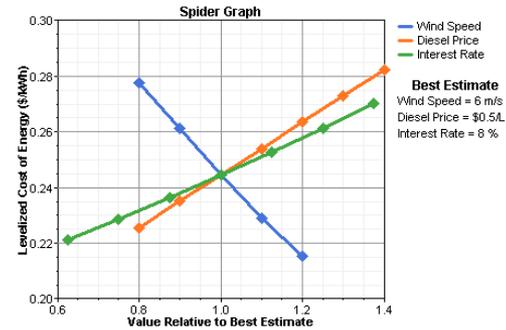
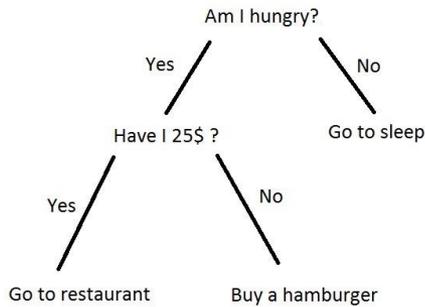
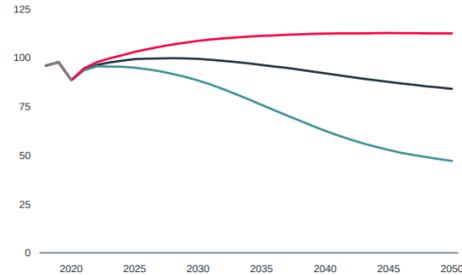


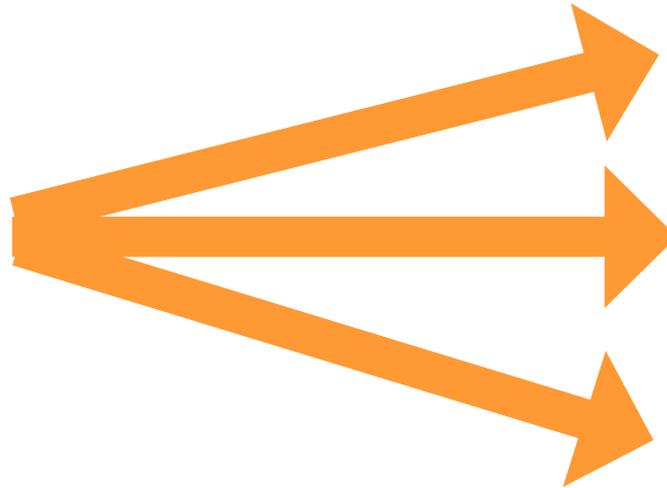
- **Meaning, purpose and scope of scenario planning**
- Scenarios and decision-making
- Scenario development methods
- Scenario practice in the world of energy
- Fundamental driving forces/key uncertainties
- World Energy Scenarios – The future of nuclear (2019)

What do we NOT mean with scenarios?



Different pathways to different worlds

The Present



**Scenarios are distinctly different ways
in which the contextual environment
may evolve towards in the future.**

What do we mean with scenarios?



- Plausible narratives
- Spanning \pm uncertainty range
- Internally consistent
- ≤ 4



- Forecasts
- Precise
- Static

Scope

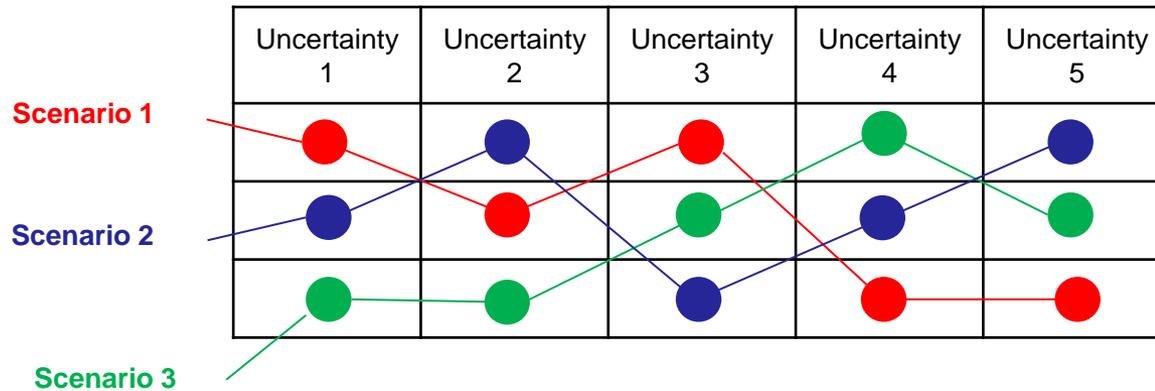
- Geographic area
- Themes
- Time horizon

Purpose

- Bridging gaps
- Public debate
- Framework for strategy
- Decisions

“Memories of the future”

Making the connections

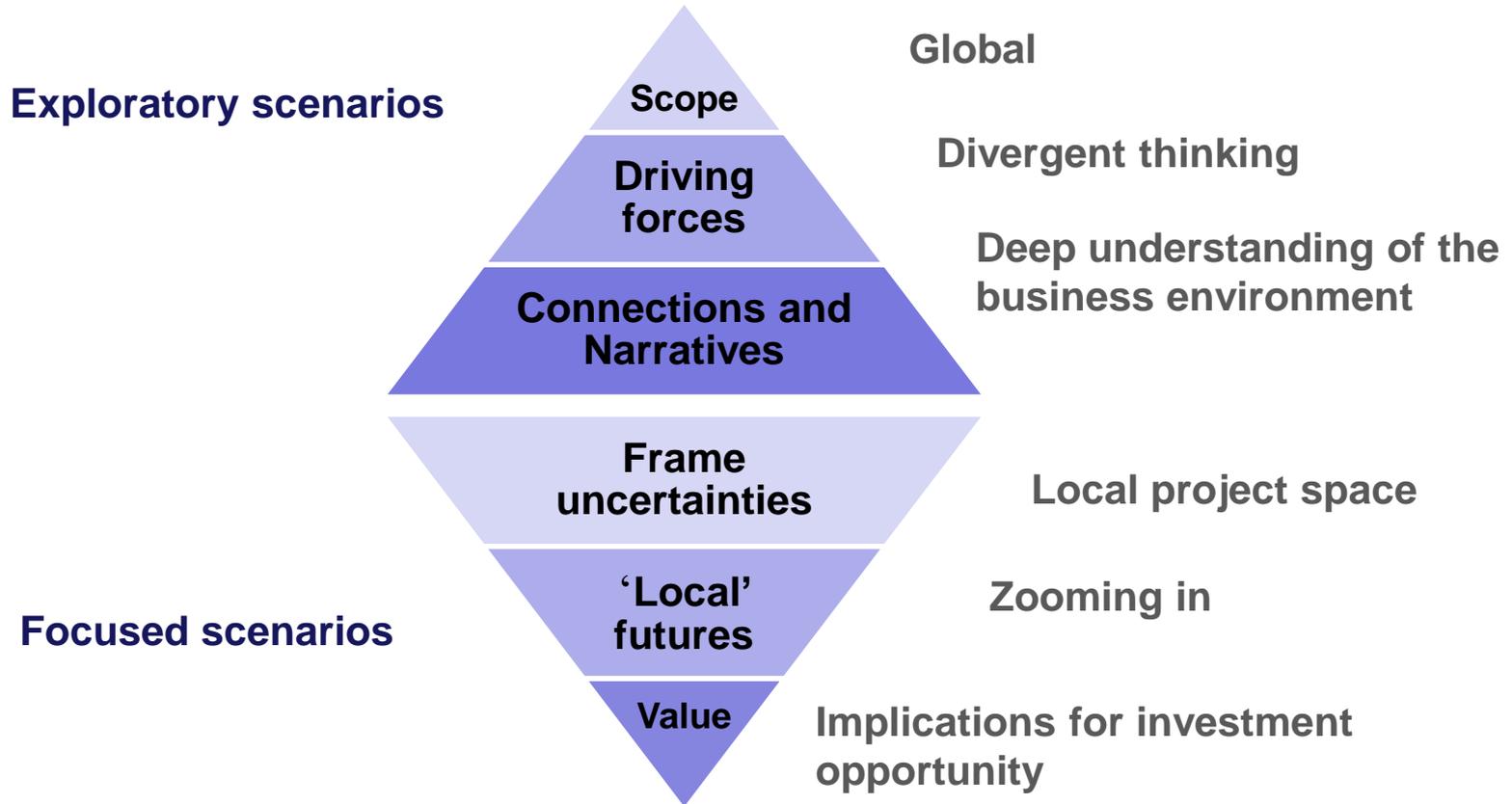


The scenario method is a heuristic approach to reduce the complexity of the external environment to a few internally consistent and logical concepts

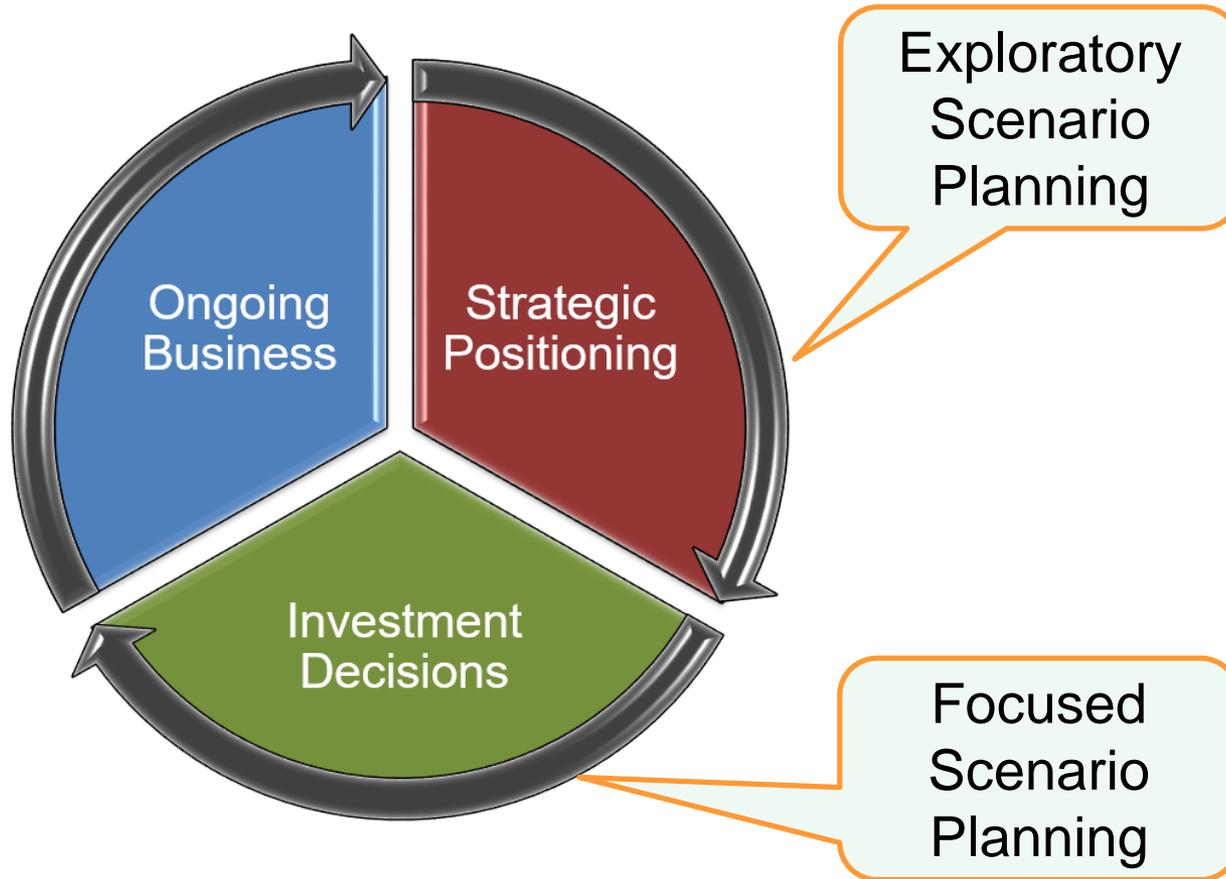
Challenging but plausible



Exploratory and Focused scenarios



Application of scenarios



The Shell scenarios of 1992

GLOBAL SCENARIOS 1992 - 2020



As an example..



Liberalisation can evoke two responses: individuals, nations and companies can seize the opportunities....

....on the other hand the threats posed by liberalisation to entrenched interests, to the losers and to national, religious and cultural identity, may lead to a predominant atmosphere of fear and resistance, and a negative feedback loop

The Shell scenarios of 1992

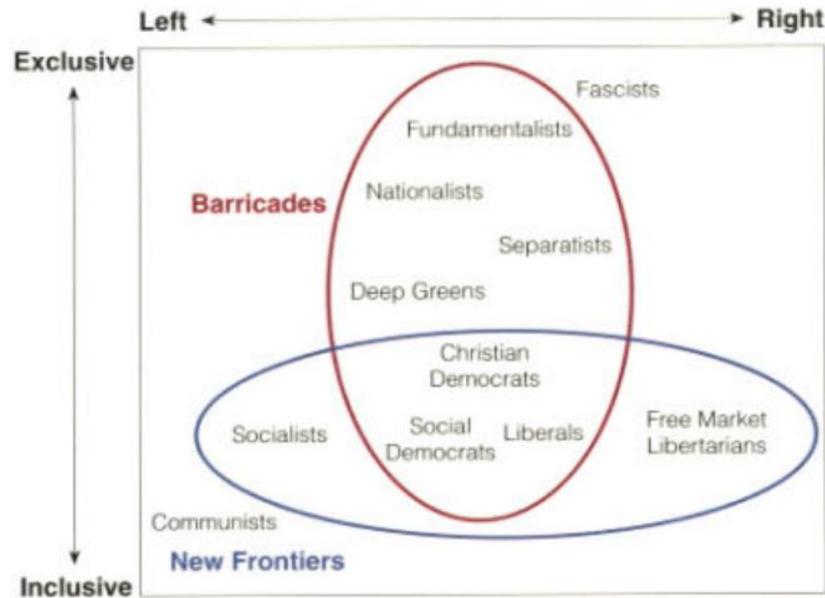
New Frontiers

Globalization and liberalization succeeds, high economic growth everywhere

Barricades

There is a strong back lash to globalization, nationalism prevails

Politics of Identity



“New frontiers”

- Cooperative approach to global problems
- Drive towards democracy
- Very high growth in developing world
- Companies from emerging economies go global
- High energy demand

“Barricades”

- Multi-polar political spectrum
- Nationalism
- ‘Forgotten groups’
- Resistance against liberalisation
- Some poor countries succeed, many fail
- Countries have own ‘brand’ of capitalism
- Trade agreements bilateral
- Physical barriers against migration

- Scenarios are alternative images of future developments
- Actual developments will not precisely follow a single scenario
- Reality will have elements of all scenarios
- The main benefits of scenario thinking are:
 - ✓ an improved understanding of 'how things hang together'
 - ✓ to be better prepared for otherwise unforeseen developments.

So what for energy?

