Planning for climate resilience

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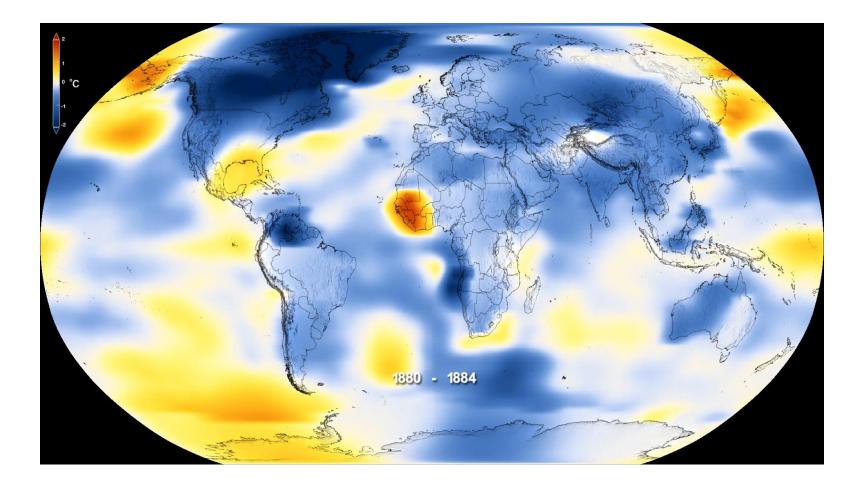
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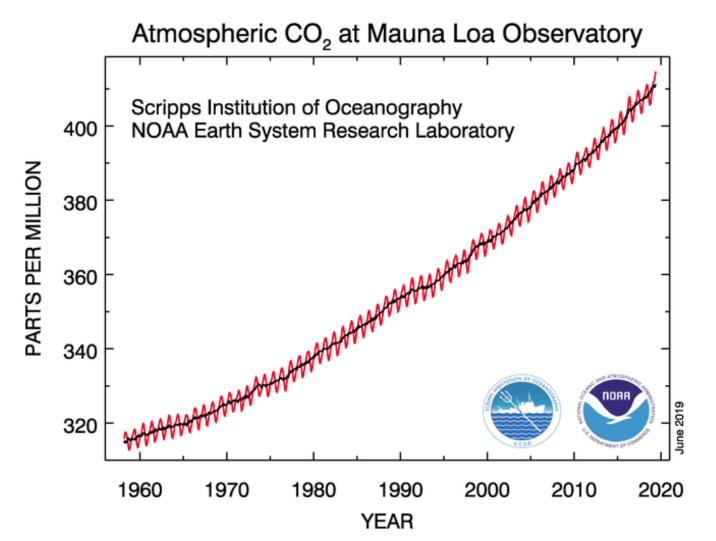
The challenge

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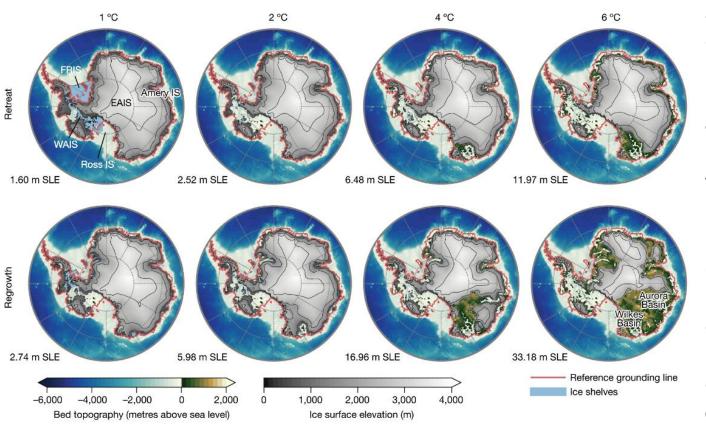
4 years – a long time in politics and policy

- UK Government "net zero" by 2050
- 65% of district, county, unitary and metropolitan councils now declared a climate emergency
- But, climate impacts hitting harder and sooner than climate assessments indicated event a decade ago





Long term Antarctic ice loss for different warming levels



2°C warming (Paris agreement) \rightarrow 2.5 metres of SLR

 4° C warming $\rightarrow 6.5$ metres of SLR from the Antarctic alone

Even moderate climate warming has incredibly serious consequences for humanity – and these consequences grow exponentially as the temperature rises.

https://www.nature.com/articles/s41586-020-2727-5.epdf?sharing_token=ev084XA00J1j0rCBfQEiCNRgN0jAjWel9jnR3ZoTv00uZB9Rvamxk4HmXZx10T90oj5_ByA7GJo49TBx_C-1rhkTnSu0U34nWwMyTEqKGiDCuNXaUeh03RaM93xso5_USoygNZ732vfKc6YmPBEwAQEaDB-AfcBA1JW7O6q9iLcZayHOG9Px_187vImY81XRYv2S9KyKVeqewXVMXSgtxZw5RRAVS9bmjxhd1VNnXRx9Jz68ZCDpDo_n4Hgwy9_uj16Tn7G46dFEVXyVXzU9Vb7RPJInZthDS0wxi1F7QSB02UikFZQSB02KiweDUmMC7e0H0P5ad84mmvus-1YP206_ZNDV2_8bCdnFbu0XjbiUgySCCcnJJ1vMcTraUM3UBV2xJw%3D%3D8ktracking_referrer=www.theguardian.com



Climate impact and planning



Research for **Climate Change Risk Assessment 2** showed the number of people in England exposed to a 1:75 year river/coast flood event:

- **750,000 people** currently exposed;
- 4,200,000 people exposed in 2080 in a 4 °C global temperature rise scenario.
 - **950,000 people** exposed in 2080 in a 2 °C global temperature rise scenario where adaptation responses in England are enhanced.

https://www.theccc.org.uk/publication/progress-in-preparing-for-climate-change-2019progress-report-to-parliament/

Updated Environment Agency flood risk allowances. In the south east, we should be planning for at least 1.6m of sea level rise by 2125.



The adaptation challenge

People, place and space

Successful adaptation requires thinking about the diversity of people and communities and their differing needs. We must also understand the way places work and the actions needed ranging from individual building design to large-scale coastal flood defence.

<u>Time</u>

The specific challenge for planning is to think about **how these issues will play out over the lifespan of development** (usually a minimum of 100 years) and to **consider future climate impacts**, for example how sea level will continue to rise after 2100. Our response now will lock us into certain irreversible pathways.

This implies new ways of thinking and working. Time is running out for us to begin building resilience, so we need immediate, radical action.



Why planning matters

The power of planning

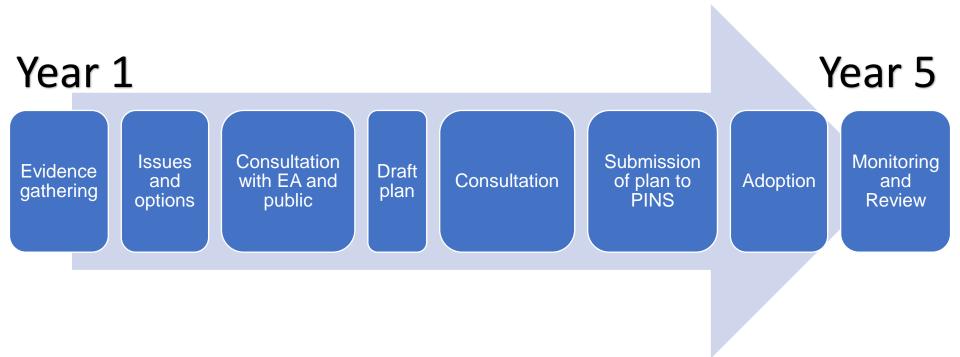
- 385,200 planning permissions were granted in year ending June 2019.
- 213,600 new build completions in year ending March 2019.
- There are 1 million unbuilt homes in the pipeline which have planning permission (Local Government Association, Feb 2020).
- In 2019, there were 6,000 applications for major housing developments, and 39,000 applications for minor housing developments.



Vital role of the local plan

The plan-led system

Local plans are the key way to secure resilience for new and existing development.





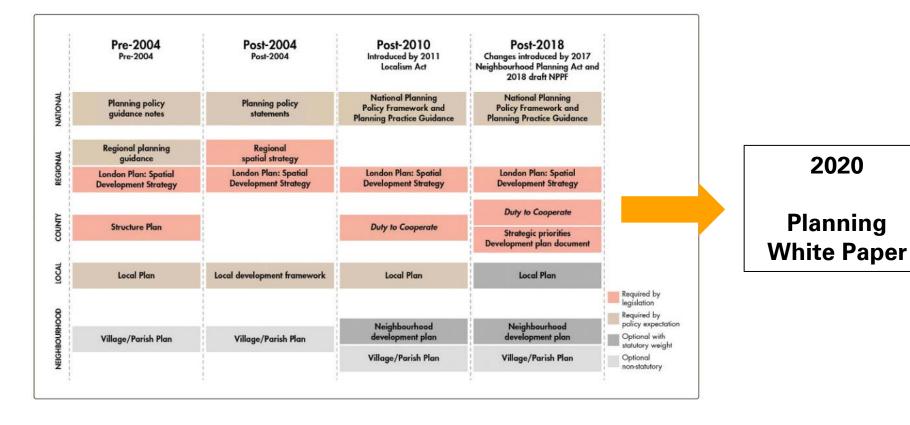
Development management



For major housing development (>10 units) this usually takes 16 weeks.



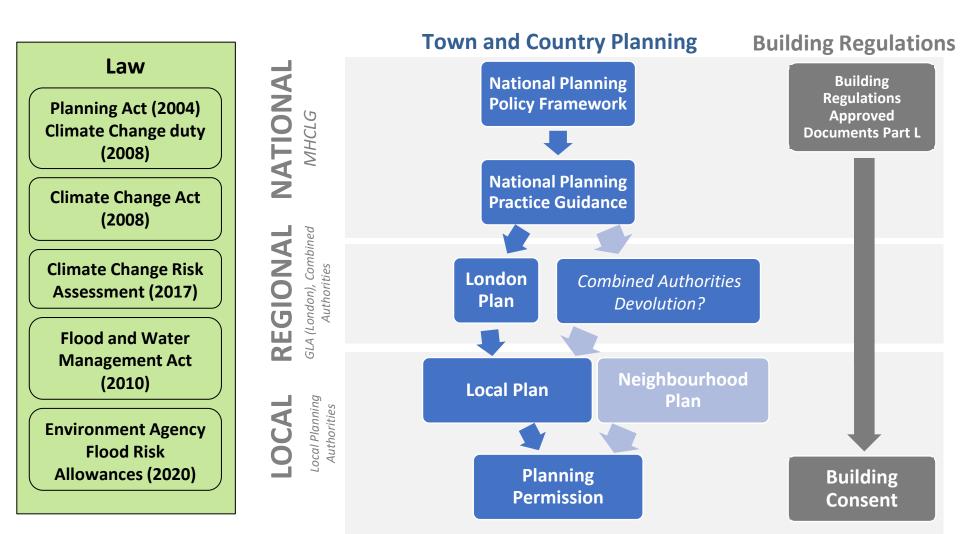
Constant reform



Development planning frameworks in England since 2004.



Key law and policy





Impact of new development on resilience



Future outcomes







What we need to do

There is major gap between the theory of how we plan and delivery on ground.

Chronic lack of local authority skills and capacity

Investment in training and upskilling local authority staff and members

Government emphasis on housing numbers of priority for planning Bespoke guidance on effective delivery of current government system – and understanding that adaptation measures can deliver on other critical policy areas such as public health

Out of date local plans based existing, rather than future, risk levels

Greater understanding of risks now and in the future, and the transfer of this data into local plans