

HM Government

Department of Energy & Climate Change

2050 Pathways Calculator


A platform for an energy literate debate




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July 2014

In the UK the 2050 Calculator
'encouraged an energy-literate debate'


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➤ **Engage experts** with open-source model

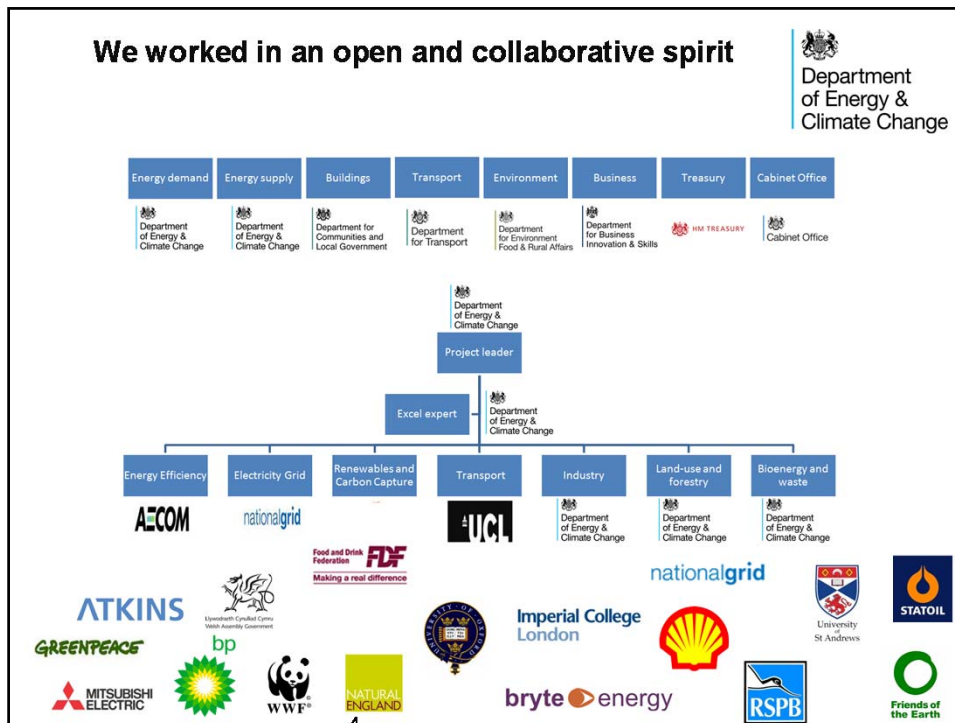


➤ **Inform policy makers** with 'what if' scenarios and which levels of ambitions 'add-up'




➤ **Empower the public** with an engaging holistic overview

2






How 2050 Calculator impacted our policy debate and formulation?




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- Understanding of what matters in the debate


➤

- Seeing the interactions, for example, impact of moving out of nuclear


?
- Seeing impacts of choices, like bioenergy
- Government analysis for 2020, 2030 and 2050 individual sectors such as decarbonisation of grid target, role of gas, energy security impacts etc.



The 2050 Calculator helped us to build momentum behind our communications work



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Expert stakeholders

Several hundred stakeholders involved in building the Calculator (before it was first published).

Of these, about **100** experts took part in detailed discussions about the trajectories.

2050 webtool

The 2050 webtool has been used by over **100,000** unique users since its launch in July 2010

My 2050

Over **150,000** visits to the website since launched.

Over **20,000** pathways submitted via My2050.

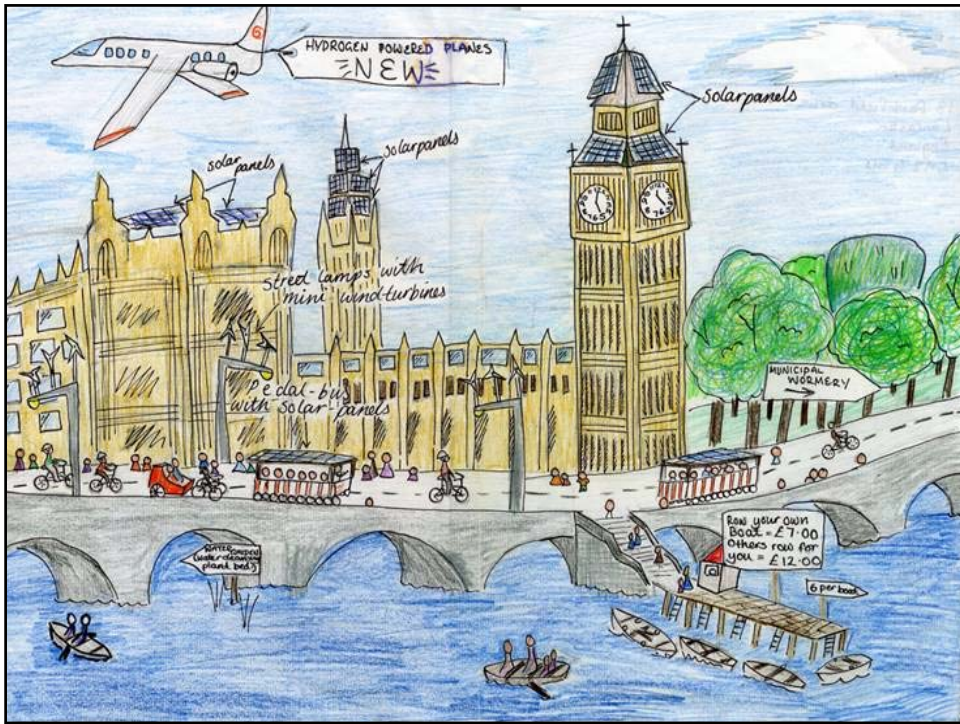
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Hay Festival

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The 2050 Calculator also assists in our international work



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...and Good Luck with the *'Japan 2050 Low Carbon Navigator'*!



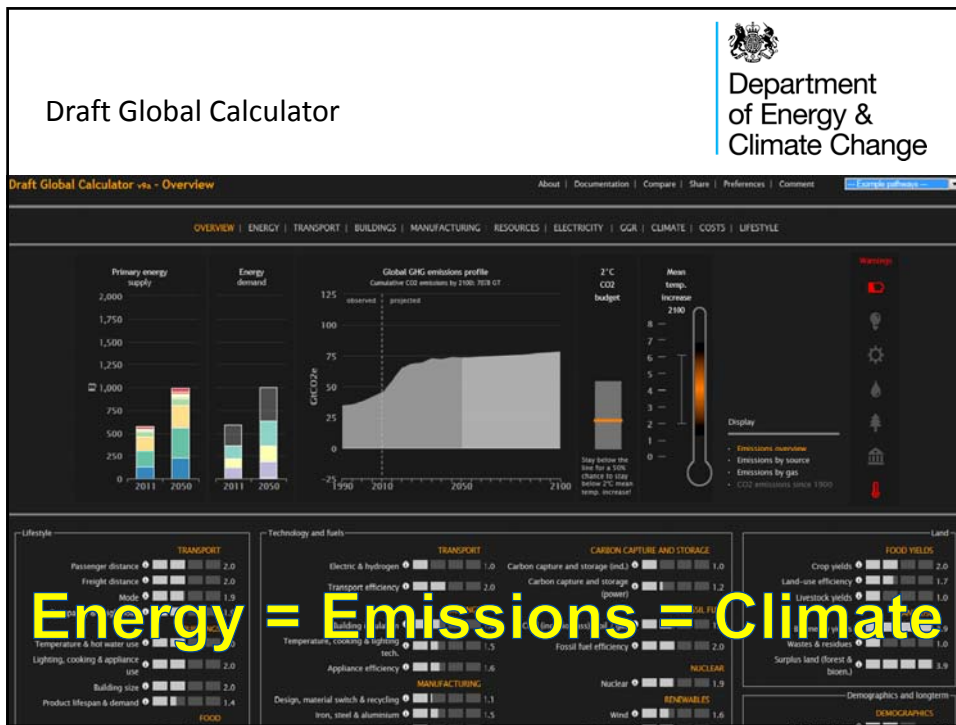
We hope you will find the tool as useful as we did in the UK.

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ANNEX



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Expert stakeholders – with very different opinions – use the 2050 Calculator



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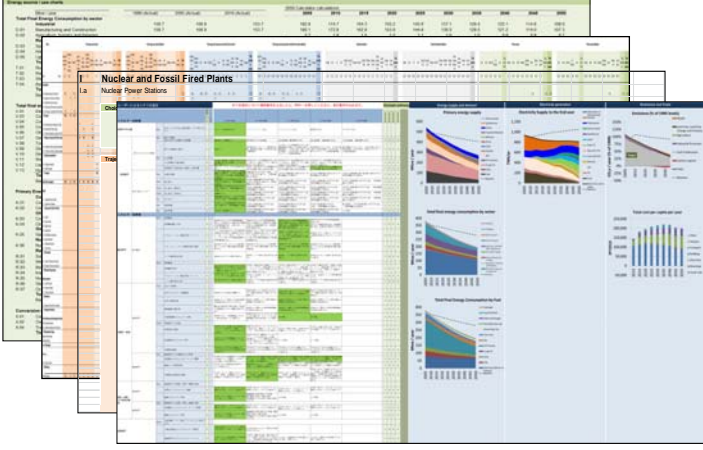








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Excel Spreadsheet model




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Trajectory setting

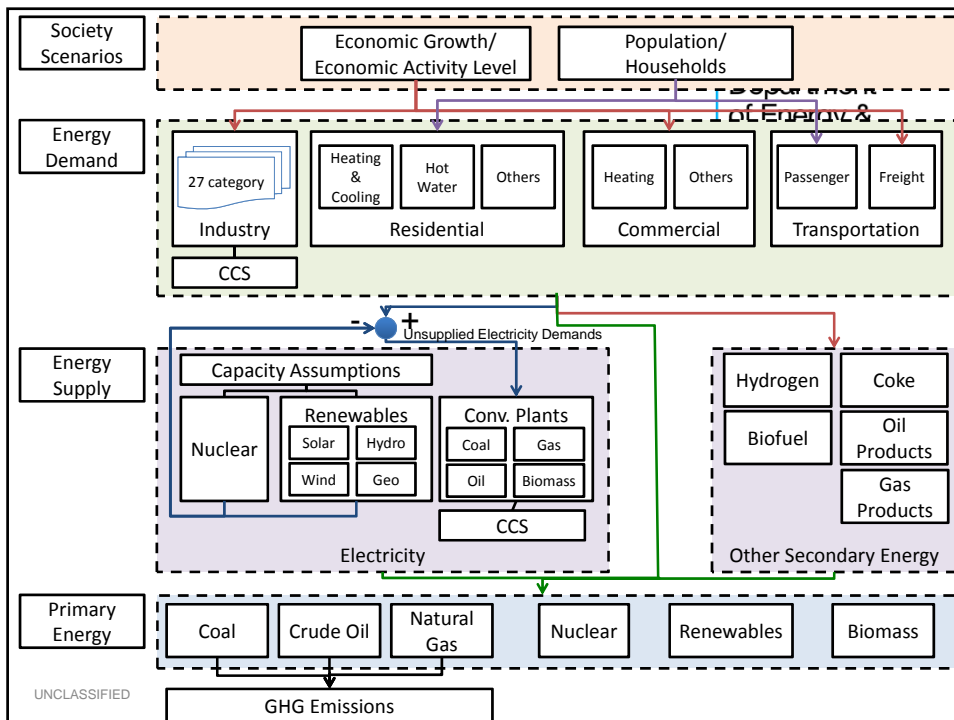
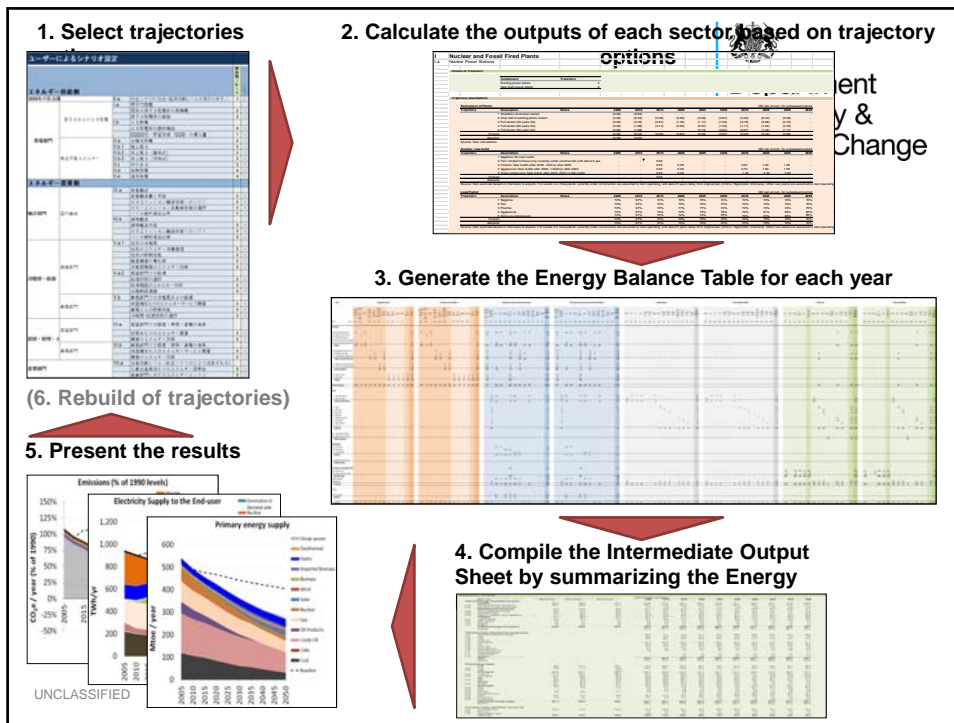
| | | | | |
|---------|---------|---------|---------|---------|
| Level 1 | Level 2 | Level 3 | Level 4 | Level 5 |
|---------|---------|---------|---------|---------|

No efforts
(existing capacity, same technology, no change in consumption)

Great efforts
(increased renewable energy, advanced technology, reduced unit energy service demand)

Physical limit/ Technical potential
(Renewables)

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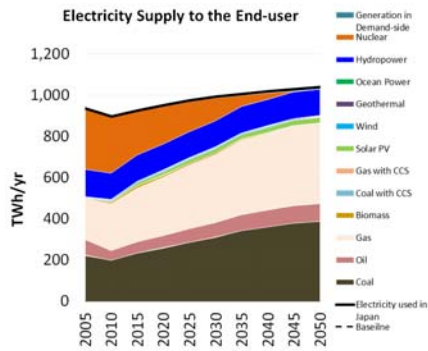


Example pathways

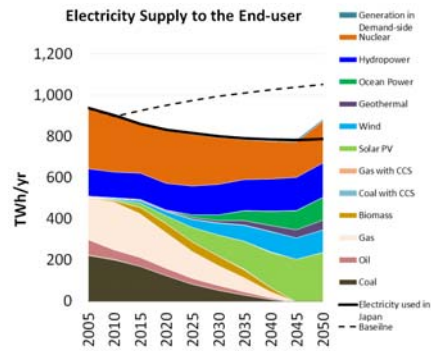


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“No effort” pathway



“Great effort” pathway



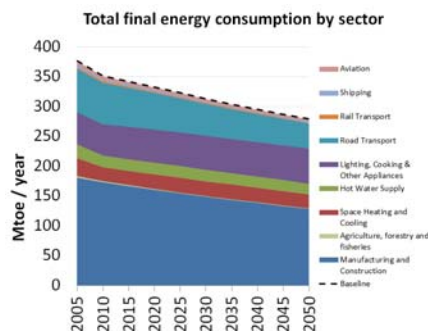
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Example pathways

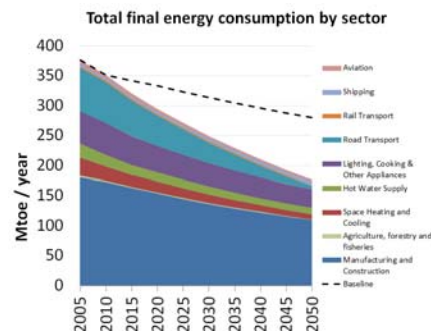


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“No effort” pathway



“Great effort” pathway



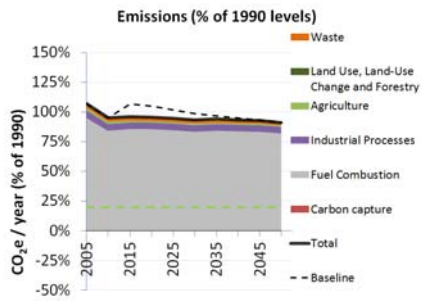
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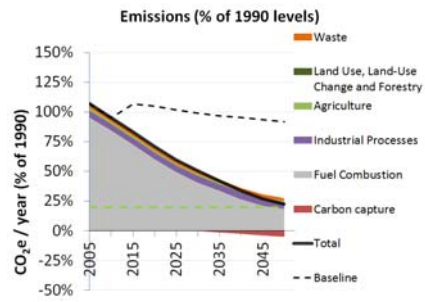
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Example pathways

“No effort” pathway



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