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# GREENHOUSE CARBON BUDGETS – HOUSEHOLD METAPHOR’S BRIDGING THE SCIENCE – POLICY INTERFACE ON CLIMATE CHANGE

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Metaphors of Transformative Change  
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15<sup>th</sup> September 2017

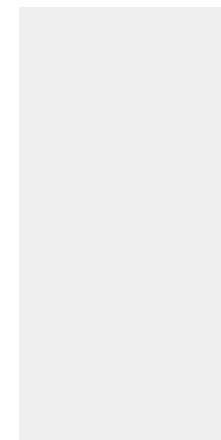




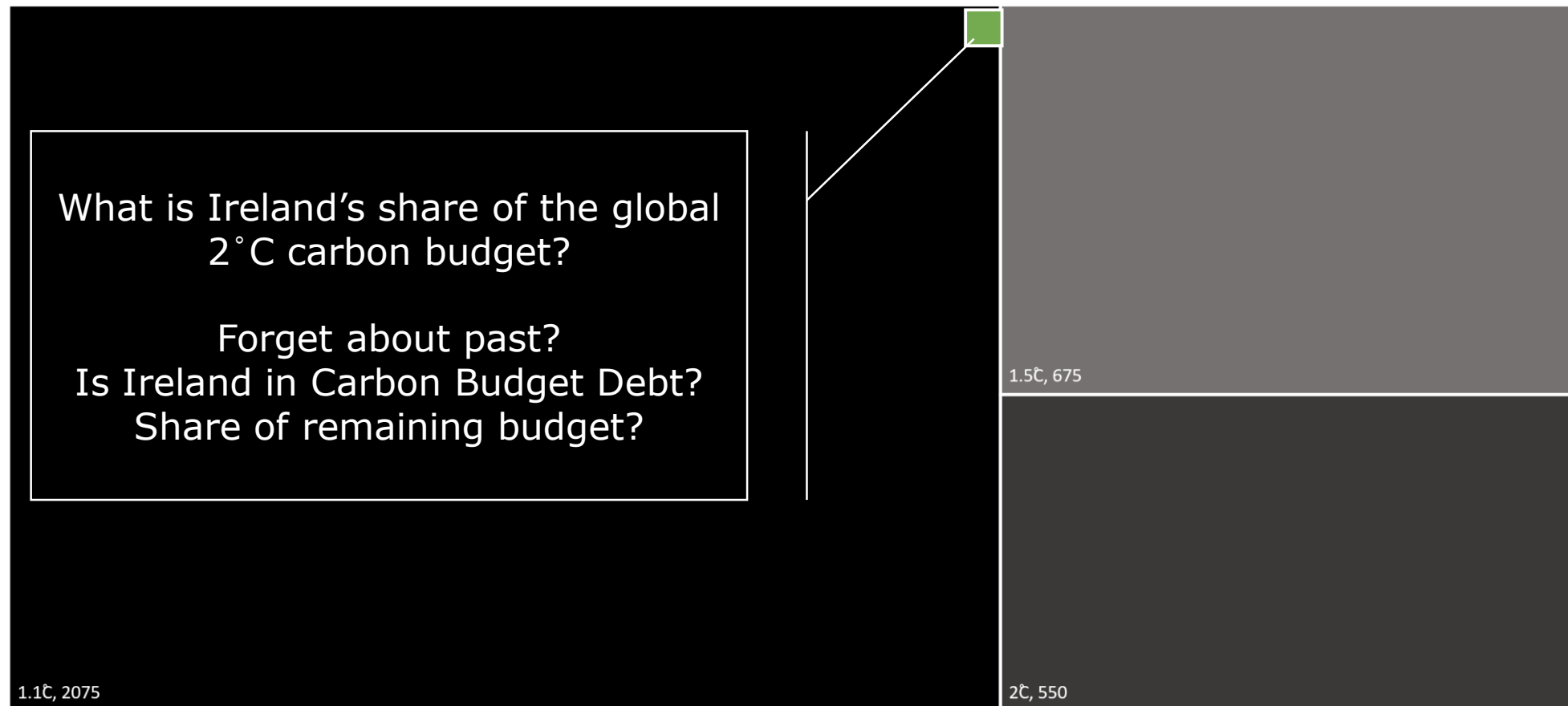
NASA Earth's City Lights – 2012  
<http://earthobservatory.nasa.gov/Features/NightLights/>

# Simple Science-Policy Message: Carbon Budgets

Temperature increases about  $0.5^{\circ}\text{C}$  for every 1 trillion tonnes of  $\text{CO}_2$  emitted



Carbon Budgets (GtCO<sub>2</sub>)



What is Ireland's share of the global  
 $2^{\circ}\text{C}$  carbon budget?

Forget about past?  
Is Ireland in Carbon Budget Debt?  
Share of remaining budget?

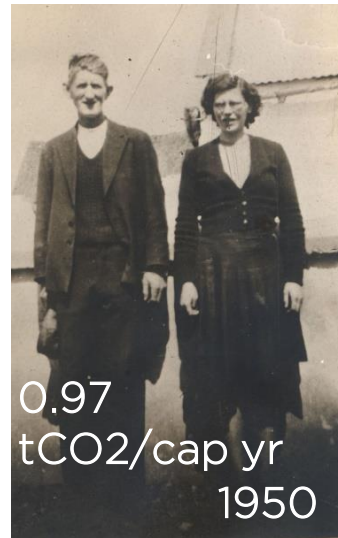
■ 1.1°C ■ 1.5°C ■ 2°C





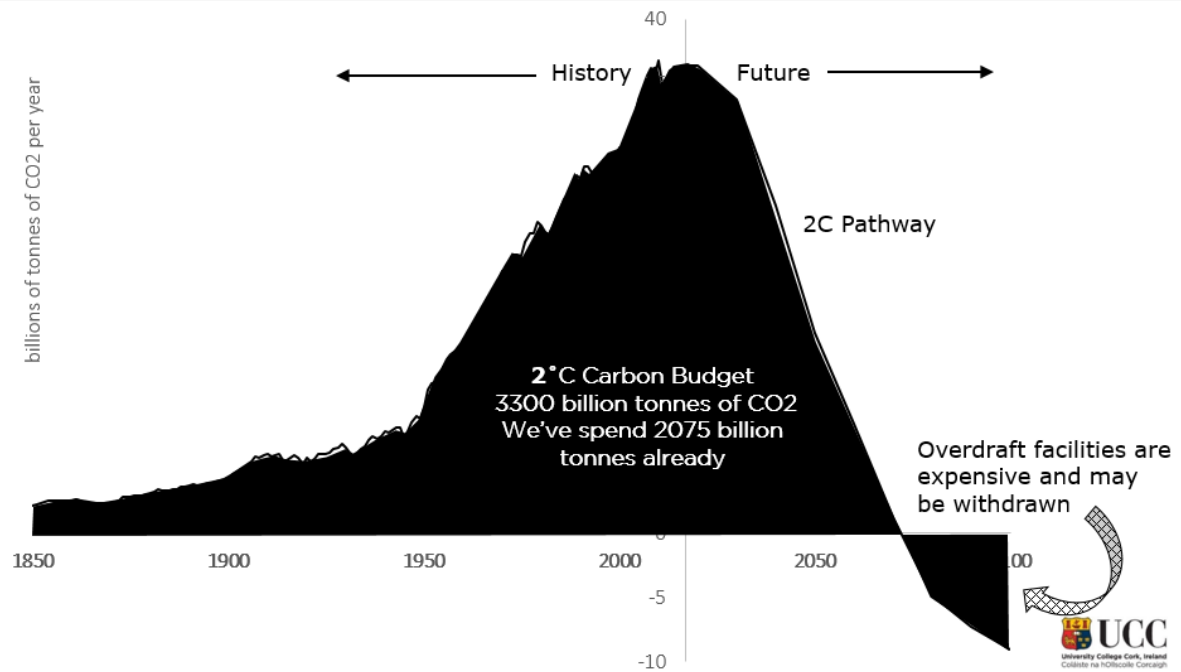


# Intergenerational transnational equitable budgets



My nephews  
Morgan  
& Charlie  
(& Sylvain my  
brother in law)





## Intergenerational transnational equitable budgets



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Thank you  
**QUESTIONS?**



**MaREI**

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# Environmental Research Institute Instiúid Taighde Comshaoil

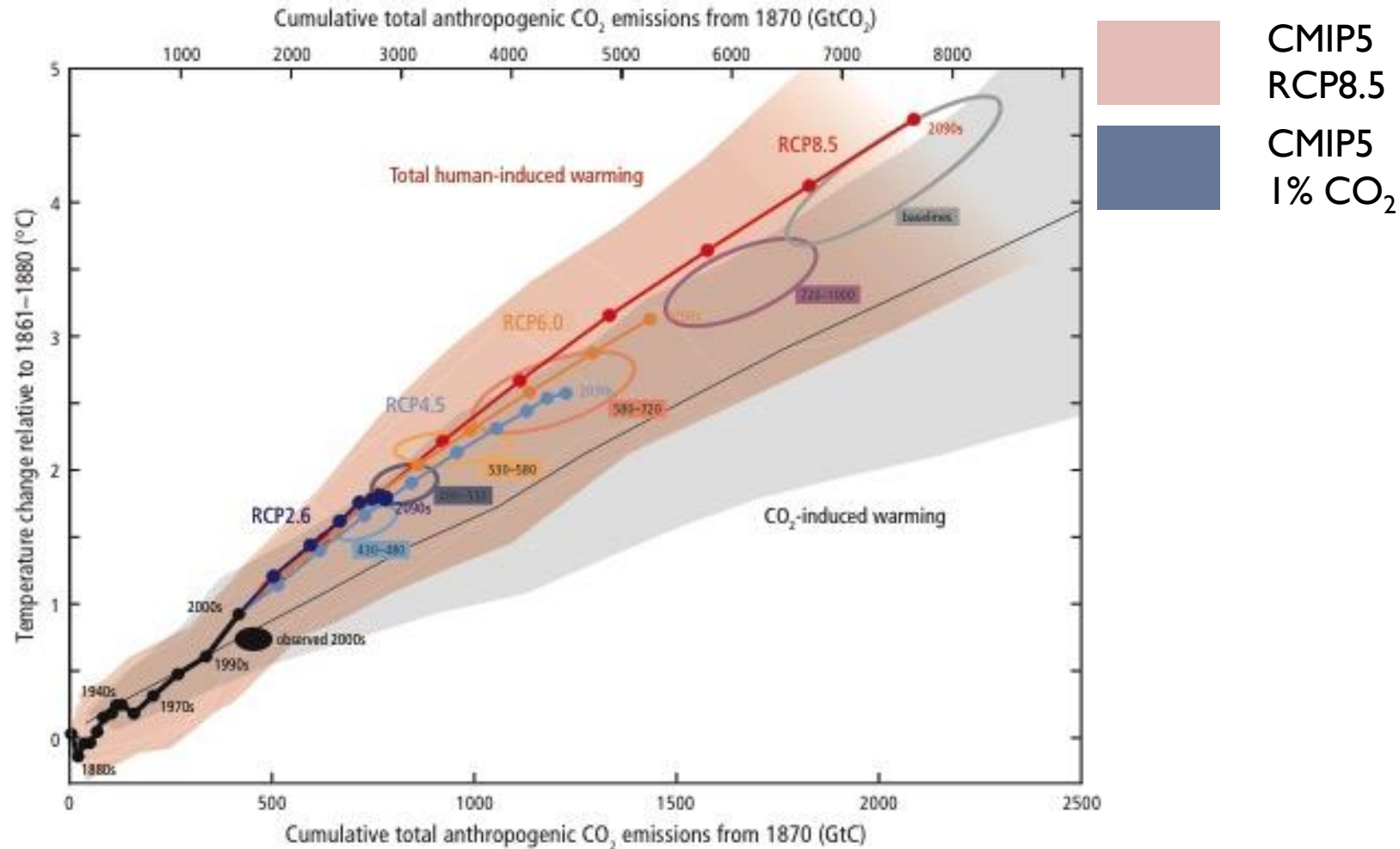
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Energy Policy and Modelling Group  
[www.ucc.ie/energypolicy](http://www.ucc.ie/energypolicy)

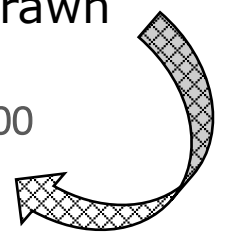
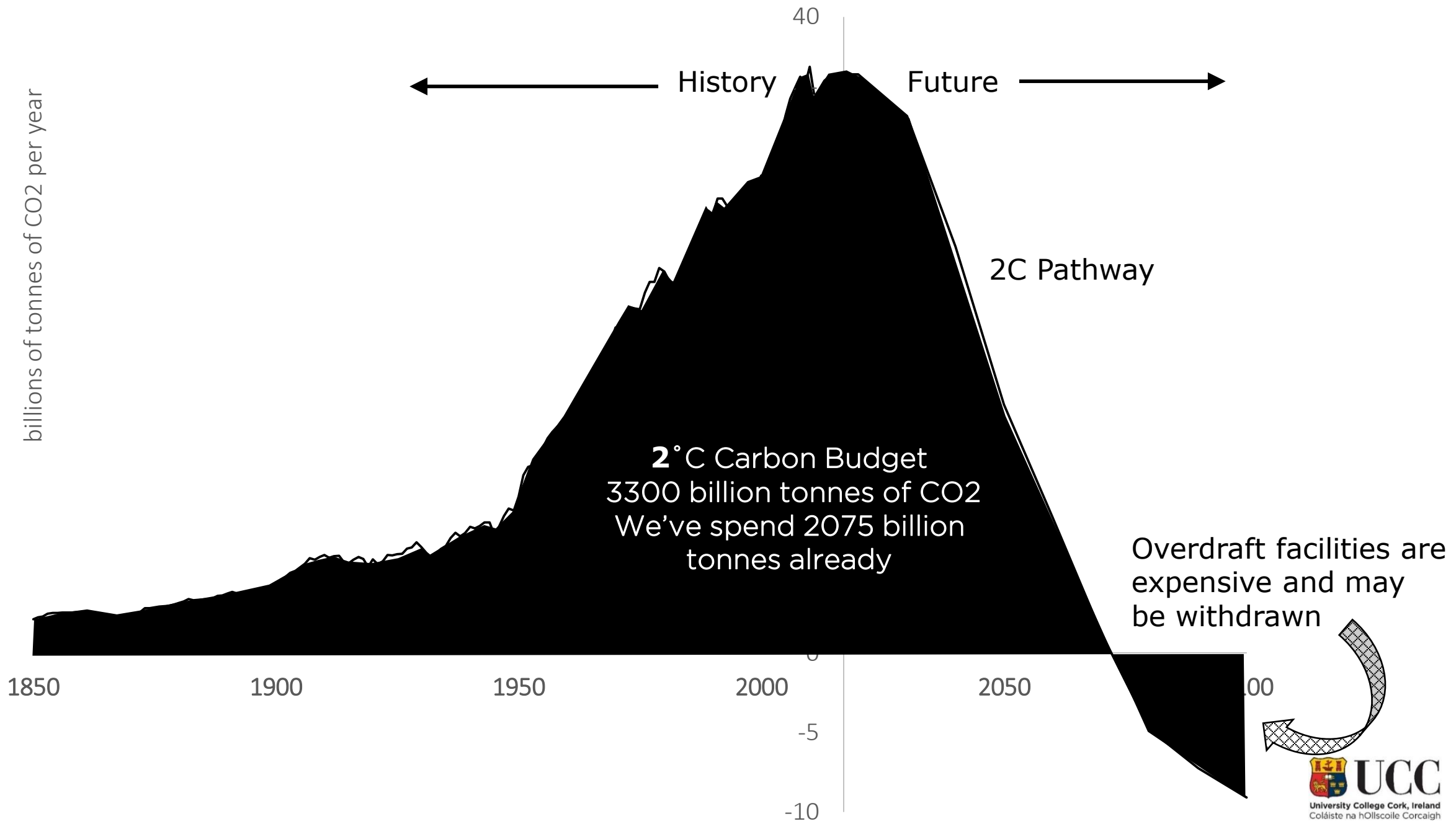




# Peak warming depends on **cumulative** carbon emissions, but budgets are uncertain















Lahinch Beach, IRELAND  
- Monday, January 6<sup>th</sup> 2014





Lahinch Beach, IRELAND –  
Sunday, December 29<sup>th</sup> 2015