
Examples of UK domestic DSM activities

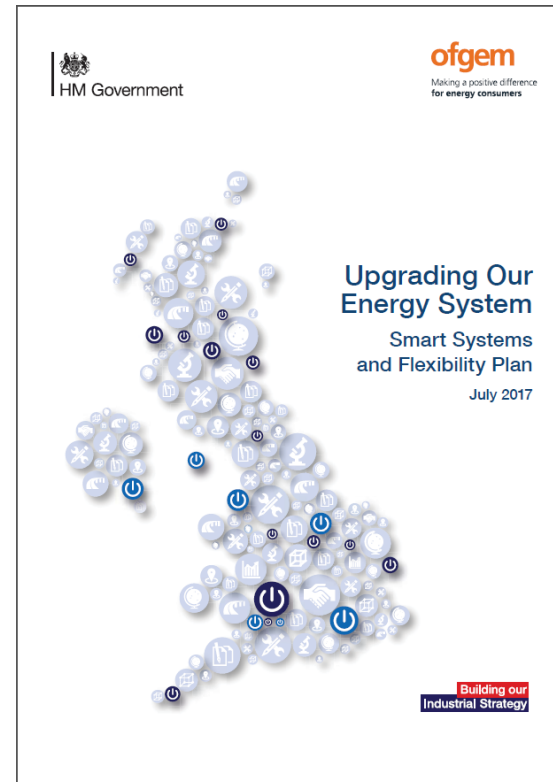
Smart Energy Policies

Tom Ritchings, Clean Electricity, BEIS



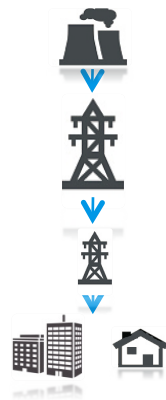
Department for
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Upgrading our Energy System: Smart Systems & Flexibility Plan



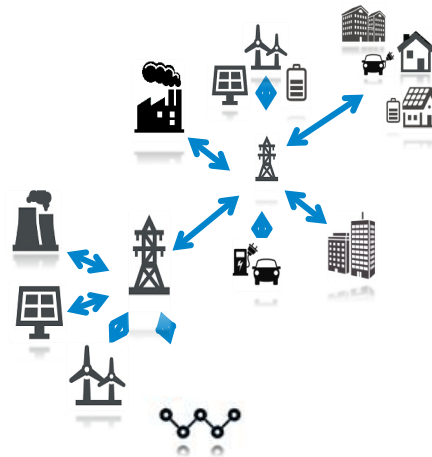
Our energy system is undergoing fundamental change

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.

