



**March 2<sup>nd</sup>, 2017**

# Energy Storage on the Global Stage

**Dr Matthew Rowe**

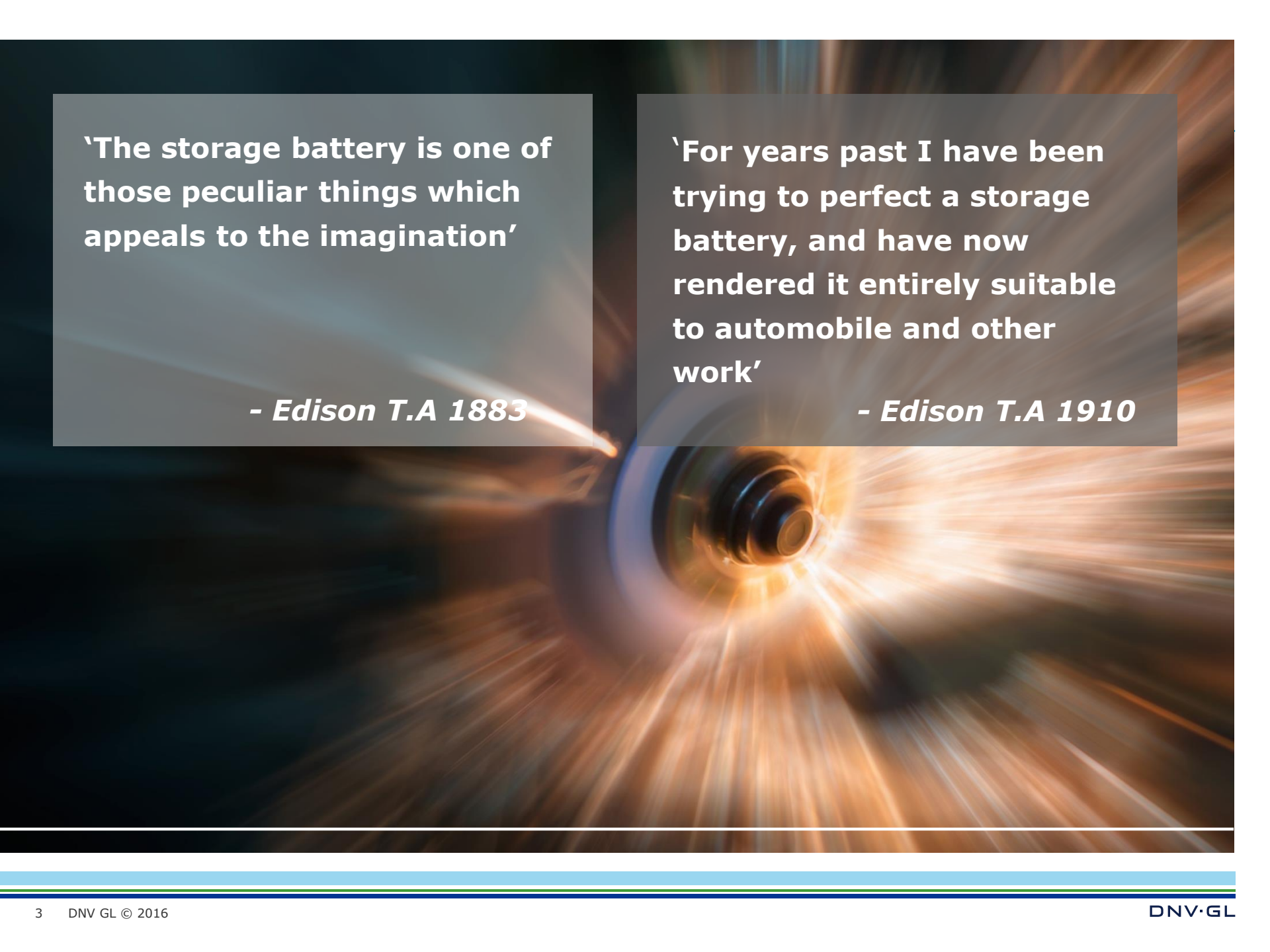


# DNV GL – Global Leaders in Energy Storage Advisory Services



## Storage Applications





**'The storage battery is one of those peculiar things which appeals to the imagination'**

**- Edison T.A 1883**

**'For years past I have been trying to perfect a storage battery, and have now rendered it entirely suitable to automobile and other work'**

**- Edison T.A 1910**

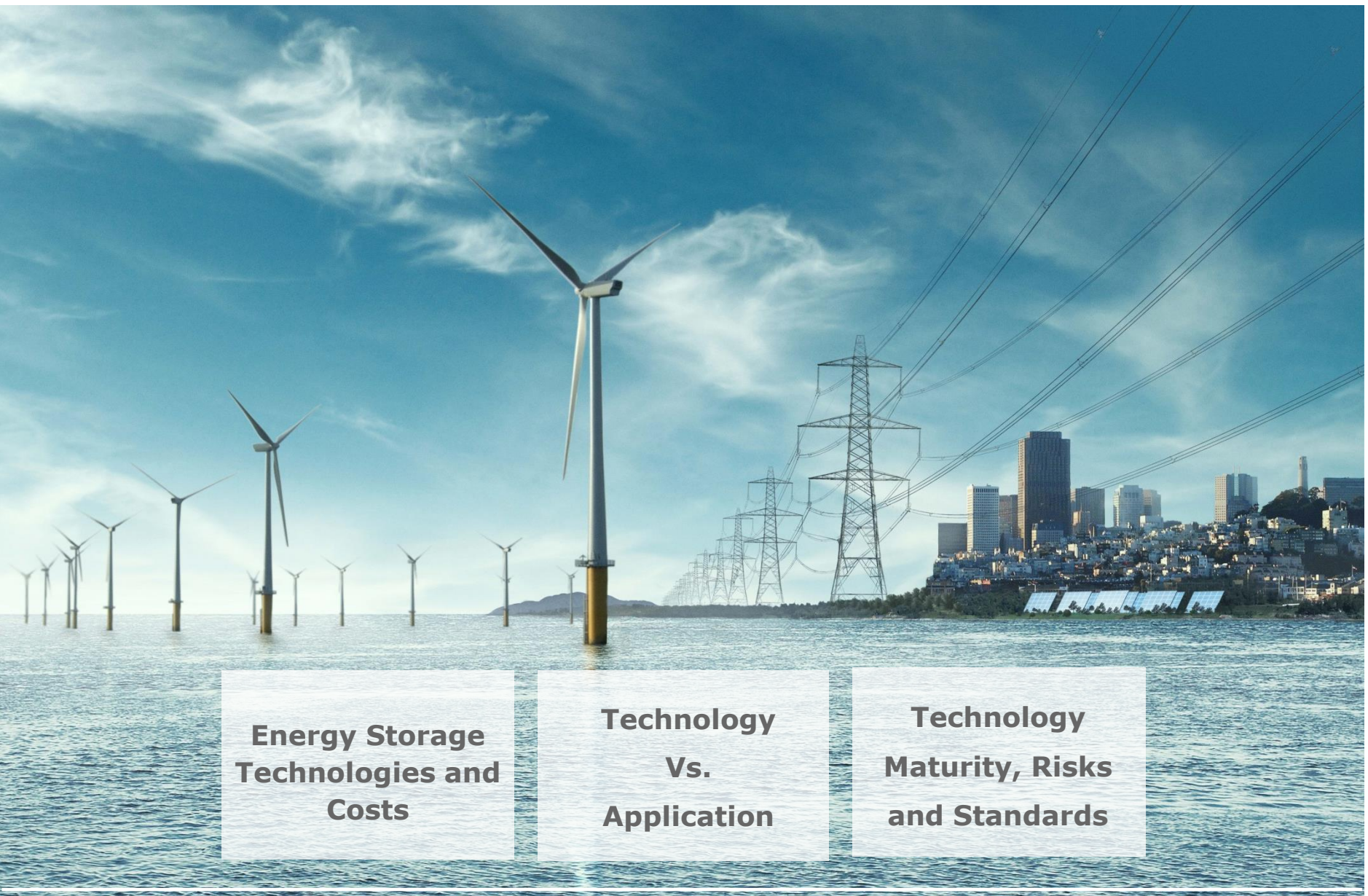












**Energy Storage  
Technologies and  
Costs**

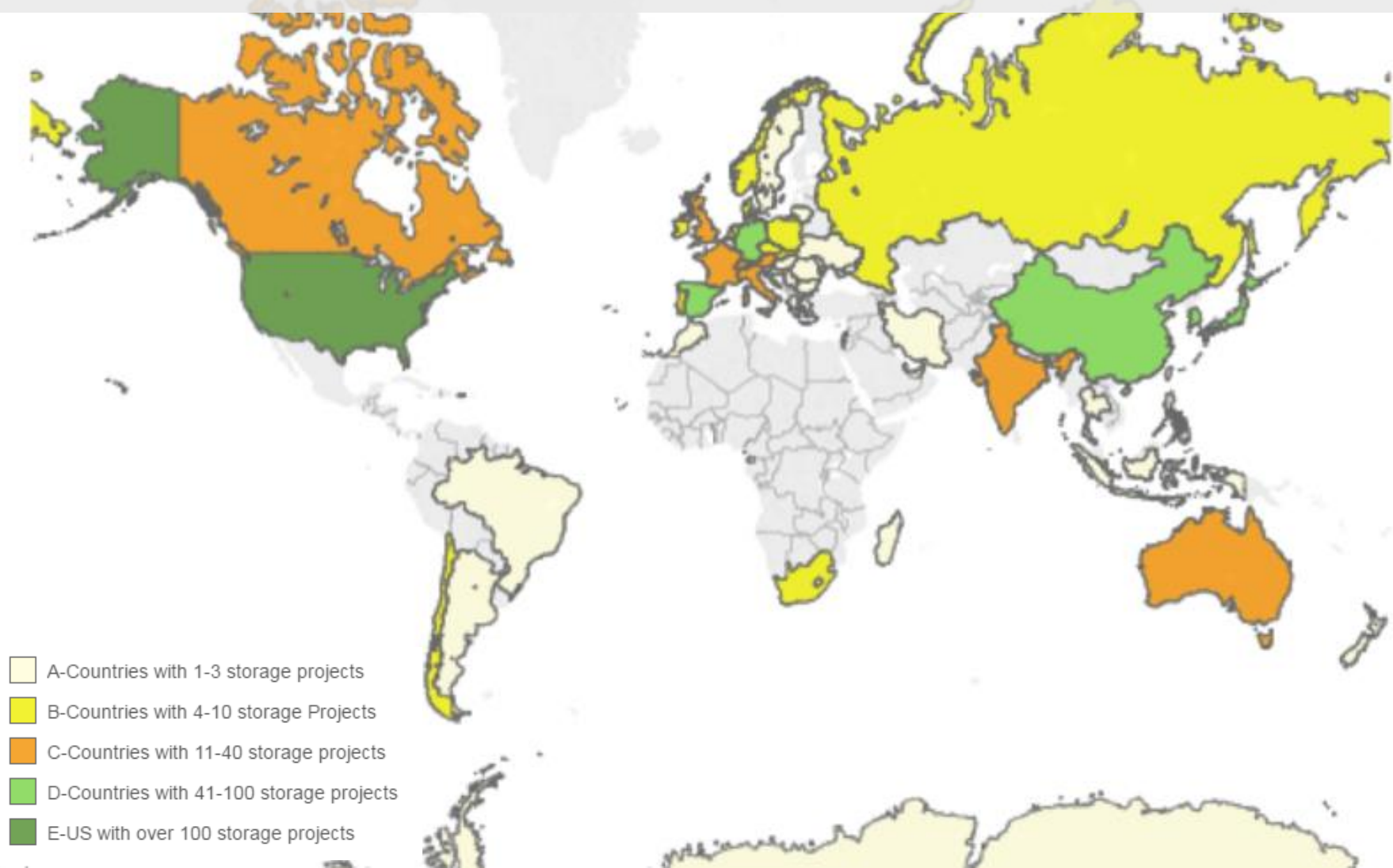
**Technology  
Vs.  
Application**

**Technology  
Maturity, Risks  
and Standards**





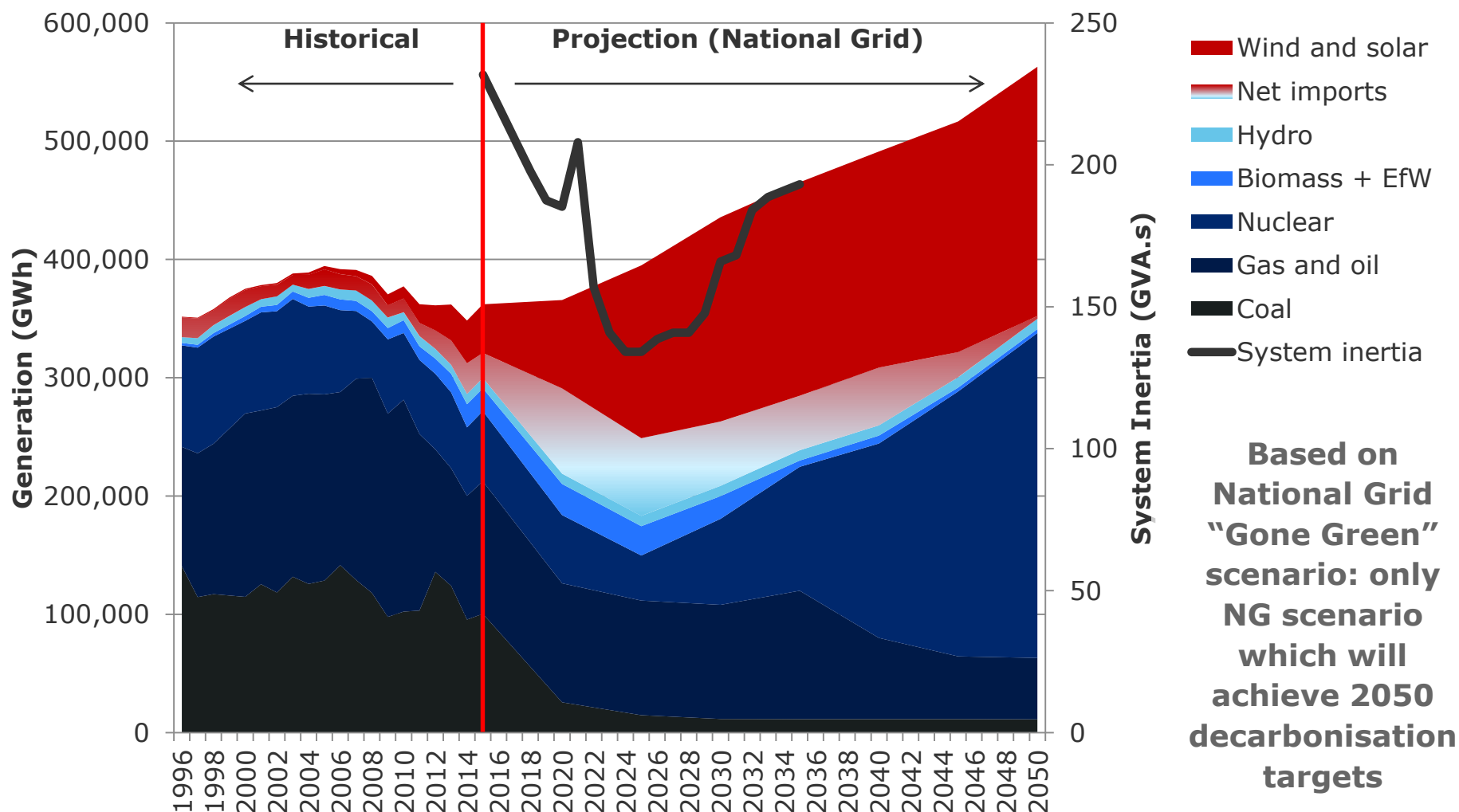
# Global Map of Energy Storage Installations by April 2016







# Increasing renewables bring new electricity network challenges



Sources: National Grid FES; National Grid SOF; DECC Digest of United Kingdom Energy Statistics (DUKES)





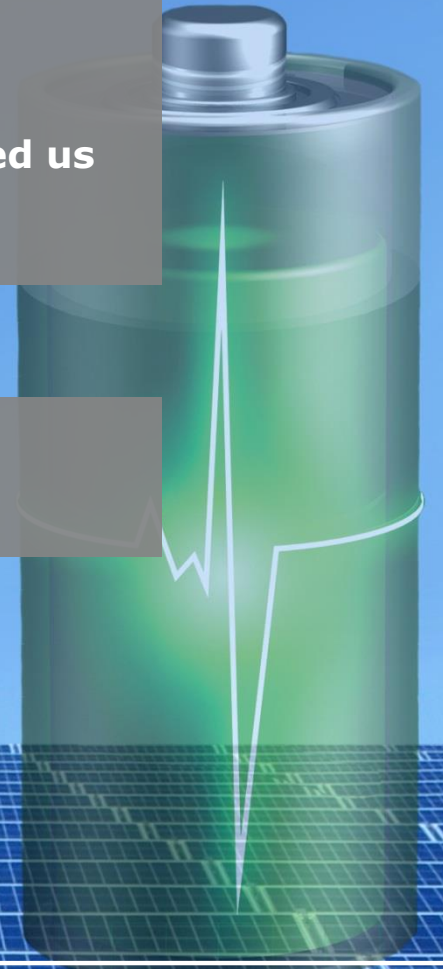


**Commercial and Regulatory Uncertainty**

**Opportunities and Revenue Streams for Storage**

**Globally, transformative and disruptive technologies have forced us to rethink existing business models and strategies**

**Disruption is either going to happen to you or because of you**  
**@briansolis**







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