

**Electricity
Transmission**

The Pathway to Net Zero: reimagining the future network

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A landscape photograph showing a road winding through green fields under a cloudy sky. A large white lattice tower with multiple cross-arms is the central focus, with power lines stretching from it across the frame. The text is overlaid in the lower half of the image.

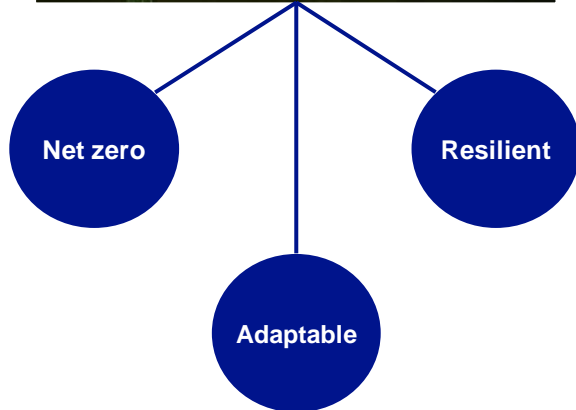
**We're responding to a world
impacted by conflict in
energy and climate change...**

Meeting net zero targets for 2030, 2035 and 2050

In the 1950-70s we designed & built a grid with the future in mind...



We know the energy grid of 2050 will be a different grid from today...



...in 2020/30/40s we must therefore fully upgrade & reimagine the grid

Enable and support delivery of the **government's ambitious targets** on the pathway to 2050:



600,000 heat pump installations p.a. by 2028



2030 ban on new petrol and diesel cars & vans



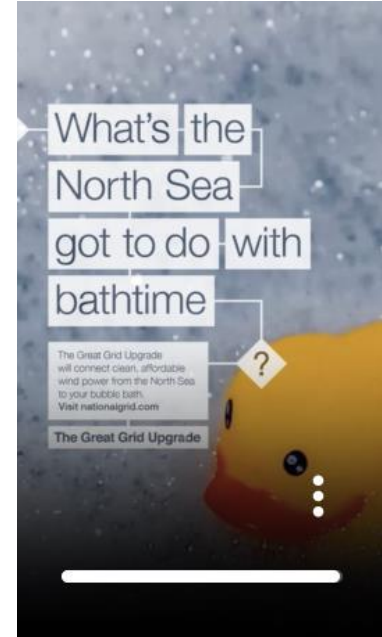
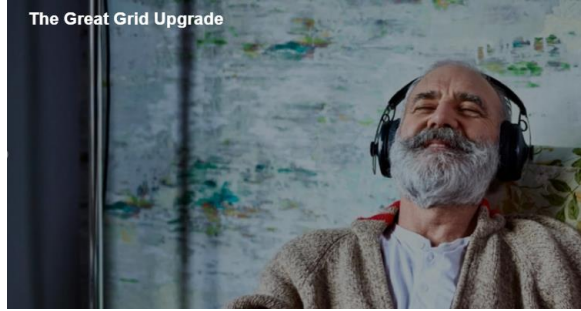
Up to 50GW OSW by 2030



Fully decarbonised electricity system by 2035

We need to listen... and bring consumers and communities with us

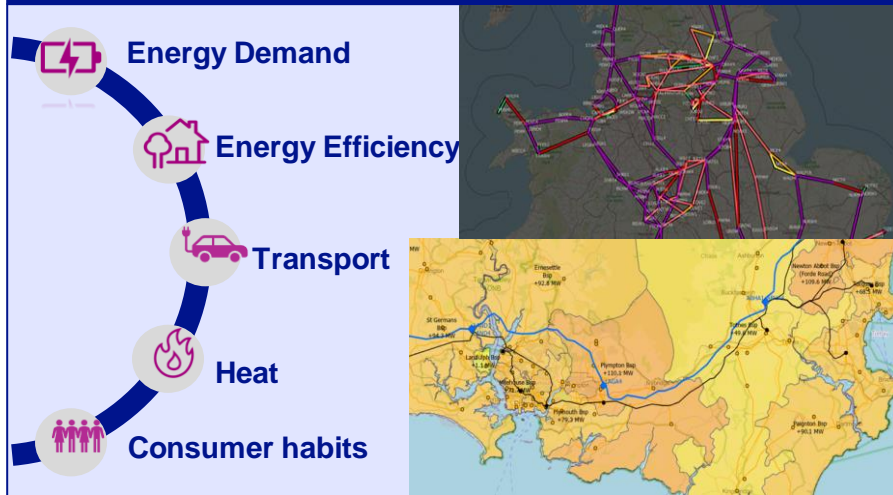
The Great Grid Upgrade



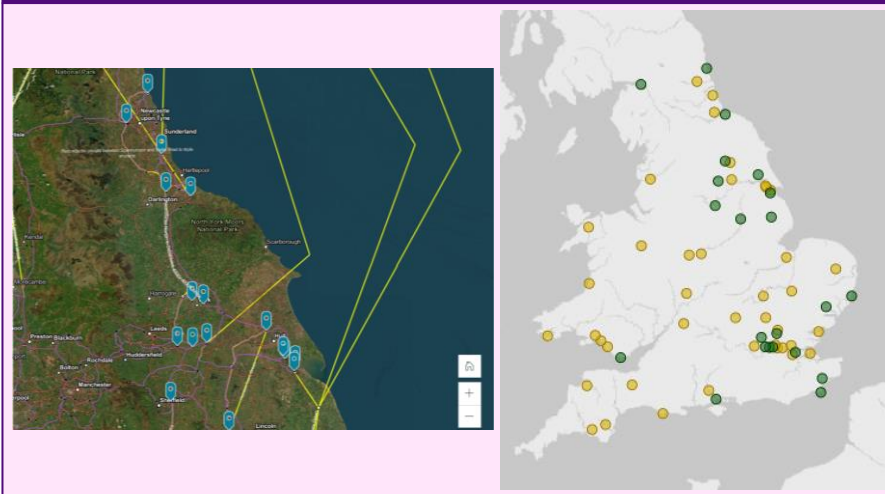
A campaign for consumers to connect decarbonised energy with our everyday lives

Understanding how to hit the 2035 and 2050 targets

Delivering net zero: 2035 and 2050 back



Future Network Blueprints



*The results show significant implications to deliver the required investments.

Changes to the regulatory framework increases the chances of achieving both 2035 & 2050 targets

Considerations...

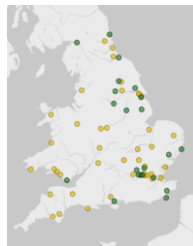


Ageing assets + Fast growth for connecting wind = Peak of work during PC26

Future Network

Blueprints

assesses scale and hotspots for plans and network



Next phase of works is to holistically review deliverability and optimisation of decisions



Supply chain strategy

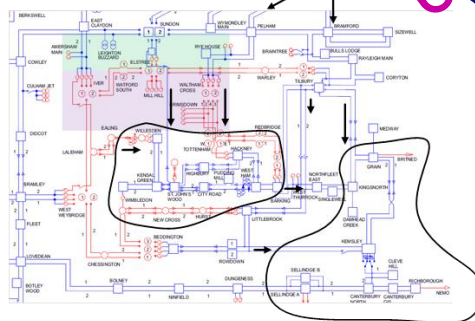


An appropriate asset management strategy

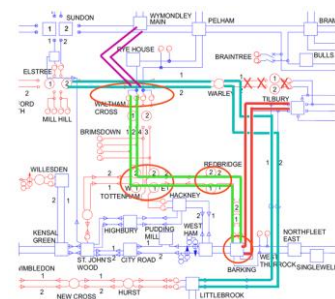


Skilled resource

System access will likely influence work sequencing and approach







We need to take a regional view of system access challenges






The future regulatory framework must enable positive consumer outcomes, while overcoming the macro-challenges facing the energy transition

The regulatory framework needs to enable us to support positive consumer outcomes











- Prevent excessive profits 
- Achieve cost efficiency  
- Protect consumer welfare 









- Accessible and responsive  
- Transparent and enables choice
- Enhanced protections for the vulnerable 

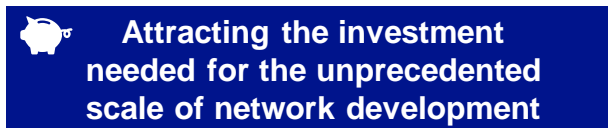
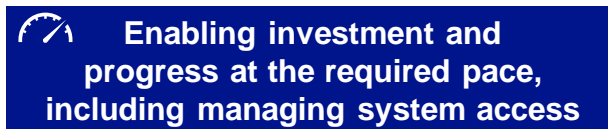


- Enable infrastructure and markets required for net zero transition   
- Minimises cost of net zero transition   
- Apply innovative solutions  

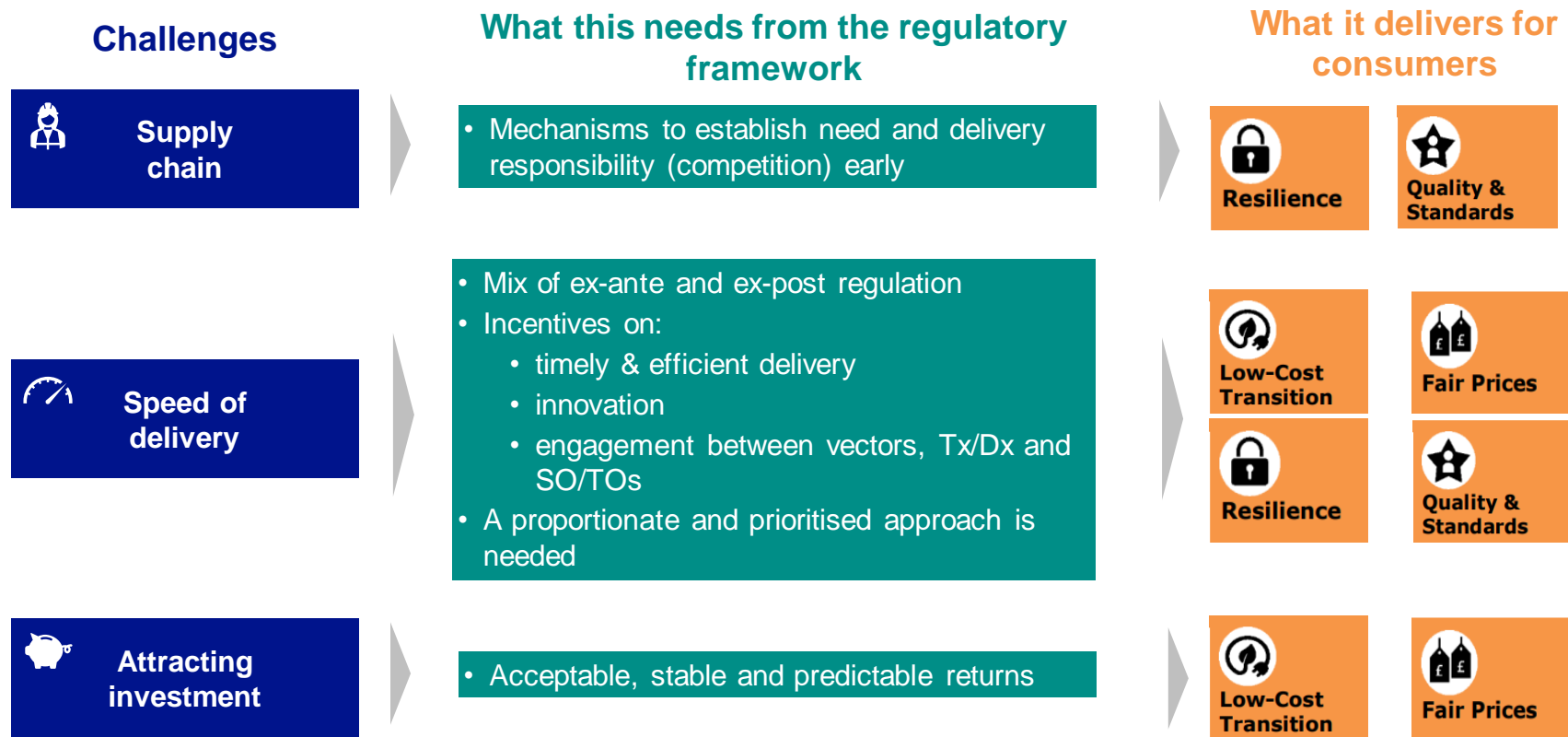


- Maintain security of supply  
- Robust to market developments & external shocks   
- Ensure sector is investable 

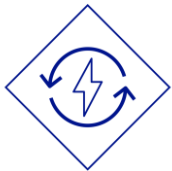
Challenges the framework needs to help us overcome to support these outcomes



We have identified some key principles we think the framework needs to reflect to overcome the challenges and deliver positive consumer outcomes



Takeaways ...



The grid of 2035 will be different from that of today, with a scale and level of transformation we have not seen in our working lifetimes



We want to ensure we prioritise the right investments for consumers and UK plc



Critical to this will be supporting Ofgem to make sure the regulatory framework delivers the investments needed