

# What you can do next

- A Global 2050 Community?
- Best use of your time on Friday, 21<sup>st</sup> September

Jan Ole Kiso  
Beijing 2050 Conference

September 2012

# The 2050 Calculator is a product that is continuously evolving

The collage illustrates the evolution and components of the 2050 Calculator. It features:

- Top Left:** A complex data interface with multiple charts and tables, showing energy demand and generation scenarios.
- Top Center:** A 3D Sankey diagram titled 'The 2050 Energy System' showing energy flows between different sectors and sources.
- Top Right:** A 'China 2050 Pathway' infographic with the subtitle 'Our Most Optimistic Scenario, Our Ambitious Pursuit in the Future'. It includes charts for emissions, energy demand, and energy supply.
- Middle Left:** A flowchart showing the transition from 'Gas' and 'Nuclear (fission)' to 'Electricity', which is then used for 'Gas boilers' and 'Resistive heating' to provide 'Heating'. It notes that capacity is set by choice of level of action.
- Middle Center:** A silhouette of human evolution from an ape to a modern human, symbolizing progress and adaptation.
- Middle Right:** A diagram showing 'Données' (Data) leading to 'Demande énergétique Wallonne d'ici 2050' and 'Offre énergétique Wallonne d'ici 2050'. It lists levers for change such as 'Changements comportement', 'Intensité carbone', 'Électrification', and 'CSC dans l'industrie'.
- Bottom Left:** A 'My Energy' simulator interface with sliders for 'Supply' and 'Demand' and a 'Submit This World' button.
- Bottom Center:** A 'My Energy' simulator interface showing a 3D city model with sliders for 'Supply' and 'Demand'.
- Bottom Right:** A 'My Energy' simulator interface with a 3D house model and sliders for 'Supply' and 'Demand'.

**Knowledge is the only treasure that increases with sharing**

# The 2050 Calculator has three guiding principles



- **All Energy forms**  
(oil, coal, gas, biomass, electricity etc)
- **All Greenhouse Gases**  
(from fossil fuel combustion, but also from industrial chemical processes and land-use etc)
- **Aim to inform Government decision-making**

# We aim to lower the barrier to developing a 2050 Calculator as far as possible



- All 2050 Calculator information is open-source and available under [decc.gov.uk/2050](https://decc.gov.uk/2050)
- Users can add analysis at 2050 wiki pages ([2050-calculator-tool-wiki.decc.gov.uk](https://2050-calculator-tool-wiki.decc.gov.uk))
- Introduction on web-tool programming (<https://github.com/decc/twenty-fifty>)
- All programming source-code and visuals of My2050 available on request
- If you like to be further inspired, read David MacKay's free book ([withouthotair.com](https://withouthotair.com))
- 2050 Calculator Online-Forum available on invitation
- DECC welcomes visitors and presentations by those advancing the 2050 Calculator approach
- To contact DECC's 2050 Calculator team please mail:  
[jan.kiso@decc.gsi.gov.uk](mailto:jan.kiso@decc.gsi.gov.uk) (0044 300 068 5510) or  
[edward.hogg@decc.gsi.gov.uk](mailto:edward.hogg@decc.gsi.gov.uk) (0044 300 068 6961)

**A 2050 Calculator Community facilitates the swift exchange of information, ideas and best-practice**

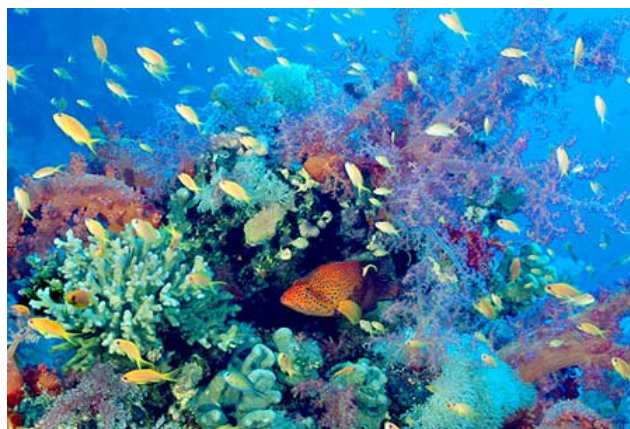
Possible additions to the calculator methodology are being looked at



**Water usage**



**Air pollution**



**Biodiversity impacts**



**Global energy and  
climate implications**

## How best to use Friday, 21<sup>st</sup> September?

**Aim of the day will be to informally discuss modelling and project ideas around the 2050 Calculator**

**10.00 – 13.00 (Buffet Lunch)**

**Open workshop: A detailed ‘walk-through’ of the 2050 Calculator**

- Please bring your laptop, if you have one with you!
- Exploring the structure of the spreadsheet in more detail
- Looking at an example of an energy supply sector and an energy-use sector
- How to adapt the model
- Data issues
- Modelling expertise available to explore technical issues on request
- Web-tool development

**Tom Bain/Tom Counsell (DECC)**

**Zhang Bo (ERI)**

**Julien Pestiaux (CLIMACT)**

**All day (if required)**

**If interested, individual conservation around possible national 2050 Calculator projects**

- Outlining project ideas
- Resourcing 2050 Calculator initiative
- How DECC and UK Government could assist
- Interested further evolutions of existing 2050 Calculator initiatives
- Any other issues

**Ed Hogg/Jan Ole Kiso (DECC)**