


# Welcome to the managing uncertainty through RIIO-T2 webinar

- Thank you for joining us! You will be joined in listen only mode.
  - Please do not unmute yourself or turn your camera on.
  - We will run polling to get your input and welcome any questions via the chat function throughout the session.
  - There will also be an opportunity to ask voice questions in the Q&A session – dial in via telephone if you want to do this
- 
- Please note we will be recording this webinar
  - Both the recording and slides will be made available on our website



## Managing uncertainty through RIIO-T2

Seeking your views on how we plan our business and manage uncertainty against a changing energy landscape

26<sup>th</sup> February 2019

**nationalgrid**

Our consultation document on managing uncertainty can be found here:

[Document Link](#)

This webinar is part of a programme of engagement to build our business plans for the RIIO-T2 period. You can get involved through our website:

[Get involved website](#)

# Managing uncertainty through RIIO-T2

#RIIO-2 webinar

National Grid Electricity Transmission

19<sup>th</sup> March 2019

**nationalgrid**

View our consultation document here <https://www.nationalgridet.com/document/129626/download>



# Agenda

Item		Approx. timing
1	Introduction and context	10 mins
2	Future of Electricity Transmission engagement playback	10 mins
3	Business planning for the future	15 mins
4	Managing uncertainty in setting the RIIO-T2 price control	20 mins
5	Q&A session	5 mins
6	Next steps and close	

## Your hosts:



**Ivo Spreeuwenberg**

Regulatory Strategy Manager

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**Wayne Mullins**

Strategic Planning Manager

[Wayne.Mullins@nationalgrid.com](mailto:Wayne.Mullins@nationalgrid.com)

# How you can get involved today



Throughout the presentation please feel free to provide feedback or ask questions via the **chat function** and we will pause at points to respond

We will be using the **polling function** at certain stages during the presentation to collect your views and feedback



We will have a **question and answer session** at the end of the webinar, which we will use to cover any additional questions you may have – submitted through chat function

# 1 Introduction and context

*Ivo Spreeuwenberg*

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# Building our plans around your priorities in 2019

## Your priorities

### Consumers want

an affordable energy bill

to use energy when they want

a sustainable energy system

### Stakeholder want us to

provide a safe and reliable network

protect the network from external threats

care for communities and the environment

be transparent

make it easy to connect to and use the network

enable the energy transition

be innovative

provide value for money

*Key priorities for dealing with future energy uncertainty*

- Consumer and stakeholder priorities; established April 2017 and tested continually
- Guiding our engagement focus and the structure of our business plans
- Energy uncertainty an issue across our entire plan; of particular importance for so called 'load related' elements (shown in green)

## Building our plans

Building our plans

User Group

Challenge Group



# The energy industry is changing rapidly with implications for business planning and setting a price control

## Decarbonisation



## Decentralisation



## Digitalisation



Area of Impact	Timescale	Aspect of managing uncertainty	Focus of the document / webinar
1) Business planning	Long term (beyond 2030)	<ul style="list-style-type: none"> <li>The need for and role of electricity transmission networks <b>beyond the T2 period</b></li> </ul>	i. <b>Playback of what you have told us</b> through our engagement activities between July and October 2018
	Medium term (up to 2030 including the RIIO-T2 period)	<ul style="list-style-type: none"> <li>The <b>approach to business planning</b> for the future</li> </ul>	ii. <b>Introducing our approach</b> to business planning
		<ul style="list-style-type: none"> <li>The <b>range of possible future scenarios</b> NGET should plan against</li> </ul>	iii. <b>Seeking your views</b> on the range of futures we are planning against
2) Setting the RIIO-T2 price control		<ul style="list-style-type: none"> <li>Setting a <b>baseline allowance</b> for T2 expenditure against which uncertainty mechanisms will operate</li> </ul>	iv. <b>Seeking your views</b> on developing a single scenario used to set a baseline revenue allowance
		<ul style="list-style-type: none"> <li>Appropriate <b>uncertainty mechanisms</b> that adjust the baseline allowance based on what actually needs to be delivered</li> </ul>	v. <b>Seeking your views</b> on our proposed approach to uncertainty mechanisms in the T2 period

## 2 Future of Electricity Transmission engagement playback

*Ivo Spreeuwenberg*

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# Engagement on future role of Electricity Transmission

## Our engagement



- Exploring the long-term role of the electricity transmission network
- Inform stakeholders and gather their views – over 70 stakeholders between July and October 2018
- Blog posts, discussion document detailing our analysis, webinar, session with our User Group, BEIS, Ofgem, ADE and ongoing discussions with DNOs
- Discussion document available at <https://www.nationalgridet.com/node/127801>

## Our conclusions

### Priorities

- **New focus areas** within the stakeholder priorities (e.g. enabling customer solutions),
- **Things to draw out** in how our RIIO-T2 plans address priorities (e.g. how we could facilitate flexibility),
- Plan **further engagement**, focussed on these areas.

### Trends

- Stakeholders broadly **agreed with our areas of focus**, and
- **Insights gathered** through analysis of futures that stretch the level of decentralisation and the speed of decarbonisation of transport and engagement **valuable in building our plans**.

### Outcomes

- **Ongoing need for transmission** recognised by most; planning to **focus on RIIO-T2 timescales**,
- Some believed the network could be a blocker to **EV uptake – we will continue to engage heavily**,
- **Need for a whole system approach** strongest; building our plan in this manner important.

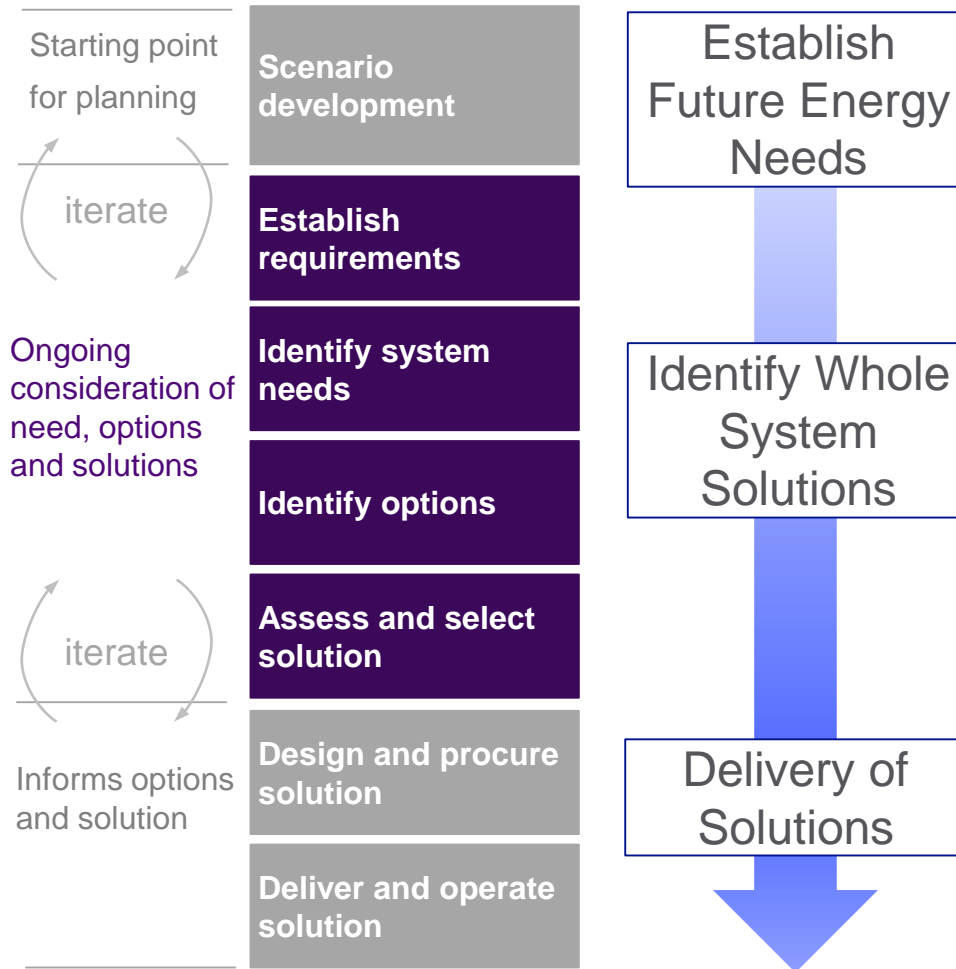
# 3 Business planning for the future

*Wayne Mullins*

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# Overview of our business planning process



We propose to use the Future Energy Scenarios as the basis for our business planning, further informed by local insights

ESO gathers extensive stakeholder input

Updated annually

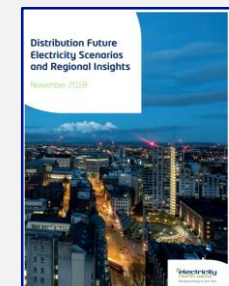
ESO annually create credible, national pathways for the future of energy over next 30+ years



Source: ESO [Future Energy Scenarios 2018](#)

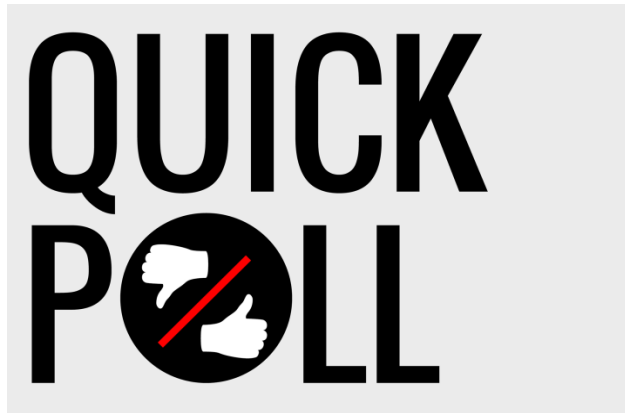


Further informed by regional forecasts and other insights



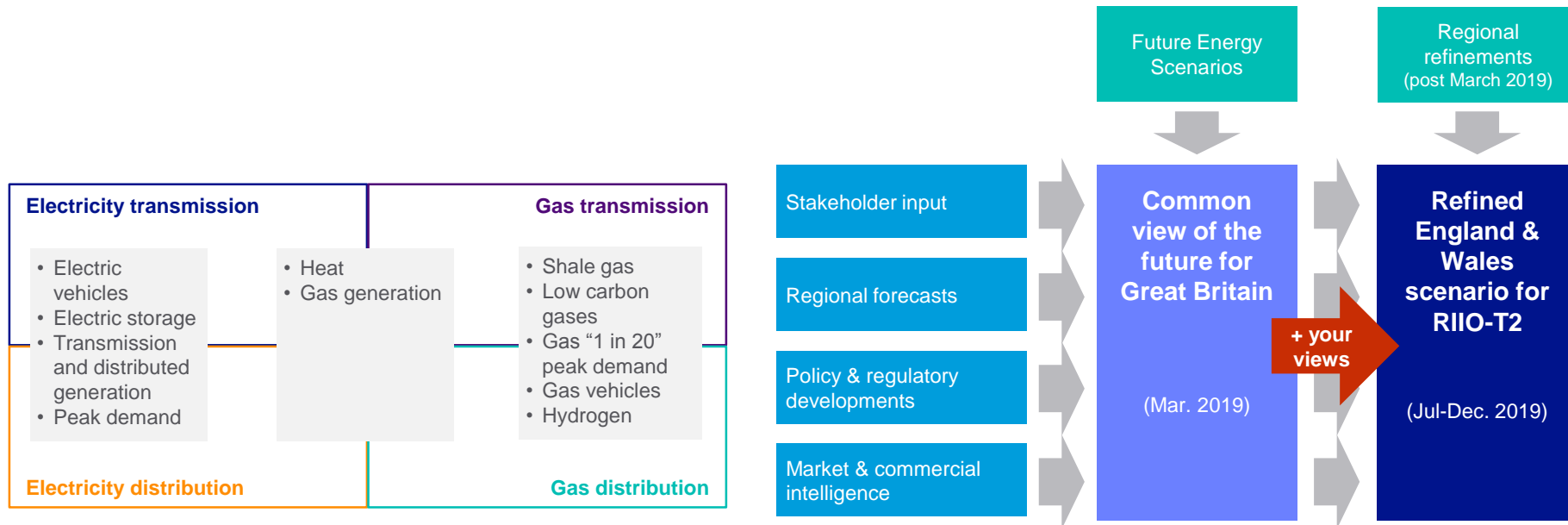
Source: ENW [Distribution Future Electricity Scenarios and Regional Insights](#)

# Are the Future Energy Scenarios, further informed by regional insights, a suitable range for planning our business?



- a) Yes
- b) No
- c) Not sure

# Approach to developing an England and Wales scenario



## A number of key building blocks have been used to develop the E&W scenario:

### Demand

“Base” demand drivers		“New” demand drivers	
Economic activity	Energy efficiency	Energy storage	Electric vehicles
Consumer behaviour	Industrial processes	Heat pumps	Demand-side response

### Generation

Transmission connected		Distributed technologies	
Supply decline (e.g. coal, nuclear)	Interconnectors	Wind	Solar
Other connections	Asynchronous generation	Diesel & Gas	Energy storage

# Is our approach to setting a scenario for England and Wales a reasonable one?



- a) Yes
- b) No
- c) Not sure

# 4 Managing uncertainty in setting the T2 price control

*Ivo Spreeuwenberg and Wayne Mullins*

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# How energy uncertainty is managed in the RIIO framework

## 1 Set the price control

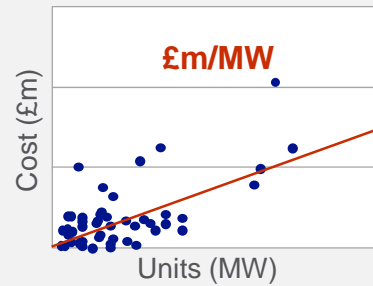
How it works

Baseline allowance based on forecast volume\* requirements

Baseline allowance  
£Xbn

+

Calculate unit cost allowances



## 2 Adjustments to reflect requirements

Adjusted allowance

Baseline allowance


Adjusted allowance


Unit cost allowance adjusts baseline up or down to reflect actual volume delivered  
( + OR - £m/MW)


Out-turn volume\* requirements

RIIO-T1 experience

Unit cost allowances set at RIIO-T1 control

 Network connections

 Network reinforcement

 Planning requirements

£16bn baseline allowance

>£2bn uncertainty mechanism adjustment

<£14bn adjusted allowance

RIIO-T2 proposals

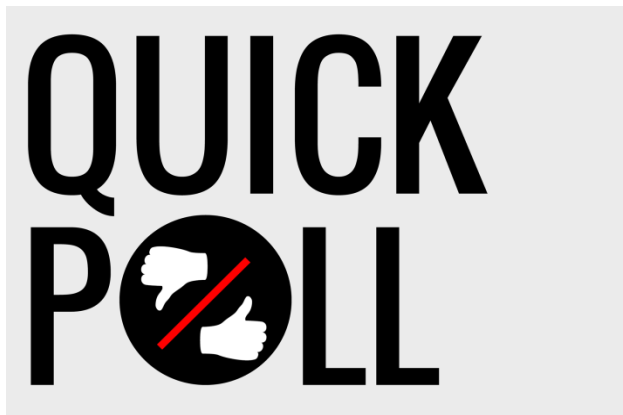
We will apply a similar approach for T2 and propose to:

- 1) Recalculate and redesign some existing unit cost allowances
- 2) Introduce **new categories** for areas not adequately covered in T1
- 3) Develop the detail of a potential mechanism that allows for **anticipatory investment**

\*Volume = amount of additional capacity on the network, numbers of specified equipment, etc. (mechanism dependent)

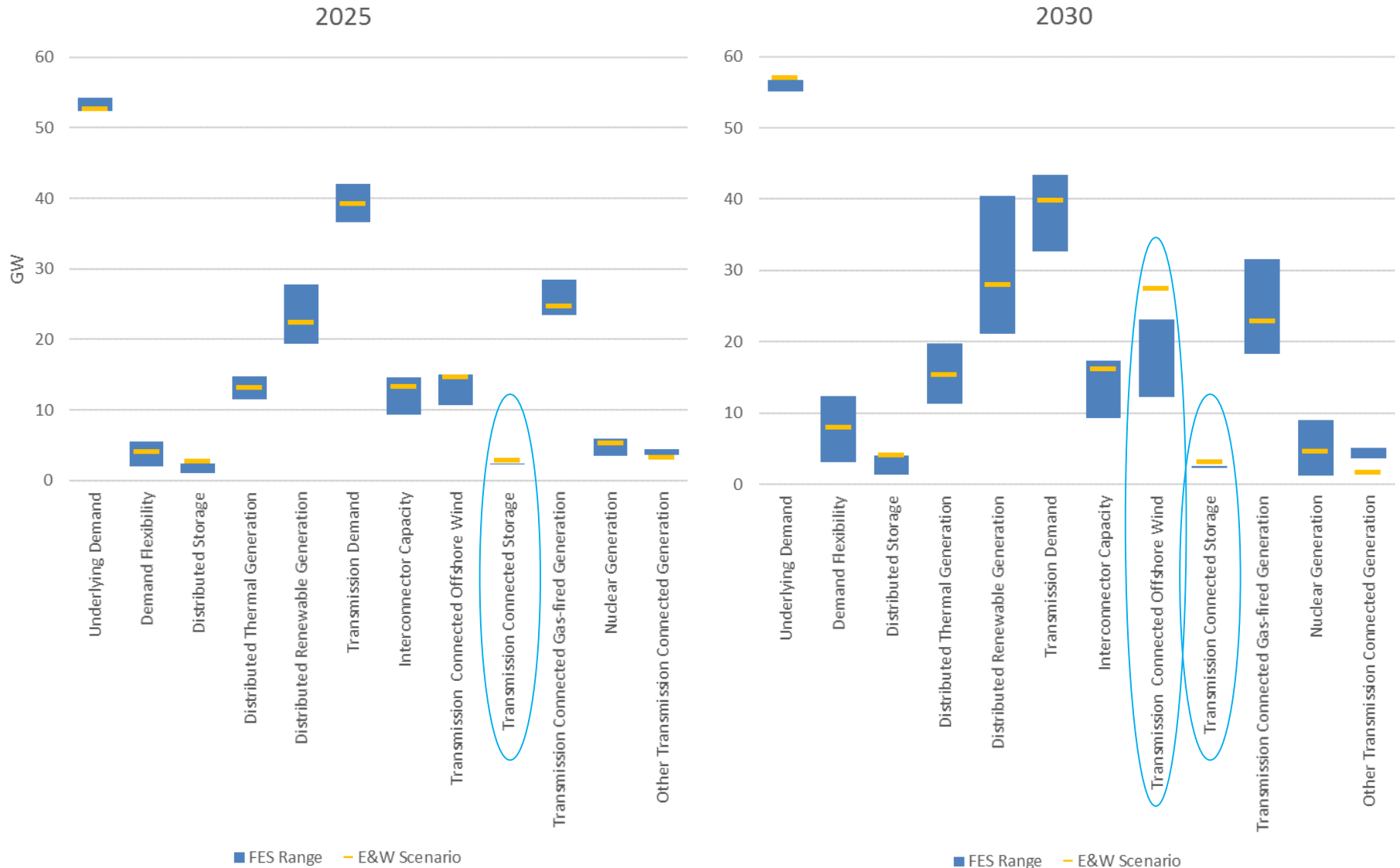


# Should our baseline be set in a manner that is most likely to...?



- a) Increase allowances over the T2 period
- b) Decrease allowances over the T2 period
- c) Maintain allowances over the T2 period
- d) Not sure

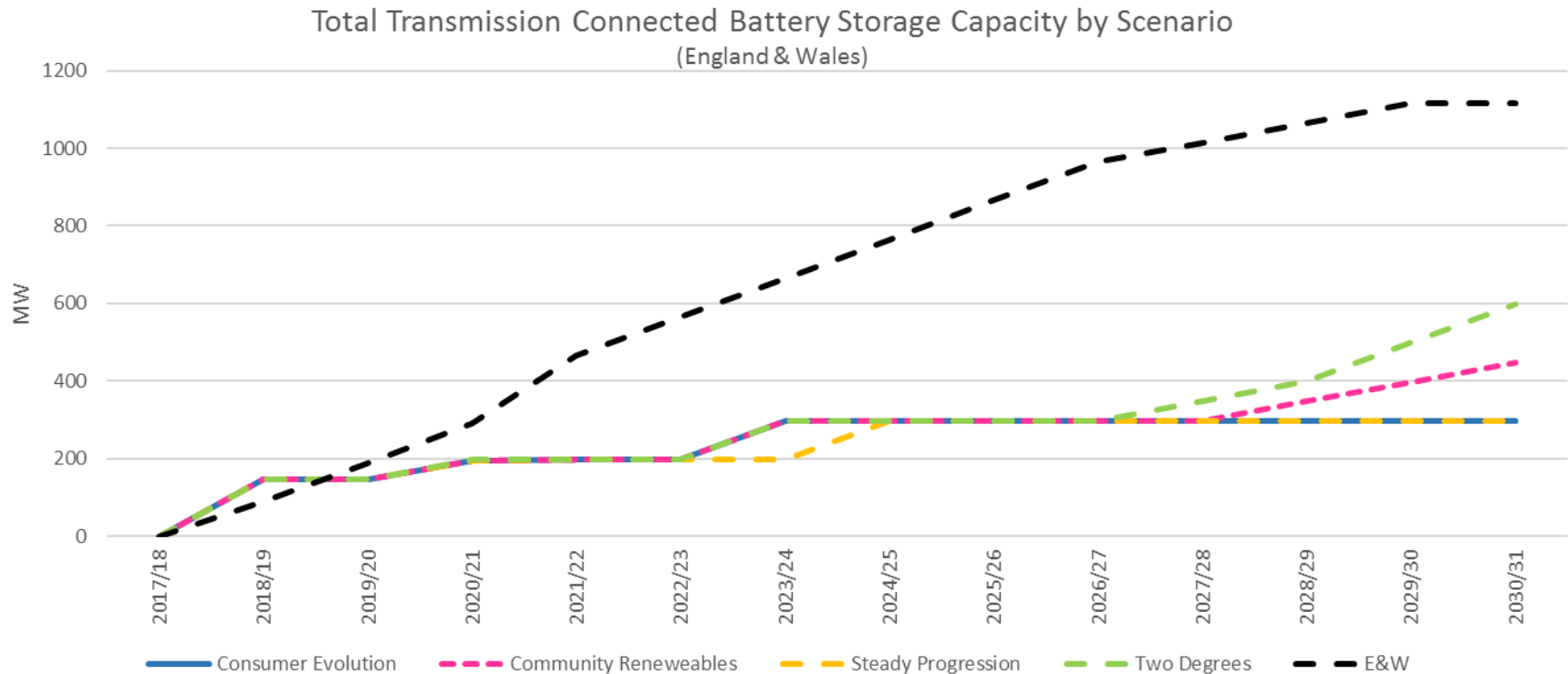
# Overview of our England & Wales scenario



# Electricity storage capacity

## Our E&W forecast reflects a notable uptake in Battery Storage applications

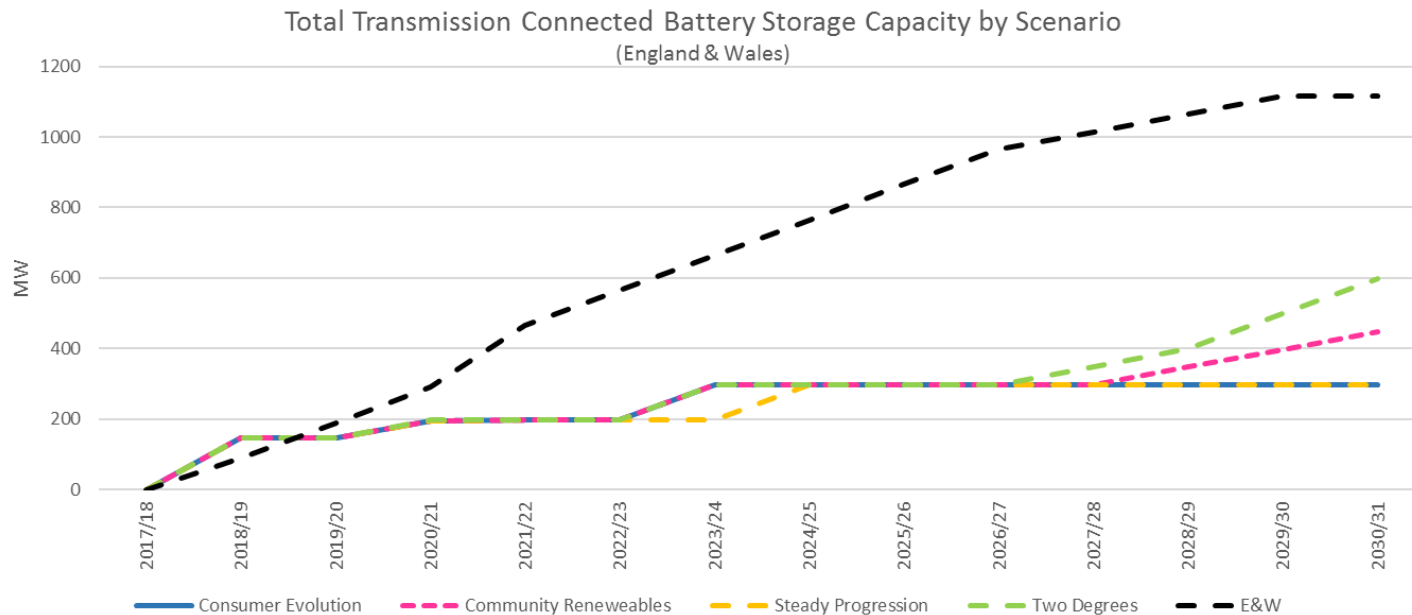
- The 2018 ESO Future Energy Scenarios see a limited number of projects connecting up to 2030, reflecting limited activity in this area prior to FES studies;
- However, 1.8GW of transmission connected capacity is now contracted to connect by the mid-2020s;
- Further interest indicates this could reach up to 4GW.
- Whilst we have increased our E&W forecasts beyond the current FES range, we have taken a rather conservative view, given the low number of large scale projects connected to date.



# What are your views on our storage assumptions



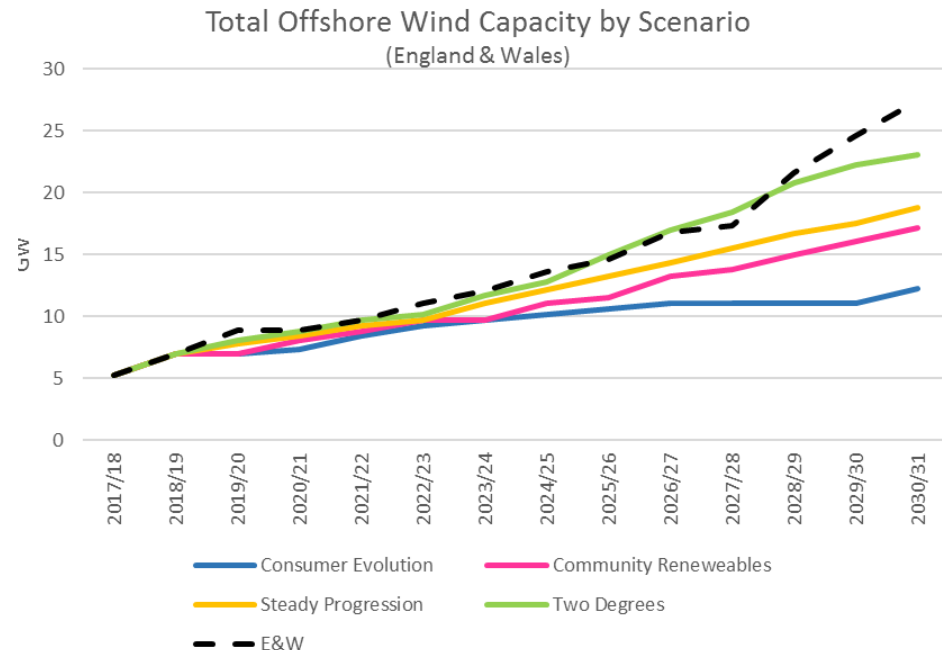
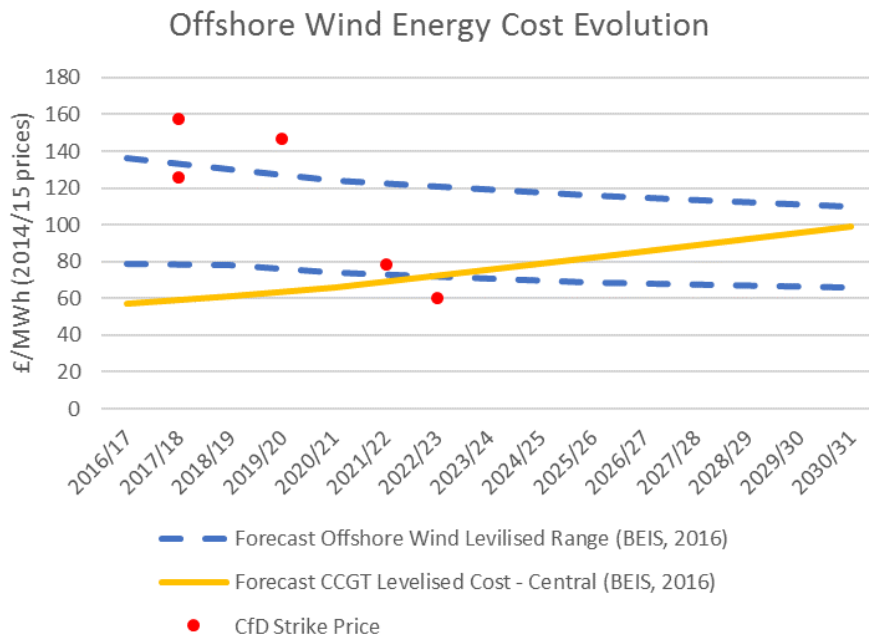
- Far too optimistic
- Too optimistic
- About right
- Not optimistic enough
- Far from optimistic enough



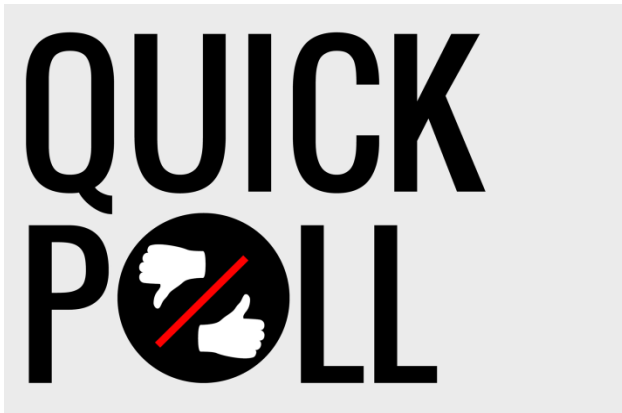
# Offshore Wind capacity

## Reducing Costs of Offshore Wind leads to additional growth

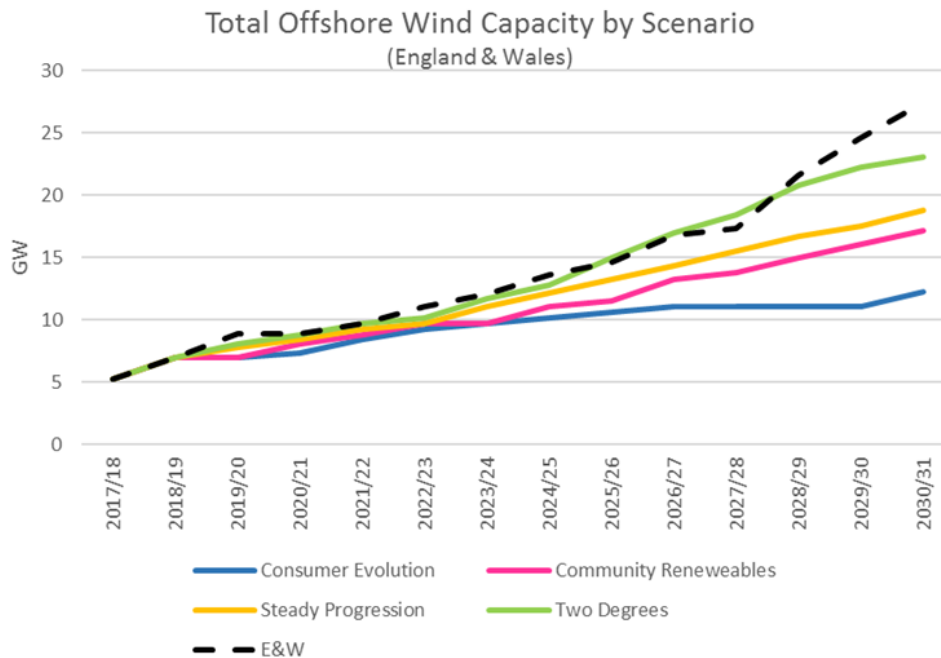
- Costs observed in the results in the 2<sup>nd</sup> CfD Allocation Round suggest costs have reduced more rapidly than previously projected.
- Projects likely to be at cost parity with traditional generation in the mid-2020s, making subsidy free projects likely.
- The recent announcement of Government's Sector Deal for Offshore Wind should strengthen the sector further, leading to further growth.
- Our E&W Offshore Wind projections are similar to the ESO Two Degrees scenario up to mid-late 2020s, but show additional growth beyond this



# What are your views on our offshore wind assumptions



- a) Far too optimistic
- b) Too optimistic
- c) About right
- d) Not optimistic enough
- e) Far from optimistic enough



# 5 Question and Answer session



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# 6 Next steps and close



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# Please give us feedback so we can improve future engagement

- 1 How would you rate the content of this webinar?
- 2 How would you rate the delivery of content by our speakers?
- 3 How would you rate webinars as a vehicle for delivering content?
- 4 Any general comments? (free text)

# Upcoming opportunities to get involved in building our plans

## Future engagement on– Providing a safe and reliable network

*We will be covering how the different elements of our strategy interact to deliver a level of reliability, and how we may flex our options based upon what stakeholders have told us to date.*

20 March

Managing Transmission Network Reliability document released on our [website](#)

26 March

Webinar

[Click to book a space](#)

21 May

Workshop

Details coming soon

We also have a consultation out at the moment, playing back what stakeholders have told us to date, please take a look and give us your feedback, the [consultation](#) closes on **31 March 2019**.

To view previous topic engagement playbacks please also visit our [Get involved website](#)



# Thank you for attending! – your input is important

The changing energy landscape is increasing the uncertainty of future market conditions which has implications on the role of the transmission network, how we plan our business, and how we manage uncertainty.

We welcome any additional views you may have on any of the topics raised in the webinar today or within the consultation document.

You can share these views with [gary.stokes@nationalgrid.com](mailto:gary.stokes@nationalgrid.com) by 1 April 2019.

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