

# GB Energy Policy – constraints and opportunities

Eden Energy Island Conf.  
17 March 2015



New Thinking For Energy



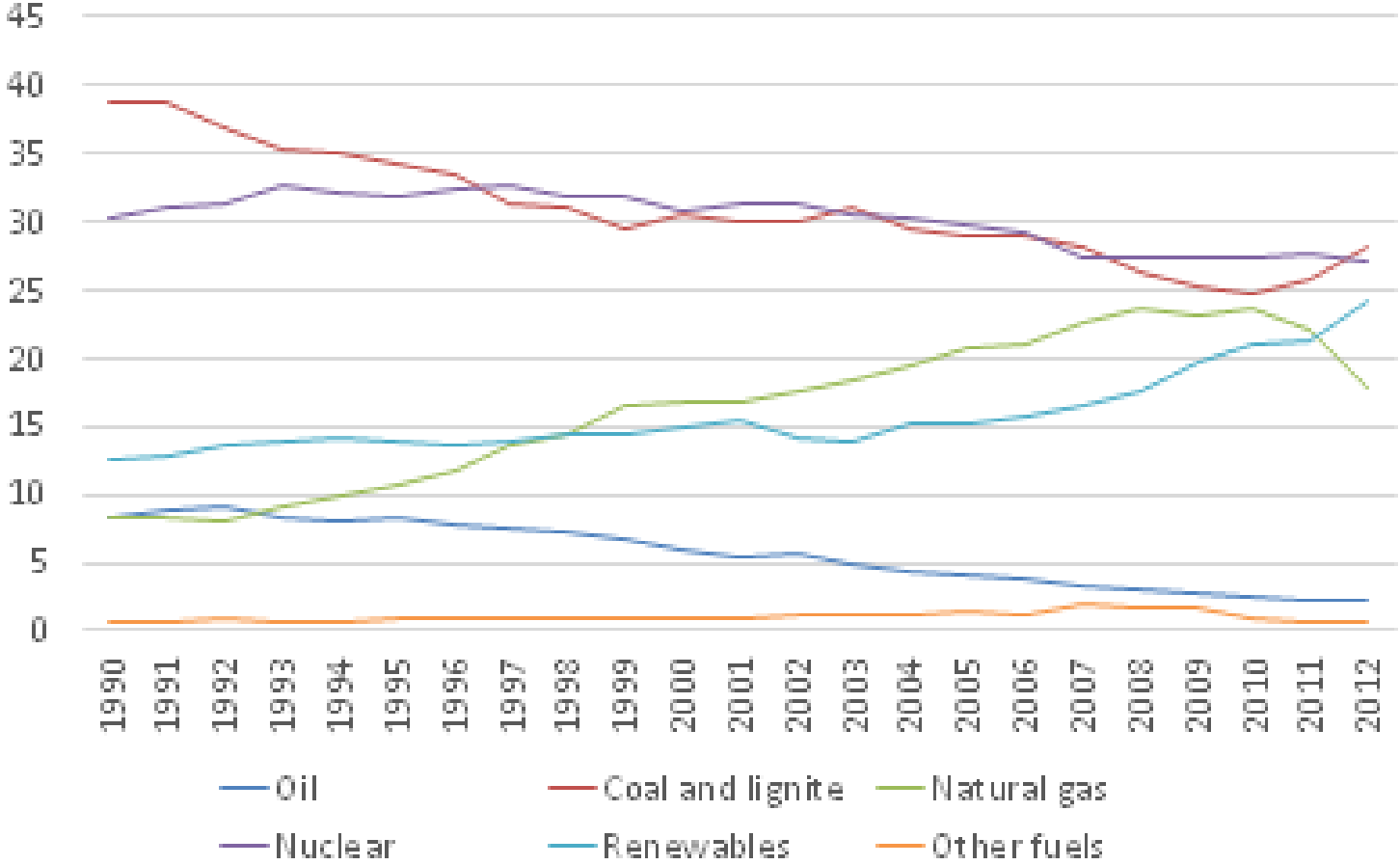
# Overview

- How is energy policy developing at EU level?
- How is energy developing in GB?
  - Energy, anyway always political, has become very political under the coalition
  - Not all doom and gloom
    - Some changes at city / community level driven by people + changes occurring elsewhere
    - Importance of ‘beacons’ and local, sustainable systems, as Cornwall is becoming
- What is way forward?

# Context – Europe Overview

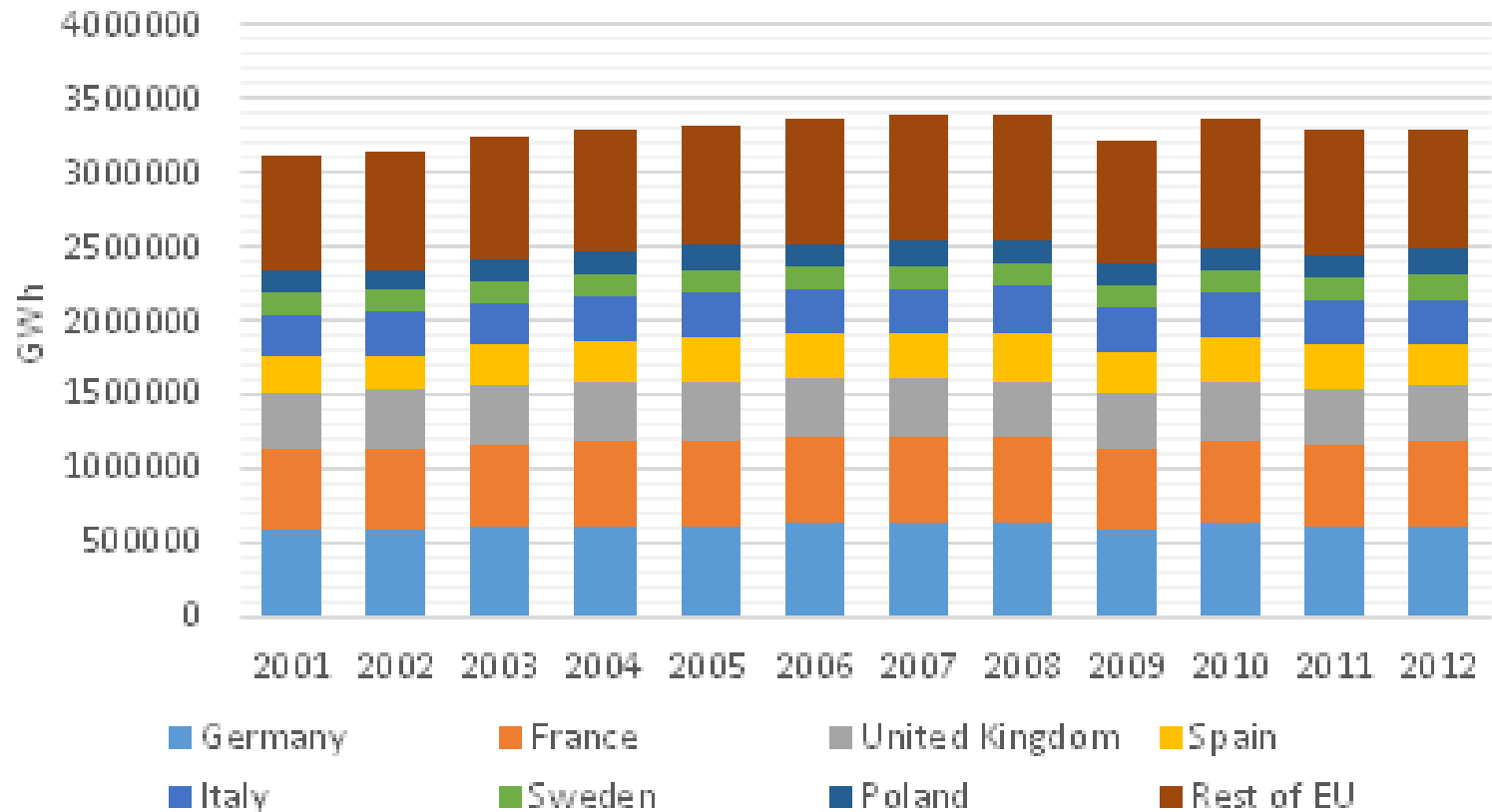
- Fundamental change happening in a few countries in Europe and this is driving change in GB
- EU policy the so-called 20:20:20 policy
- Negotiations about the 2030 policy
- And as of a couple of weeks ago, the EU now has a renewable based energy policy at its heart  
<http://juncker.epp.eu/my-priorities>

# EU Changing Power Mix



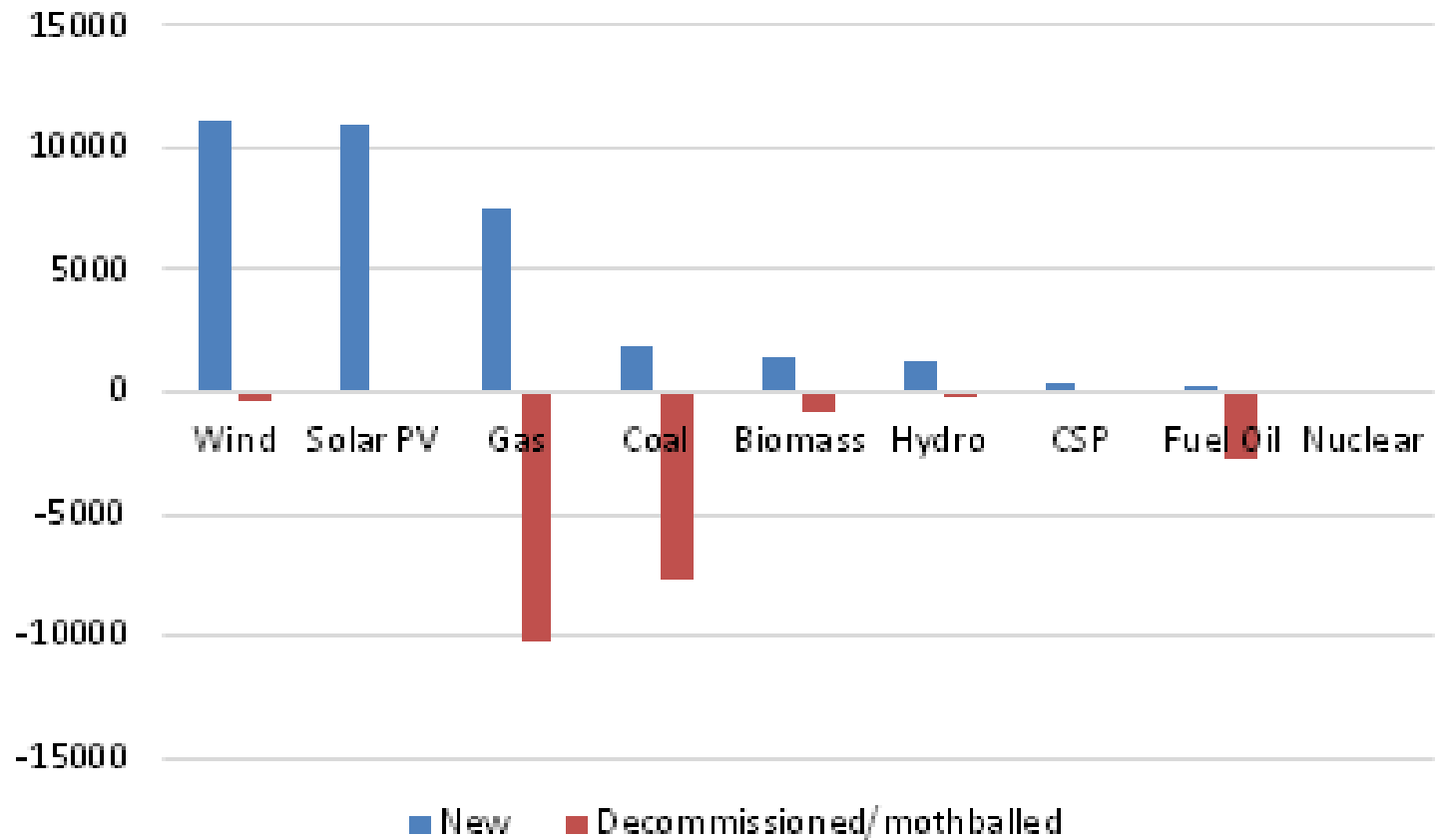
Source: Eurostat and IEA

# Power demand



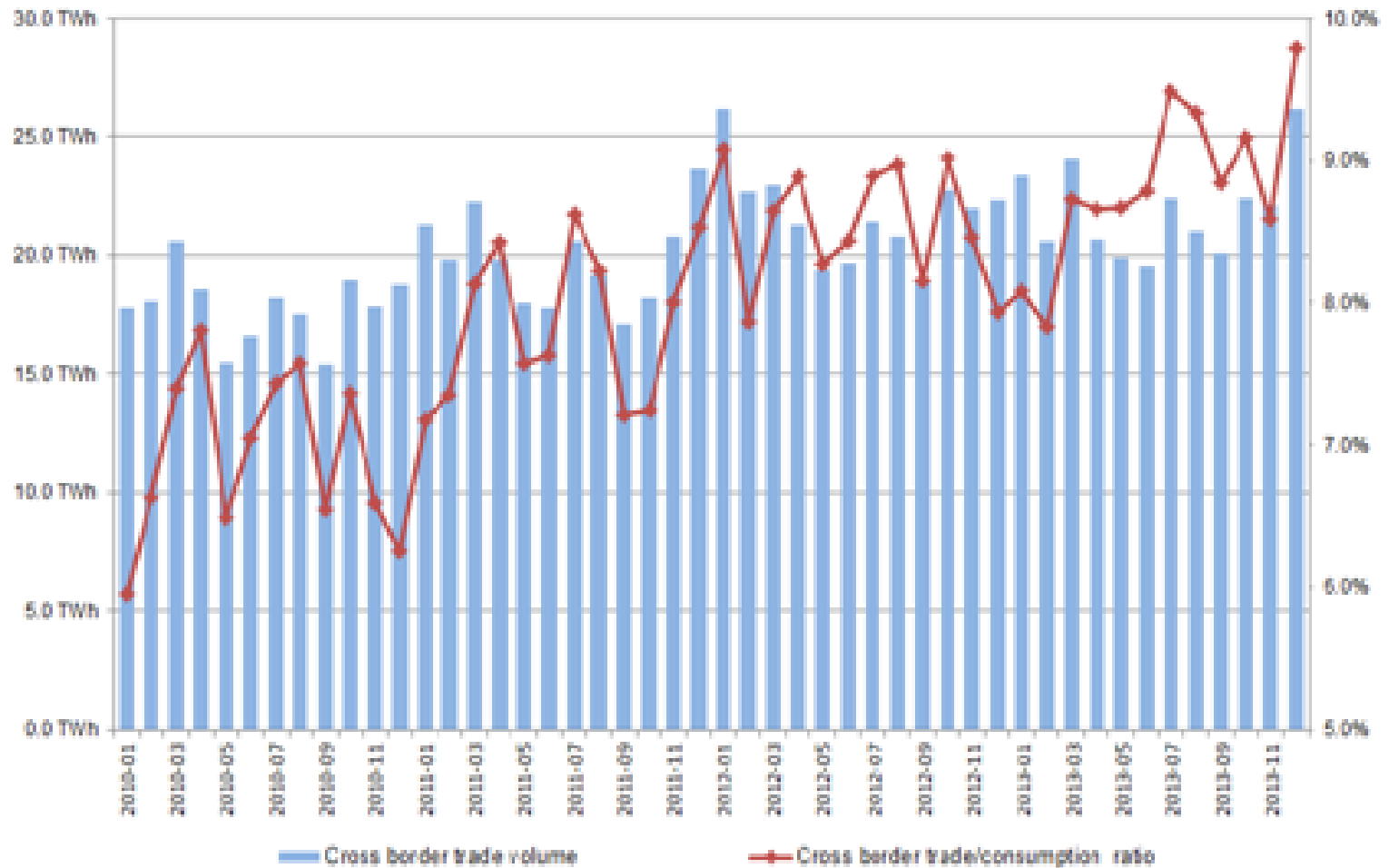
Source: Eurostat 2015

# EU Net Electricity Generating Capacity Changes in 2013 (MW)



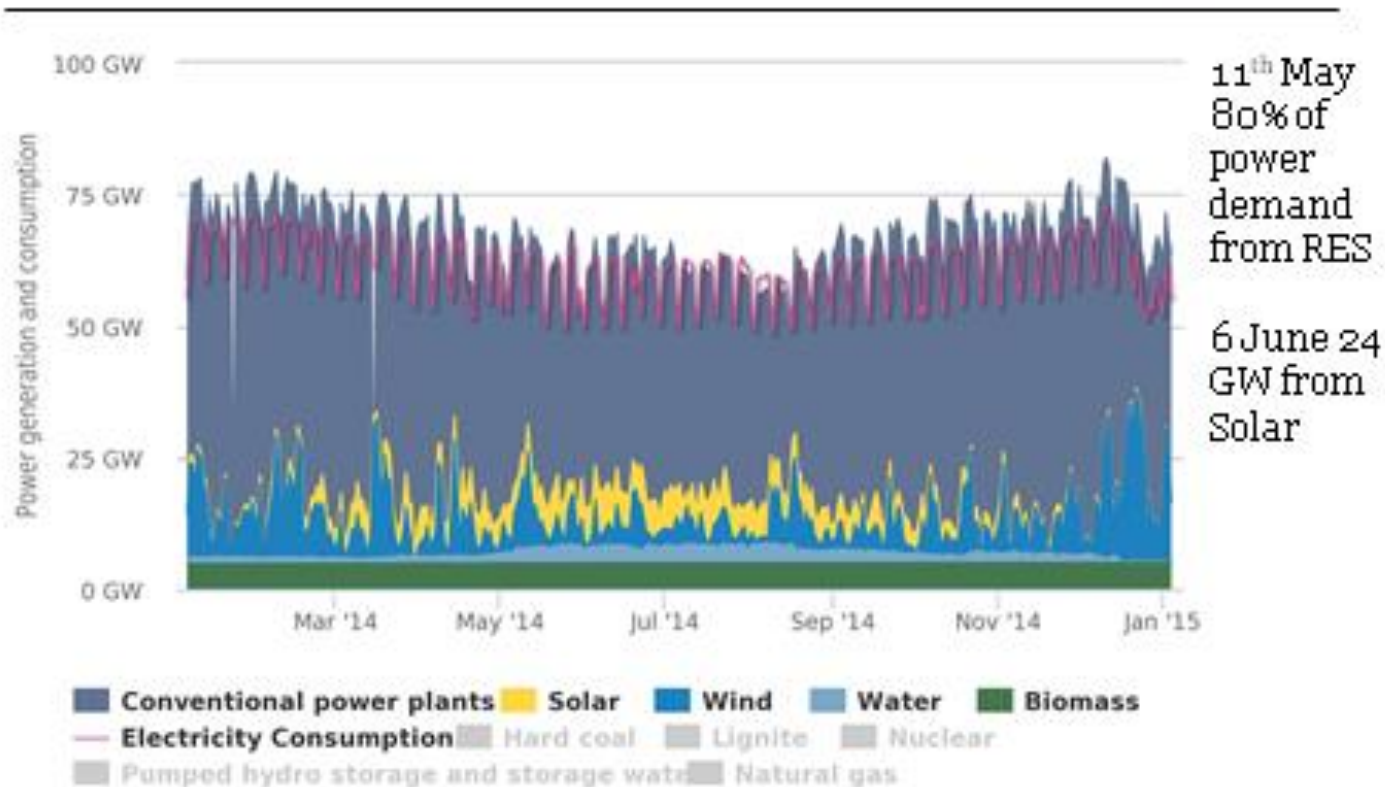
Source: EWEA 2014

# Interconnection



# Some countries are undergoing fundamental change - renewables pushing out fossil fuels from markets

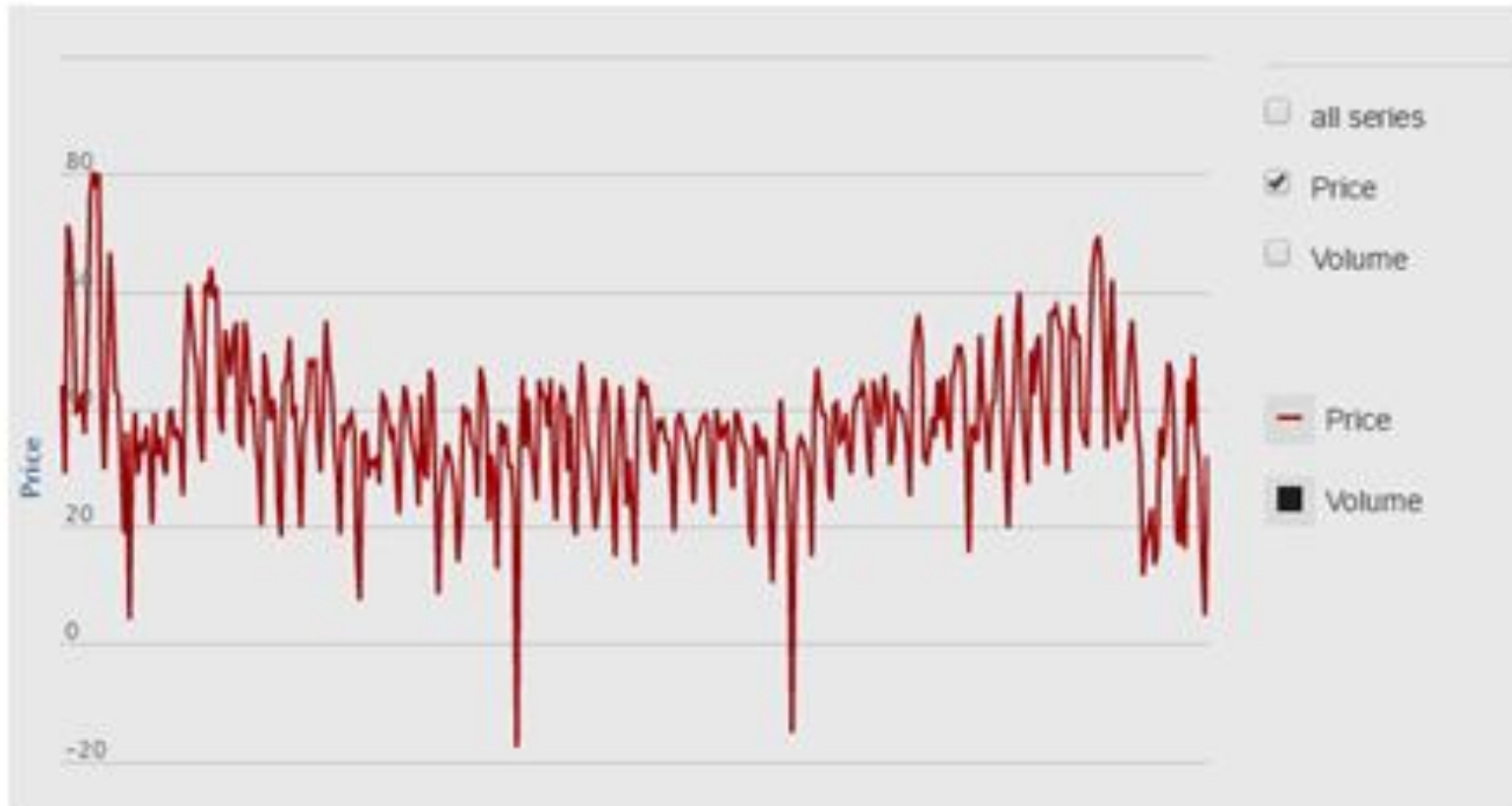
German Power Production and Demand in December 2014



Agora Energiewende; Current to: 05.01.2015, 17:30



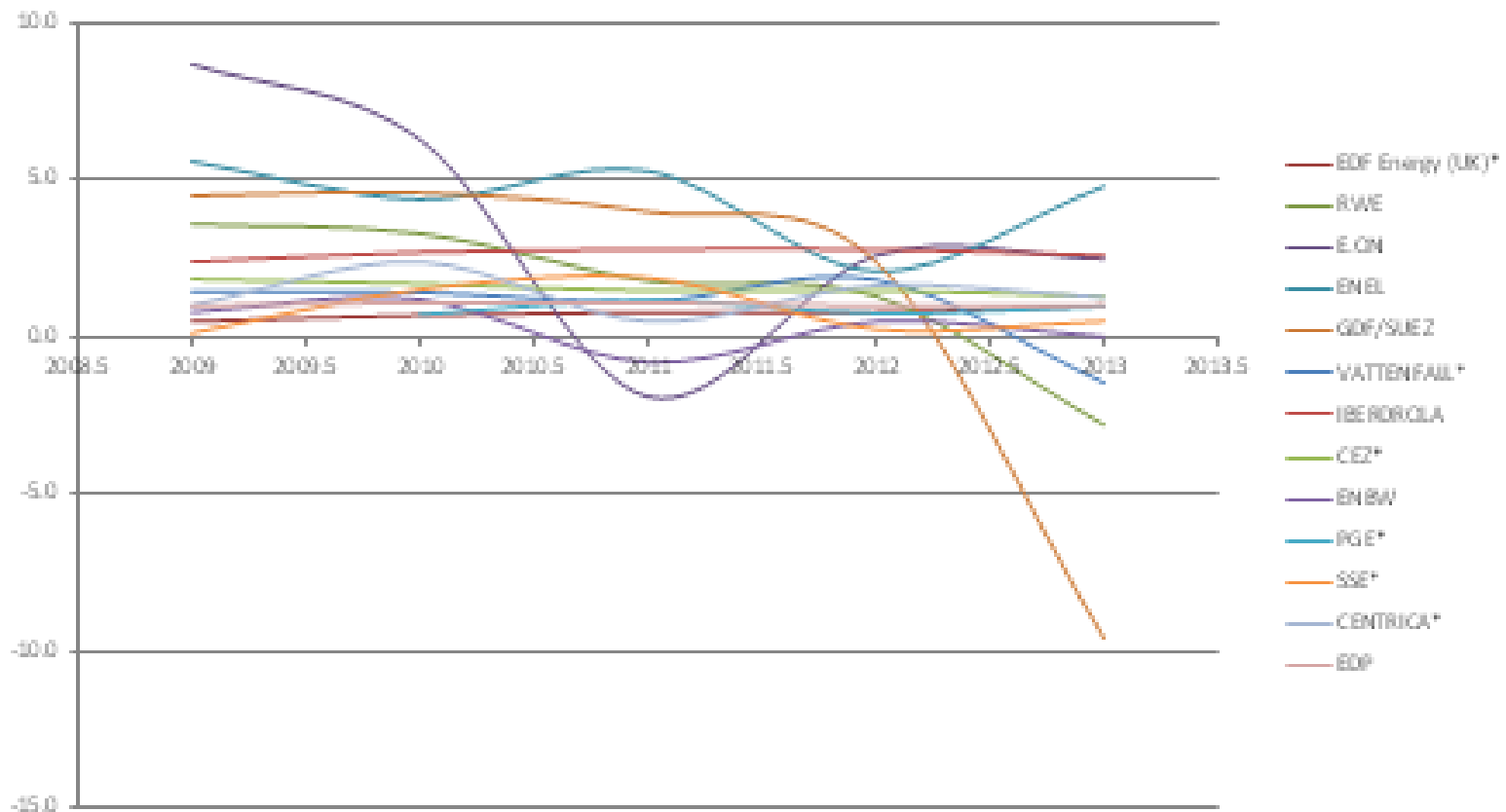
# Impact on Price on German Exchange in 2014



Source: EEX 2015

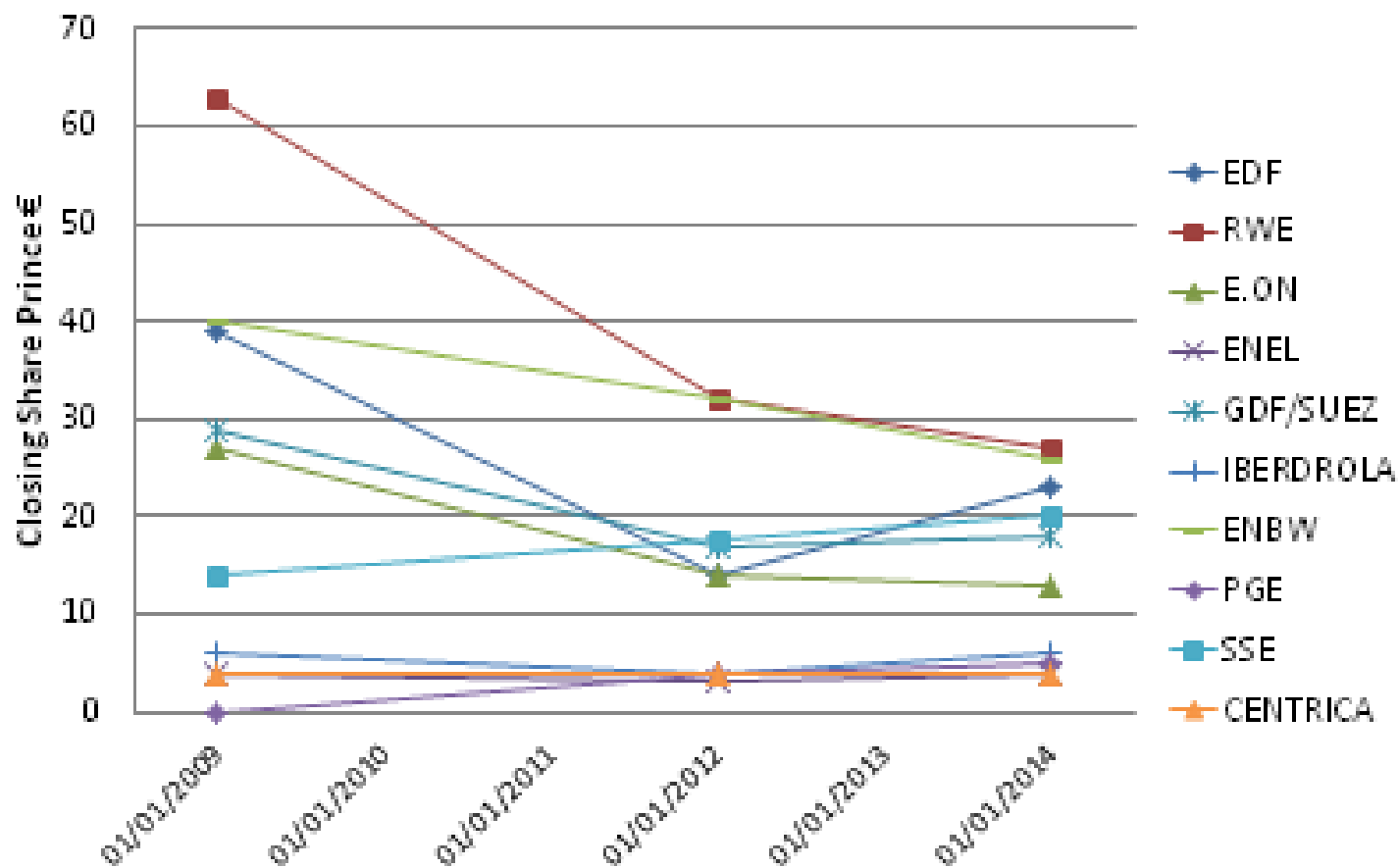
# Major European Electricity Utilities

## Net Income (€ billion)



Source: Annual Reports

# Share Prices of Major European Electricity Companies



Source: Reuters

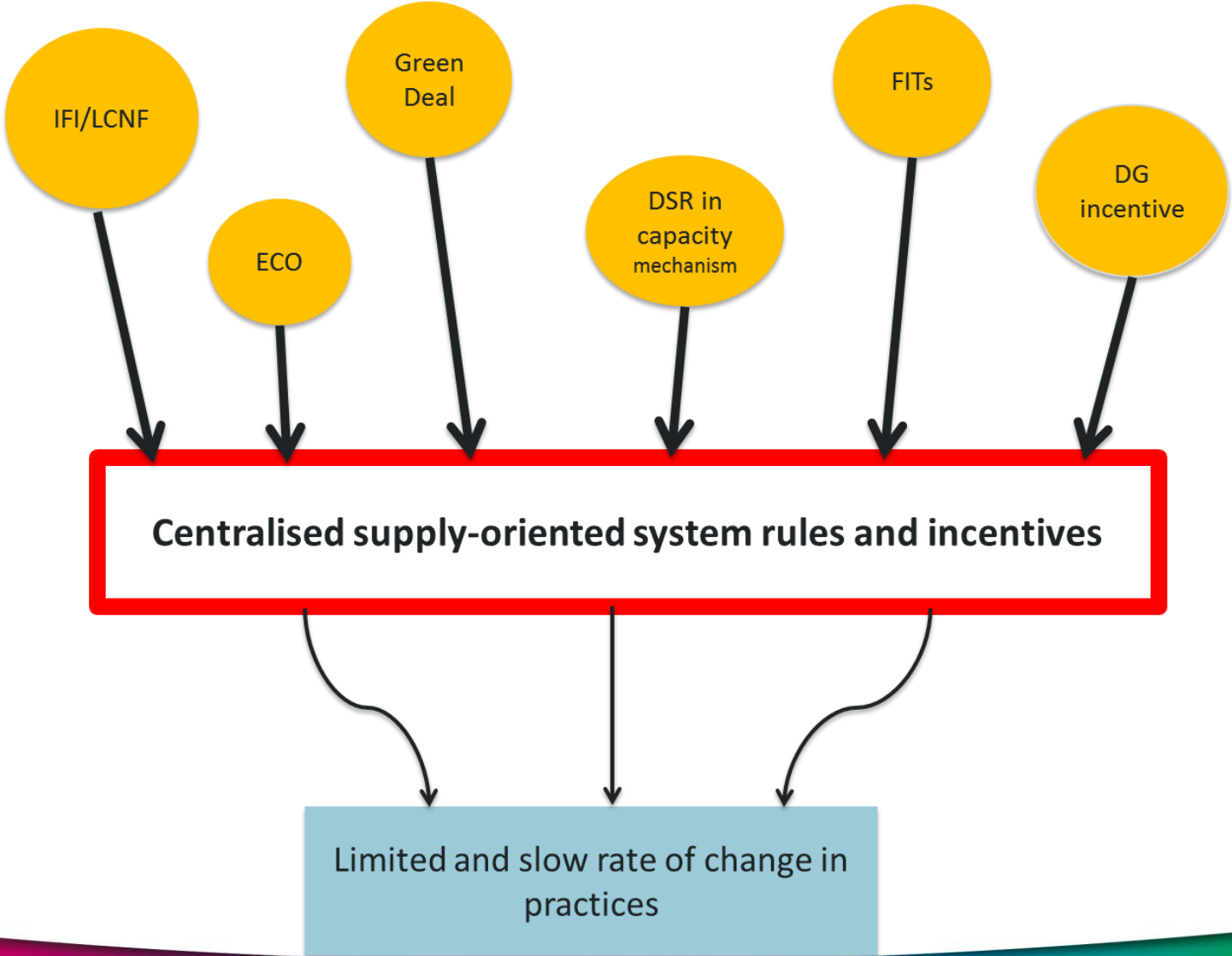
# GB has a unique energy policy

- Since 2010 Electricity Market Reform has been main policy
  - A retrenchment not a reform
  - Fundamental goal to build nuclear power
    - One or two possible, but more unlikely
  - Implemented a ‘capacity market’ which pays money to existing, as well as some new, electricity capacity
- Renewables, community energy, demand side all secondary

# The system just not set up to make it easy for new entrants, new ideas



# Demand side policies find it difficult to make headway in the current energy system



# GB Energy challenges

<http://projects.exeter.ac.uk/igov/wp-content/uploads/2015/03/ECCFuture-Challenges-for-Energy-Policy-March12th-2015.pdf>

- Need a new mind set
- Current institutions are self-reinforcing, not fit for purpose and needs to be restructured
  - <http://projects.exeter.ac.uk/igov/working-paper-change-and-inertia-in-the-uk-energy-system/>
- Legitimacy has to increase

AND if we manage these 3 challenges above then it will better enable the 3 challenges below

- Greater connection, involvement, engagement with customer / citizens
- Inertia to be overcome, new things to happen
- An end to poor, decisions which we know will not lead to our stated goals



# Its not all doom and gloom in GB

- GB has not had the benefit of many policies available elsewhere but impacts of other countries is helping GB to change
- Community Energy policy is inconsistent but numbers of CE groups increasing; has various lobby groups now (eg CE England, 150 members)
  - FITs has been a great success and kick-started all sorts of developments
- City-wide projects also strengthening eg
  - Public sector starting to want a new role
    - Seeing energy as complementary to their goals
- Electricity / heat coming together more
- Individuals demanding more say in decisions



# Achieving a sustainable economy

- A 'middle way' Energy Policy is just not sufficient
  - Need fundamental change to our institutions
    - What chance that?
- In the mean-time
  - try and do things differently
    - Learn from good practice elsewhere
    - individuals, communities, cities in whatever way creating a new way of producing / using / selling
  - It's the way to change energy

# ADDITIONAL SLIDES

# Energy challenges

<http://projects.exeter.ac.uk/igov/wp-content/uploads/2015/03/ECCFuture-Challenges-for-Energy-Policy-March12th-2015.pdf>

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# Need a new mind set

- Lots and lots of things are changing within the energy system (technologies, economics, new business models, customer wishes)
- –But very little is changing
- •This is because the mind set of most actors remains centralised, selling, fossil-fuel based, technocratic, customers as passive recipients
- –This is the reason why there is so much inertia in the system; why there is so little legitimacy

# Current set of institutions are not fit for purpose

- Current, centralised economic regulation not suited to smart, responsive, integrated, competitive system
- Fundamental rethink of the role of the Regulator, Utilities, System Operator, markets and networks, new entrants, customers and citizens
  - Requires institutional restructuring and new set of relationships between them
- Current institutional and legal base acts as fundamental block to change
  - Maintains inertia
  - Maintains illegitimacy
  - Allows poor decision-making

# Legitimacy has to increase

- EP and its system currently top-down, technocratic, inaccessible for most customers
- •Broad view that Government policies and regulation benefit energy companies rather than customers
- –Too simplistic, but nevertheless a lot of truth in it
- •Needs to become bottom-up, dynamic, engaged and optimised at each level (household, community, city, region etc)
- •Needs new institutional framework (see Public Value Regulation on IGov website)

# Problems of energy are just one dimension of society wide challenge of legitimacy

- Increasingly society does not see themselves connected with Parliament or those who benefit from Government decisions
- –Having to rethink the role of Government, and its LEGITIMACY in an age of social media where (particularly) younger people are asking why is it that they are excluded from decisions other than at general elections, given the availability of technology which, in theory, allows them to be involved with any decision they wish to be involved in

# Move from current delegated to more, directed, strategic framework to enable required rate of change

- Public Value Regulatory Process
  - Different institutions (probably)
  - Different balance between institutions (eg less dominant economic regulator)
  - Different balance between public and private (eg State-owned, not for profit System Operator)
  - Different relationships between institutions and actors (eg less letter of the law, more spirit of intention via more detailed expression of expected relationships (both legal and qualitative))



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