

# Reshaping Regulation: Normalising the energy sector

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# Changing energy system



Social

- Urbanisation
- Aging
- Connected lifestyle
- ...



Economic

- Economic growth
- Distribution of wealth
- Energy & data policy
- ...



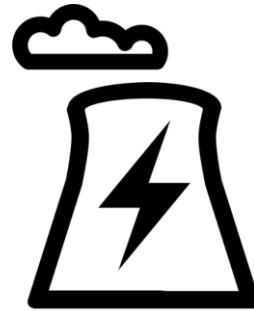
Environment

- Decarbonisation
- Climate change impacts / adaptation
- Visual amenity
- ...



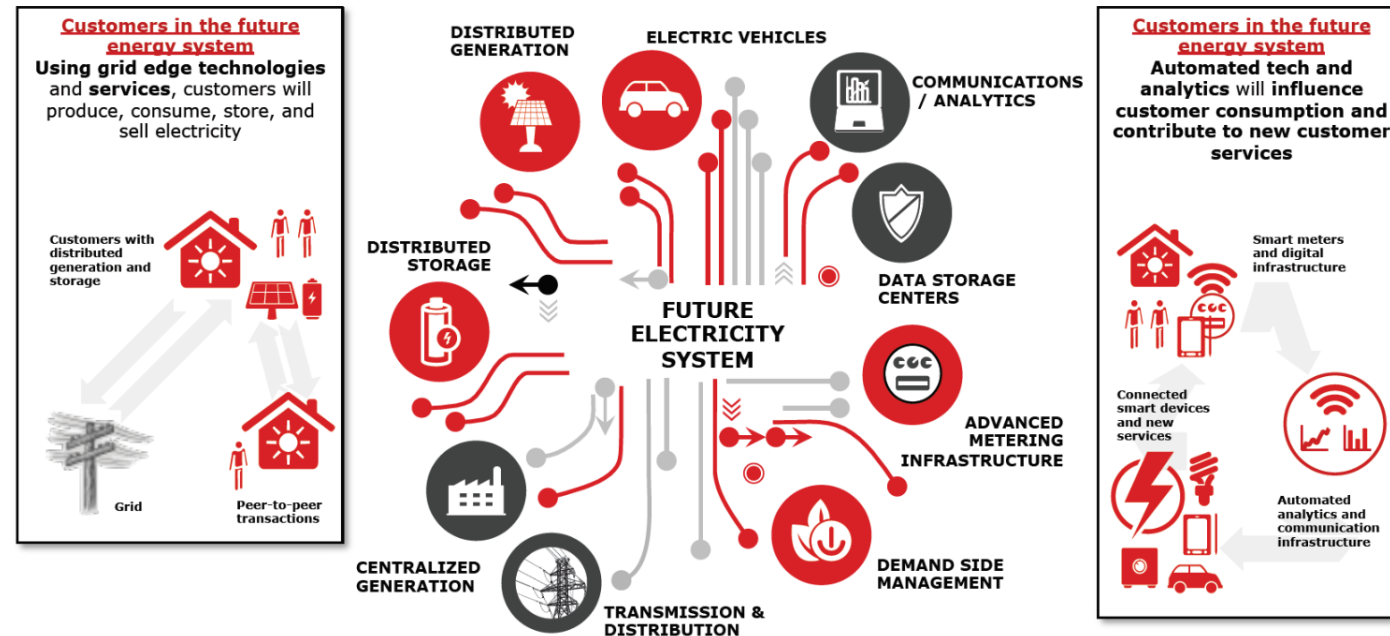
Technology

- Cost of technologies
- Artificial intelligence / machine learning
- Smart stuff (IoT, HEMS, etc)
- ...

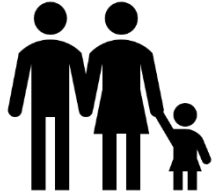


Uni-directional  
Passive consumers  
Centralised generation  
Few large actors

Acknowledgement: World Economic Forum report - The Future of Electricity



# Reshaping regulation Pt I – key messages



Regulate for how consumers consume not how businesses are organised



Regulate for system optimisation to deliver the most productive, efficient and affordable system



Regulate to promote transparent, cost-reflective and open markets



Regulate for where energy system security is truly at risk

Reference: Reshaping Regulation 1<sup>st</sup> November 2017

<https://www.imperial.ac.uk/grantham/publications/reshaping-regulation-powering-from-the-future.php>



# Since then...



To all interested parties,

**Future supply market arrangements – response to our call for evidence**

In November 2017, we published a call for evidence asking stakeholders whether the current regulatory arrangements that govern the retail energy market will best serve the needs of future consumers, or whether these will need to change in light of the significant technological change already affecting the sector.<sup>1</sup> Following consideration of respondents' views we now consider there is a strong case for fundamental reforms to be explored. This letter provides a summary of the evidence we received and sets out our conclusions on what changes need to be considered further. It also sets out the next steps we will be taking in line with our conclusions.

*“...we are not confident [the current supplier hub model] will enable consumers to benefit fully from the greater levels of innovation, digitalisation and competition made possible by the energy system transition...”*

[https://www.ofgem.gov.uk/system/files/docs/2018/07/future\\_supply\\_market\\_arrangements\\_-\\_response\\_to\\_our\\_call\\_for\\_evidence\\_0.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/07/future_supply_market_arrangements_-_response_to_our_call_for_evidence_0.pdf)

ofgem Making a positive difference for energy consumers

Getting more out of our electricity networks by reforming access and forward-looking charging arrangements

**Consultation**

<b>Publication date:</b>	23 July 2018	<b>Contact:</b>	Jon Parker, Head of Electricity Network Access
<b>Response deadline:</b>	18 September 2018	<b>Team:</b>	Electricity network access reform
		<b>Email:</b>	NetworkAccessReform@ofgem.gov.uk

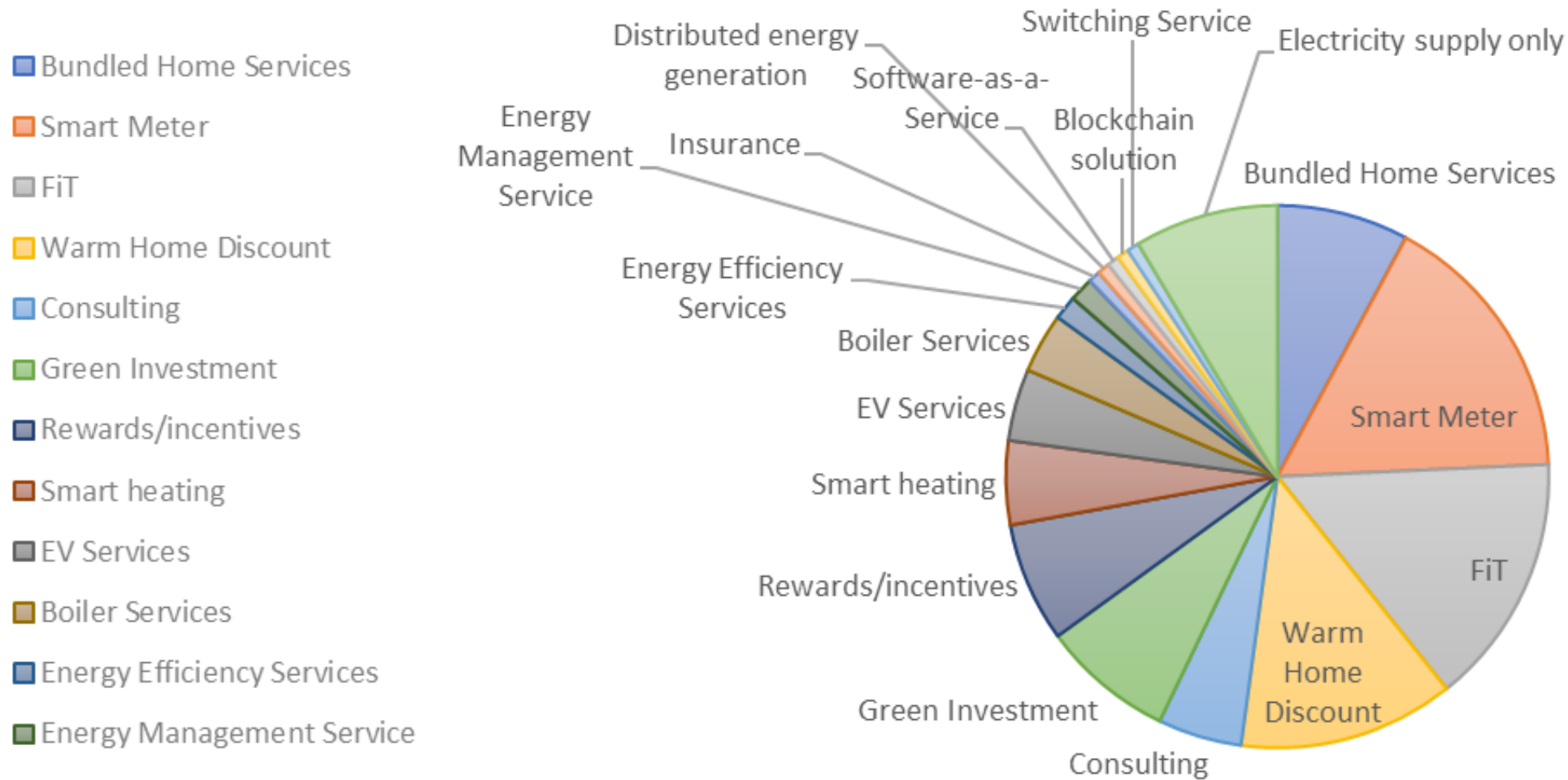
*“We do not think the current approaches to allocating and using capacity – and charging for the associated network usage – on the electricity networks can adequately address the associated challenges and opportunities.”*

[https://www.ofgem.gov.uk/system/files/docs/2018/07/network\\_access\\_consultation\\_july\\_2018\\_-\\_final.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/07/network_access_consultation_july_2018_-_final.pdf)



# New 'supplier' models emerging

Activity Mix Offering Mar-18



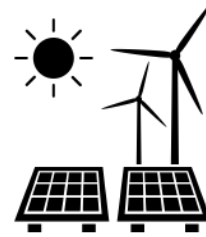
# New value available to electricity utilities



Plant efficiency  
£75 – 1809 m



Service provision  
£5 – 9 bn



Local LC generation  
£42 – 4600 m



Large LC generation  
£0.61 – 8 bn



Flexibility optimisation  
£400 – 2000 m



CCS  
£-0.14 – 1669 m

Up to £21bn  
of new value  
is available to  
electricity  
utilities per  
year by 2050

# Reshaping regulation Pt II (Nov 2018)

## Headline

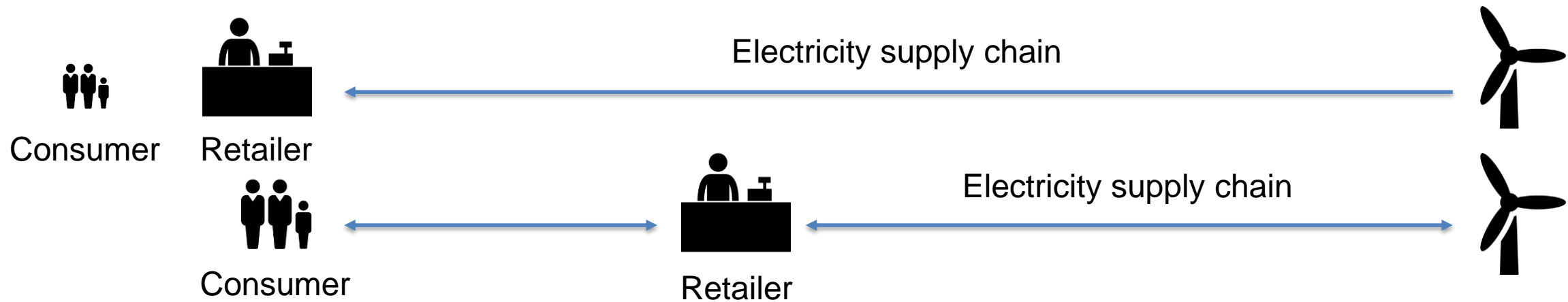
We need to normalise the energy sector

1. Power to the consumers
2. Unleash the power of data
3. Recalibrate security of supply
4. Reshape regulation



## Normalising the energy sector

**“The energy sector should be open to same benefits, opportunities, pressures, risk and expectations that consumers’ benefit from in other products and services.”**



# 1. Power to the consumers

**“Give the Consumer the power to make, shape and break how they are provided with energy”**



**More Complexity  
More Transparency**



**More Choice  
More Consumer Power**



**More Freedoms  
More Penalties**

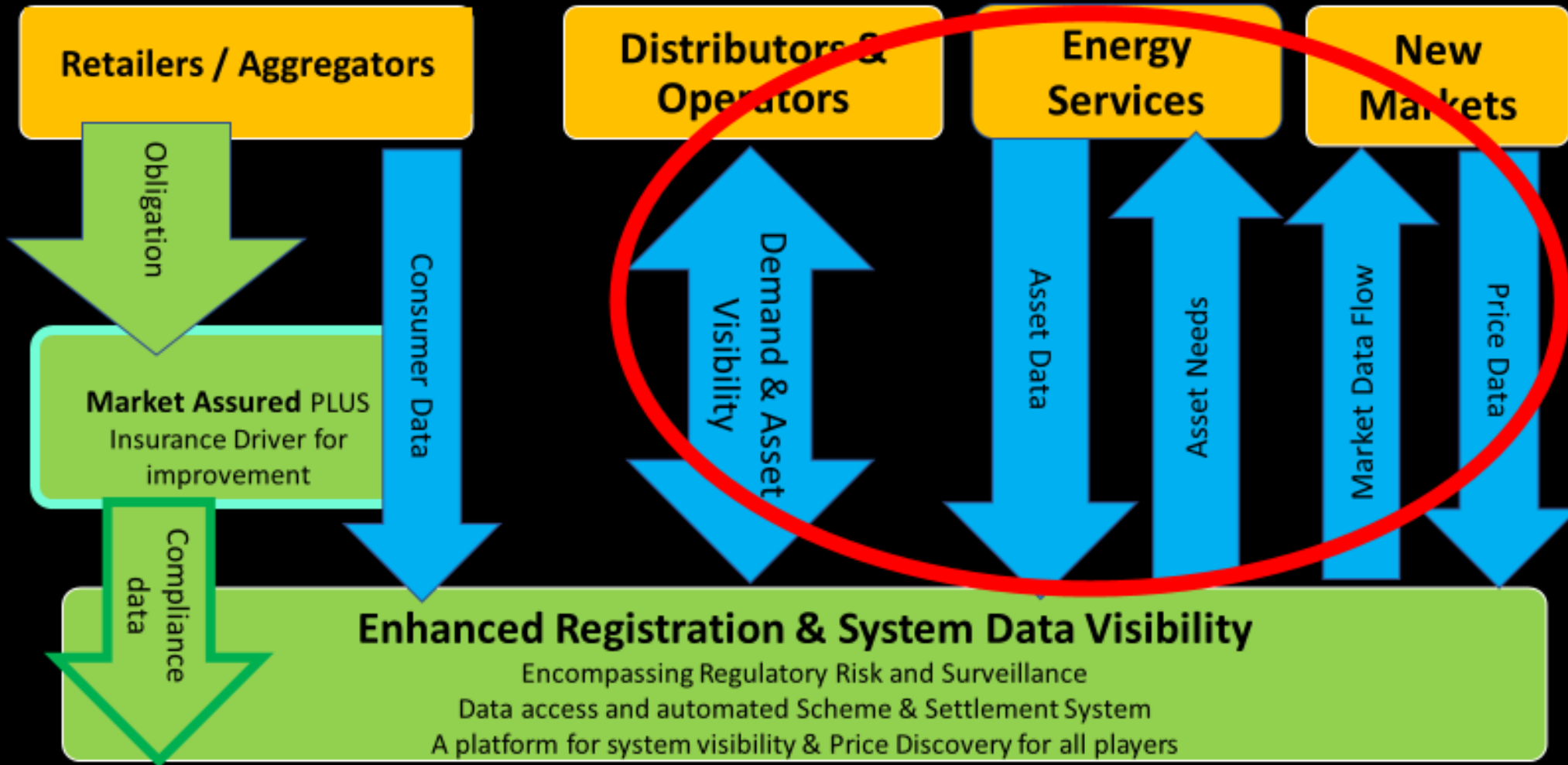


**More Services  
More Redress**

## 2. Unleash the power of data

“Drive better service provision, price discovery and system optimisation by opening up electricity system data to serve the public good.”

### BETTER REGULATION: System Visibility & Price Discovery



### 3. Recalibrate security of supply

**“Recalibrate security of supply to reflect the new nature and ‘anatomy’ of the sector delivering appropriate risk profile for the security of the system”**



**No Build: Less Build**



**Better Build and Fully  
Costed Procurement**

## 4. Reshape regulation

### A Pathway to Normalising Energy

**TODAY's JOB BETTER**

**3. INCREASE ENFORCEMENT**  
Exercise sanctions

**3. REDEFINING VULNERABLE**  
Focusing on the problem

**2. NETWORK NORMALISATION**  
Roles, Responsibilities & Productivity

**3. CONSUMER PROTECTIONS**  
New redress & X-Regulatory  
Equivalence

**3. ONE CONSUMER REGULATOR**  
Start convergence across Essential  
Service Regulators

**5. OPTIMISATION  
REGULATION**  
New Regulatory Outcome

**3. NORMALISING  
RETAIL**  
Assurance / Insurance

**1. SYSTEM VISIBILITY**  
Data Platform

**3. ENHANCED REGISTRATION**  
Risk Assessment

**4. NEW SOS HIERARCHY**  
Need Driven Procurement

**TOMORROWS's JOB DIFFERENTLY**

# Reshaping regulation Pt II (TBC November 2018)

## Headline

We need to normalise the energy sector

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3. Recalibrate security of supply
4. Reshape regulation

