Shell Global Scenarios to 2025

Dr Peter Snowdon
Shell International Limited
Agenda

- Why scenarios
- Scenarios of the past
- Scenario framework
- Global Scenarios to 2025
- Implications for energy
- How we use scenarios in Shell
The Shell Global Scenarios

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WHY use scenarios?

- Sensitise managers to the outside world
- Challenge mental maps
- Develop common language and shared understanding
- Create alignment
- Anticipate and prepare for uncertainty

…and therefore make better strategies
Scenarios versus forecasts

The Present

The Path

The Future

FORECAST

Current Realities
(mental maps)

Multiple Paths

Alternative Future Images

SCENARIOS
Key Issues and Drivers Identified

Issues

- Structural drivers
- Information
- Technology
- Ecology
- Politics
- Power distribution
- Policy
- Cultural factors
- Legislation
- Demography
- Regulation
- Territorial

Resources

- Financial
- Physics
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Shell Global Scenarios of the 1990s: “TINA” and the dilemmas of globalisation
2001–2005:
The dual crisis of ‘security’ and ‘market trust’
The dual crisis
Three forces shaping our global business environment

Efficiency
Market incentives

Security
Coercion, regulation

Social cohesion
The force of community

The state responds to the crisis of security and trust
Focus on these forces?

- Efficiency
- Market incentives
- Security
- Coercion
- Regulation
- State-centric
- Market-centric
- Civil-society-centric
- Social cohesion
- Aspirations to equity
Mapping competing forces that influence strategies & behaviours

Points on the map show complex *trade-offs*...

... as competing forces pull towards the triangle apexes.

- **Efficiency Market incentives**
- **Security Coercion, regulation**
- **Social cohesion The force of community**
GDP Growth

average growth rates (%)

- **Open Doors**: 3.8%
- **Low Trust**: 3.1%
- **Flags**: 2.6%

Globalisation
Low Trust Globalisation
“Carrots and Sticks”

- A legalistic, ‘prove it to me’ world – lack of trust
- Security through intrusive checks and controls
- Global cooperation on crisis issues - coalitions of the willing
- Globalisation on OUR terms
- Divergent initiatives to address global commons
- Competing standards
- NGO alliances with investors and/or states
Low Trust Globalisation
Energy Scene

- Moderate economic and energy growth.
- Energy security by diversity of supply and interconnectivity.
- NOCs looked upon to deliver gvt policies with market discipline.
- Opportunities pursued to diversify from oil in transport sector.
- Gas growth, but some limits on infrastructure growth.
- Energy diversity policies keep coal in the picture.
- Renewables receive government support.
Open Doors
“Incentives and Bridges”

- Pragmatic, ‘know me’ world
- State acts consensually through incentives and soft power
- Precautionary principle
- The value chain of trust
- Independent media scrutiny
- Companies, NGOs, governments work together pragmatically to promote inclusive globalisation
- Civil society works with investors
High economic and energy growth.

Energy security by open markets, the right to invest and international law.

NOCs and IOCs compete on equal terms.

Costs for transport alternatives fall, but oil remains dominant.

Rapid expansion of LNG and pipeline gas.

High energy demand makes “clean” coal attractive.

Costs for renewables fall rapidly as society calls for such solutions.

Carbon costs internalised. Consumers choose on price.
Flags: “Nations and Causes”

- Dogmatic, ‘follow me’ world
- Competing claims of self-centric communities
- States push national agendas.
- Governments seek to overcome social divides through populist and nationalistic policies
- Security sought by limiting access (“gated communities”)
- Bilateral agreements and political blocks.
- “Sand in the wheels” of global mobility
Low economic and energy growth.

Energy through conservation and self-sufficiency.

Fear of access to resources give focus on efficiency and indigenous supply.

Efficiency pursued - uptake of hybrids - reduces oil imports.

In fragmented world, investments suffer and gas grows slower.

Use of coal stimulated by govts where offers self-sufficiency.

Significant gvt/society support for Renewables as indigenous.
2025 GDP:
40% higher in Open Doors vs. Flags

average growth rates (%)

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<th>2025 GDP: 40% higher in Open Doors vs. Flags</th>
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<tr>
<td>Open Doors</td>
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<tr>
<td>Low Trust Globalisation</td>
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<td>Flags</td>
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Energy Demand
Predetermined

- Overall Demand
- Coal
- Renewables
- Power/Transport
- Developing countries demand relative to developed
- % Fossil fuels in demand
- % Oil in Transport
- Diesel demand

2005 position and magnitude of change

2025 range of possible outcomes
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Business planning
Which signposts?
Trust Globalisation
Low
Security
Coercion, Regulation
Efficiency
Market incentives
Open Doors
Social cohesion
The force of community
Flags
Fundamental questions that face us all