

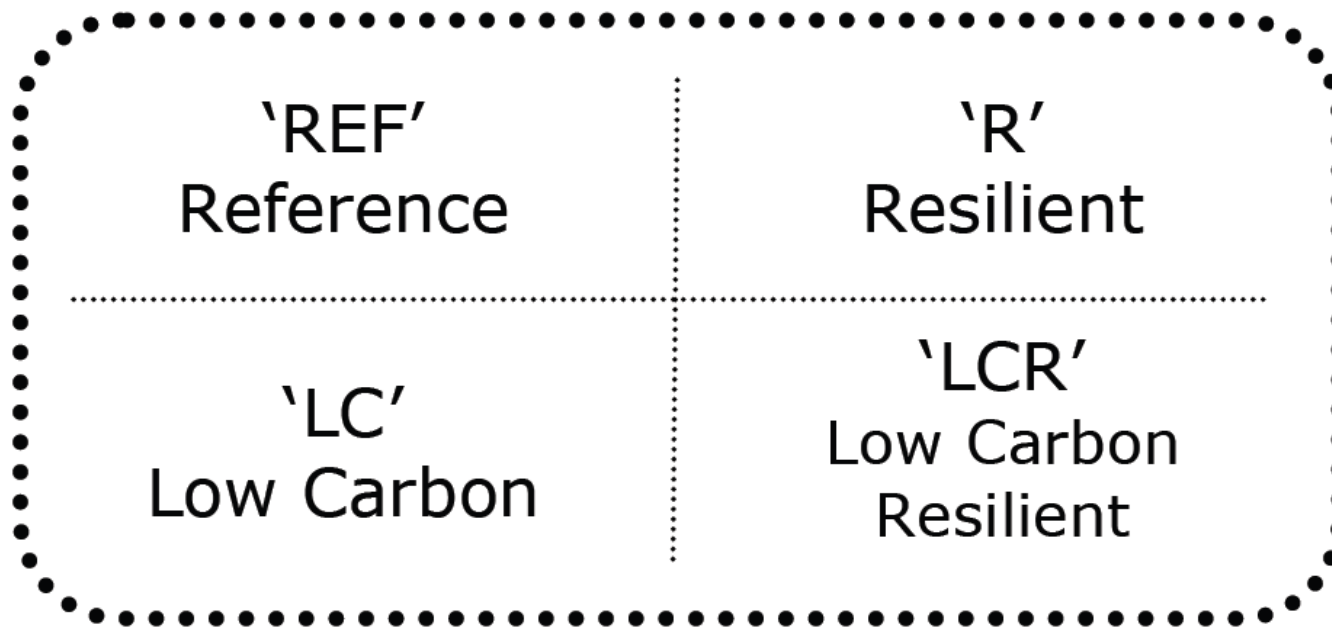
(Internationale) Beispiele für Energieszenarien

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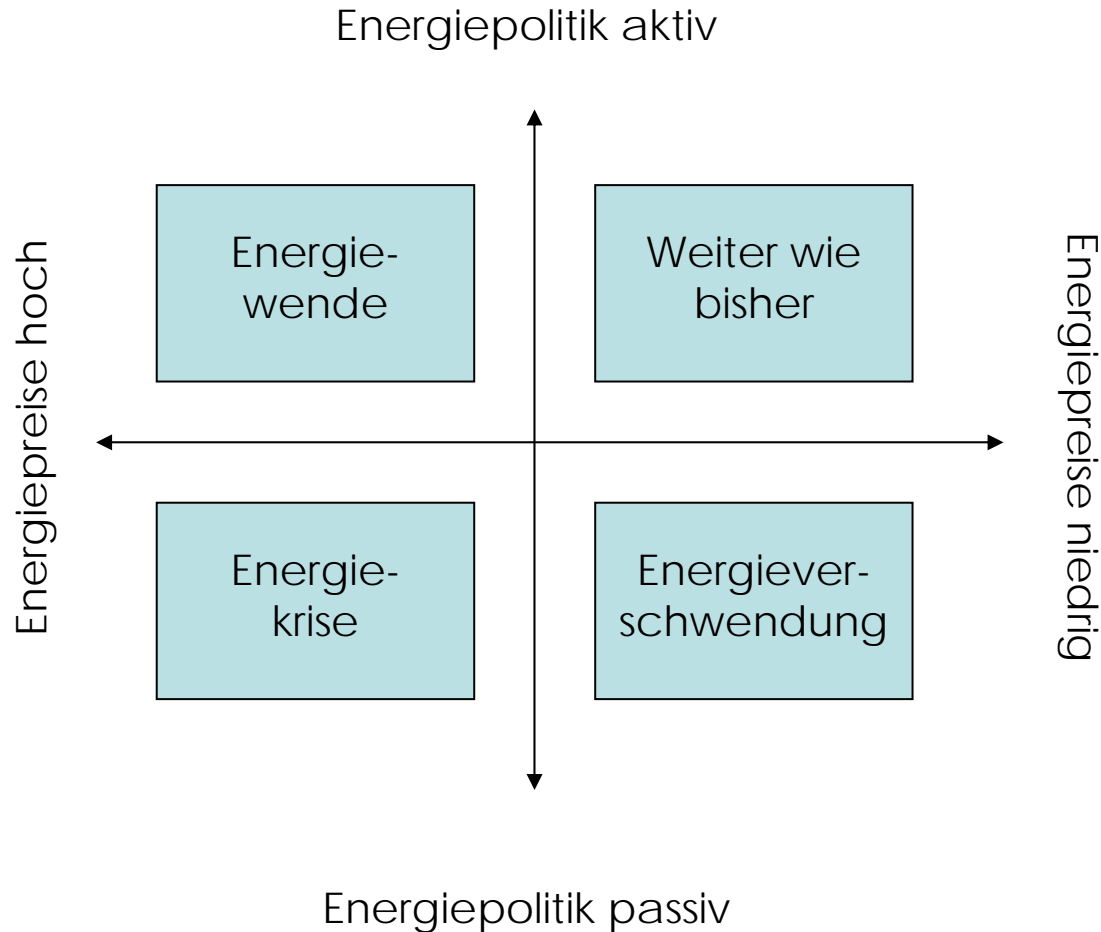
Beispiele für Energie-Szenarien

- Global Business Environment and **Shell Energy Group** (2001), Exploring the future - Energy Needs, Choices and Possibilities, Scenarios to 2050, Shell International Limited.
 - Dynamics as Usual
 - Spirit of the Coming Age
- TNS Infratest (2004), Horizons 2020, commissioned by the Siemens AG.
 - Szenario1: Equality, freedom and modesty
 - Szenario2: Speed, networks and risks
- De Jong et al. (2007), EU 2050 Storylines, Clingendael Energy Programme, The Hague
 - Rolle des Staates
 - Grad der Globalisierung

- UKERC (2008), Pathways to a Low Carbon Economy: Energy systems modelling, UKERC Energy 2050 Working Paper 1.



Energieszenarien der ÖROK Szenarien 2030



- Reduktionsziel für 2050 von 60% der CO₂-Emissionen gegenüber 1990
- Excel-Sheet Modell („scenario-generator“), das das UK Energiesystem quantitativ beschreibt
- Scenario generator entwickelt unter Berücksichtigung von Schlüsselfaktoren unterschiedliche end-points für die Energienachfrage
- Charakterisierung des Energieangebots, das den unterschiedlichen Nachfragemustern gerecht wird und gleichzeitig das Reduktionsziel erreicht
- Beschreibung der Entwicklungspfade hin zu den Endpunkten

Step 1

Specify the strategic objective

Step 2

Describe the present day energy consumption and supply patterns

Step 3

Characterise energy demand at the chosen end point year

Step 4

Define an energy supply system that will meet the specified pattern of energy demand.

Step 5

Step back in time from the defined end point to describe the transition from there to the present day

Kurzbeschreibung der Tyndall Szenarien

| | Red | Blue | Turquoise | Purple | Pink |
|--------------------------------|--|--|--|--|---|
| UK GDP (per year) | 3.3% | 1.6 % | 2.6% | 3.9% | 3.9% |
| Dominant economic sectors | Commercial | Commercial; public admin; non-intensive industry | Commercial; construction; public admin | Commercial; non-intensive industry | Commercial; non-intensive industry |
| Energy consumption (Mtoe) | 90 | 130 | 200 | 330 | 330 |
| Number of households (million) | 27.5 | 25 | 30 | 27.5 | 27.5 |
| Energy use per household | Large reduction | Very large reduction | Small reduction | Similar to current | Similar to current |
| Supply mix | Coal (with and without CCS); renewables; H ₂ ; biofuels | Coal (with CCS); nuclear; CHP; biofuels | Gas (with and without CCS); biofuels; nuclear; H ₂ ; renewables | Nuclear; renewables; H ₂ ; biofuels | Nuclear; CCS (coal and gas); renewables; biofuels |
| Decarbonisation policies | Innovation and technology driven | Collectivist approaches to demand-side policy | Similar to today with focus on supply | Strongly market-focused government | Strongly market-focused government |