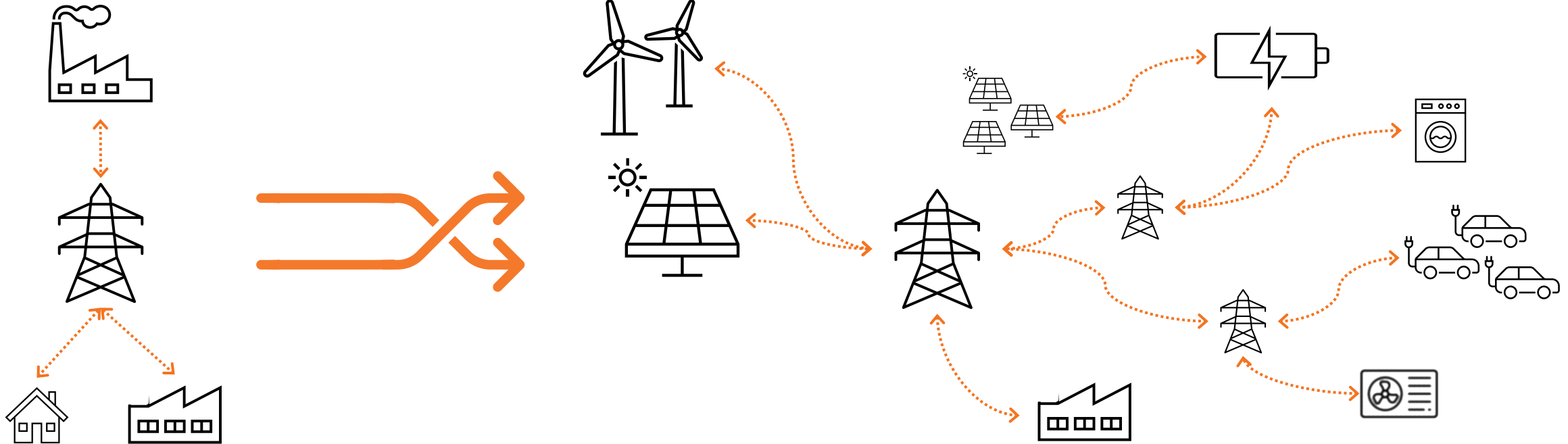


# The Future of Distributed Flexibility



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**Ofgem - UK energy regulator**  
**March 2023**

# The Imperative and Potential of Flexibility



We need to transition to a  
**flex-centric  
energy system:**

**30 GW**  
**Flexible demand needed**  
in 2050

*BEIS modelling*

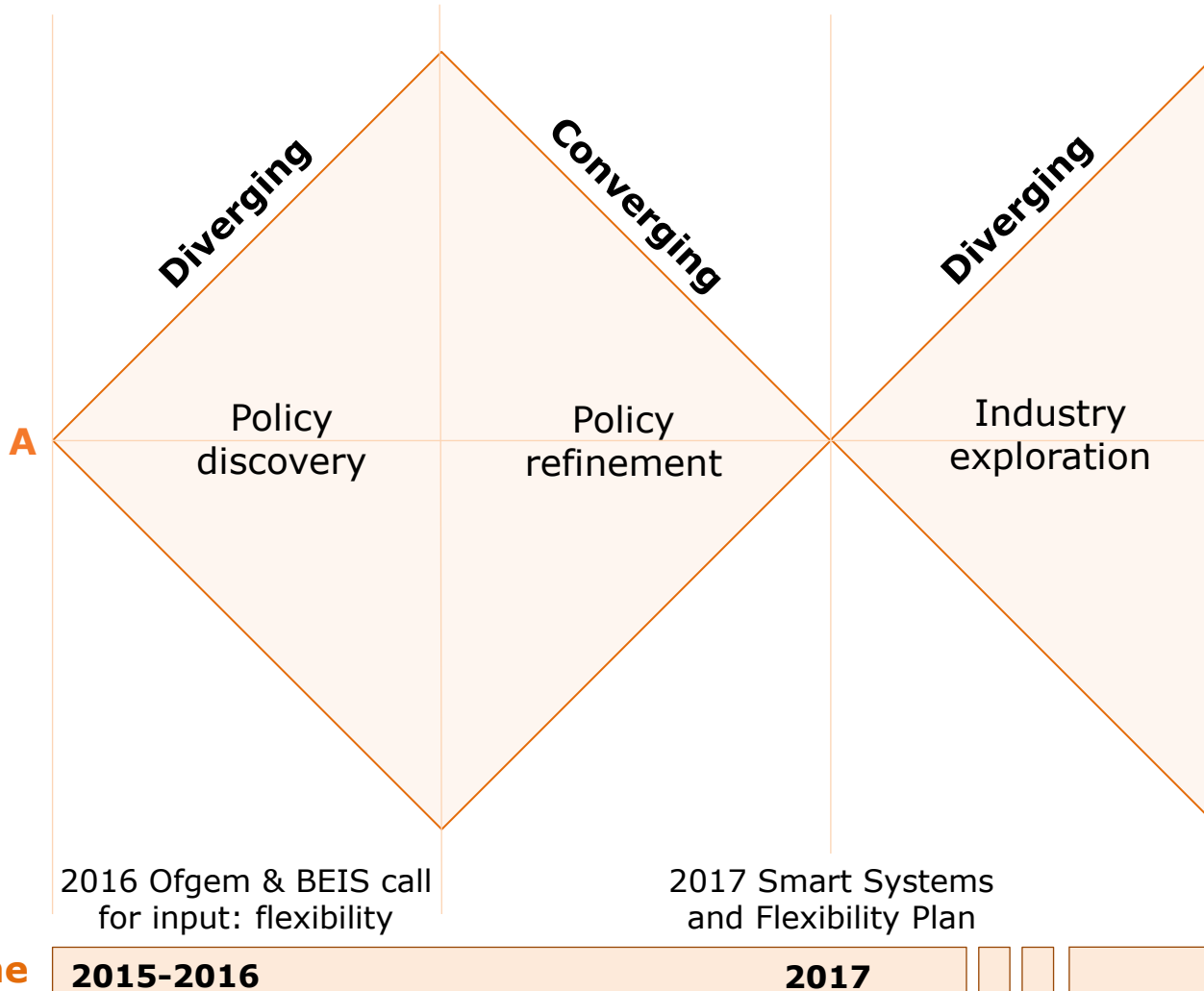
**£5 billion /year**  
**System cost savings** from  
demand side flexibility in 2050

*Carbon Trust & Imperial modelling*

# Flexibility Journey: Where are we now?

## Early policy development

## Develop and implement



### Achievements to date:

#### Strategy

- Smart Systems and Flexibility Plan 2021 ([link](#))
- Energy Data and Digitalisation Taskforces ([link](#), [link](#))
- Energy Networks Association, Open Networks Project ([link](#))

#### Networks and Assets

- Electricity System Operator legal separation ([link](#))
- Distribution Network flexibility licence obligation ([link](#))
- EV smart charging regulation ([link](#))

#### Industry-led standards

- Energy Smart Appliance standards ([link](#))
- Flex Assure code of conduct ([link](#))

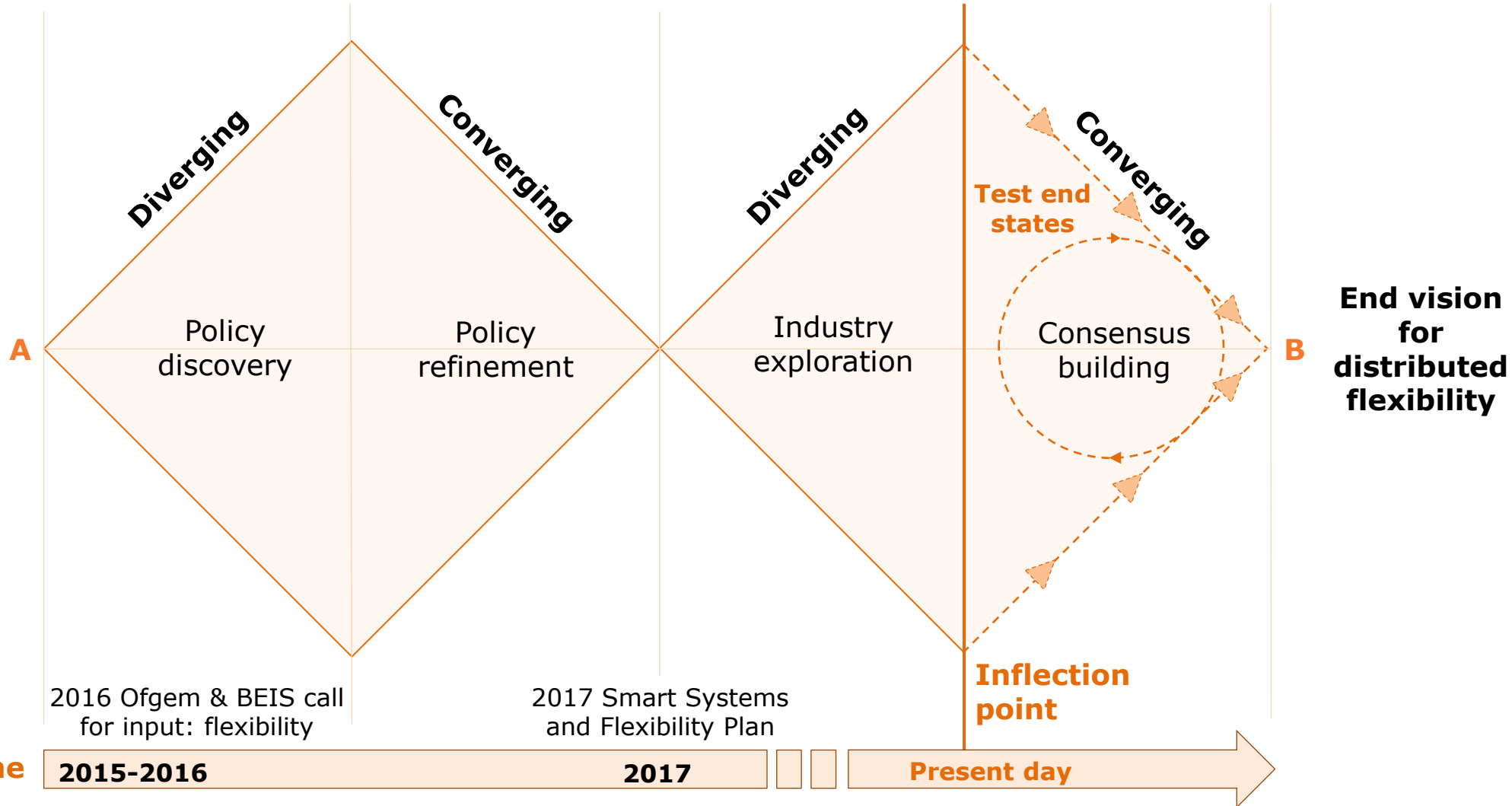
#### Innovation

- Ofgem, Strategic Innovation Fund, £450mn in RIIO-2 ([link](#))
- DESNZ, Net Zero Innovation Portfolio, £65mn on flexibility ([link](#))
- UK Research and Innovation, £104mn Prospering From the Energy Revolution ([link](#))

# Flexibility Journey: Where can we go?

## Early policy development

## Develop and implement

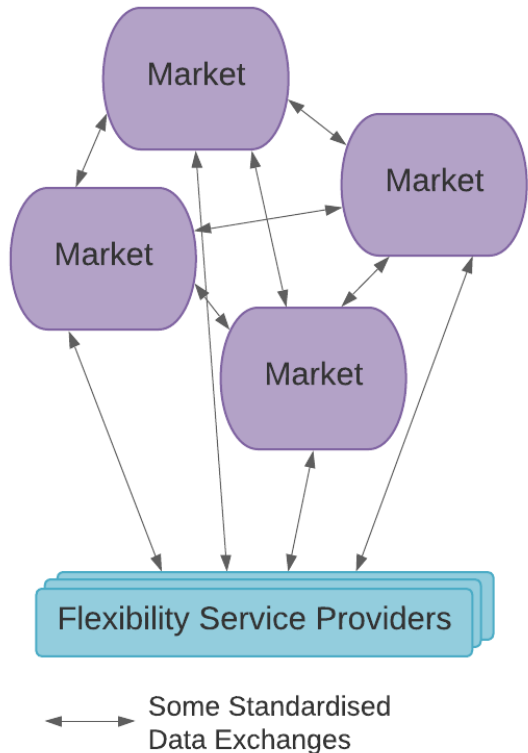


**Common digital energy infrastructure**

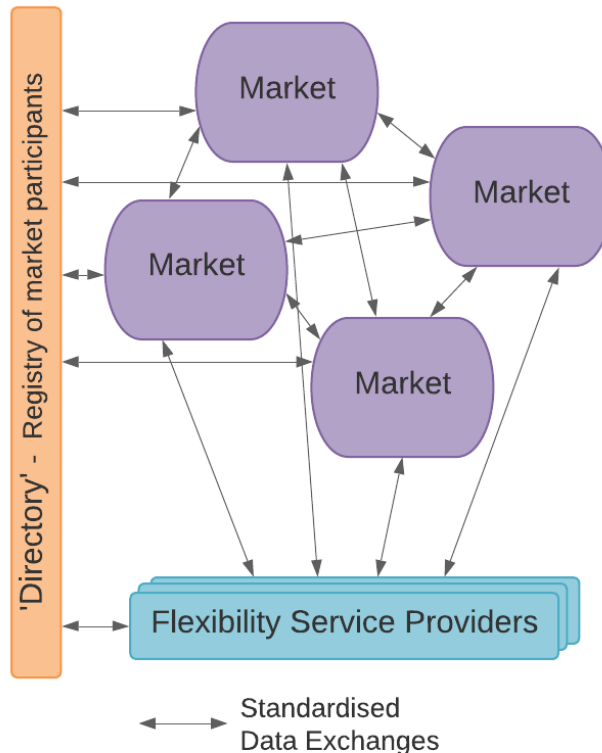
1. Information Transparency
2. Coordinated market access and operations
3. Trusted Governance

Four visions for a common digital energy infrastructure:

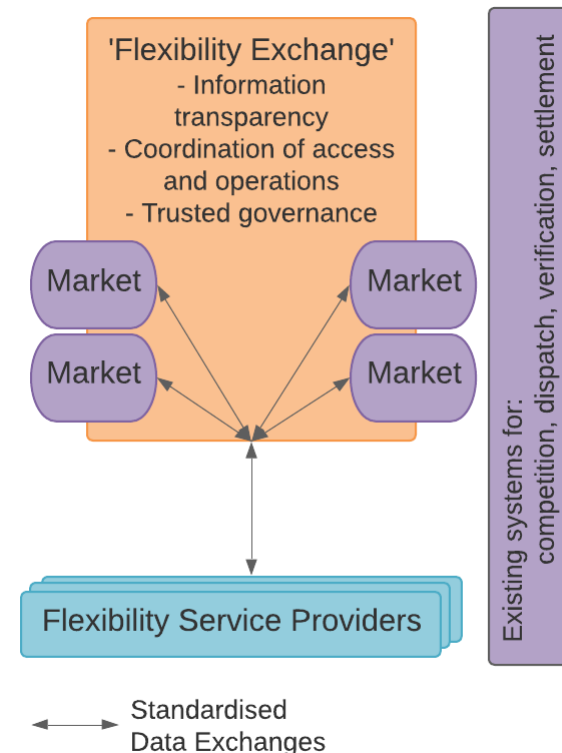
## 1. BAU continues



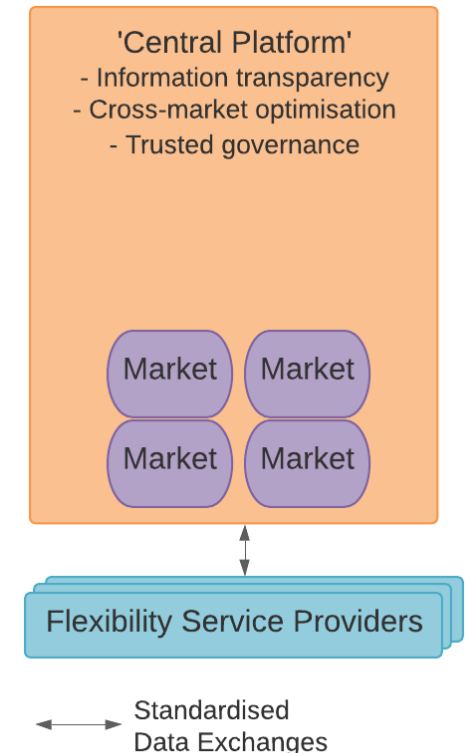
## 2. Thin "directory"



## 3. Medium "flexibility exchange"



## 4. Thick "central platform"



## We welcome your thoughts

Two publications are open for responses:

- The Future of Distributed Flexibility  
<https://www.ofgem.gov.uk/publications/call-input-future-distributed-flexibility>
- The Future of Local Energy Institutions and Governance  
<https://www.ofgem.gov.uk/publications/consultation-future-local-energy-institutions-and-governance>

**Written responses:** 10 May 2023

We will be engaging with stakeholders throughout the response period.

**Email us:** [flexibility@ofgem.gov.uk](mailto:flexibility@ofgem.gov.uk)

**Thank you**