

# Delivering Net Zero

## New thinking on a fit-for-purpose institutional framework

Lessons from the past; Pointers to the future

27 February 2020

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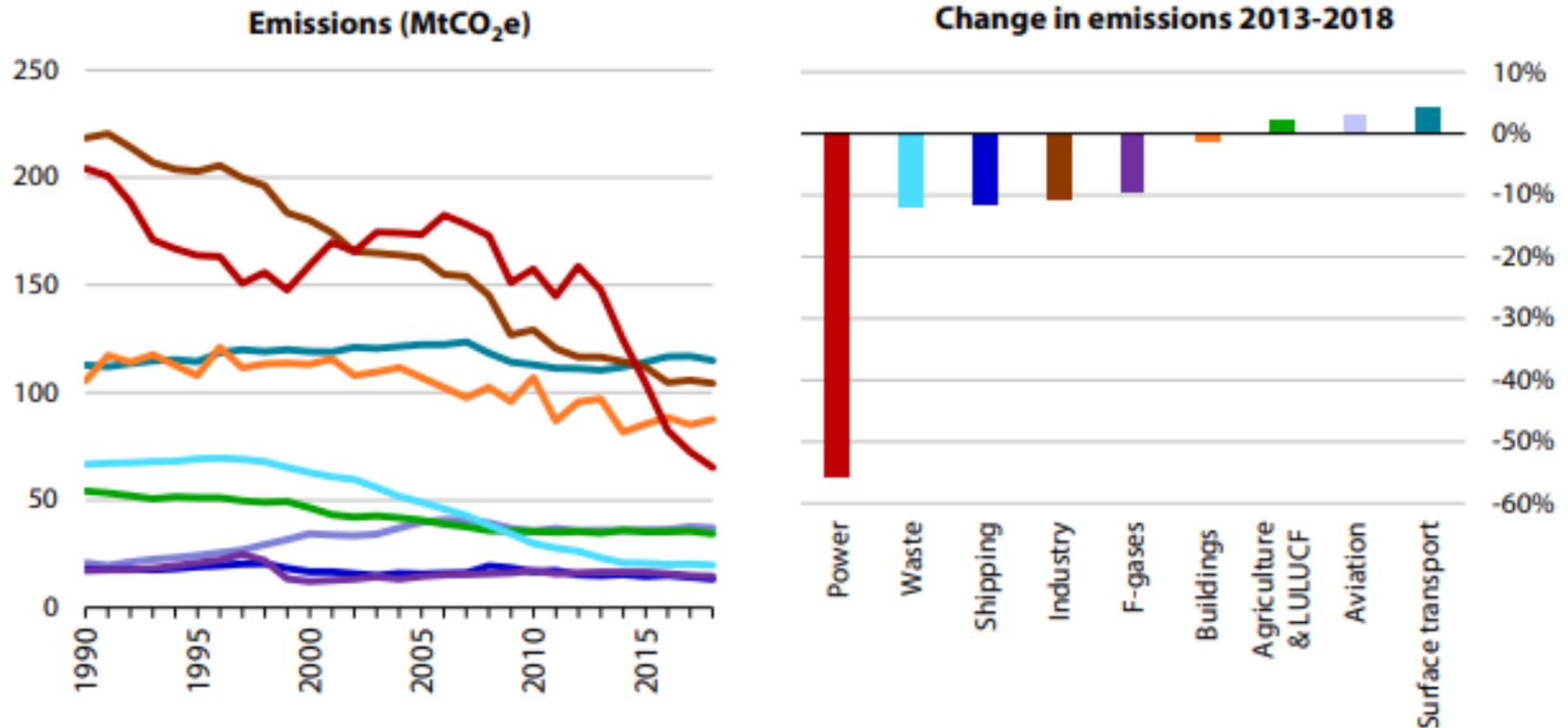
New Thinking For Energy



# Definitions

- Energy Governance
  - policies, institutions (at all levels), economic regulation, network rules, market design, retail policy etc **AND**
  - the decision-making processes behind those rules and incentives, including the extent, and ways, people are involved

Figure 1.5. Trends in UK sectoral GHG emissions



**Source:** BEIS (2019) 2018 UK Greenhouse Gas Emissions, Provisional Figures; BEIS (2019) 2017 UK Greenhouse Gas Emissions, Final Figures; CCC calculations.

**Notes:** The chart on the right-hand side shows changes in sectoral emissions between 2013 and 2018 for all sectors except for Agriculture, LULUCF, Waste and F-Gases which cover the period 2013-2017; buildings emissions in this chart are temperature-adjusted.

# Energy systems are changing rapidly

- Push for decarbonisation across energy – electricity, heat and transport
- Falling prices of decarbonised and flexibility technologies (wind, solar, storage) leads to new economics
- Increasing proportion of energy resources at distribution/local level – so decentralisation happening and increasingly the economic option
- Digitalisation allows new system operation, including the demand side, and further alters energy economics
- Greater involvement by customers leading to new ownership and business models (?democratisation)
- Greater civil engagement, including climate litigation

# We know what has to be done (in general) to speed up the decarbonisation of energy

- Putting the 'politics' aside
  - We need more direction from SoS; money from Treasury
  - Institutional change; new roles; new incentives; new regulations etc – next slide
  - We need more coordination between policies, institutions, regulators, executors; between sectors; between scales etc to minimise costs
  - We have to 'stop' losers of change undermining decarbonisation
  - We have to ensure a just transition / protection for vulnerable from short to medium costs
    - – this is not just an energy issue – we need new agreements between Ministries including Treasury, BEIS and DWP
  - We need to keep it simple
    - Whatever one thinks of nuclear, hydrogen, CCS etc the uncontested least regret options are renewables and energy efficiency
    - Complication aids those who / which don't want change
  - We should beware 'saviours'
  - The age old 'middle way' practice of civil service has to be rethought

# Thinking about the Politics

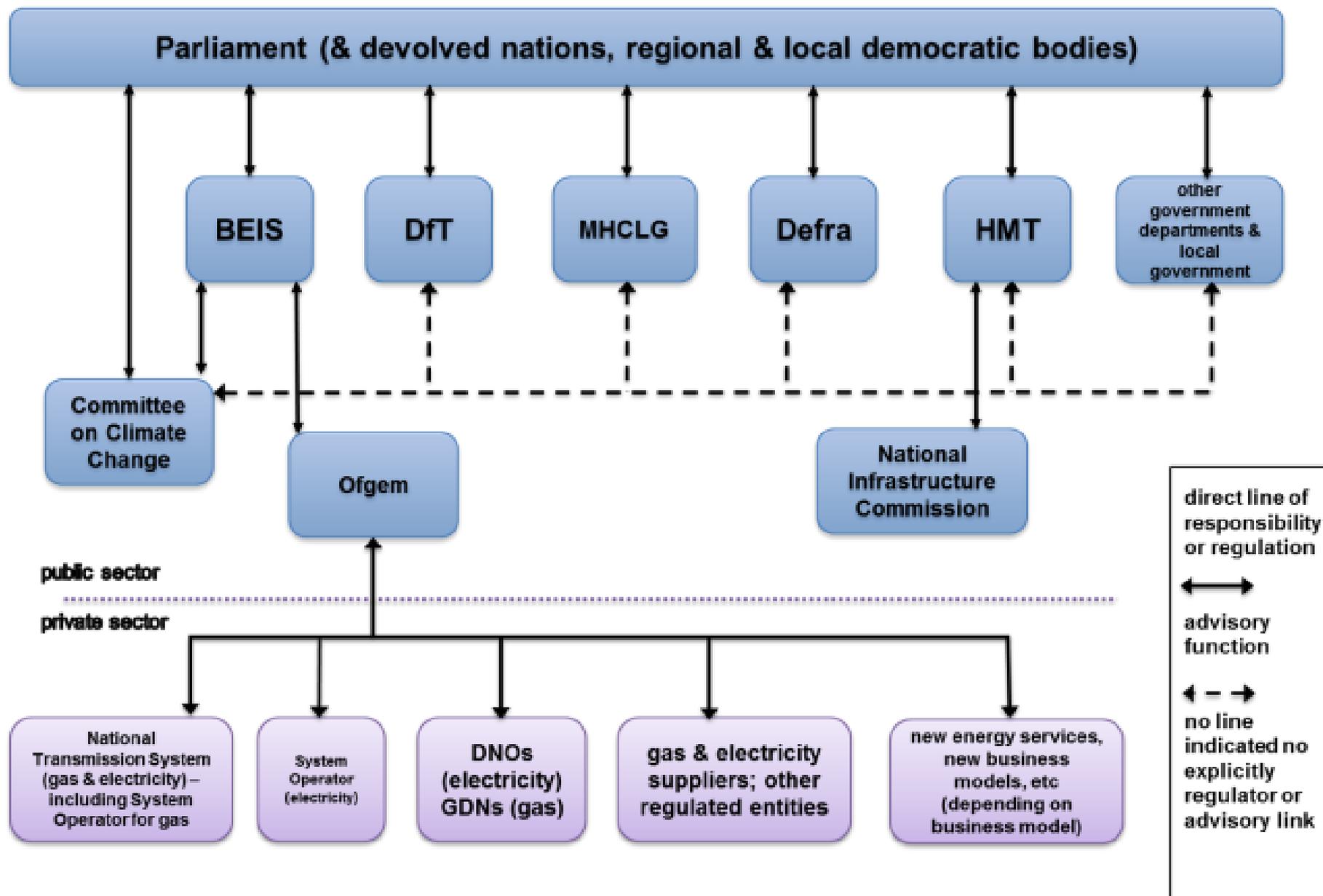
- The move from a dirty to a clean and efficient energy system is hugely political
  - A few big decisions need to be made
- We need to create a decision-making process which recognises the politics, but is able to side-step it
- If we think rapid net zero is essential; a huge opportunity for GB; a net economic benefit over the long term for society; **why cannot we get this going, particularly since it is broadly policy?**
  - Are there other failures outside of own in energy?
    - Economists
    - Political scientists
    - Justice ?

# The Rational IGov Approach: Transformation of the Energy System

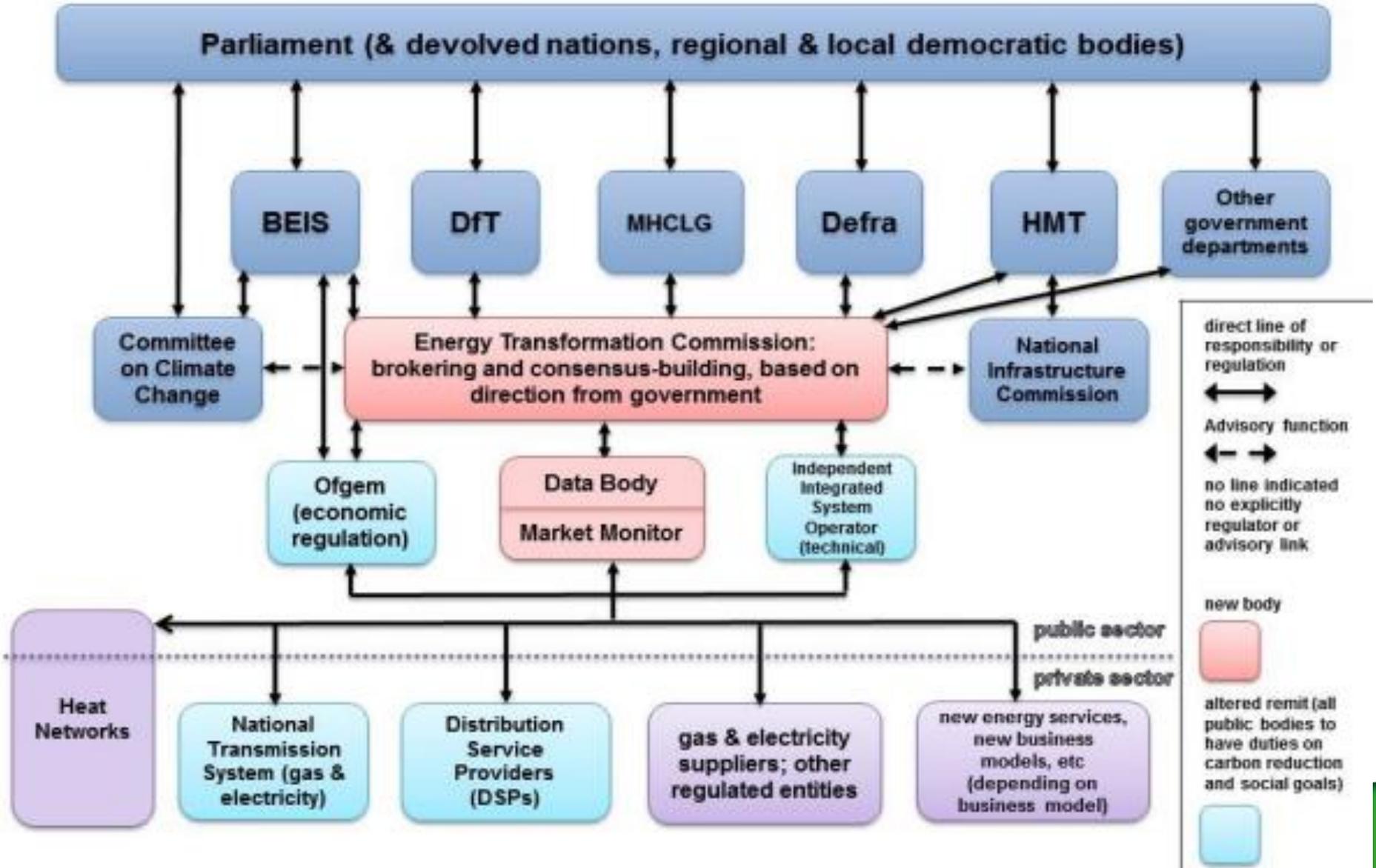
- Show how governance is undermining our policy goals (2012-2016)
- Produce a fit for purpose governance framework as a source of discussion (2016-2019)
  - Which sets out a way to manage and coordinate
  - Which provides a process to manage distributional impacts
- Establish principles of governance (2012-2019)
  - Legitimate and transparent governance
  - People at the centre
  - Adaptive regulation



# GB energy governance: current institutions and responsibilities



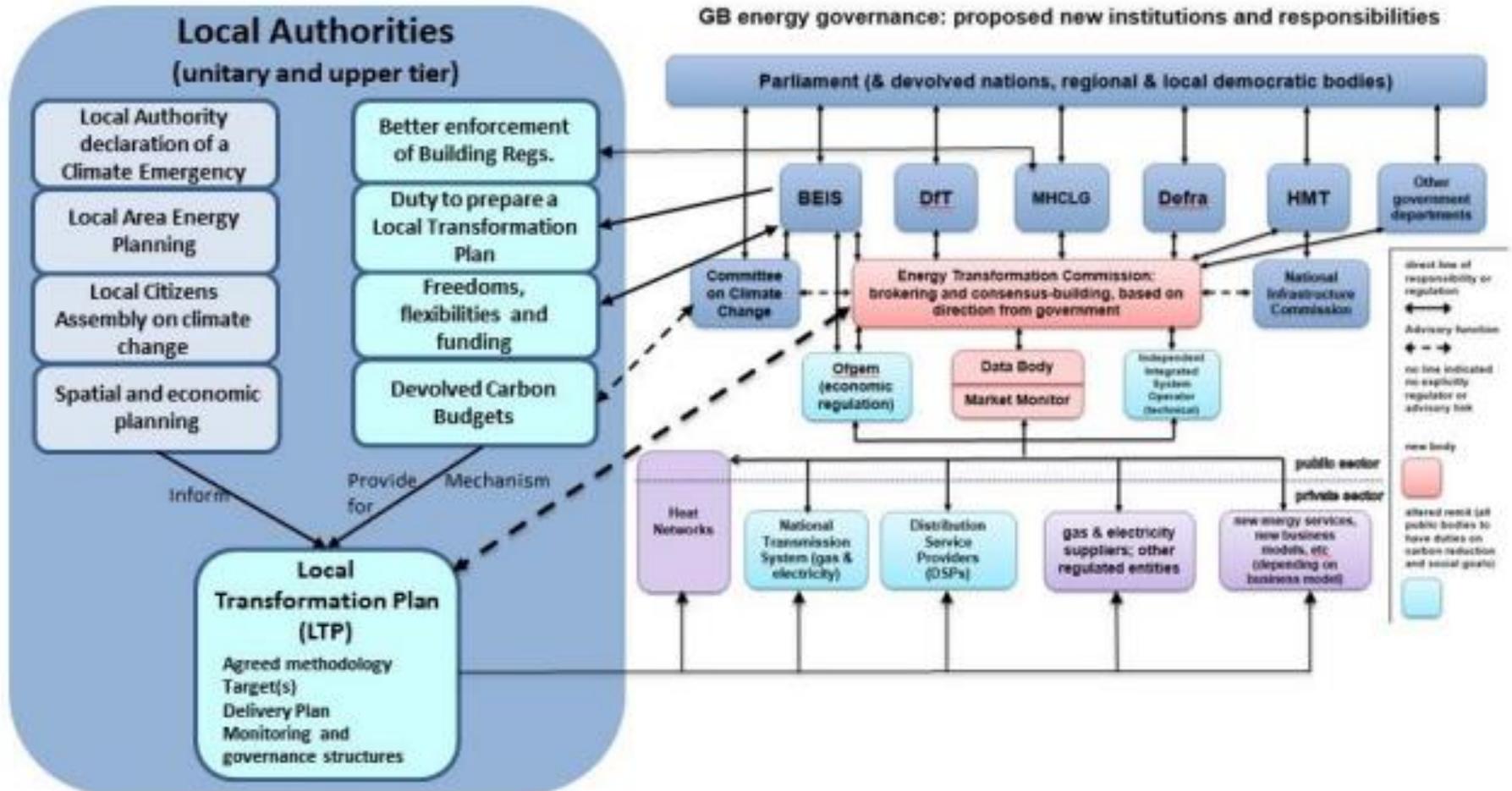
## GB energy governance: proposed new institutions and responsibilities



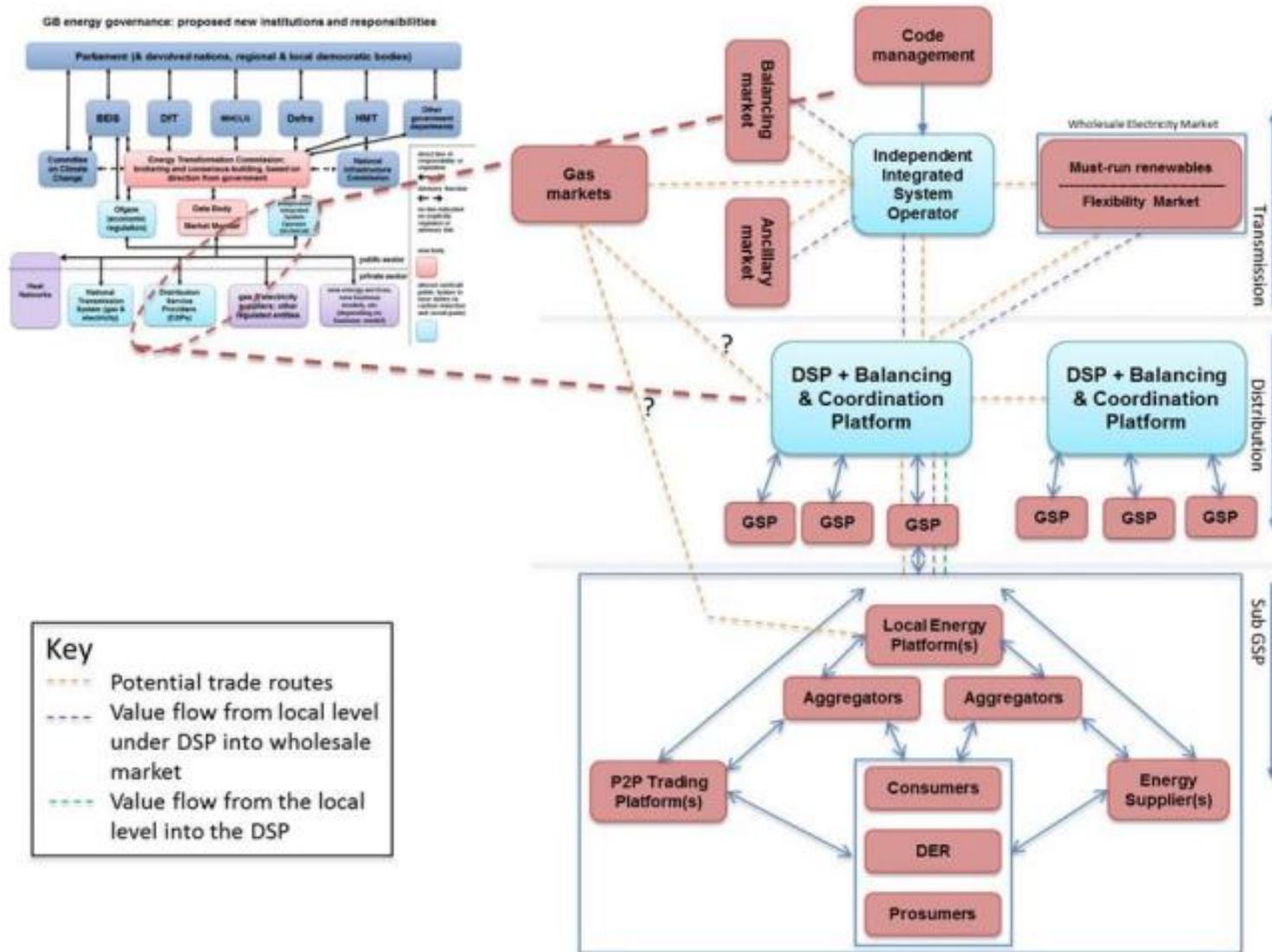
# Local Government Dimension has to be coordinated:

<http://projects.exeter.ac.uk/igov/wp-content/uploads/2019/08/IGov-Getting-energy-governance-right-01-08-19.pdf>

## Local and national energy governance



# Market Dimensions as well: <http://projects.exeter.ac.uk/igov/wp-content/uploads/2019/08/IGov-Getting-energy-governance-right-01-08-19.pdf>

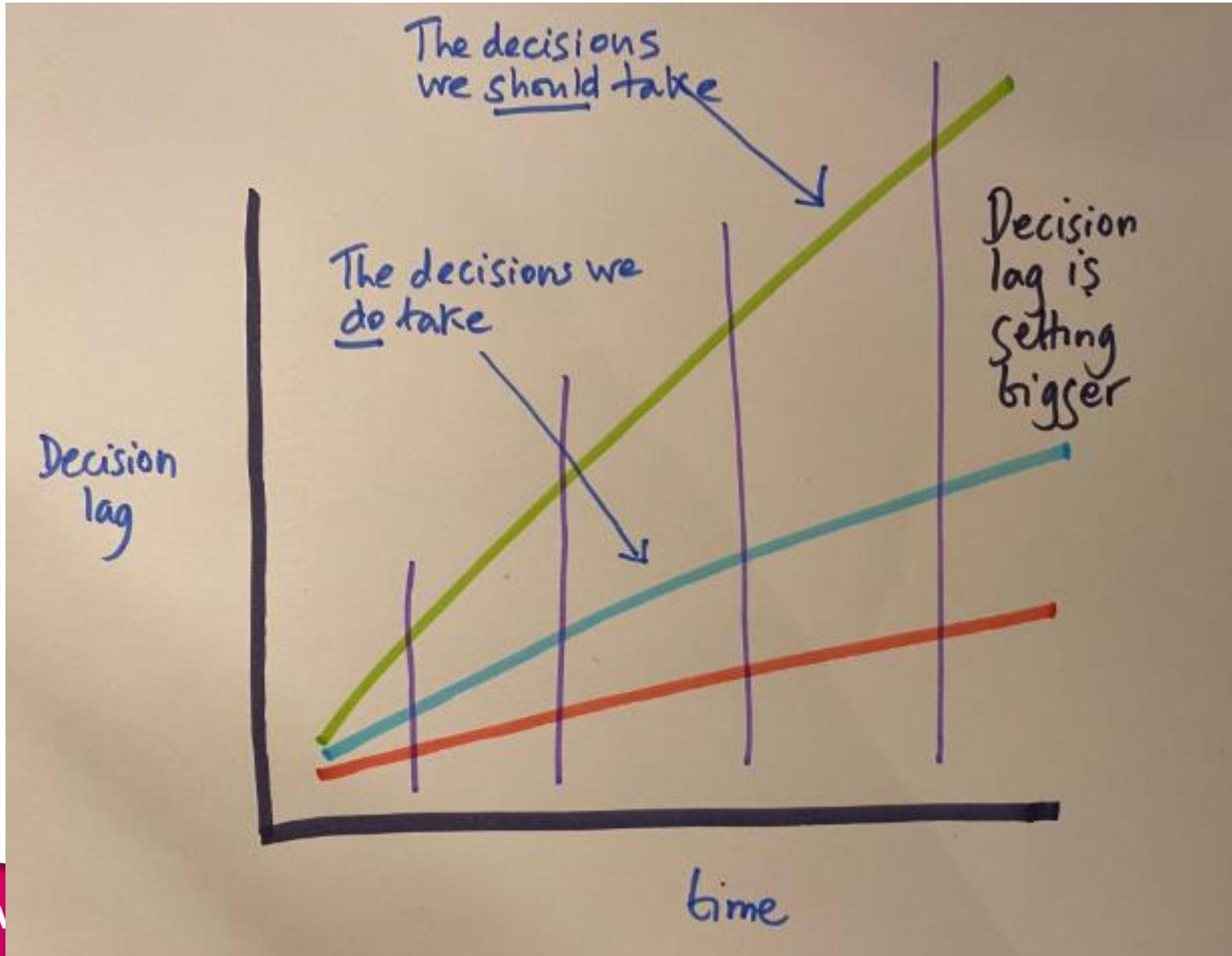


IGov Figure 6: Local market design

# How to speed up the priority actions? Lessons learned:



# The governance and regulatory decision-lag has to disappear not get bigger



# Negative distributional impacts have to be confronted

- Just as the Government continues to support the wishes of companies losing out from Government policy RATHER than supporting the companies which support the policy
- GB seems unable to move to dealing with equity / distributional impacts of transformation
  - The climate crisis is not just an energy issue
  - Institutional change needed here as well
  - Buildings energy efficiency an important part of this
    - Upfront money will be essential

# Something has to counter the lack of Vision / Ambition in GB – we have some policies but not the desire to get there

- Danish Energy Plan
- <https://kefm.dk/ministeriet/aftaler-og-politiske-udspil/energiaftalen/>
- NEF Green Deal  
<https://neweconomics.org/2019/11/five-ways-to-fund-a-green-new-deal>
- Ofgem Decarbonisation Plan  
<https://www.ofgem.gov.uk/publications-and-updates/ofgem-s-decarbonisation-action-plan>

# Lessons learned

- It is not possible to give 'loser' companies / sectors long enough to adjust to net zero
  - They have had long enough to understand the pathway
  - Just transitions mechanisms are needed
- Our 'middle way' decision making is just making everything worse
- We have to accept energy is political by confronting it; it does not work to avoid it
- Policy has to be what people want and are prepared to accept
- We need a separate data regulator

# Pointers to the future

- We have to coordinate
  - ETC
    - Responsible for the key issues
      - institutional change
      - change of Duties / Responsibilities / Regulations
      - Institutional / financial needs of distributional impacts / equity
      - Getting a full energy efficiency programme going
      - Sorting out what to do with the gas network / heat
    - Shadow Body in Cabinet Office, as way to set it up
    - We have to get the opportunities for GB across to all, including long term lowest costs.....
- If Government / Regulators etc do not accept fast enough then it has to be down to people to build the pressure

# Appendix

# Transformation of the Energy System – Update our outdated governance

- No process for direction-setting or managing a process of decarbonisation, across government departments and agencies, and across different industrial sectors.
- No adequate governance arrangements for protecting low-income households.

# Transformation of the Energy System - Principles of Energy Governance

## – Legitimate and transparent governance

- setting clear outcomes; making institutions and decision-making processes transparent and accessible to all system participants; and aligning value in the system with the outcomes required, through market design and regulatory mechanisms.

## – People at the centre

- Energy governance must create markets which reward people for providing system services such as demand reduction, flexibility, and demand response. This requires a different system of consumer protection, including greater segmentation, understanding that not all people will be actively engaged, and that vulnerable households will require specific interventions and policies. There should also be an acknowledgement that people have a role beyond their participation in the market, as citizens giving (or withholding) consent and engaging with governance.

## – Adaptive regulation

- adapt to changing circumstances. Specifically, there should be a shift from 'input' type regulation to output-based regulation. Reviews should also be incorporated into regulatory processes, to allow adjustments during the period of regulation. Finally, regulation needs to be adaptive to the needs of a local area, with local areas developing their own plans.

# Transformation of the Energy System with a new governance framework – reform institutional structures

- Energy Transformation Commission (ETC) as the coordinator, taking lead from Secretary of State
- An Integrated Independent System Operator, which also oversees Codes
- Ofgem's remit would be reformed, with new Duties for carbon reduction
- The devolution of energy governance to local levels, in the form of a new statutory duty on local authorities, requiring them to produce a Local Transformation Plan. This Plan would require local areas to set devolved carbon budgets, with freedoms, flexibilities and funding provided from national government.
- Local markets for energy services would be provided through Distribution Service Providers (DSPs), created through reform of Distribution Network Operators (DNOs).
- New market design
- The establishment of a cross-economy Data Regulator; a data body or portal for energy system information; and a market monitor