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The implications of the UK's Electricity Market Reform for the consumer

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Which?, London
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E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

Overview of Report

With thanks to Laura Platchkov and Irina Shaorshadze:

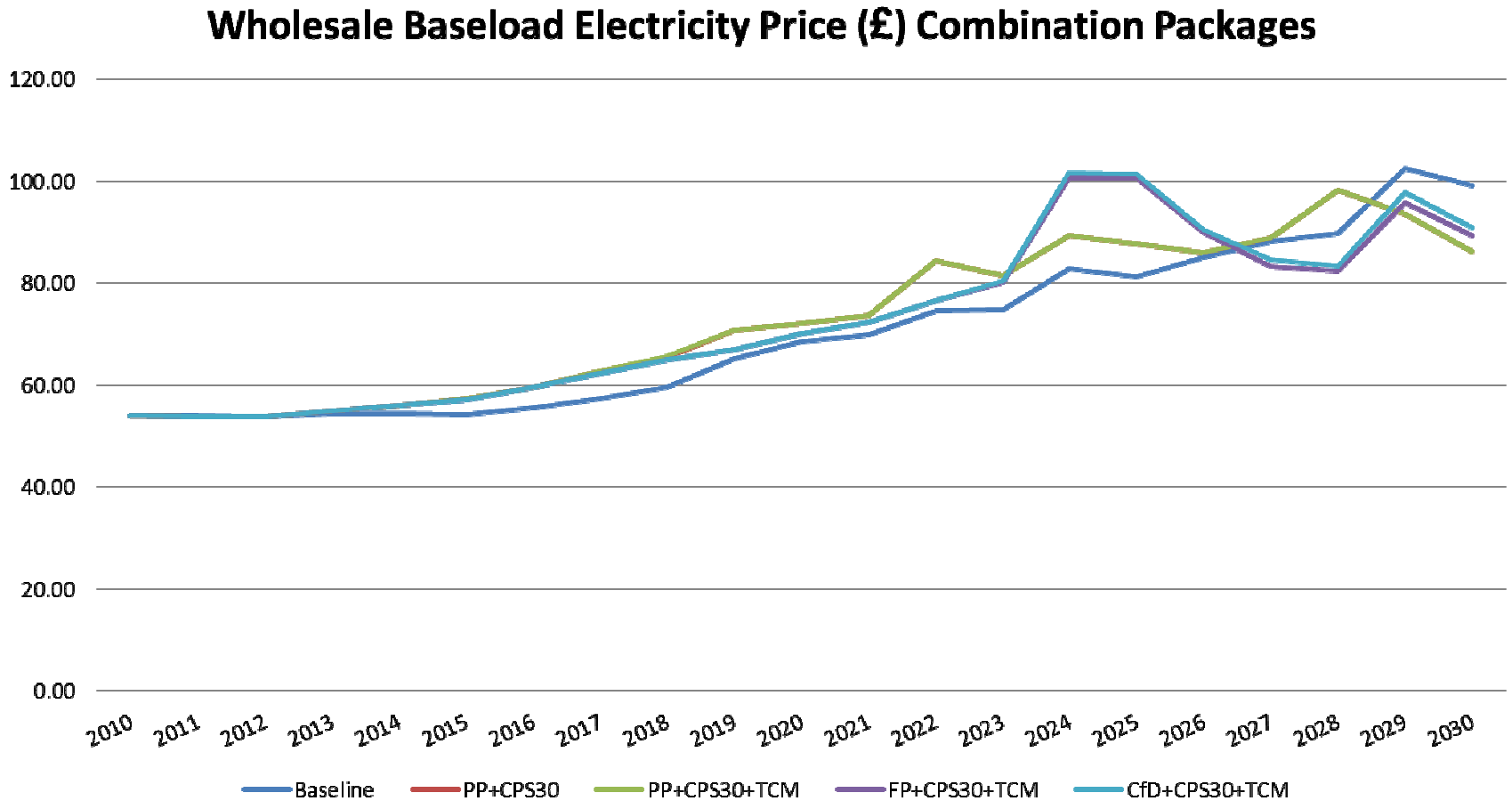
1. Context and objectives
2. Review of key policy documents
3. Impact on households bills & energy services
4. Consumers' reaction
5. Potential risks & unintended consequences
6. Alternatives
7. Conclusion

What EMR says: Household Bills

- DECC assume reduced household consumption from 2010 to 2030 (10% decrease)
  - This is the direct result of current and planned government policies. No second round demand side reduction effect.

- The Consumer bill goes up, but not as much as the wholesale prices
  - Wholesale baseload electricity prices increase by 69% from 2010 to 2030 under the preferred package.
  - Residential Consumer Electricity Bill increases 33% by 2030 under prefered package.
  - Bill is 1% higher than in Baseline in 2020, but 7% lower in 2030.
  - However, baseline assumes ambitious adjustments in RO bands to meet Renewable Obligations...
  - Using Ofgem assumptions for T&D costs residential bills rise 50% or 67% per unit by 2030.

Household Bills: 1



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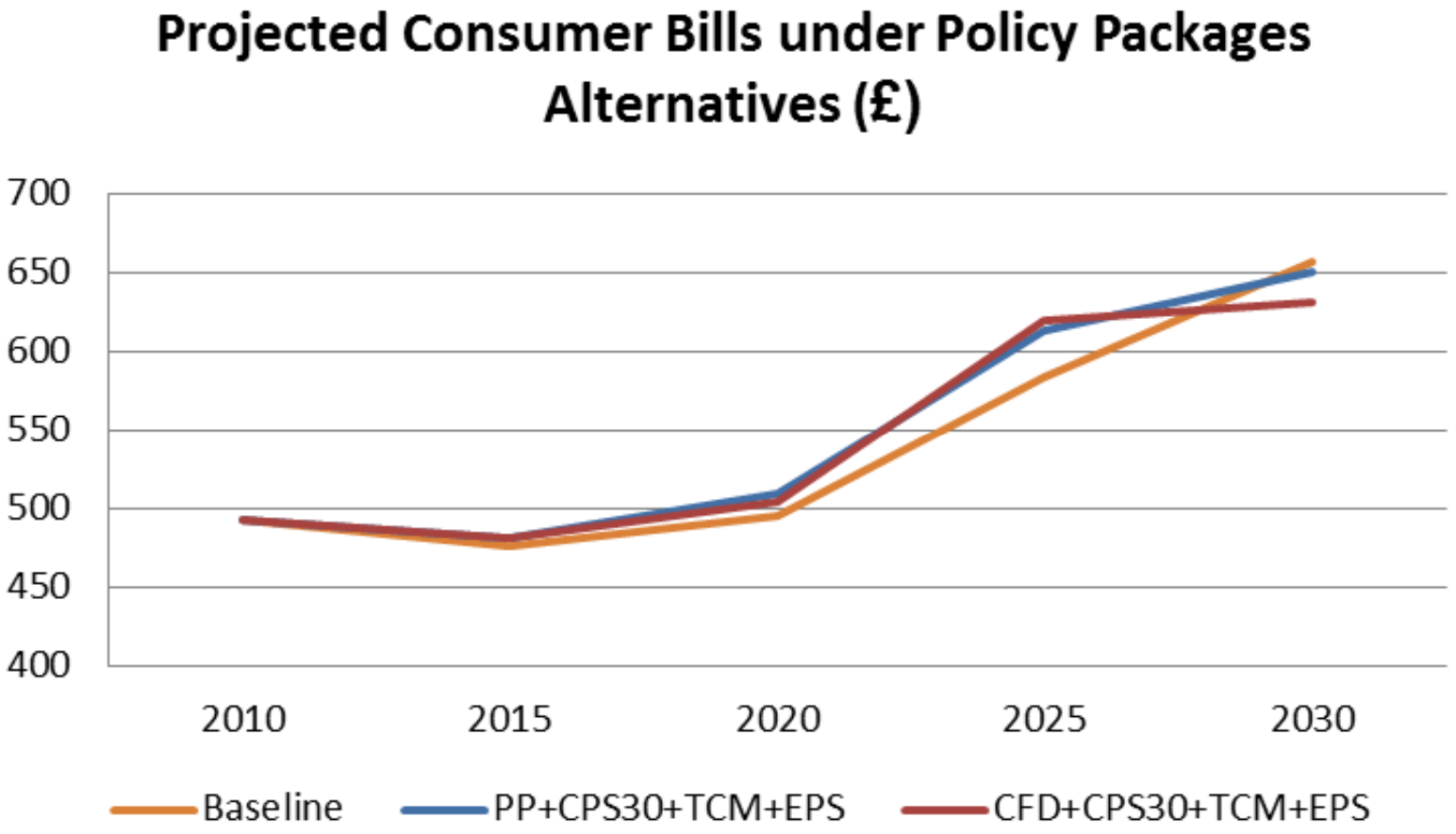
Household Bills: 2



What Consumers Will Get...

- Lead Package (CFD+CPS30 +EPS+TCM)

a. Consumer welfare impact	*-ve*
b. Distributional Analysis	*-ve*
c. Indirect Impact	*Not analysed*
d. Renewables	*+ve (?)*
e. Decarbonisation	*0*
f. Energy Security	*NPV<0*
g. Cost of Capital and Risk	*???*

Potential risks

- **Complexity, redundancy, uncertainty & timing**
  - Risks of "stacking on" multiple instruments imposes additional tangible and less tangible costs (Fankhauser et al. 2011)

- **Importance of non-cost barriers:**
  - Ex. planning issues, consumers' support, grid access & charging, capacity & supply chain, T&D (ECORYS, 2008; IEA, 2008; Pollitt, 2010).

- **Specific technology risks:**
  - One of the most illustrative case is nuclear power, where history clearly shows that estimated costs are less than outturn costs:
    - E.g. Olkiluoto in Finland: reported contract price in 2004 was 3 billion of Euros. Now 5 billion. 3 year delay. Design of the deal in fact makes consumers' bear the risk (Schneider et al. 2009).
    - E.g. Flamanville in France: cost estimated at 3.3 billion Euros in 2006, 5 bn, 2010.

Alternative policies?

- *Demand-side management:*
  - Cheapest and most direct technologies focus on demand reduction (Pollitt, 2010).

- *Creating consumer markets for green energy:*
  - Importance of engaging consumers (MacNamara and Grubb, 2011).

- *R&D support:*
  - Need to enhance R&D and support technological progress (Jamasb and Pollitt, 2010).

- *Refocus action at EU level:*
  - Smaller EU ETS quotas, minimum reserve price, auto adjustment to RES (OECD, 11).
  - International tradable green certificates (TGC) (Meyer, 2003).

- *Fiscal measures:*
  - arbon price increase brings revenues that can be recycled & redistributed (compensation mechanisms). Energy policy and tax policy intimately linked.

Conclusions on EMR

The analysis raises serious questions about EMR proposals as regards:

1) Policy objectives:

- A substantial part of it related to expensive RES policies
- Significant surplus transfer from consumers & government to market players
- Short term impact on net carbon emissions would be zero, given the EU ETS

2) Policy design:

- EMR shifts responsibility from market to government for energy security
- EMR is optimal tax policy AND optimal energy policy

3) Policy consistency:

- UK energy policies criticised for complexity and inconsistency (OECD, 2011)
- Risk analysis underplays scope for policy failure

- **Much more attention of EMR effect on real incomes**
- **Risks seem to be increased for households**
- **Green Deal and RHI open avenue for including heat as part of wider energy policies – however this should not mask what is happening under EMR.**

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