Governance and transition to a sustainable energy system: how institutions, rules and incentives in Great Britain support the current system and undermine change

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# Conservative / Lib Dem Policies since 2010

- Electricity Market Reform 2010
  - Main aim to enable support for new nuclear programme
     <a href="http://www.theguardian.com/environment/2011/mar/11">http://www.theguardian.com/environment/2011/mar/11</a>
     /nuclear-power-reason-energy-regulations
  - Includes a capacity payment which has supported existing gas, coal and nuclear – to some extent must make up for the non-EDF Big 6 irritation with Hinkley
  - The Legal requirements of implementing a new
     Energy Act have been more or less met for example consultations etc but Government has done what it wants to do in the face of almost complete opposition across energy system spectrum

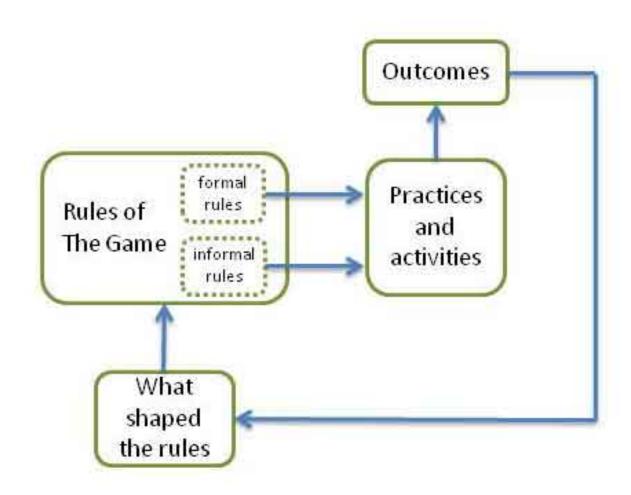
## **GB** energy policies since May 2015 and election of the Conservative Government

- Zero carbon homes by 2016 cancelled
- Zero carbon buildings by 2019 cancelled
- Green Deal cancelled
- Climate Change Levy exemption for zero carbon energy cancelled
- Solar support via RO cancelled
- Onshore wind via RO and CfD cancelled
- Public ownership of the Green Investment Bank (to be privatised)
- Differential Vehicle Excise Duty weakened
- Preventing Shale Gas Exploration in Protected

### How can this have happened?

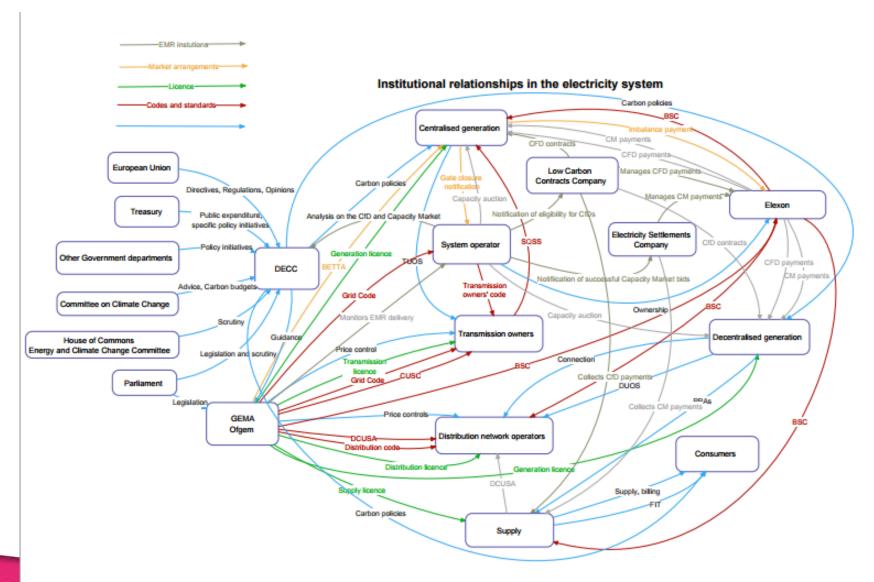
- The Manifesto said that it would ban onshore wind but none of the other policies.
- What is it about GB energy governance which enables this?
- The outcome is probably a gas future

#### What is Governance?



## **Current GB Energy Institutions and**

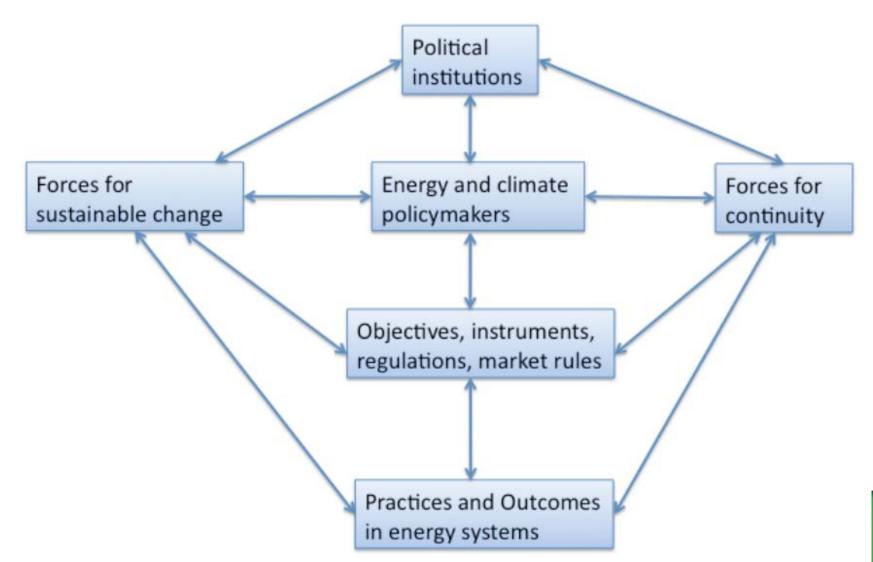
deas http://blogs.exeter.ac.uk/energy/2014/11/12/mapping-the-power-in-the-electricity-system/



# The formal rules - how easy is it for new entrants to access / make money / survive in GB energy system?

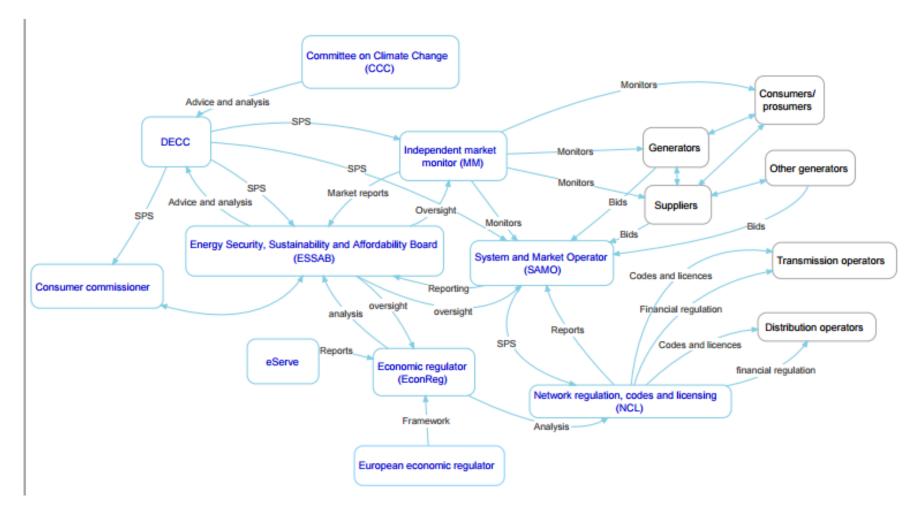
- <a href="http://projects.exeter.ac.uk/igov/working-paper-change-and-inertia-in-the-uk-energy-system/">http://projects.exeter.ac.uk/igov/working-paper-change-and-inertia-in-the-uk-energy-system/</a>
- In general,
  - The energy system rules benefit the few (de facto the incumbents) rather than giving access to everyone (ie difference between RO and FIT)
  - 'So called' technology and fuel neutral / blind rules which benefit the cheapest
- Market rules support the current system
  - A bilateral market with penal balancing rules
  - A market wide capacity mechanism, minimal DSR
  - Poor liquidity of trading, more difficult for variable energy
- Retail market liquidity issues most customers don't switch (CMA says 17% profit for electricity suppliers and standard variable tariff)
- Vertical Integration of Big 6 powerful structure in favour of supply; maintains affordability problems; and means that 'price' / transparency is poor
- Code and License Governance not fit for purpose difficult to make change
- Supplier hub model does not recognise embedded benefits so DG is not paid their value
  - Powerful triangle of Government, Independent Regulator and Privatised Grid

# So what shaped the rules of the game in GB, and what does it mean for transformation?



## proposed solution http://projects.exeter.ac.uk/igov/working-paper-public-

value-energy-governance/



#### **Annex**



### The best thing about GB Energy Policy

- The best thing in GB energy [so far has to be question market now given recent policy changes] is that 10% of our electricity supply comes from new entrant suppliers
  - see Ofgem non-traditional business model paper (<a href="https://www.ofgem.gov.uk/publications-and-updates/non-traditional-business-models-supporting-transformative-change-energy-market">https://www.ofgem.gov.uk/publications-and-updates/non-traditional-business-models-supporting-transformative-change-energy-market</a>)
  - For new entrant suppliers see
     <a href="https://www.ofgem.gov.uk/monitoring-market/overview">https://www.ofgem.gov.uk/monitoring-market/overview</a>