

# What our stakeholders said

## FutureSmart

A smart grid for all: Our transition to Distribution System Operator

# Thank you

At a time of unprecedented change, the industry needs to collaborate like never before.

The Future Smart Consultation was a chance to do just that, and the engagement and feedback we received was incredibly valuable.

**We welcome your continued engagement and feedback.**

The consultation is now closed. However, we still encourage you to continue to provide us with feedback or get in touch.

Please send your feedback or get in touch to either:

**Microsite:**

[futuresmart.ukpowernetworks.co.uk](http://futuresmart.ukpowernetworks.co.uk)

**Our DSO email:**

[futuresmart@ukpowernetworks.co.uk](mailto:futuresmart@ukpowernetworks.co.uk)

**By post to:**

UK Power Networks, FutureSmart response,  
Newington House, 237 Southwark Bridge Road, London, SE1 6NP

**You can also subscribe to the Future Smart mailbox by emailing us on the DSO email above.**



# Executive Summary

**These are exciting times in the world of energy. We are on the verge of change that is as significant for electricity as the advent for broadband was for telecommunications and new players and disruptors are entering the energy market.**

Advances in technology are transforming all aspects of people's lives, and this is certainly true of how people use energy. In the coming years, more people will own electric and driverless cars, use smart appliances in their homes, and generate, store and sell their own electricity. They will be able to manage energy in their home remotely and through voice-activation via advanced app-based products and virtual assistants.

People's lives are becoming smarter and their relationship with energy is changing. It is moving from being a utility to being a commodity, and new players and disruptors are entering the energy market. New market players may act as third-party intermediaries between the customer and the energy market, to help manage the customer's household package – whether that be mobility, comfort or entertainment – to optimise experiences across their lifestyle. As such, customers expect the companies and organisations behind their energy supply to respond flexibly to enable this transformation.

We have already begun our transition to become a Distribution System Operator (DSO) so that we can empower and enable our customers and the communities we serve to benefit from a decentralised, decarbonised and digitised energy system.

**At a time of unprecedented change in our industry, it is more important than ever that we listen, collaborate and share**

We launched our Future Smart strategy in July 2017, describing UK Power Networks' vision of the future DSO role, and the transition we believe is necessary for our industry to deliver 'a smart grid for all'. The consultation ended in September 2017.

In addition to the formal responses to the consultation, we also gathered stakeholder views at a series of engagement events that we ran from early 2017 to March 2018.

**Our stakeholders are helping to shape our plans to transition to a Distribution System Operator (DSO) to support 'a smart grid for all'**

During the consultation, we engaged with a wide range of stakeholders including customers, industry partners, government, community groups, generators, the regulator, charities and suppliers. We would like to thank all our stakeholders for their comprehensive and detailed response to and engagement with our consultation. This feedback has helped to shape our plans and they have directly influenced UK Power Network's implementation of its vision of a smart future.

An overwhelming majority of stakeholders endorse UK Power Networks strategy and leadership, giving us confidence we are delivering plans that are meeting their needs. The feedback has also influenced and enhanced our 2018/19 plans and ensured we are prioritising our efforts in the right areas.

This report summarises the feedback UK Power Networks' received and our response.

**Listening to our stakeholders will continue to be a priority**

We recognise at a time of unprecedented change that it remains vital to listen, share and collaborate. We will continue to place our customers and stakeholders central to our transition to DSO.

As such, we encourage you to continue to provide us with feedback, ideas and challenge as we progress our transition to becoming a DSO. Details of how you can continue to provide feedback can be found on the opposite page.





# Introduction

**UK Power Networks is transitioning to a Distribution System Operator (DSO) so we can respond fully to the changing needs of our customers, both now and in the future, and work with the wider industry to help deliver a decentralised, decarbonised and digitised energy system at lowest cost.**

Our stakeholder engagement strategy is to deliver better outcomes for our customers by using stakeholder feedback to inform the projects and services that will deliver our long-

term business plan; our Future Smart strategy and consultation was an opportunity for us to understand if we are prioritising the right areas, or if there is other work that we can be doing to create a Smart Grid for all.

**This report summarises the 32 responses to our consultation from a broad spectrum of stakeholders:**



4

Technology Provider



1

Network Operator



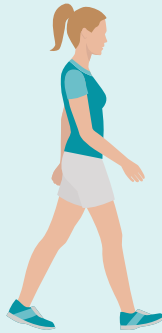
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Individual



1

Supplier



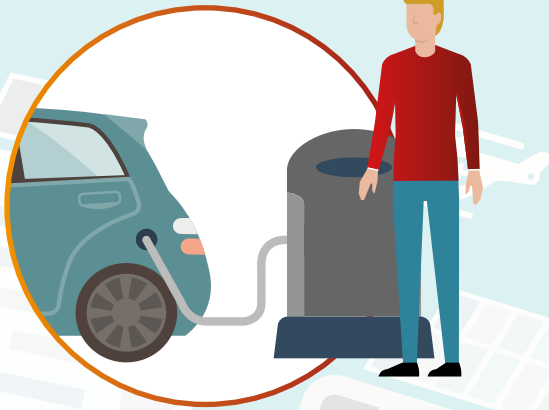
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Distributed Energy Resource



3

Industry Bodies

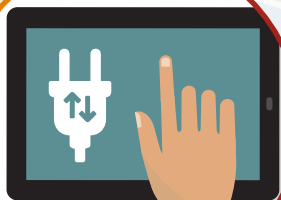


1

Engineering & Consulting Services

1

Energy Developed & Service Provider



3

Aggregator





# Customers helping us Shape 'A Smart Grid for all'

**Summary of engagement:** We used a variety of channels to capture stakeholder feedback including live events, our Future Smart website and social media.



**95 industry stakeholders**

attended the 8 September event



**3,873**

unique microsite page views



**68 pieces of coverage,**

including 6 pieces of national coverage



**8,083 views**

of video post on LinkedIn



**19,193 reach**

of launch blog post



**257 mentions**

of the #smartgrid and #futuresmart



**95% positive**

feedback for the 8 September event



**32 consultation forms**

have been filled out

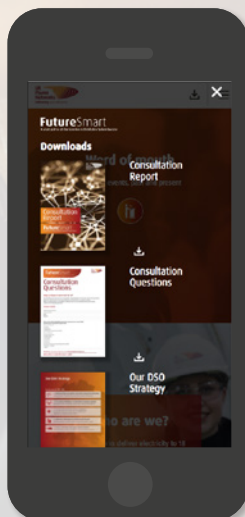
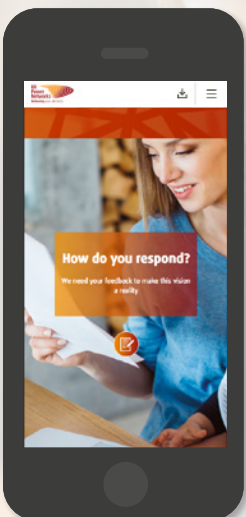
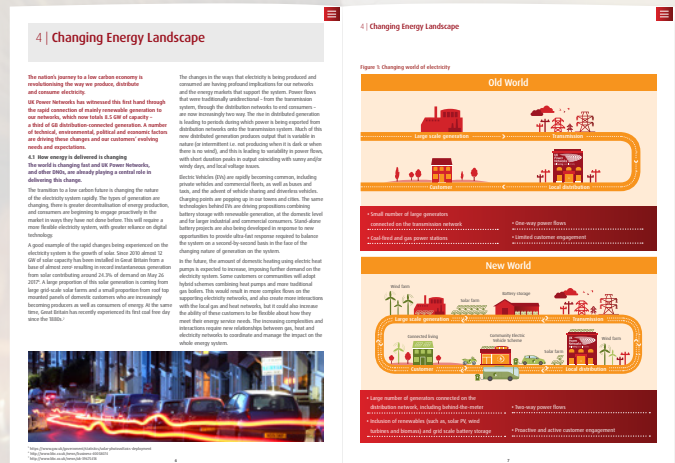
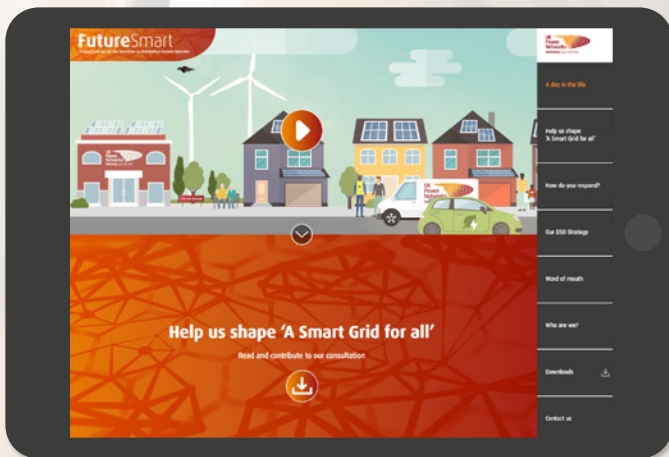
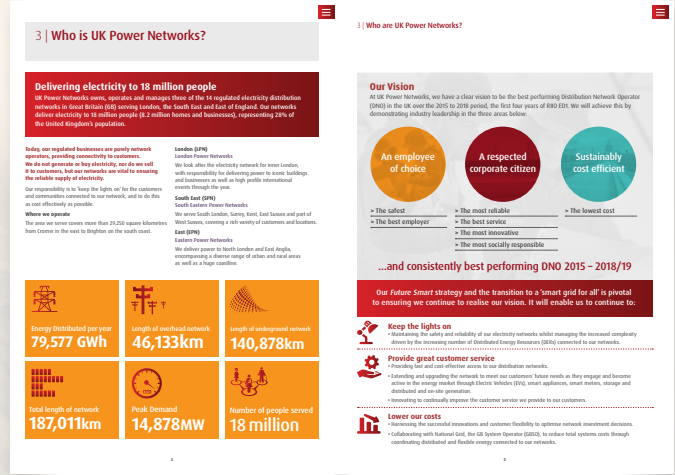


**>30 Engagement events**

held or attended with stakeholders

\*Above figures up to date as of March 2018.

# What we did to engage people



## Future Smart Report Materials



We produced the Future Smart consultation report, two-page summary document and our five point DSO strategy. These were available digitally on a dedicated microsite and available in hard copy. These materials increased awareness and understanding of the future role of the DSO, our plans, and gave our stakeholders the opportunity to shape our plans through responding to 20 consultation questions that we asked.

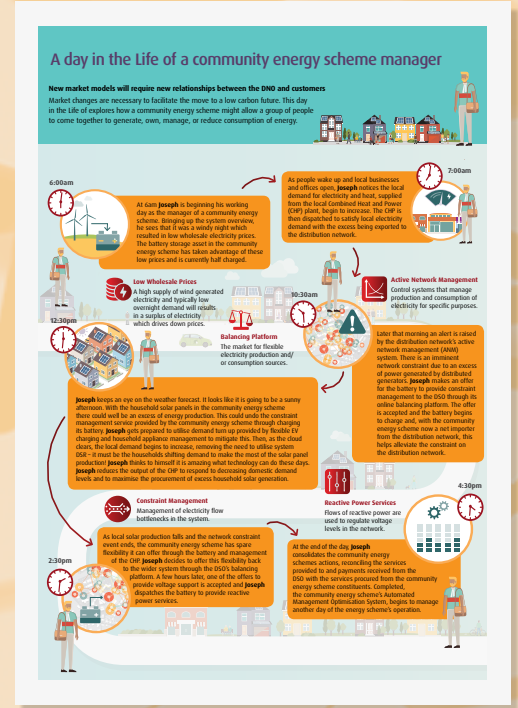
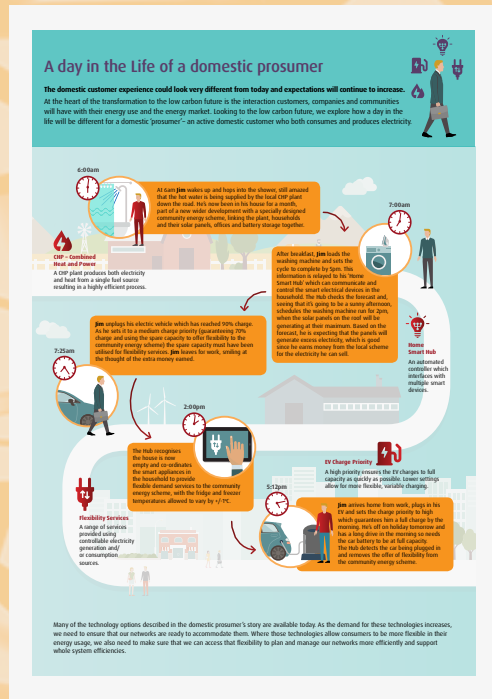
[futuresmart.ukpowernetworks.co.uk](http://futuresmart.ukpowernetworks.co.uk)

# What we did to engage people

## Illustrative customer experiences as 'A Day in the life of'

We also developed and presented four potential customer experiences as 'A day in the life of' stories to bring the strategy to life and to stimulate conversation on the potential future energy aspirations of our customers and stakeholders.

### See 'A day in the life...stories'



## Future Smart Engagement events

We held and participated in over 30 other engagement events. These events enabled us to increase awareness of our Future Smart plans and gather feedback.



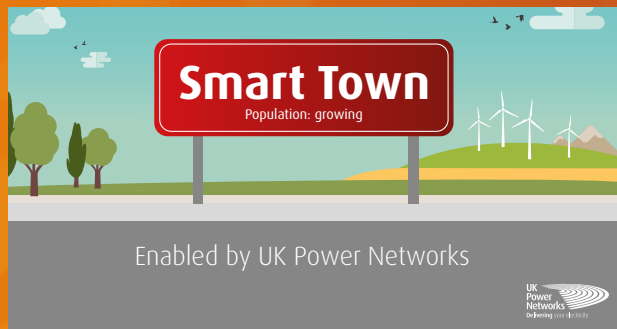




## Future Smart Animation Video

We created an animation focused on 'A day in the life of...our customer Sally.' The video helped depict a possible future in 2030 that the role of the DSO could facilitate.

Watch video



## Future Smart Conference

We hosted a flagship conference on our Future Smart strategy attended by 95 stakeholders from Government, industry, generators, suppliers, charities and think tanks. The conference featured opportunities for discussion and feedback including breakout sessions on key consultation topics and an industry panel with key influencers from the sector. This included: Janet Wood (Editor of New Power); Dr Jenifer Baxter (Institute for Mechanical Engineers, Head of Energy and Environment); Duncan Sinclair (Baringa Partners, Partner), Andrew Burgess (Ofgem, Associate Partner); Jenny Saunders (National Energy Action, Chief Executive); and Simon Roberts (Centre for Sustainable Energy, Chief Executive) – concluding with a closing speech from Laura Sandys (Former Member of the Energy and Climate Change Committee).



See materials from the event



## Live Question & Answer (Q&A) Session

We hosted a Live Q&A session with our Director of Asset Management Barry Hatton on Twitter whilst also taking questions from LinkedIn and Facebook. In total, we received and responded to 21 questions from a range of customers and businesses.

See materials from the Q&A

Your Future. Your Energy.  
Your Questions Answered.

Save the date! Join our Live Q&A

Ask Barry Hatton your questions about our transition to a Distribution System Operator

05.09.2017, 1pm - 3pm  
#AskBarry #FutureSmart



Barry Hatton  
Director of Asset Management



UK Power Networks  
Delivering your electricity



# Summary of Consultation Outcomes

Overall stakeholders endorsed UK Power Networks strategy and leadership in the DSO transition.

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## Stakeholders support and agree with our DSO Plans



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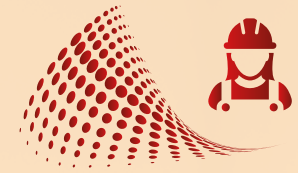
## Stakeholder views on our Future Smart strategy



# Key Themes from Stakeholder Responses

We have identified key themes from the responses and have developed near-term actions in 'Our Stakeholders Said, We Will' table to strengthen our 2018/19 DSO plan in line with the feedback.

**Accelerate the roll out of Active Network Management** to facilitate quicker and cheaper connections



**Continue to run flexibility tenders for Distributed Energy Resource (DER)** and improve understanding of our flexibility needs

**Support local energy growth** through information and collaboration



**Educate and inform different customer groups** of the transition to DSO and opportunities of the future of energy



**Improve network visibility and monitoring** at the lower voltage levels to accommodate DER growth

**Consider potential new areas of vulnerability** as a result of future energy developments and explore who will serve and respond to their needs



**Clarify the DSO's roles and responsibilities** as separation steps taking place in National Grid at the transmission level

**Strengthen the collaboration between different energy sectors** such as transport, heat and gas as will have an influence on electricity networks within a whole systems approach



We received a wealth of supporting comments and views, which we are also considering in developing our strategy further. [Click here to see the Detailed Consultation Response Insights.](#)



# The feedback shaping our 2018/19 plans

How UK Power Networks is successfully responding to stakeholder feedback.

**Our stakeholders said...**  
1. Accelerate roll-out of Flexible Distribution Generation (FDG) from the current publicly available plan to facilitate quicker and cheaper connections

**We will...** 

Bring forward the roll out of Active Network Management for the management of high voltage constraints from 2021 completion to end of 2019 completion.

Publish the revised roll out plan online in 2018.

**What are the benefits...?**

Customers looking to connect their Distributed Energy Resource (DER) site to our network, will have the option to select the FDG connection offer to connect quicker and cheaper.

The FDG connection offer will also serve as a platform to evolve a customer's DER site to one that provides flexibility for the DSO to manage the local distribution network and to provide national balancing services to the Transmission System Operator (TSO) for constraint management on the transmission network. This will give customers access to new revenue streams in return for flexibility services.

**Our stakeholders said...**  
2. Open up flexibility markets for Distributed Energy Resource (DER) and outline to the market our flexibility service needs

**We will...** 

Publish a roadmap of UK Power Networks flexibility needs in 2018 for the period 2018 - 2023 in a format co-designed with customers. We will continue to run flexibility tenders through 2018.

Collaborate on development of flexibility market platforms through the Open Utility and Electron projects.

Address industry coordination aspects within the Energy Networks Association (ENA) Open Networks project.

**What are the benefits...?**

Market participants will have a clear and forward-looking view of our requirements of when and where we are looking for their support in the provision of flexibility services. This will help them to understand the revenue streams available from the DSO local market.

Whether market participants are well established in the market or a new flexibility provider / innovator, our flexibility tenders will begin to be available on online flexible market platforms, providing a seamless and easy customer experience for bidding resources.

**Our stakeholders said...**  
3. Support local energy growth through information & data provision and collaboration

**We will...** 

Develop a new Community Energy web page to act as a knowledge centre to support local energy growth.

We will have the new website live in a format co-designed with customers by July 2018.

**What are the benefits...?**

Community energy schemes looking to connect to our network, will be given useful tips and signposts to navigate the process.

To help you on your local energy journey, we will highlight case studies from existing successful community energy schemes and community groups that are available to join.

# Our Stakeholders Said, We Will

How UK Power Networks is successfully responding to stakeholder feedback.

## Our stakeholders said...

4. Educate and inform different customer groups of the transition to DSO and opportunities of the future of energy

### We will...



Develop simple DSO handbooks to make the future of energy topics accessible to all our customers and local government stakeholders.

We will publish the handbook on the UK Power Networks' website in March 2018 for customers and September 2018 for Local Authorities.

### What are the benefits...?

Customers and local government stakeholders will have access to a simple -guide to the main topics surrounding the future of energy to help them understand the exciting opportunities available through this transition.

## Our stakeholders said...

5. Deliver network visibility and monitoring capabilities at the lower voltage levels to accommodate DER growth

### We will...



Continue our targeted rollout of monitoring for the low voltage network, prioritising areas where we see electric vehicle clustering.

The rollout kicked off in January 2018 and aims to deliver visibility at over 6,000 distribution sites in the next 5 years enabling the cost-effective integration of electric vehicles.

### What are the benefits...?

Customers using an Electric Vehicle will be able to charge their vehicle on our network without hassle and connect at lowest cost.

## Our stakeholders said...

6. Consider another area of vulnerability and explore the DSO's role to those without the flexibility to change their energy use habits

### We will...



Commission in Q2 2018 research to understand the impact Future Energy has on vulnerability. In particular how, alongside fuel poverty and Priority Services Register (PSR) needs, financial capability, digital skills and the implications of flexible time of use tariffs on customers whose energy use cannot be flexible, will change the nature of vulnerability. As part of this exercise we will also look to understand what role the DSO has in supporting customers in vulnerable circumstances.

### What are the benefits...?

This will provide additional industry thinking on how we bring all customers along with us on the transition to a smarter future.

It will also help us and other industry actors to understand the roles and responsibilities to manage this new area of vulnerability.

# Our DSO Strategy

## Five key areas for 2018 - 2019



### 1. Facilitate cheaper and quicker connections using proven innovation

Continue rollout of Flexible DG that uses Active Network Management



### 2. Use customer flexibility as an alternative to network upgrades

Run market tenders for flexibility services such as Demand Side Response



### 3. Develop enhanced System Operator capabilities

Develop TSO – DSO Commercial Framework, DER Dispatch capability and readiness for smart meters



### 4. Collaborate with industry and others to enable GB wide benefits

Actively participate in industry forums and engage with others to make this transition a reality



### 5. Prepare and facilitate the uptake of Electric Vehicles

Enable connections using smart solutions and ensure business readiness

