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# Examples of UK domestic DSM activities

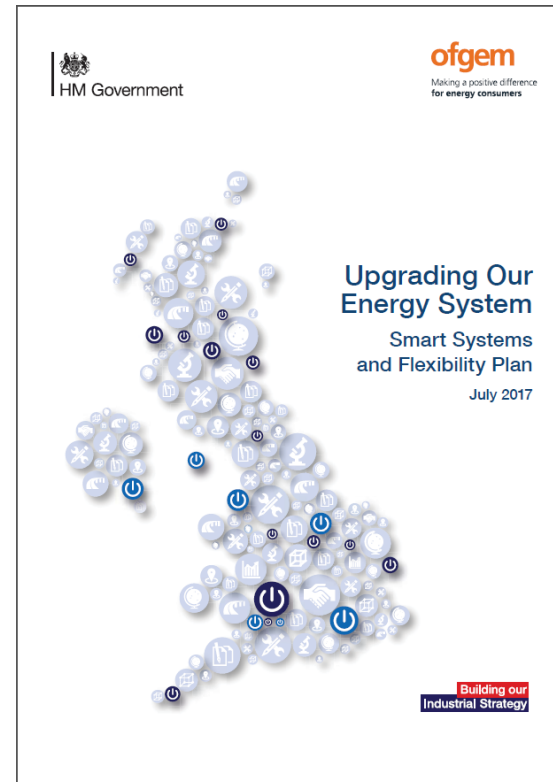
## *Smart Energy Policies*

Tom Ritchings, Clean Electricity, BEIS



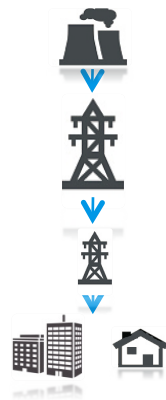
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# Upgrading our Energy System: Smart Systems & Flexibility Plan



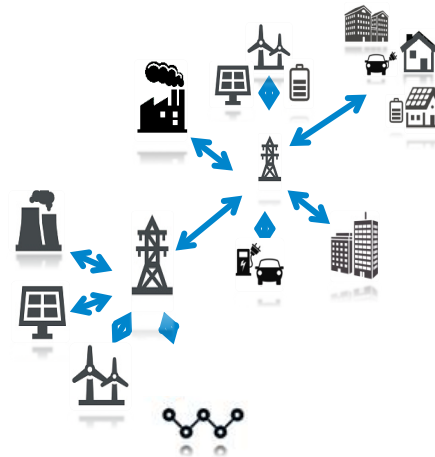
# Our energy system is undergoing fundamental change

Yesterday



- Carbon intensive
- Centralised generation
- Predictable supplies

Emerging System – increased interactions



- Low carbon
- Interconnectors
- More distributed
- Storage
- Demand-side response
- Electric vehicles/heat
- Smart grids
- A smart system

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# Rapid technology change, new business & consumer opportunities

Lithium-ion battery costs have fallen by more than 50% since 2012.



EV sector growing; charging hardware deploying, and can help manage grid demands with V2G

Smart meter roll out underway – more choice and control in the home



Aggregators working with market leaders to deliver / monetise demand response

Removing  
barriers to  
smart  
technologies



Smart  
homes and  
businesses



Markets that  
work for  
flexibility



*Deliver regulatory clarity  
and ensure fair charges to  
create a level playing field*

- Define storage and ownership rules
- Deliver a storage licence
- Planning reform
- Recalibrate policy/network charges
- Enable co-location with renewables

*Enable greater demand  
response participation  
among domestic and non-  
domestic consumers*

- Deliver smart meters
- Enable time of use pricing
- Appliance standards to enable automation & ensure cyber security
- Consumer protections

*Ensure markets allow the  
best flexible solutions to  
emerge and compete  
fairly*

- Improve access to markets (e.g. Balancing Mechanism & Ancillary Services)
- Enable value stacking from different markets
- Create new markets for network requirements

# Smart Energy Market Barriers

## The chicken and egg problem

The smart energy market needs smart offers (such as smart tariffs) and appliances which enable DSR (such as smart appliances) benefits.

