

# The current electricity market design – how do we enable a zero-carbon system?

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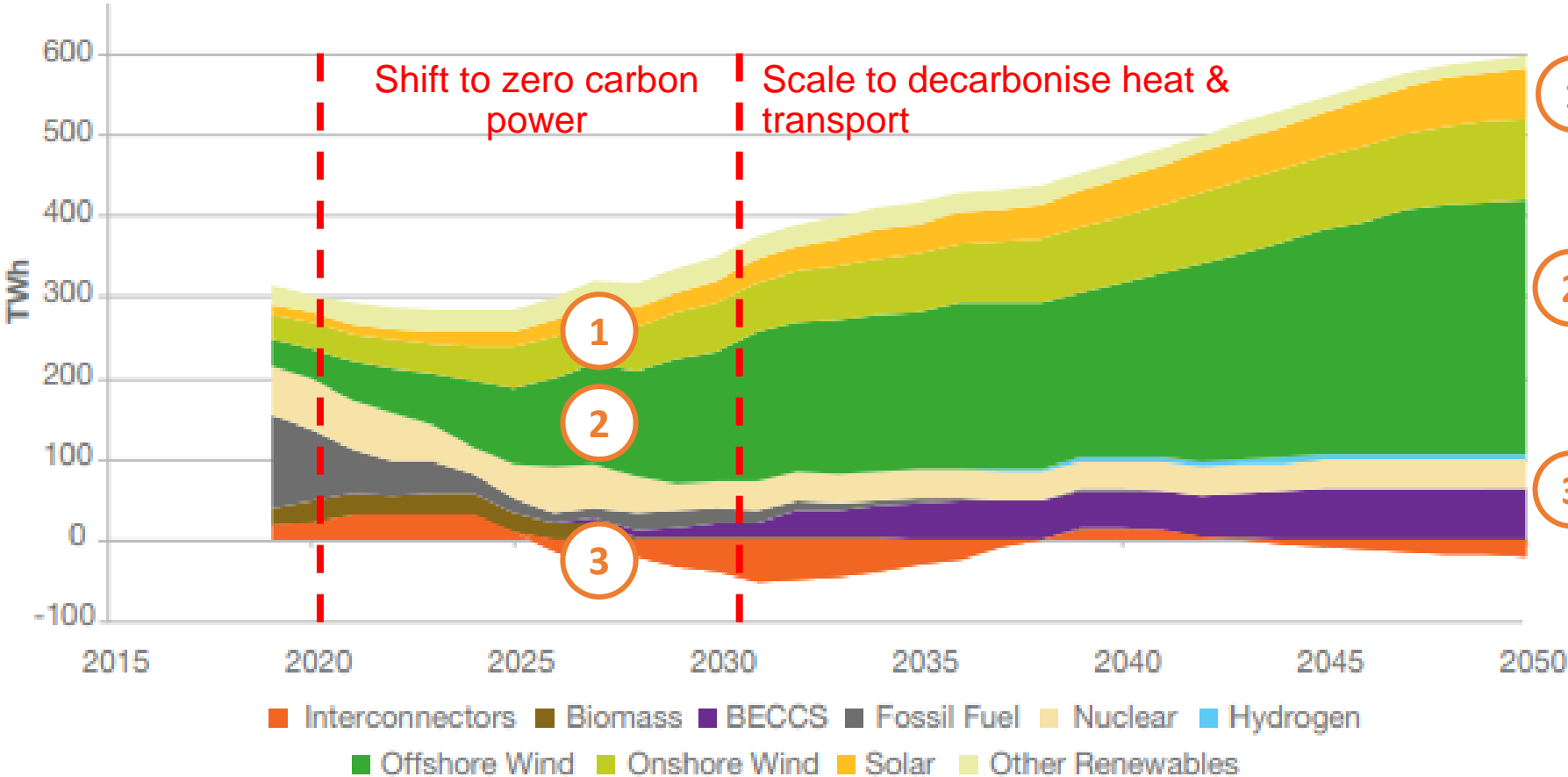


# THE ESO EXISTS TO:

- Ensure reliable, secure system operation to deliver electricity when customers need it
- Transform participation in smart and sustainable markets
- Unlock consumer value through competition
- Drive towards a sustainable, whole energy future

# Enabling full decarbonisation by 2030

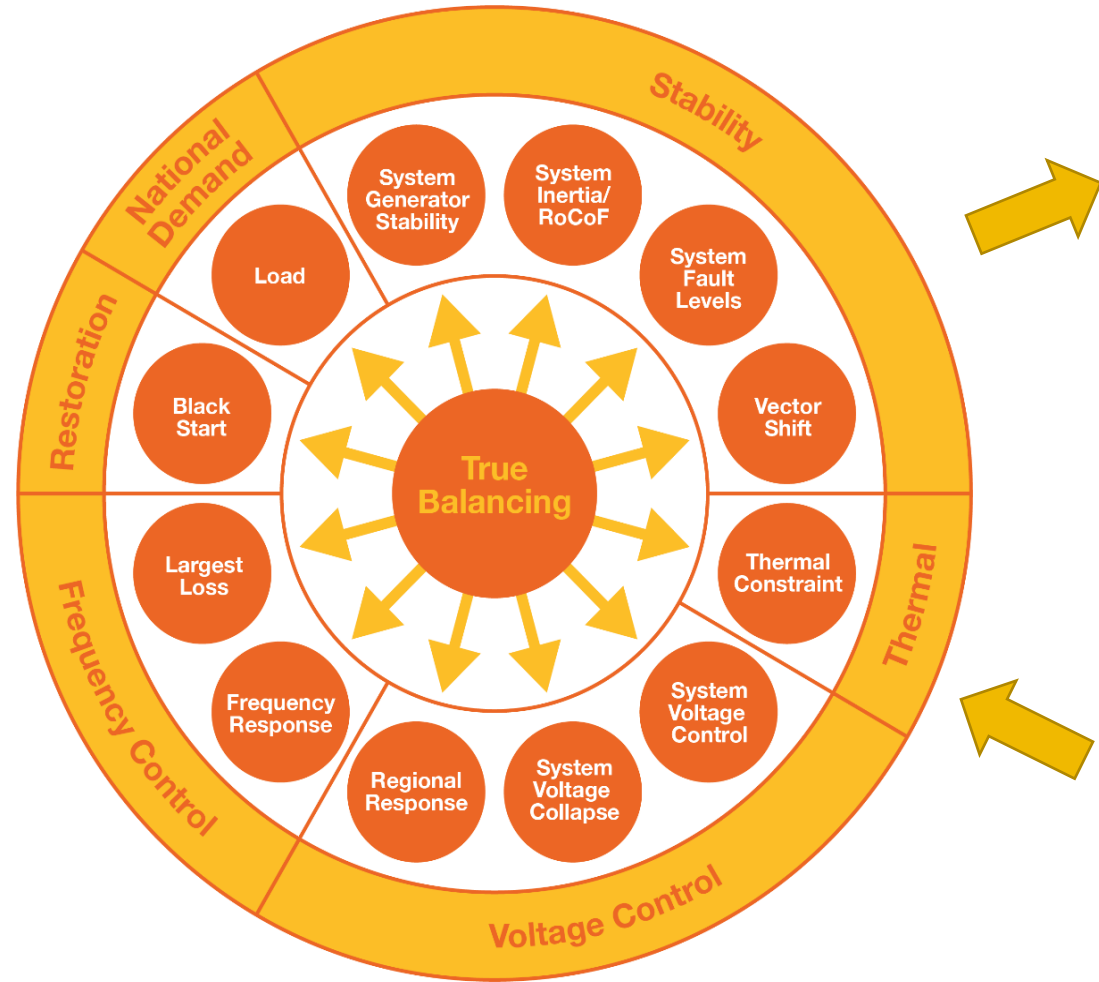
Annual generation by technology



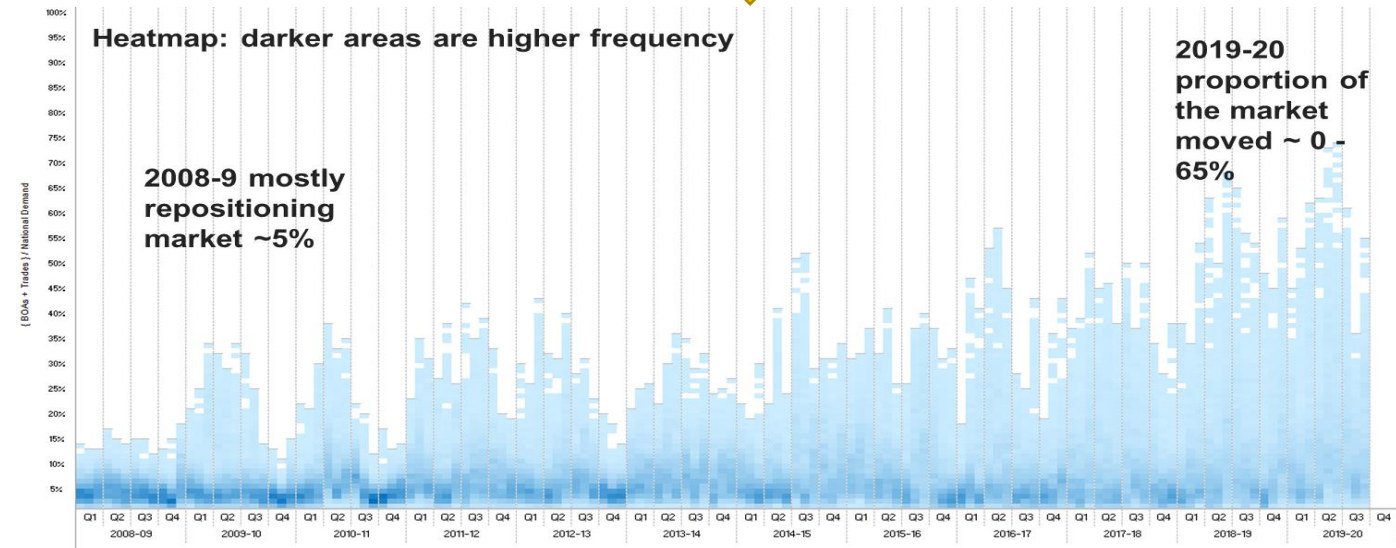
**Market change now to enable 2030:**

- 1 Up to 96% renewables will require:
  - New system services
  - New sources of flexibility
- 2 Offshore wind up 4x will require:
  - Integrated offshore grid
  - Charging arrangements
- 3 Interconnector capacity up 4.5x will require:
  - European market harmonisation
  - Common market approach to interconnectors

# Understanding the interaction between changing needs and future market behaviour is key



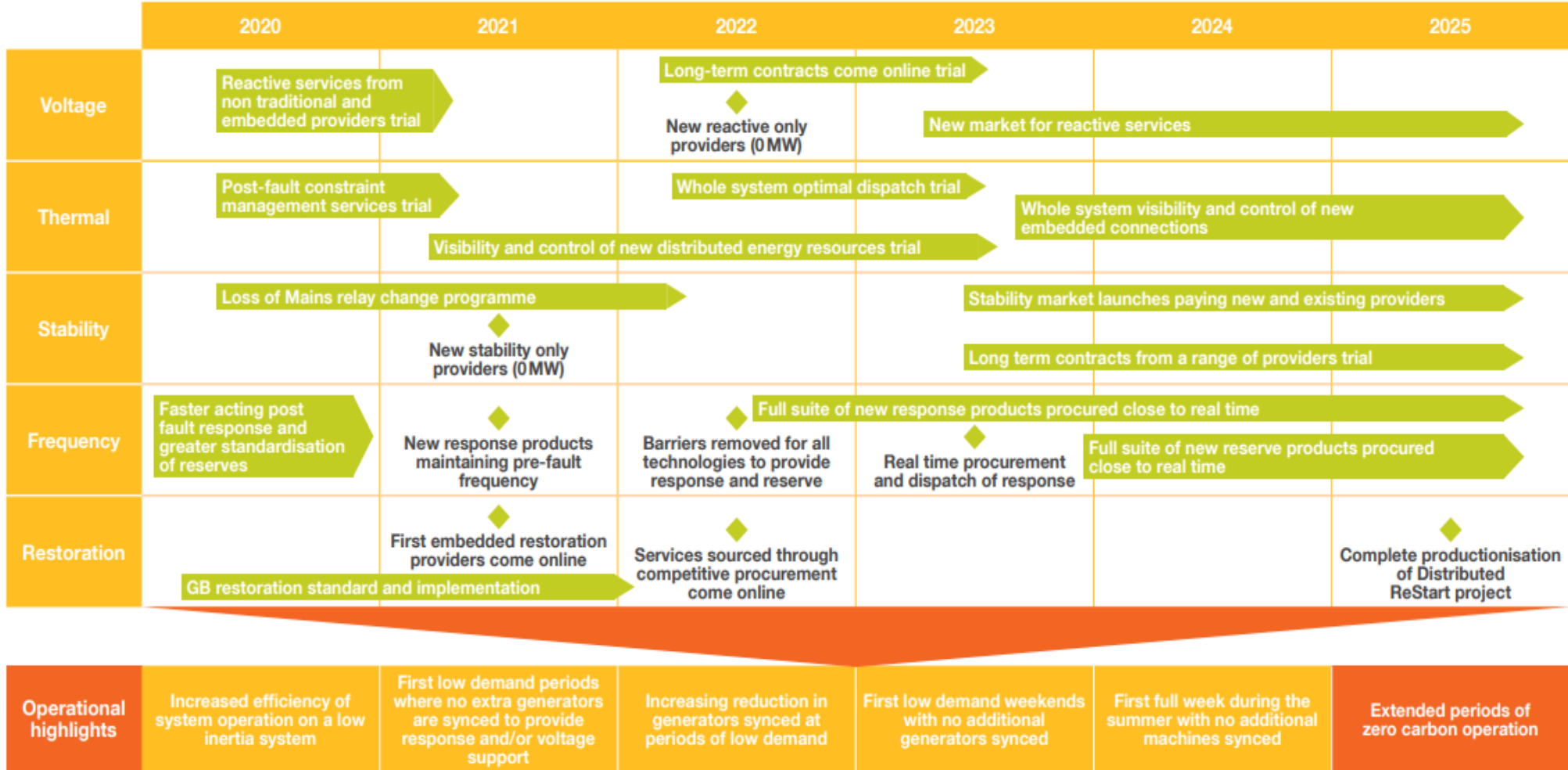
- Less dispatchable generation
- More intermittent generation
- Generation in different locations
- More embedded generation
- Greater numbers of smaller market participants
- More flexible demand and greater aggregation





# Enabled by significant market reforms

- We published an update to our Operability Strategy Report. It contained our operability milestones.



# Success

In 2025 looks like:



An electricity system that can operate carbon free



A whole system strategy that supports net-zero by 2050



Competition everywhere



The ESO as a trusted partner



