



There is one thing you can be certain of...

University of Paris Dauphine

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The UK has implemented an ambitious new policy framework to support decarbonisation

What has been driving reform and what does it look like now...

...and what has it meant for the renewables sector in the UK?

The Trilemma sits at the heart of renewables policy



- Decarbonisation and security of supply goals at least cost
- Ambitious plans for decarbonisation – investing in a range of ‘technology options’
- c. £110bn of investment needed by 2020
- Desire for new regime to attract vast amount of new capital

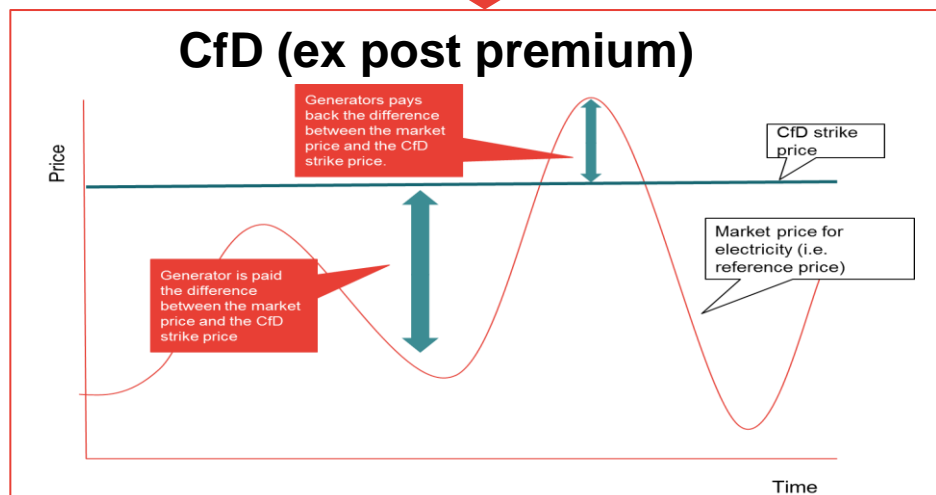
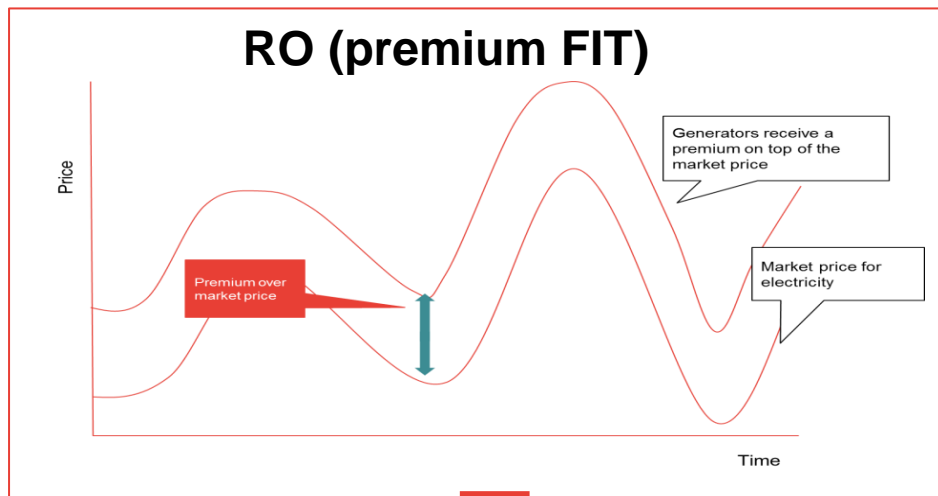
This has led to a new policy framework to deliver this investment

Transition from the Premium FIT (RO) to CfDs (ex post premium)

Allocation via auctions

New budget for low carbon support payments
(Levy Control Framework)

CfDs were designed to balance investor certainty with market participation



- Transition from the RO (premium on the wholesale price).
- Technology neutral mechanism.
- Key rationale based on achieving cost of capital reductions (similar fixed FITs), but keep generator participation in the market.
- Minimises excessive rents to participants

There were concerns about a 'route to market' ...

Offtaker of Last Resort

- Lenders require RES to have a long-term power purchase agreement (PPA).
- Concerns there would not be a liquid market for contracts.
- 'Back-stop' PPA was set up with £25/MWh discount.

Concerns not borne out

- Competitive market for PPA providers has grown with over 20 suppliers in GB.
- CfD enables participants to access cheaper PPAs
- OLR is for now irrelevant.

...but these do not seem to have been realised

To keep costs down auctions have been introduced...

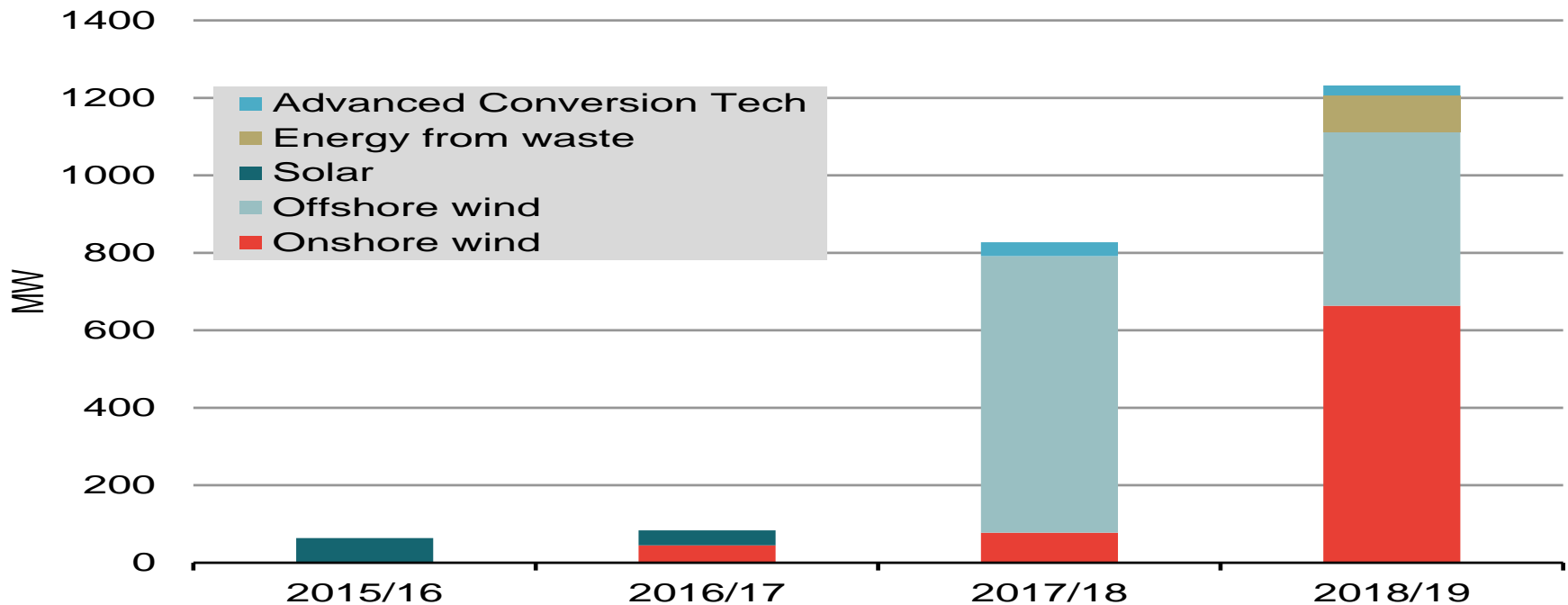
Pot 1 –
established
technologies

Onshore wind,
Solar PV (>5MW),
Energy from waste
with CHP)

Pot 2 – less
established
technologies

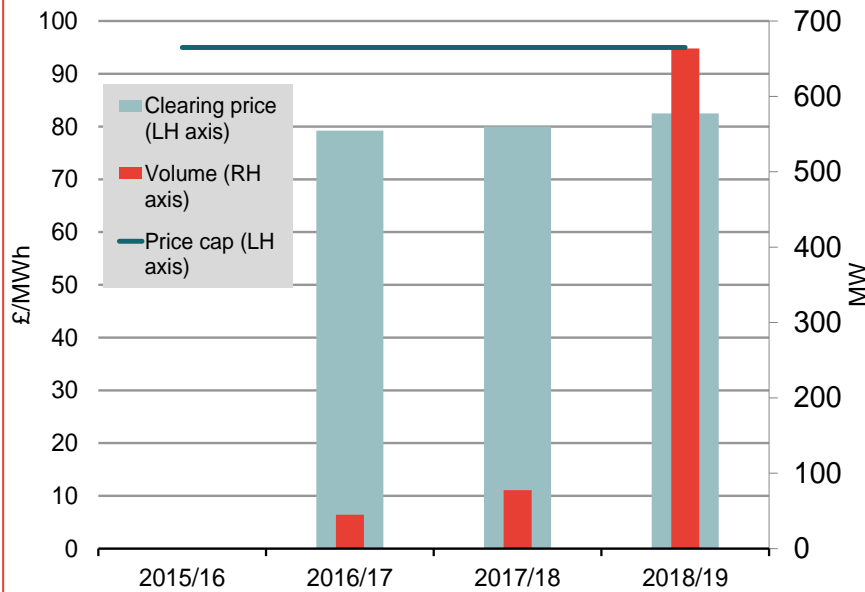
Offshore wind,
Advanced
Conversion
Technologies

Capacity awarded a CfD by type and commissioning date

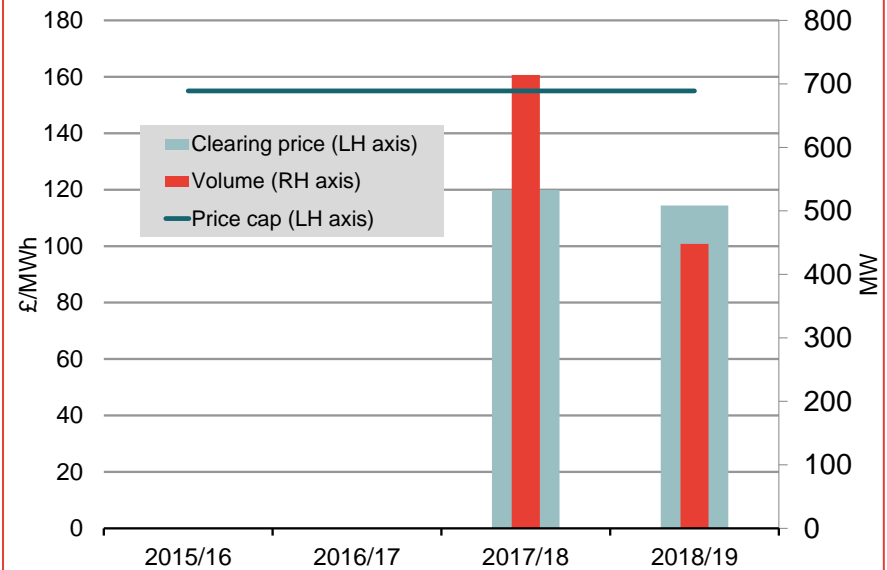


...and prices achieved were well below those previously paid by DECC

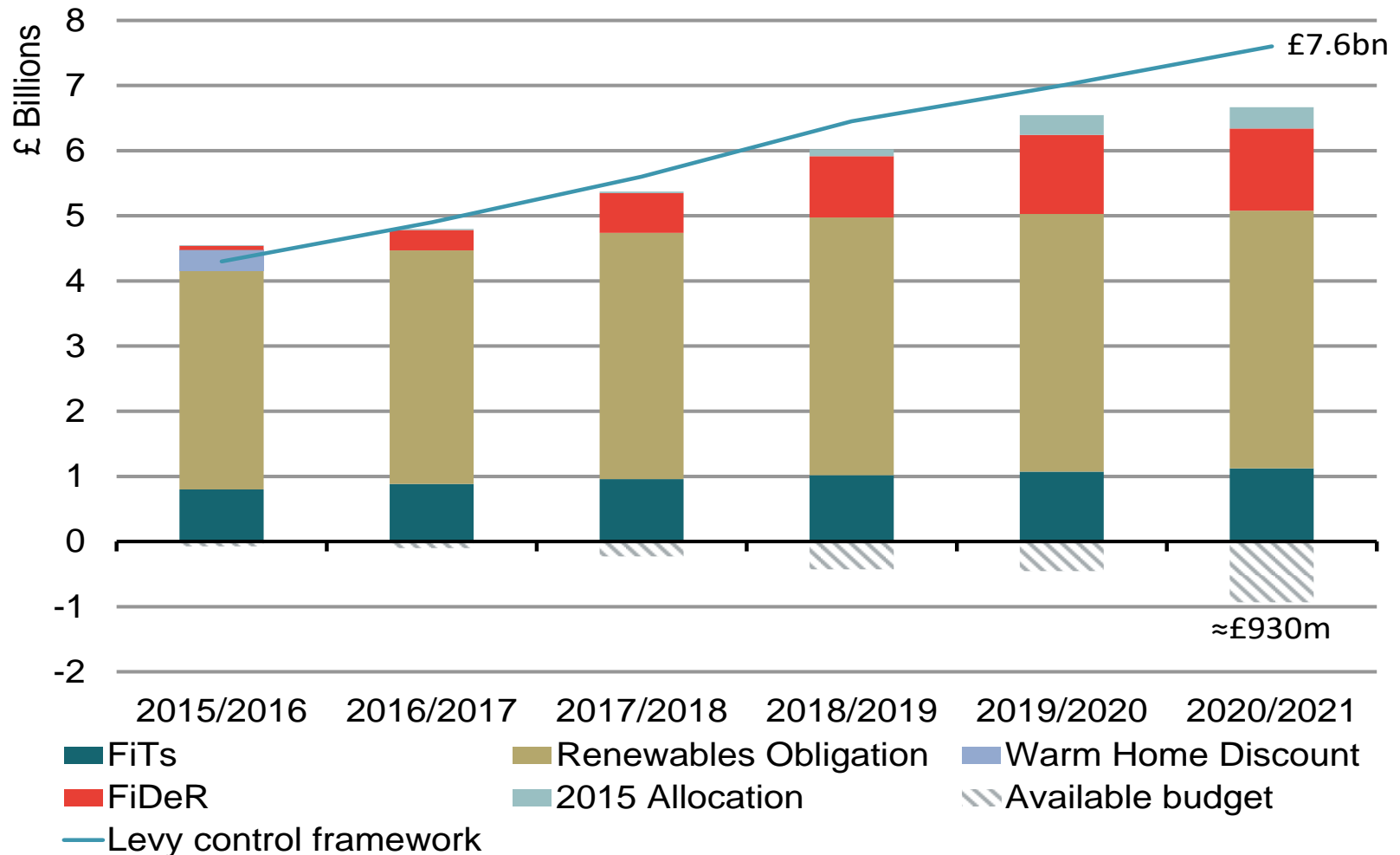
Onshore Wind



Offshore Wind



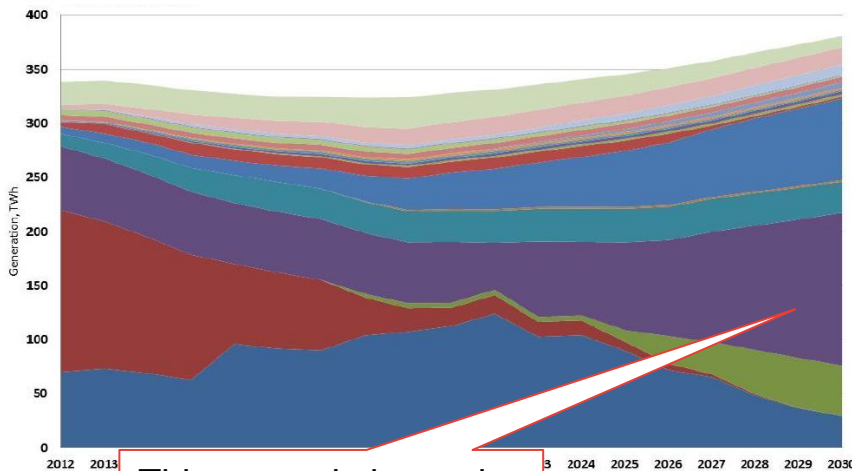
And finally a fixed budget stretching beyond a single political cycle was set



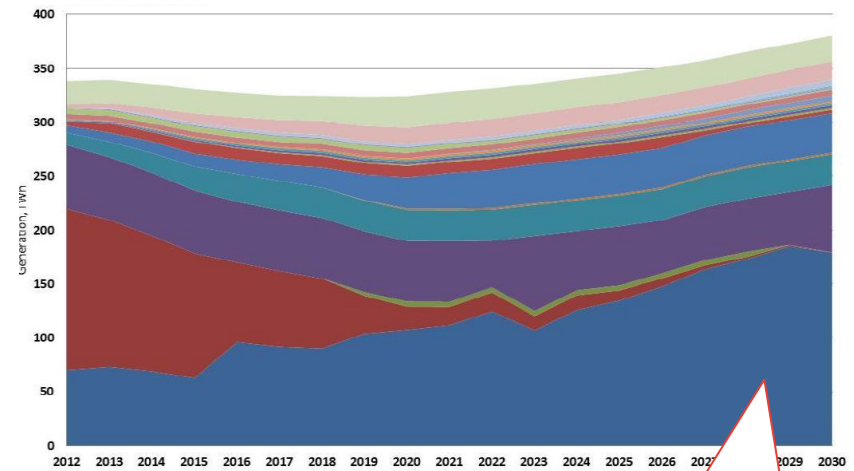
However, despite this detailed framework, we don't know really what the government ambition is

50g CO₂/kWh Scenario in 2030

200g CO₂/kWh Scenario in 2030

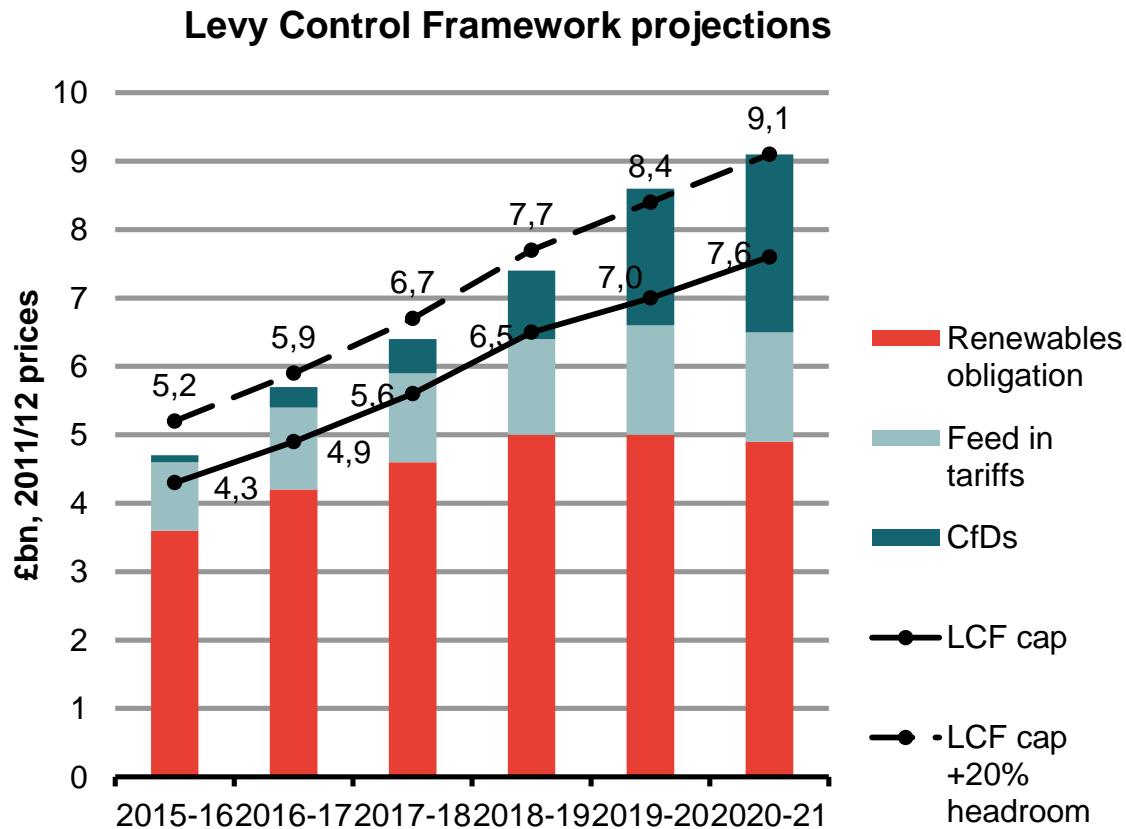


This scenario is much more reliant on nuclear energy, and will be much more expensive.



This scenario is much more reliant on gas.

Actually the budget has been blown and is unmanageable for investors...

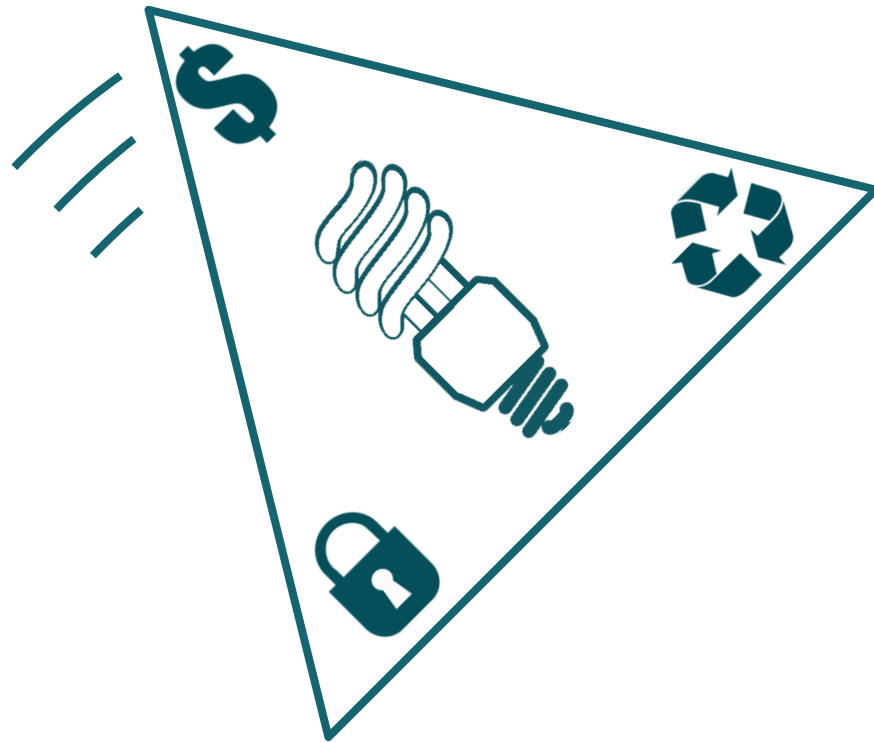


Major difficulties in managing the budget:

- Deployment
- Technology efficiencies
- Wholesale prices
- Expensive non-competitive contracts

This has in part led to the balance shifting with the new Government...

The Government may now be willing to sacrifice its decarbonisation goals to save costs



Recent decisions suggest a reprioritisation away from decarbonisation and towards greater affordability...



We will halt the spread of onshore windfarms. [...] we will end any new public subsidy for them and change the law so that local people have the final say on windfarm applications

Feed in Tariff cuts

Ending 'Green Deal' funding

Scrapping Levy Exemption Certificates (LECs)

Scrapping the 2016 Zero Carbon Homes target

Postponement of the next CfD auction

And if there is any money available in future,
it is likely there will be more tinkering...

**Technology
neutral auctions**
may require a better
understanding of
technology **system**
costs.

Frontier is advising the
UK Government on the
system costs of all
technologies including
nuclear and low
carbon.

There is only one thing you can be certain of...

...that when it comes to renewables policy Governments can provide very little certainty...

...unless you have a CfD of course.



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