# Identifying technology opportunities in the low carbon energy transition

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Our 2050 – Final-Project Event, Fitzwilliam Hotel, Dublin | Dec 10<sup>th</sup> 2018















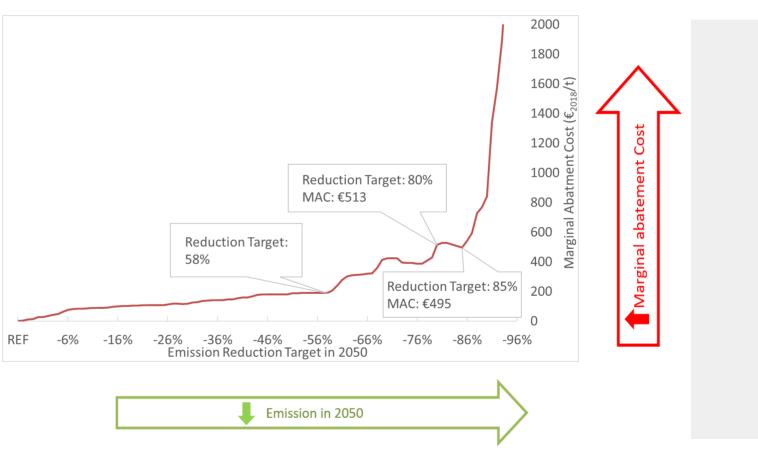




## Results – Marginal Abatement Cost Curves (MACC)



- Irish TIMES model with enhanced capacities
- Impose increasingly more stringent mitigation targets (100+ scenarios)
- Linking carbon costs in all scenarios to obtain MACC







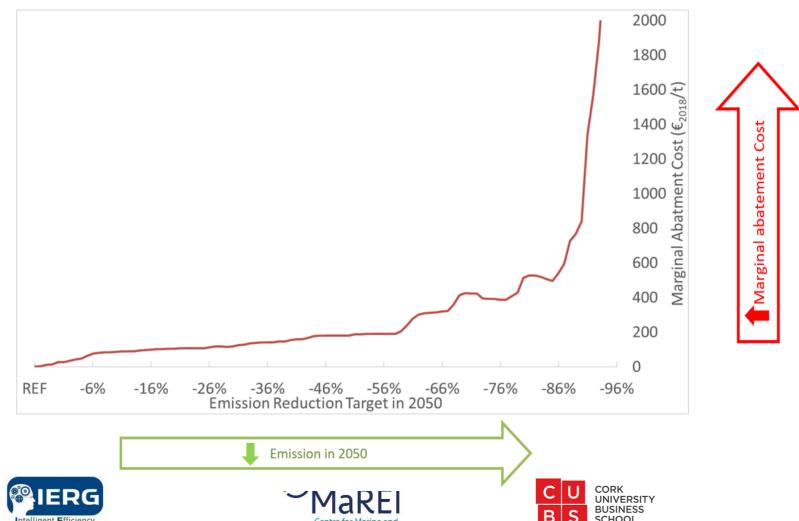






## **Technology Opportunities**









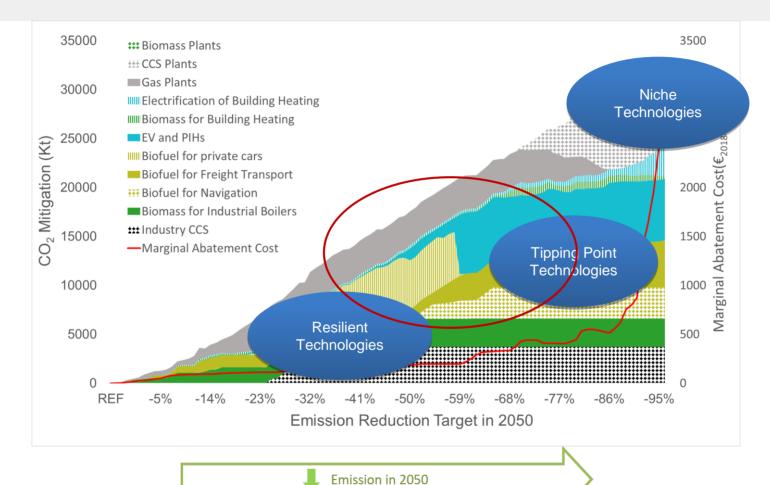






#### **Technology Opportunities**













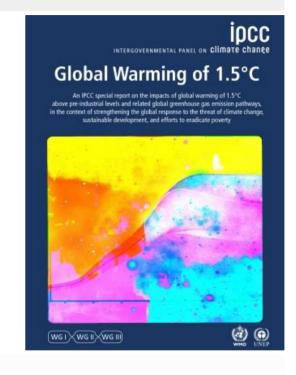




#### **Impacts**



- Model based MACCs improve existing policy tools
  - More robust insights from TIMES model
  - Strengthen shortcomings of MACCs
- Scenario ensembles affect policy making for 1.5°C
  - How close to 1.5°C target can be achieved
  - What extra efforts are required





<u>Limiting Global Warming to Well Below 2 °C: Energy System Modelling and Policy Development pp 191-205 | Cite as</u>

From 2 °C to 1.5 °C: How Ambitious Can Ireland Be?

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