

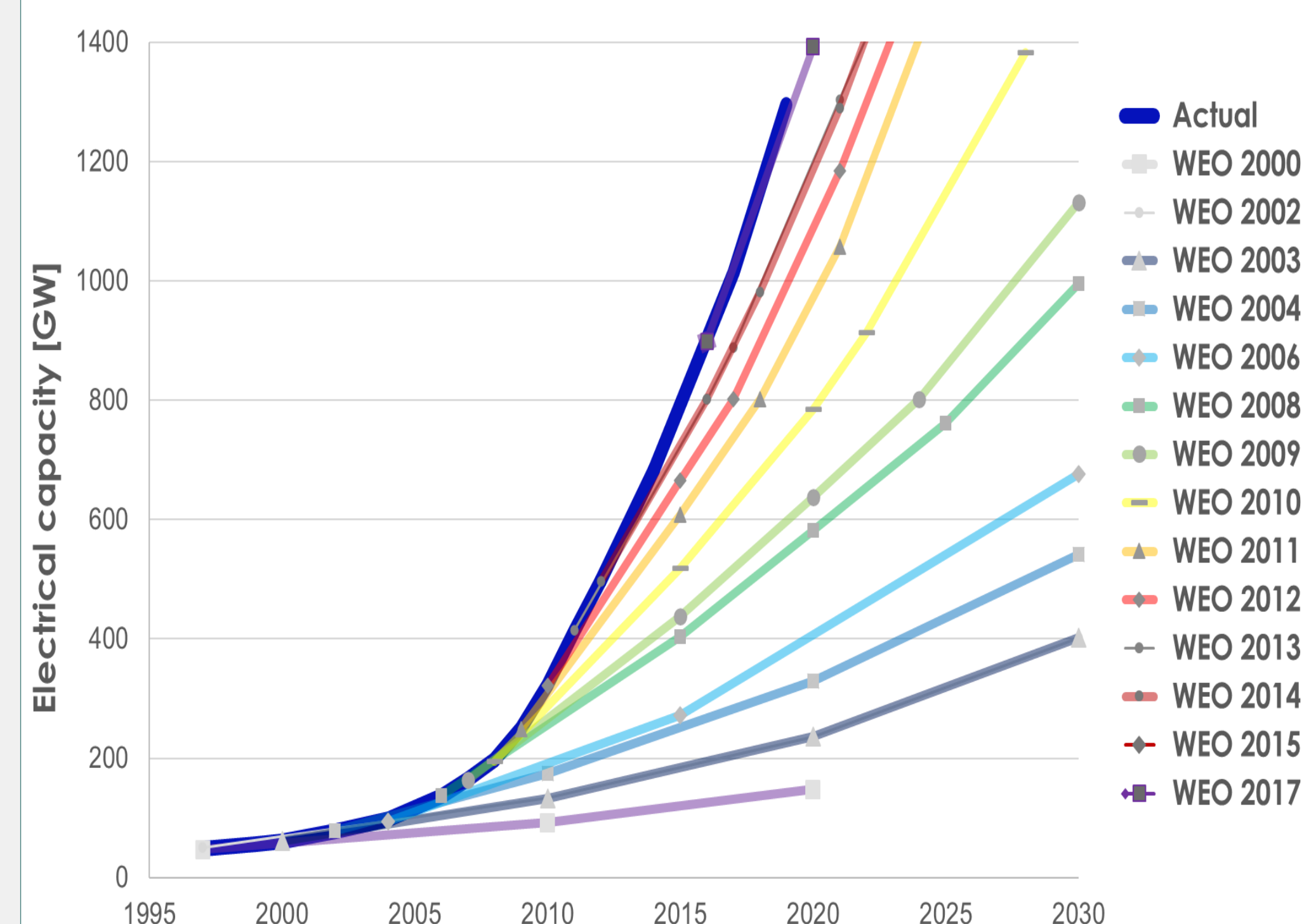
1. Introduction

Sustainable, resilient and equitable growth requires investing in rapid structural, technological transformation.

- The incoming UK government faces tough policy choices on public sector spending, taxes and debt management.
- Dealing with the climate crisis cannot be separated from how we approach other challenges.
- Treasury economists need to update their conceptual understanding and analytical toolkit to successfully guide decisionmakers.

2. Change catches us out

New renewable capacity, ex-hydro power



Source: Energy Watch Group, IEA

3. Economics can help understand/steer the process of change

Marginal incrementalist views and analytical approaches are ill-placed to inform decisions based on non-marginal, structural shifts. Economists using inappropriate tools not only get the future wrong, they make the future wrong. Narratives and expectations can sustain inertia OR drive cost-cutting innovation and reinforcing feedbacks such as learning by doing and economies of scale. Policy intervention, which 'kick starts the clean innovation machine' and builds strategic comparative advantage, is dynamically efficient.

4. Risk-opportunity, not forecasts

To address challenges of growth and productivity in a changing world, the UK Treasury must stop relying on static modelling approaches to inform strategic decisions.

- Understanding the dynamics of innovation and transformational change requires use of a broader range of analytical tools.
- Economic modelling has a role to play in assessing risks and opportunities and guiding optimal policy choices.
- All models are wrong, but some are useful. What matters most are the insights, not the flawed predictions, they provide.

5. Key lessons learned

A shift to risk-opportunity analysis and options theory means that decisions can now be taken to invest in future-proofed assets, and avoid locking into redundant infrastructure, skills and ideas.

- Our report concludes that a variety of models, complemented by a range of qualitative and non-modelling analytical approaches, with different strengths and weaknesses, can best articulate risks and inform choices.



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