

Introduction to scenarios and the UK-SSPs

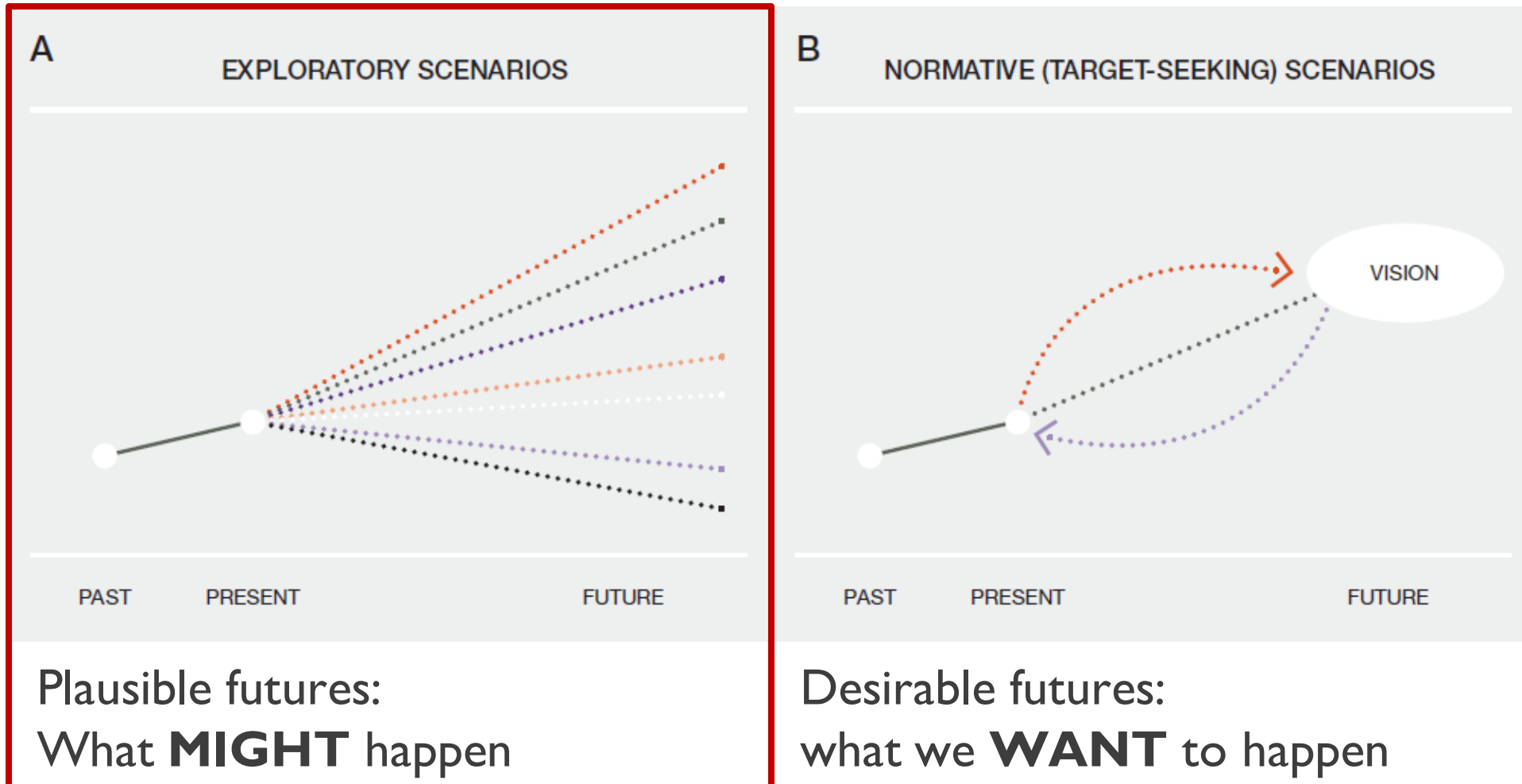


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What are scenarios?

- A tool to explore the future that addresses uncertainty
- They are presented through plausible stories or narratives
- They may be both qualitative (narratives) and quantitative (linked to models)
- They describe drivers of change - social, economic, technology, policy, governance.
- They are not predictions!

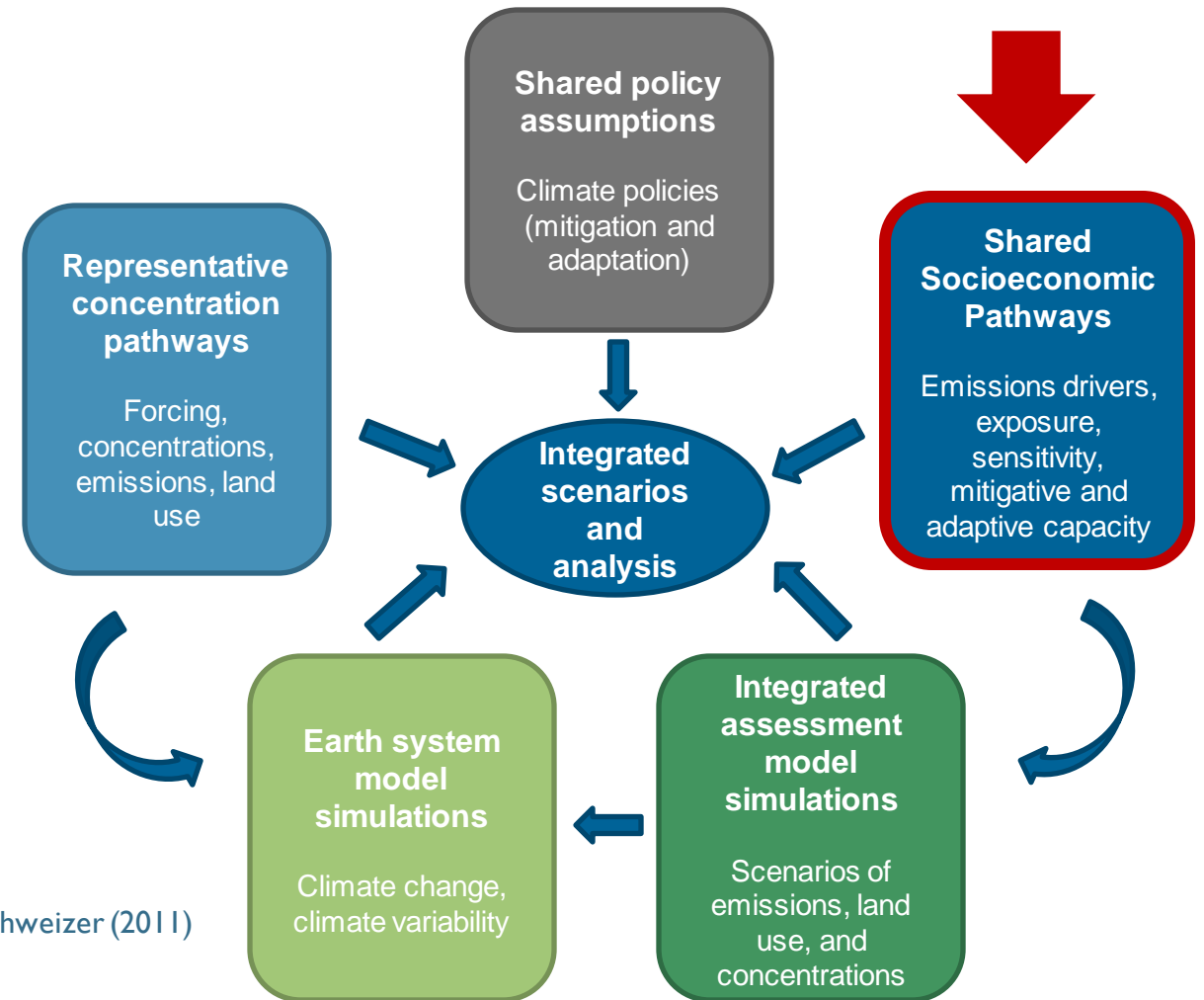
Types of scenarios



IPCC community Scenario Framework

Elements of the IPCC scenarios:

- RCPs = Representative Concentration Pathways
➔ Climate Scenarios
- SSPs = Shared Socio-economic Pathways
➔ Socio-economic Scenarios
- SPAs = Shared climate Policy Assumptions
➔ Strategies and Policy Action



Redrawn from O'Neill and Schweizer (2011) and O'Neill et al. (in review)

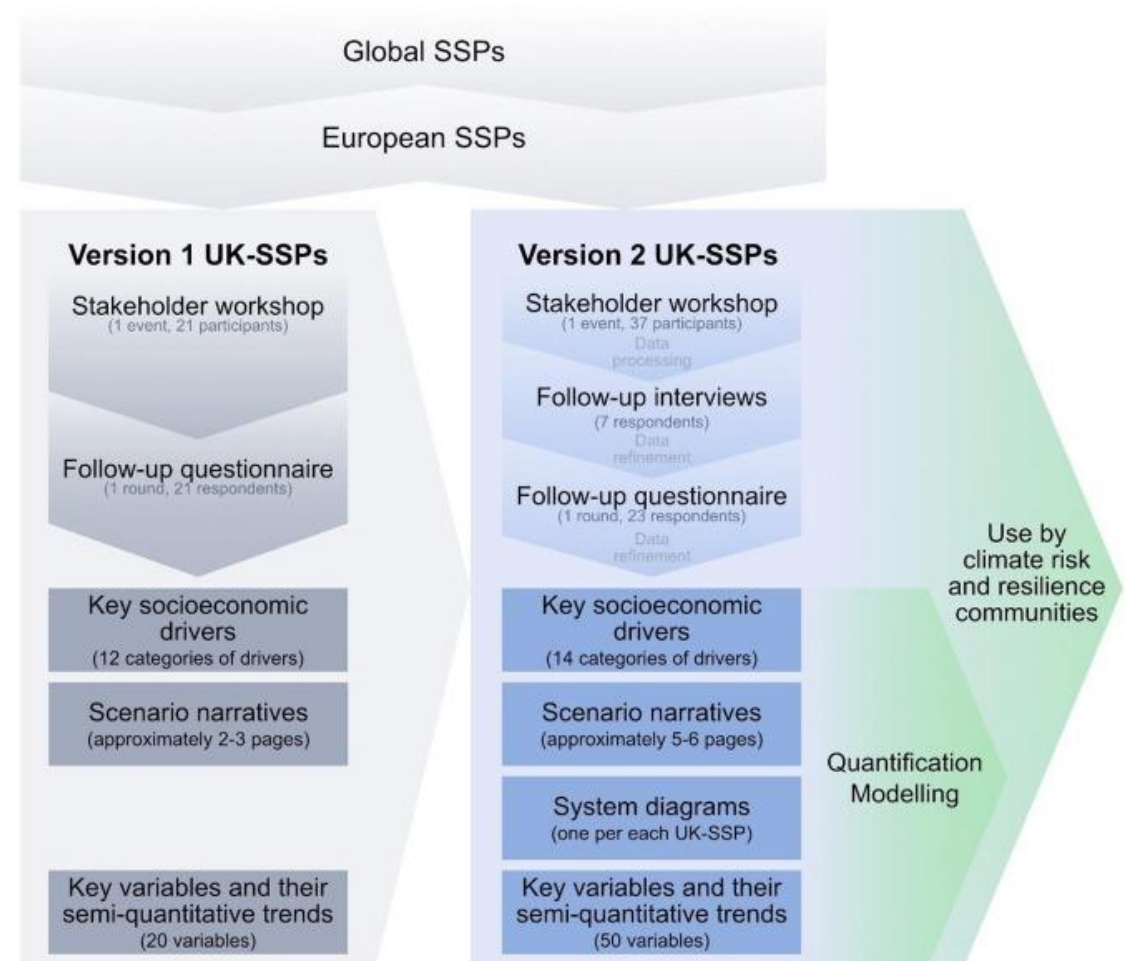
Shared Socio-economic Pathways (SSPs)

- Global SSPs are storylines describing how the global economy and society might evolve over the next 80 years (to 2100)



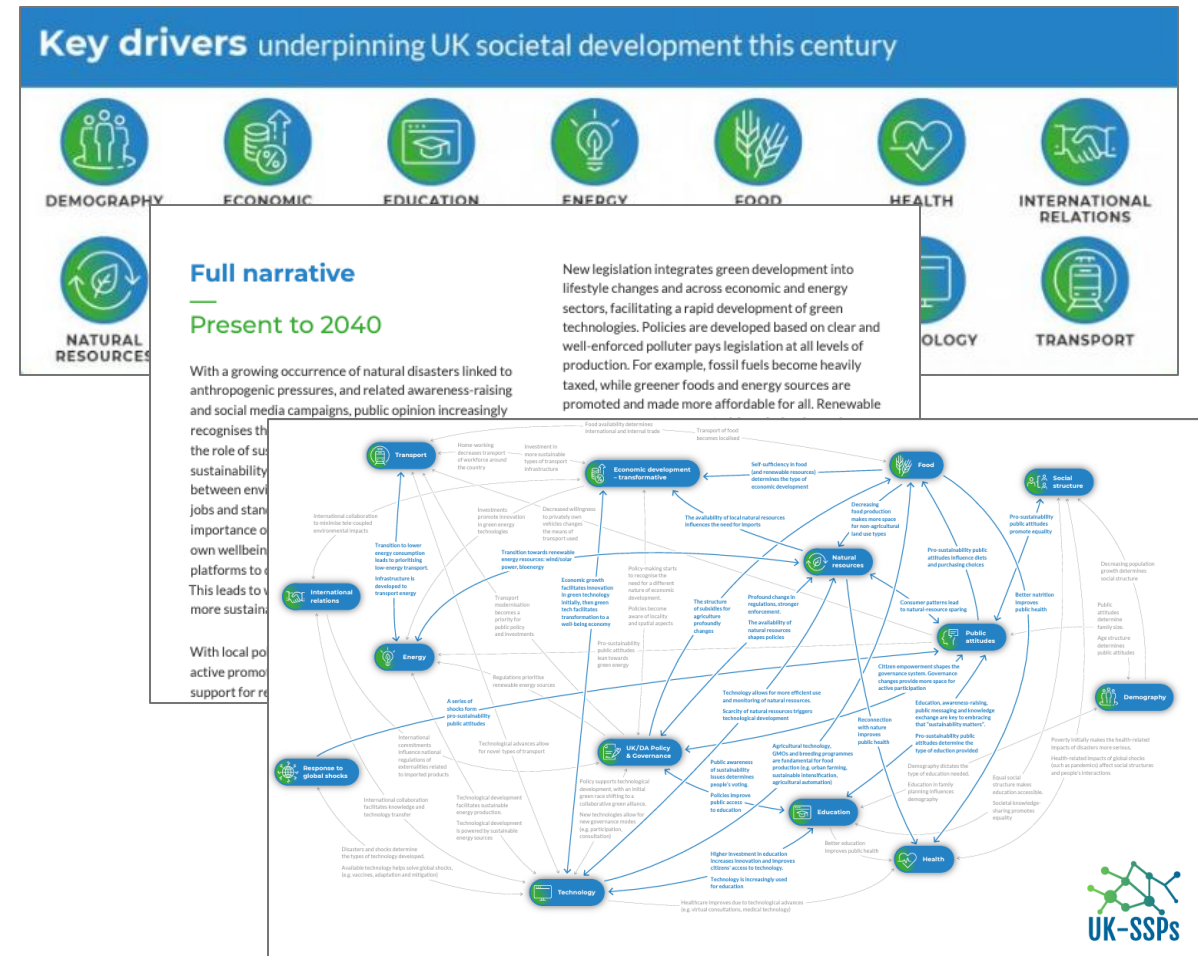
UK-SSPs

- Developed extended and downscaled SSPs for the UK (to sub-national scale) that are consistent with the global SSPs
- Participatory and iterative approach



UK-SSPs

- Four products for each SSP:
 - Key categories of socio-economic drivers and dimensions
 - Scenario narratives
 - System diagrams
 - Semi-quantitative trends of key socioeconomic indicators



UK-SSP | Sustainability



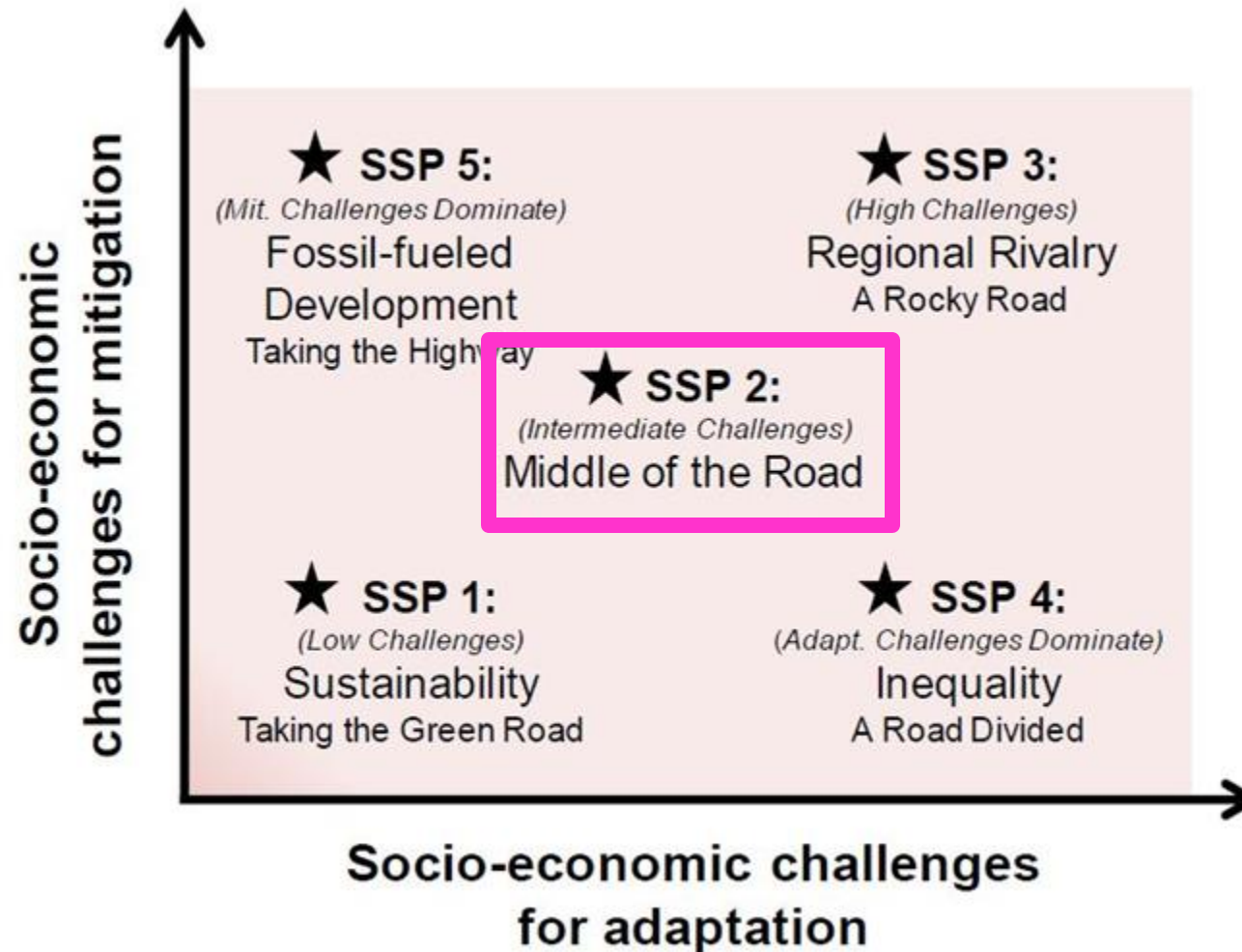
UK-SSP I

OVERVIEW

- Strong support for regionalisation
- National cooperation
- Transition to renewable energy
- Transition to non-monetary economy
- Green technological innovation
- Low consumption lifestyles
- Transition to a circular economy



UK-SSP2 Middle of the Road



UK-SSP2

OVERVIEW

- Public services become public-private partnerships
- Economy grows, but inequality increases
- Large share of the population work in internet-based jobs, and have legal protection
- Reactive policy approaches to crises and shocks limit rising inequalities
- Cities become city-states



UK-SSP3 Regional Rivalry



UK-SSP3

OVERVIEW

- Closed borders, barriers to trade
- UK breaks apart
- Environmental regulations scrapped
- All public spending on defense
- Health and education limited
- Exploited workforce
- High levels of corruption and criminality
- Transition to self-subsistence lifestyle



UK-SSP4 Inequality



UK-SSP4

OVERVIEW

- Radical green development strategies transform UK businesses and wealth distribution
- Society becomes increasingly polarised and the North-South divide widens
- Welfare State ends, leaving a small elite in control of economic and natural resources



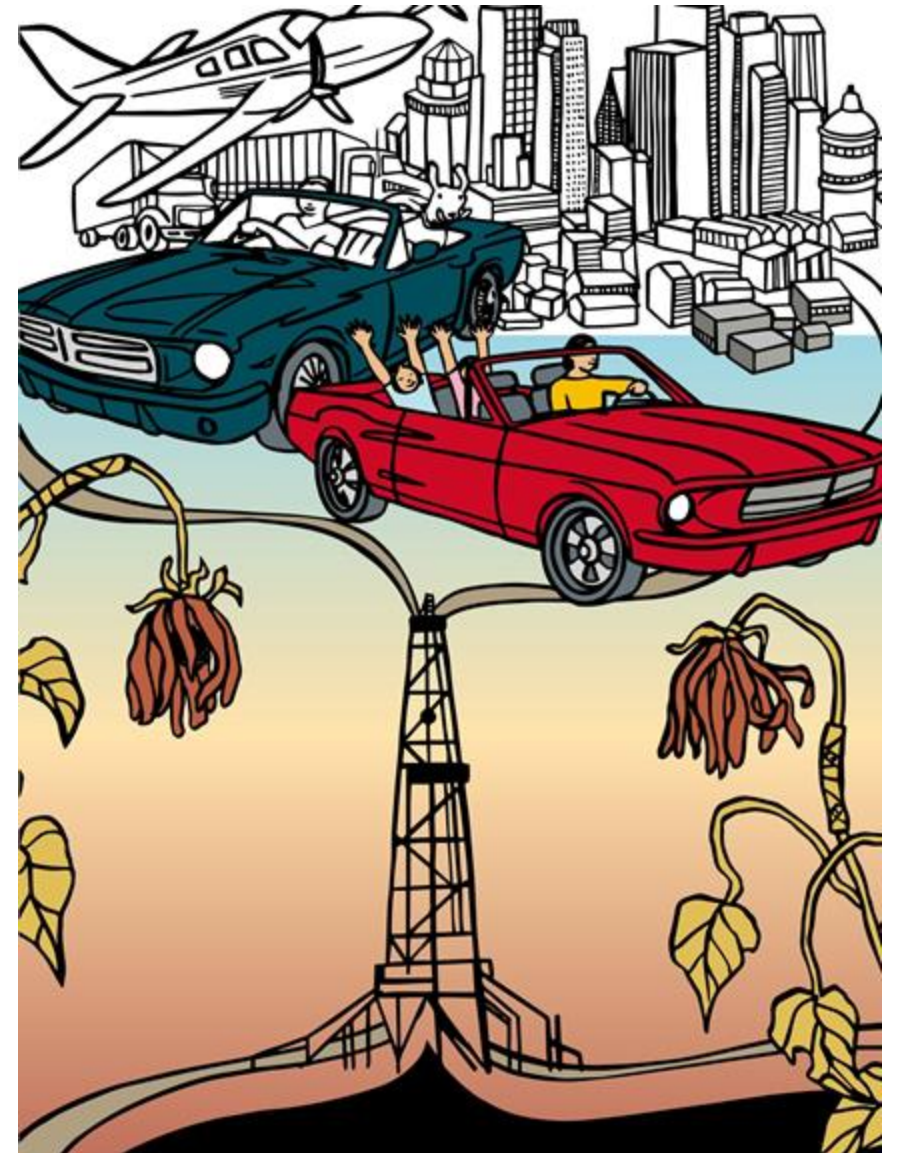
UK-SSP5 Fossil-fueled development



UK-SSP5

OVERVIEW

- Reduced support for carbon taxation
- Development in national manufacturing
- Reduction of North-South divide
- Economy and welfare growth
- High-tech development
- High consumption lifestyles
- Environmental tipping point





Thank you!

