
Energy Data Modernisation: A policy perspective

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Focus today

- Why is data important in energy context?
- What is the Energy Data Taskforce and its recommendations?
- How do we translate them into policy?
- Message for stakeholders

Why is data important?

News story

UK becomes first major economy to pass net zero emissions law

New target will require the UK to bring all greenhouse gas emissions to net zero by 2050.

Published 27 June 2019



A whole system view across electricity, gas, heat and transport underpins a sustainable energy transformation. Widespread digitalisation and sharing of data is fundamental to harnessing the interactions between these changing systems.



Well over 2.8 trillion data points will be collected in 2050 to understand where EVs are charging on the electricity system.

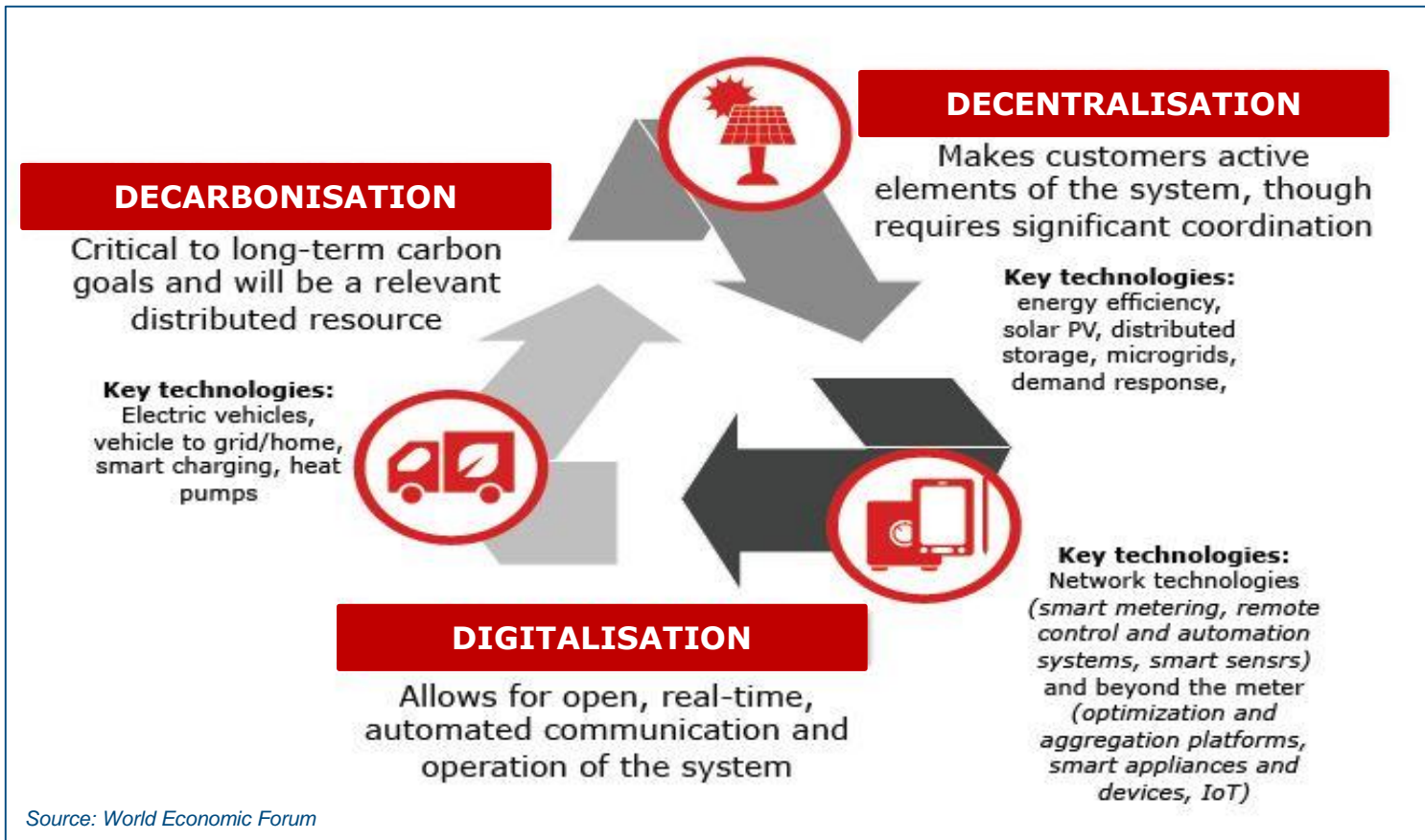
What this means

- Significant digitalisation of legacy infrastructure is required to provide visibility and enable optimisation of the whole energy system. This must be done in a way that ensures data and systems are interoperable.
- Data must be made accessible to decision makers across interdependent systems such as gas, electricity, and transport.
- Appropriate governance and standards will be required in order to ensure a joined up and digitalised energy system.



Why is data important?

Characteristics of our future energy system



Digitalisation contextualised

DIGITALISATION

Allows for open, real-time automated communication and operation of the system

DATA

Digital Information

ANALYTICS

The use of data to produce useful insights

CONNECTIVITY

The exchange of data through digital communication networks


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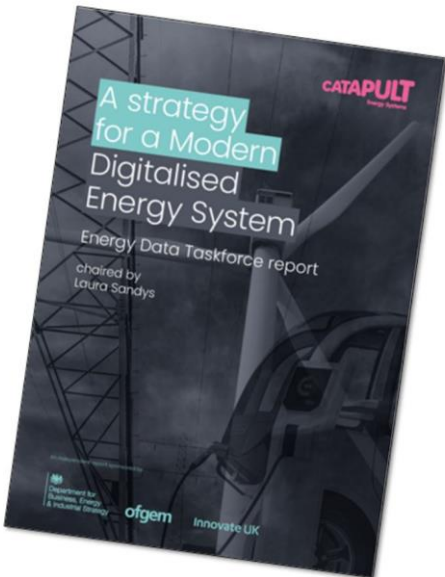
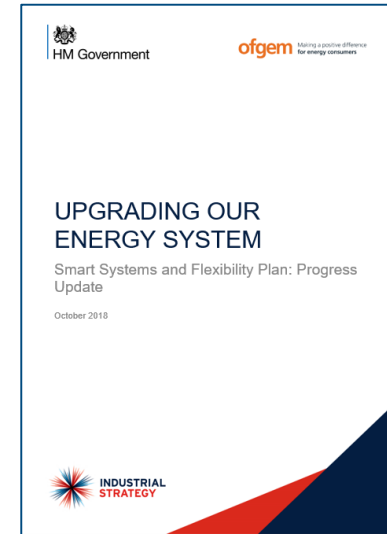


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Energy Data Taskforce: Background

Oct18- Smart Systems and Flexibility Plan Update

- Data is **intrinsic to transition** to a smart system.
- Currently, there is a **lack of transparency** and **barriers to access** to certain data-sets which can **limit competition** for energy services and **restrict innovation**
- **Opportunities exist for optimisation** and allowing innovators to realise where they can **add value to the system**



June 19- A strategy for a Modern, Digitalised Energy System

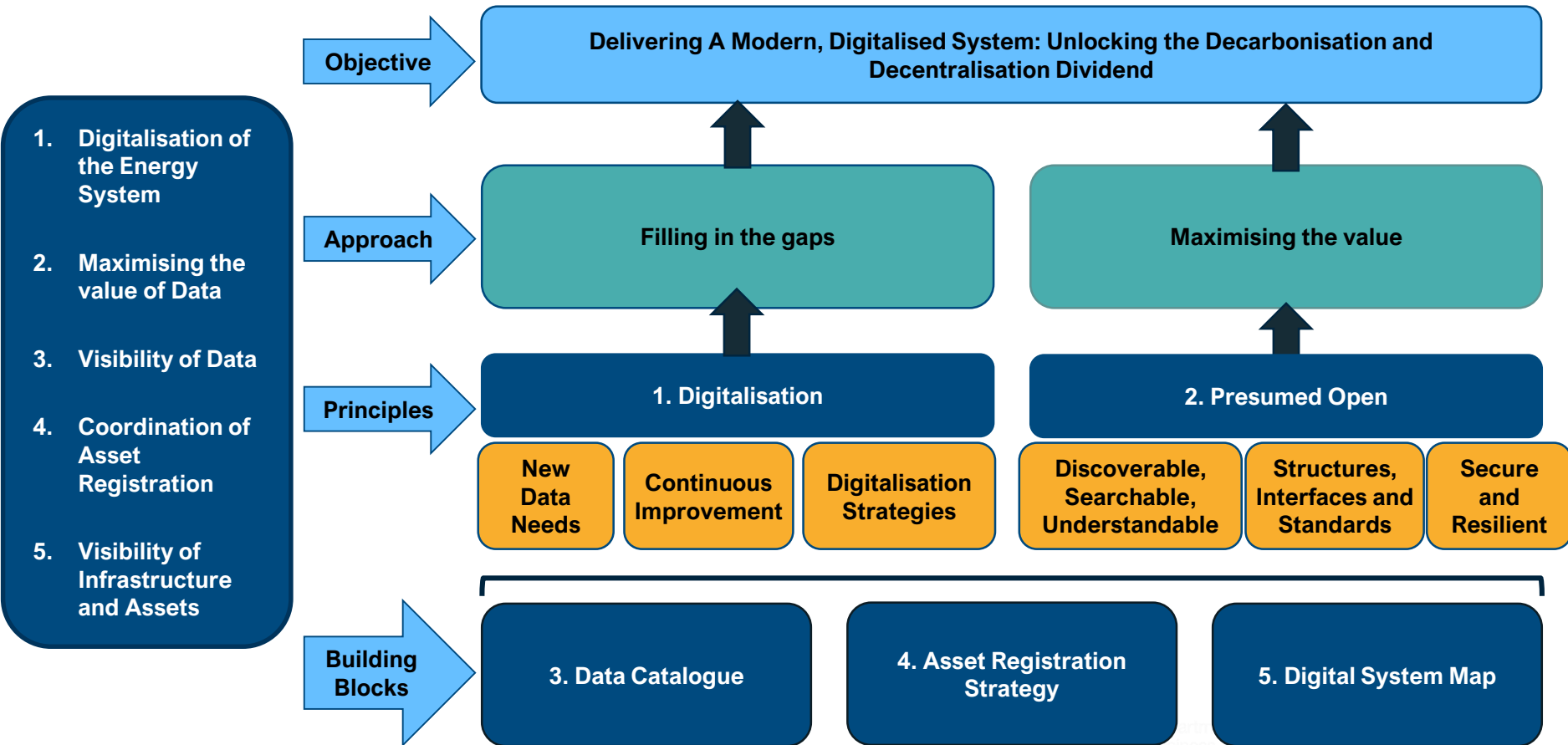
- Agile, open, and transparent process
- Widespread engagement with stakeholders
- A combination of high-level principles and specific recommendations

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Energy Data Taskforce: Recommendations



The sector is responding!

nationalgridESO

Data finder

Please click on our interactive data finder below to quickly and easily locate the data you require. You can also download the interactive PDF for future use.



Network Flexibility Map

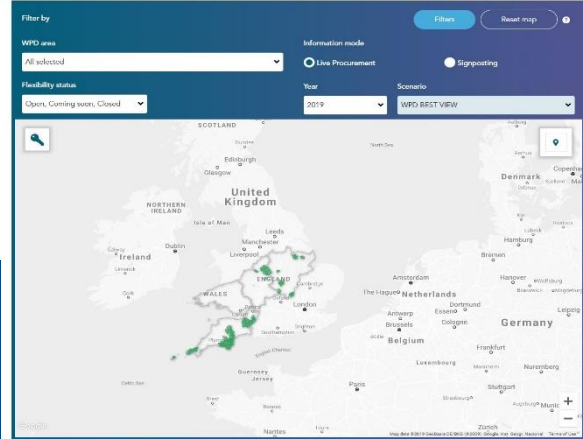
The UK's electricity system is undergoing a rapid period of change as distribution network customers invest in generation and alter their consumption behaviours to effect a lower carbon future. To enable a greater volume of demand, generation and storage to be connected, our networks are becoming smarter and more active. Creating a more efficient and flexible system will benefit all customers and empower them to be at the centre of the energy revolution.

We recognise that the change from a Distribution Network Operator (DNO) to a Distribution System Operator (DSO) is essential to driving performance and efficiency from our network and to ensure it can meet the future energy demands of all our customers. The enhanced capabilities we are developing will also give our customers the freedom to access other opportunities within the developing energy system.

Enabling new market models around flexibility is a key objective in WPD's DSO Strategy. This will require us to provide a greater level of information on the performance characteristics of our network than ever before and in a format which is understandable and transparent. This new style of information presentation has been developed through close engagement with our stakeholders and we anticipate this signposting information to inform the market ahead of us requesting tenders for flexibility.

A signpost provides general directions to a number of destinations, though does not describe the exact path in the way a map would. In the same sense, WPD's signposting information directs flexibility providers to the different distribution systems needs required under a range of scenarios and timings.

The Network Flexibility Map also provides information on the live tenders where WPD is currently seeking expressions of interest from flexibility. More information, and how to apply, can be found on our Flexible Power website - www.flexiblepower.co.uk/



ofgem Ofgem metadata

Publication date	13th June 2019
Information types	Open letters and correspondence
Policy areas	Corporate information Electricity - distribution

As part of our delivering the recommendations made by the Energy Data Taskforce, we are modernising our approach to using metadata (metadata is data that describes data sets). We collect data from the energy



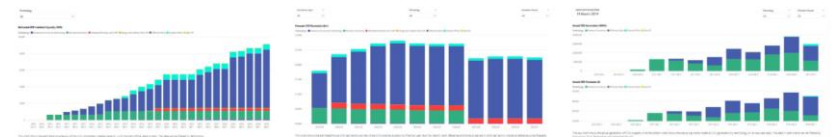
Resources / Scheme Dashboards

Scheme Dashboards

Feedback

The dashboards below summarise Contracts for Difference scheme data and metrics which are relevant for analysts, managers and policy makers with an interest in the scheme. All the dashboards provided here have been created in Power BI which allows flexible customisation of data views. The charts can be expanded for an improved viewing experience.

CFD Dashboards



Portfolio Dashboard

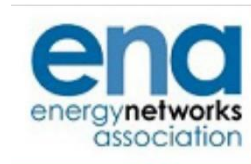
The Portfolio Dashboard shows the CFD installed Capacity profile, number of contracts starting to receive CFD payments and their installed Capacity, and contracts at different contract stages. These metrics are refreshed periodically as portfolio data are updated.

Forecast Dashboard

The Forecast Dashboard shows LCCC's long term forecast of CFD generation excluding bespoke contracts. This forecast was calculated in May 2019 for inclusion in LCCC's annual report and accounts published in July 2019 and will be updated annually.

Actuals Dashboard

The Actuals Dashboard contains historical CFD generation, CFD payments, Reference Prices, Interim Levy Rate (ILR) and demand data. The data is refreshed every working day and the latest settlement date is shown in the top left corner.



Delivering the recommendations

EDTF Reco	Policy workstream and description		
1 & 2: Digitalisation of Energy System and Maximising the value of data	Improving governance, collection and visibility of data	BEIS	<ul style="list-style-type: none"> • BEIS reviewing current legislative framework to identify any legal/policy barriers to the adoption of digitalisation and presumed open vision by the energy sector
		Ofgem	<ul style="list-style-type: none"> • Ofgem working on metadata release and data services project • Ofgem including data specific requirements in all the upcoming regulatory reviews (e.g. RIIO, DSO transition, Flexibility, Codes etc)
		Industry use of data	<ul style="list-style-type: none"> • Feedback from industry- require clarity on how to embed presumed open; so • Develop a data best practice guidance for the energy sector
3: Data Visibility	<ul style="list-style-type: none"> • Options assessment and making business case for a data catalogue • Exploring funding options 		
4: Coordination of Asset registration	<ul style="list-style-type: none"> • Further evidence gathering and policy development • Industry engagement with existing asset registration process owners 		
5: Visibility of Infrastructure & Assets	<ul style="list-style-type: none"> • Options assessment and making a business case for intervention • Exploring funding options 		

“

DO THE DIFFICULT THINGS
WHILE THEY ARE EASY AND DO
THE GREAT THINGS WHILE
THEY ARE SMALL. A JOURNEY
OF A THOUSAND MILES MUST
BEGIN WITH A SINGLE STEP

Lao Tzu

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Feedback & Questions

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