THE DEVIL IS IN THE DETAIL

Infographic on Carbon Tracker's methodological approach to carbon budget and scenario analysis*

When to stop digging?

Variations in scenarios and numbers

The object and purpose of Carbon Tracker's scenario analysis

Reserves or potential production?

Different global warming targets entail different actions:

1.5˚C

Stop developing new coal, oil and gas projects now

2˚C

No new coal needed. Level of oil and gas needed depends on the scenario selected

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Some scenarios are not instantly comparable, as they use different:

- Probability of global warming outcome
- Time period
- Distribution of carbon budget across fuels and sectors
- Inclusion of CCS or negative emission technologies (E.g. CCS)

Scenarios ≠ Forecasts

These scenarios are NOT what we desire to see happen, they are potential futures

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Carbon Tracker refers to the IEA 450 Scenario

- Most investors and companies use this scenario
- 50% probability of achieving 2˚C global warming target
- Carbon Tracker provides the supply detail needed to investigate which fossil fuel projects would be needed if this scenario were to play out

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Carbon Tracker's recent research has been focusing on potential production:

Reserves

Estimates of economic deposits in the ground.

Their level changes over time based on the price reference point and rate of replacement.

Potential production

Industry estimates of what may be produced, and when.

Useful indicator to map out the energy transition.

** This infographic is a simplified explanation of some of our key methodological considerations.
For more details please see:
http://www.carbontracker.org/wp-content/uploads/2014/08/Carbon-budget-checklist-FINAL-1.pdf*

Carbon Tracker Initiative

Coal / Oil / Gas Mix

Avoid the danger zone

How much more fossil fuels can still be burnt?

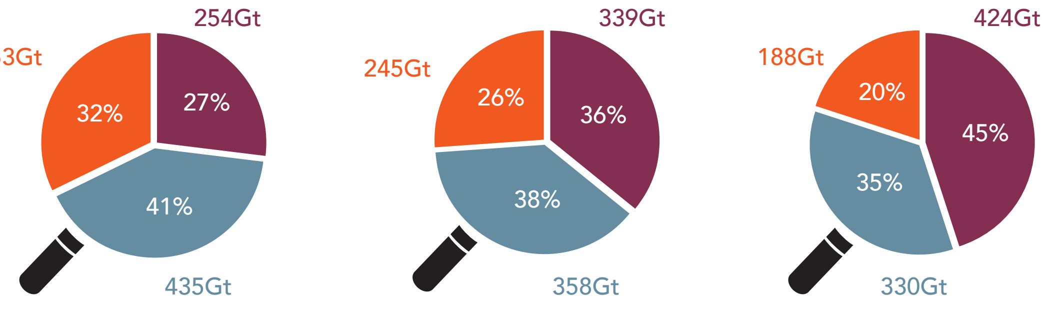
The carbon budget acts as a lens which frames supply and demand through the energy transition.

There is more than one way to meet a particular carbon budget through alternative allocations across fuels. Rystad Energy for example used the below:

Total reference carbon budget 2013-2050*

942 $GtCO_2$

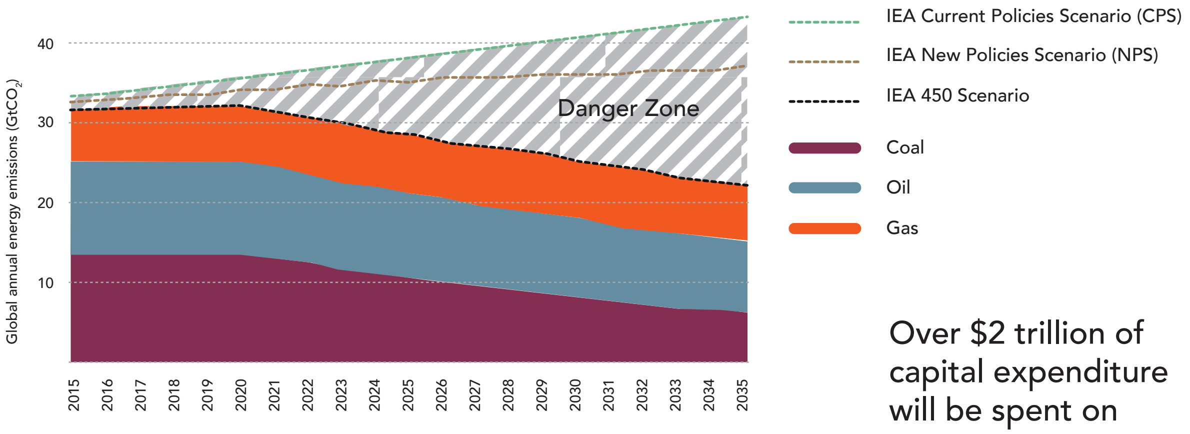
Coal Oil Gas



Low coal variant | Medium coal variant | High coal variant

Source: Rystad Energy Study "Petroleum Production under the two degree scenario (2DS)", August 2013

How much capital could be wasted?



No new coal mines required

$220bn at risk

Oil demand peak in 2020, no need for continued growth

$1.4tn at risk

Growth in gas will disappoint, esp. capital-intensive LNG

$520bn at risk

Over $2 trillion of capital expenditure will be spent on projects that are not needed over the next 10 years according to IEA 450 scenario demand levels.

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