



# **NEW LENS SCENARIOS**

A SHIFT IN PERSPECTIVE FOR A WORLD IN  
TRANSITION AND PERSPECTIVES ON GAS

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# WARNING

## UNCERTAINTIES AHEAD

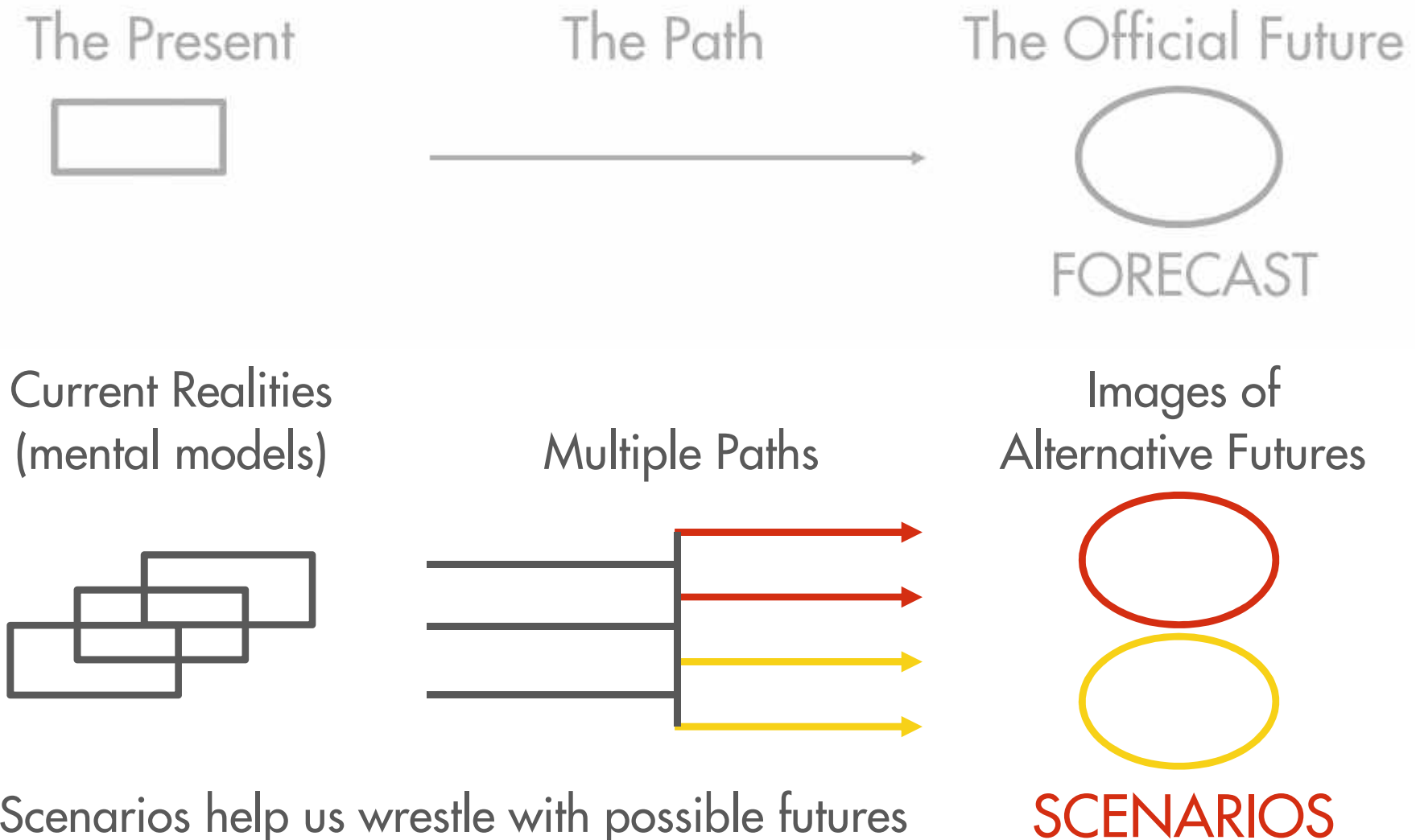
This scenarios book contains forward-looking statements that may affect Shell's financial condition, results of operations, and businesses of Royal Dutch Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements.

Forward-looking statements include, among other things, statements concerning the potential exposure of Royal Dutch Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections, and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "objectives", "outlook", "plan", "probably", "project", "risks", "seek", "should", "target", "will", and similar terms and phrases. There are a number of factors that could affect the future operations of Royal Dutch Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this scenarios book, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, fiscal, and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects, and delays in the reimbursement for shared costs; and (m) changes in trading conditions. All forward-looking statements contained in this book are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional factors that may affect future results are contained in Royal Dutch Shell's 20-F for the year ended December 31, 2011 which is available at [www.shell.com/investor](http://www.shell.com/investor) and [www.sec.gov](http://www.sec.gov). These factors also should be considered by the reader. Each forward-looking statement speaks only as of the date of this scenarios book, March 2013. Neither Royal Dutch Shell nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this scenarios book.



# WHY DO WE DO SCENARIOS?

Uncertainty and discontinuities are inevitable...



# WE ARE ENTERING **AN ERA OF VOLATILITY & TRANSITIONS**

Intensified  
economic  
cycles

Political &  
social  
instability

Building a  
'mini-lateral'  
world

Demographic  
transitions-  
urbanisation

Challenged  
environmental  
boundaries

Emerging  
resources  
Shale gas & oil

# THE FUTURE OF ENERGY

## Increasing Pressure on the Planet



**75%** of people will live in cities



More than **2 billion** vehicles (800 million today)



**Millions** will leave poverty



Energy demand will **double** in comparison to 2000



Need for **greater efficiency** to produce more wealth



Use of **renewable energy sources** to generate more energy



An aerial photograph of a rugged mountain range covered in snow. The peaks are jagged and partially obscured by low-hanging clouds. The slopes are dotted with dark evergreen trees. A faint grid pattern is visible over the entire image.

**MOUNTAINS**

An aerial photograph of a turbulent ocean. Large, white, foamy waves are crashing against dark, rocky shorelines. The water is a deep blue, and the sky is a pale blue. A faint grid pattern is visible over the entire image.

**OCEANS**





**“IF WE WANT THINGS  
TO STAY AS THEY ARE,  
THINGS WILL HAVE  
TO CHANGE.”**

**GIUSEPPE TOMASI DI LAMPEDUSA**

The Leopard



# **MOUNTAINS**

## A VIEW FROM THE TOP

### Top down approach

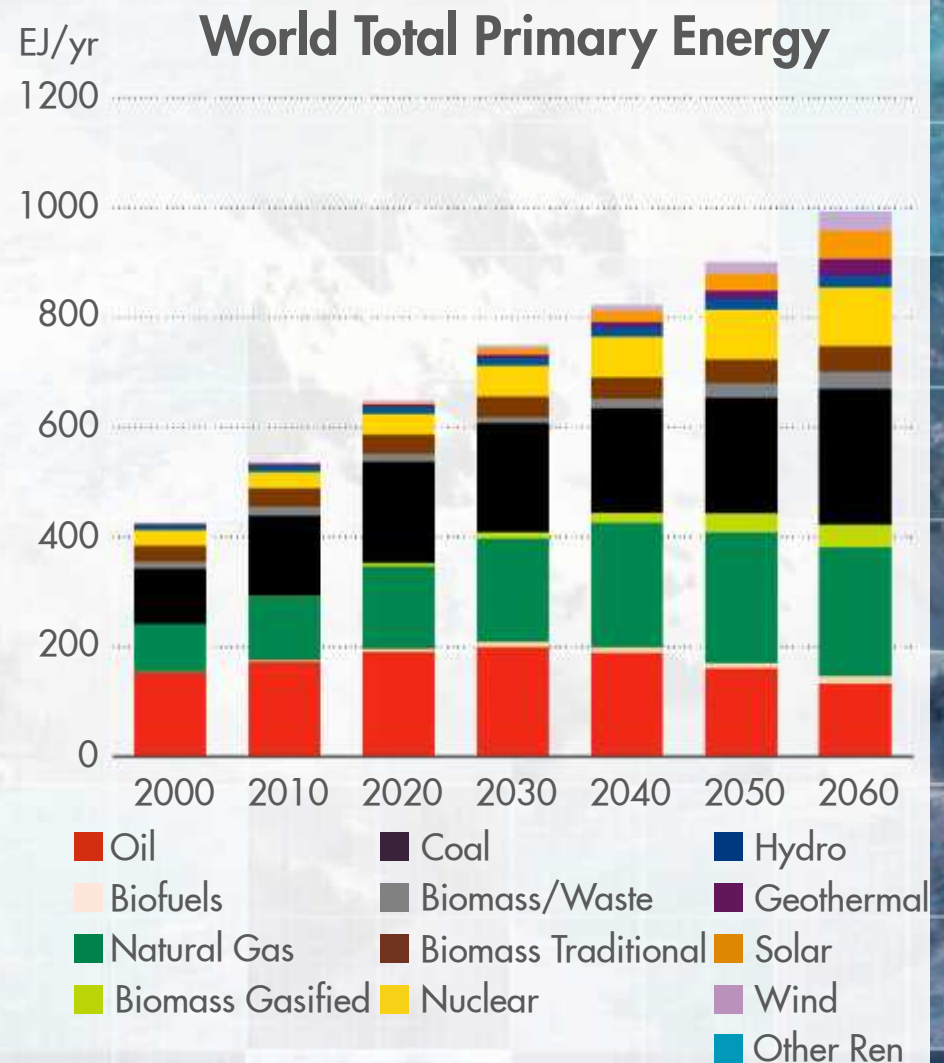
- Concentration of power – elites drive policy
  - preservation of social stability
  - evolving lock-in/out via education, income, behaviour
- Social polarisation and economic inequality
- Global economic growth moderates ...
  - developing countries in a trapped transition
- Return of the state ...
  - over time, reformist impulses in government seek room to manoeuvre
- Nationalist world ...
  - but over time, pragmatic accommodation of interests when stresses undermine stability



# MOUNTAINS

## ENERGY – Policy driven

- Moderate economic growth dampens energy demand and prices
- Supply side investments in big projects with long time horizons
- Urban planning leads to compact cities and fuel-efficient vehicles
- The Gas Backbone – the shale revolution
- Nuclear renaissance
- Renewables sluggish
- 'Clean' energy: CCS takes off by 2030
  - Electricity decarbonised by 2060



# OCEANS

## A VIEW OF THE HORIZON

People power drives change

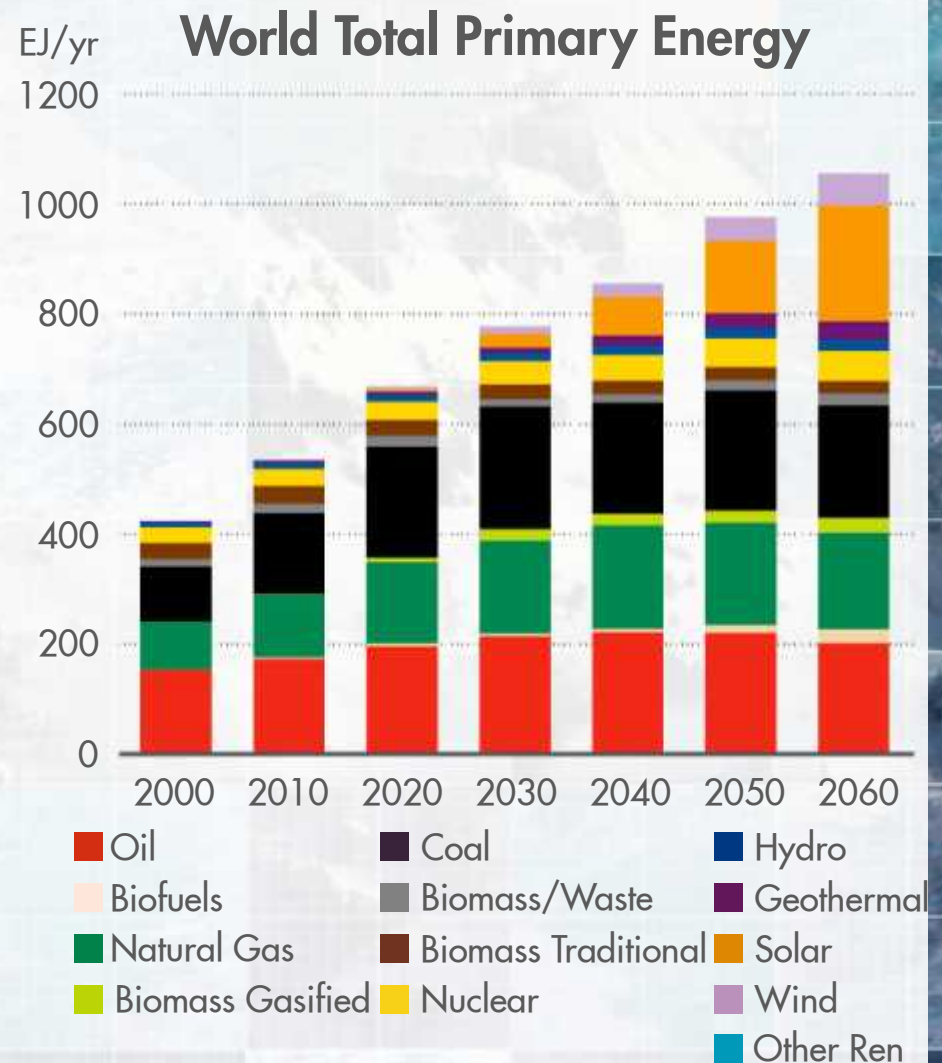
- Rising aspirations challenging vested interests and push reform
  - Social strains and political churn
- Reform unleashes market forces, driving new waves of growth and individual empowerment
- It's a copycat world
  - but perspectives can get locked in again
- Open borders world
  - From TINA to TARA, globalisation is transformed into a coat of many colours



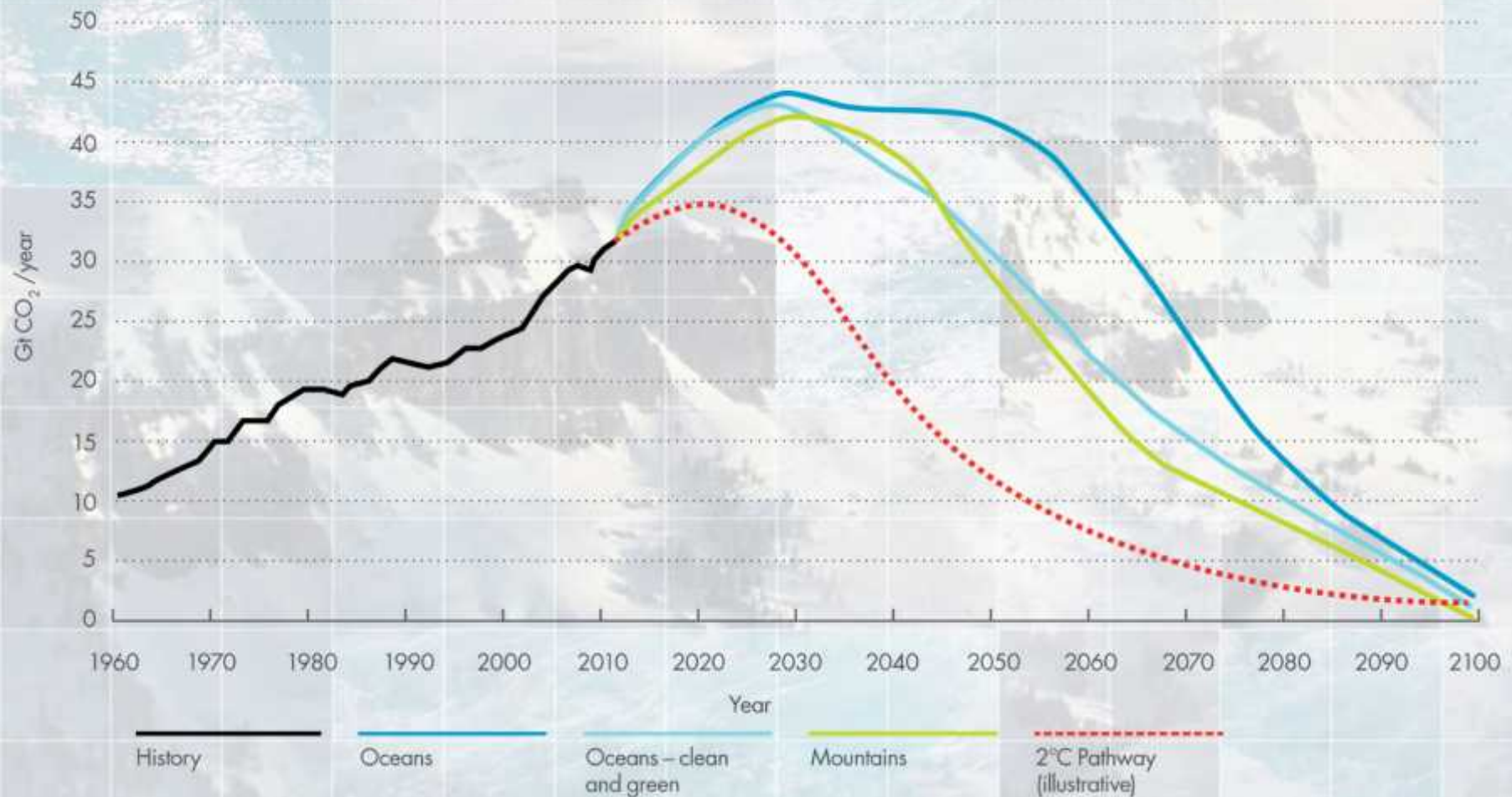
# OCEANS

## ENERGY – Market driven

- Surge in energy demand from emerging economies results in rising energy prices
- Investment in supply at times constrained by political turbulence
- Unconventional gas proves disappointing outside of North America
- The long liquid fuels game
- Strong efficiency gains
- Unlock of new renewables supplies
- Eventual climate shocks drive adaptation, Solar and CCS
  - a late 'green' world

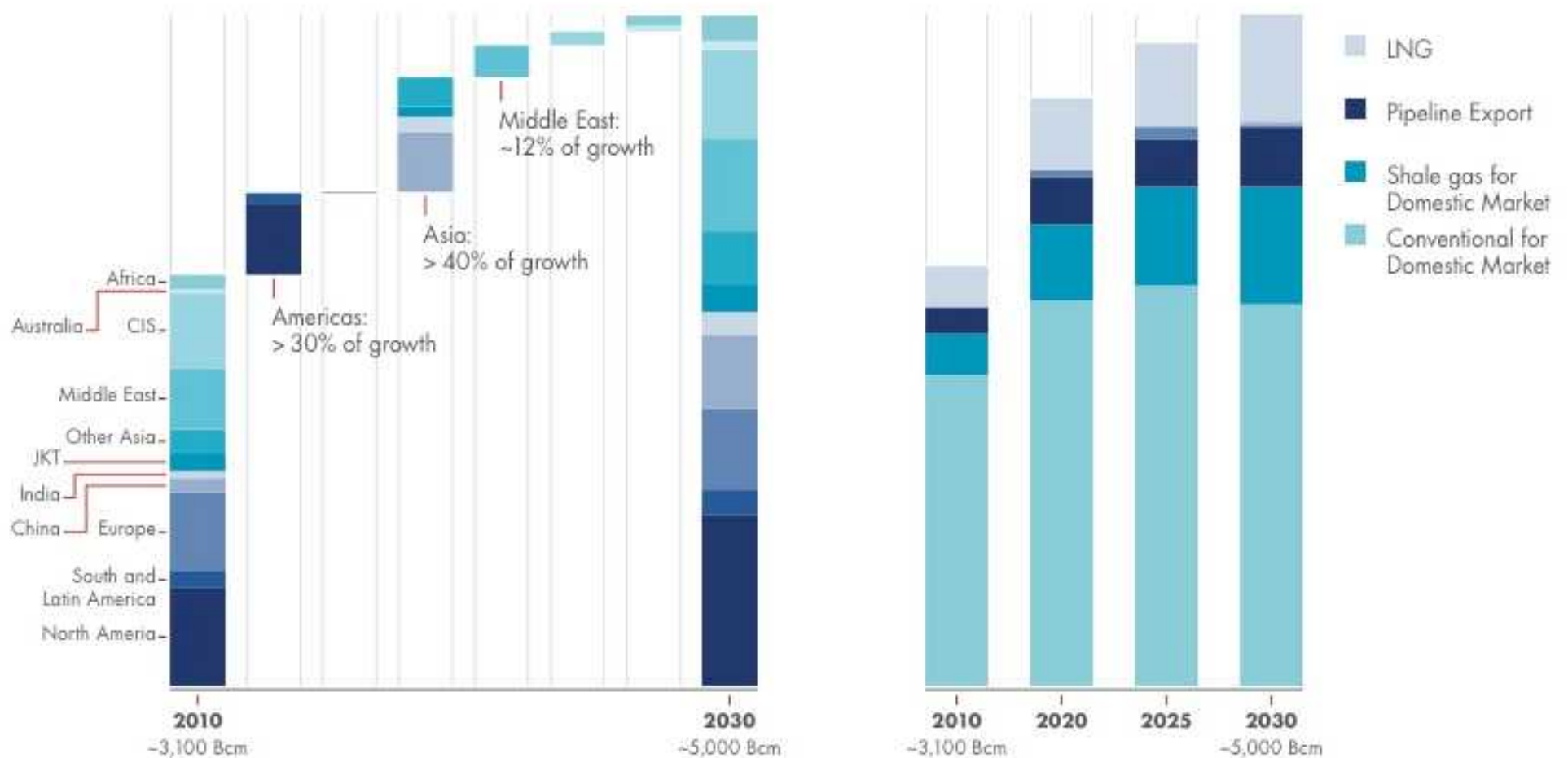


# GLOBAL ENERGY-RELATED CO<sub>2</sub> EMISSIONS





# GAS PERSPECTIVE TO 2030



# WHAT ARE WE LEARNING?

## CONCLUDING REMARKS

- Considering longer time horizons, and a broad view of drivers & interactions between markets, economics, & politics, brings focus on decisions needed today
- Both scenarios have positive and troubling features
- Resource stresses complex and urgent, but multiple opportunities
- **Clean *and* Green important:** Cleaner fossil fuels (with CCS) needed in any case – with a revolution in renewable energy as well
- **Political, economical and societal choices crucial** to develop available resources and technology
- **Innovative cross-boundary collaborations are key to success**



