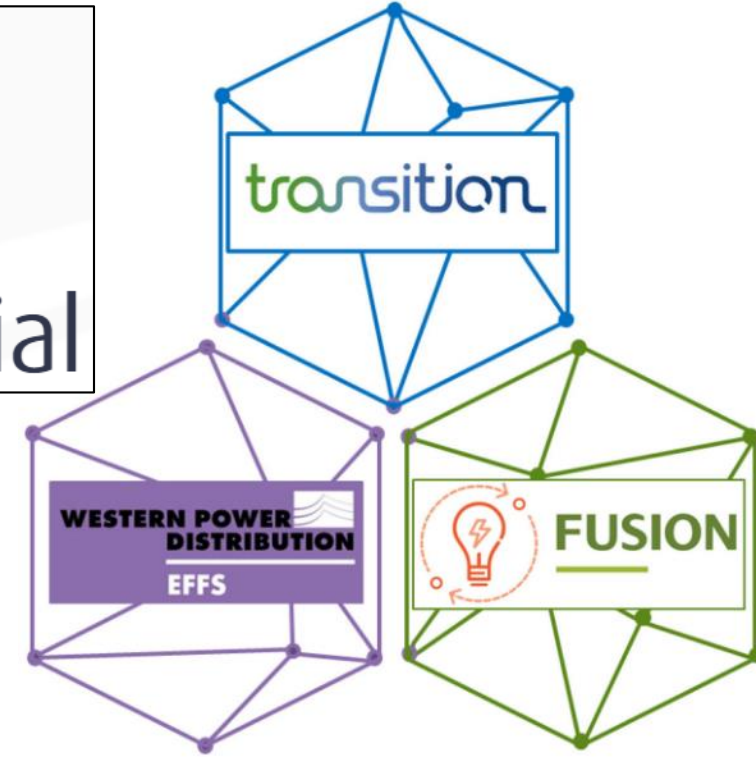
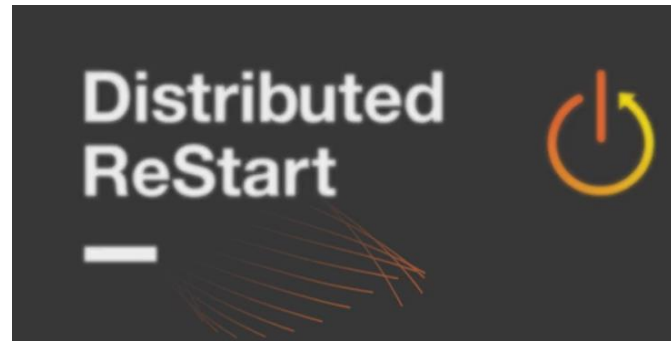
➤ At ENA we take a learn-by-doing approach



Cornwall Local Energy Market



**centrica**



# Innovation at ENA

## ➤ Smarter Networks Portal

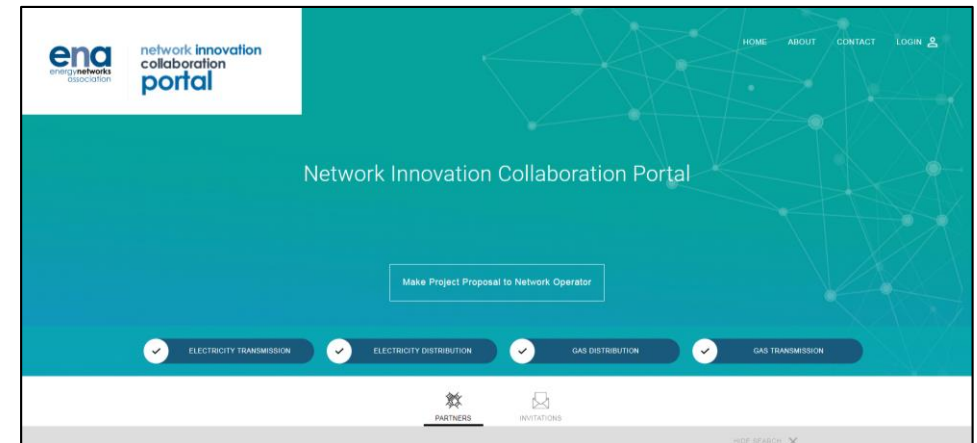
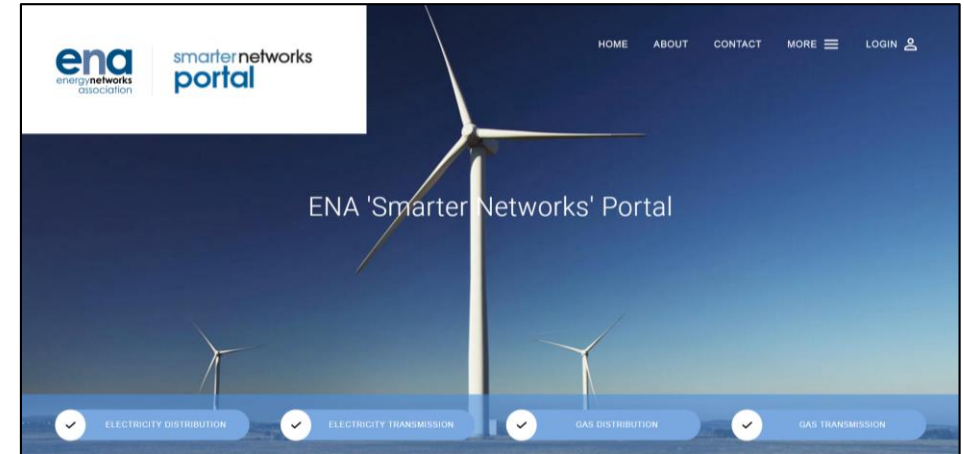
- Database of previous network innovation projects
- Over 1400 projects to date
- [www.smarternetworks.org](http://www.smarternetworks.org)

## ➤ Network Innovation Collaboration Portal

- Pitch your innovation project to the networks
- Receive notifications when the networks are looking for ideas
- <http://www.nicollaborationportal.org/>

## ➤ Annual Innovation Dissemination Events

- Utility Week Live, Low Carbon Networks & Innovation Conference, Electricity Innovation Forums, etc



# Energy Networks Association

# Thank you!

# Q&A