





Long-term Development & Adaptation Scenarios under future climates in South Africa

Long Term Adaptation Scenarios Workshop

24 January 2014

Overview



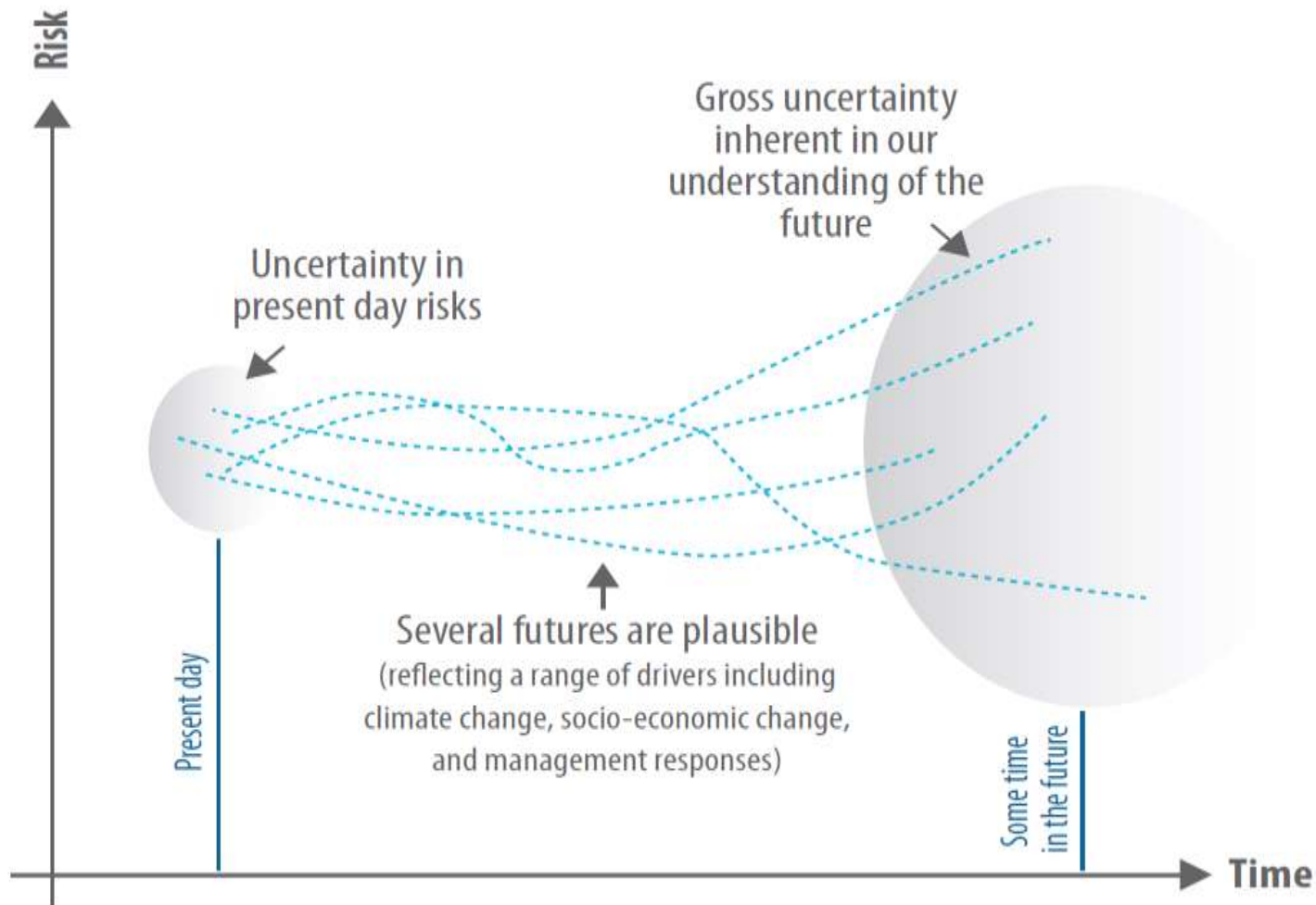
Time	Title
9:30 – 10: 30	Session 1: Overview of LTAS 1 and the qualitative scenarios
10:30 – 12:30	Session 2: Key elements within the development trajectories
14:00 – 15: 30	Session 3: Development & climate impacts
15: 30 – 16: 00	Session 4: Wrap-up

Purpose



- ✦ *Facilitate and provide support for summarising development and adaptation scenarios at sub-national and national level for South Africa under the LTAS climate futures through a lens of water and food security linked to human settlements and disaster risk reduction*
- ✦ *Scenarios as narratives of how*
 - *climate impacts on plausible development trajectories*
 - *adaptation options build resilience to vulnerabilities*

Futures and Uncertainty

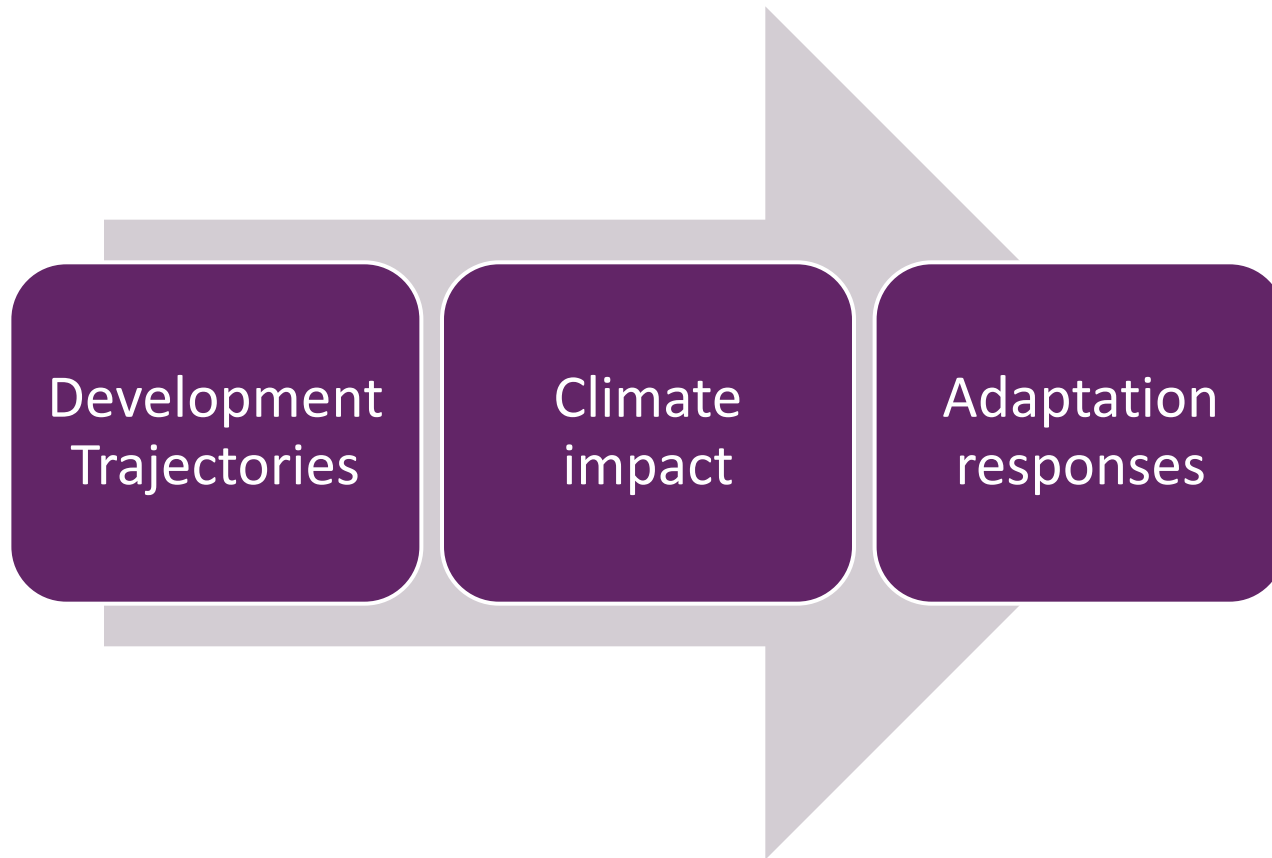


Scenario Planning



Exogenous Factors (X)	Management Levers (L)
Uncertain factors outside of the control of managers = Basis for “Scenarios”	Management options = “Adaptation options”
Relationships (R)	Performance Measures (M)
Mapping between combinations of exogenous factors (X) and levers (L) to outcomes (M) = a “Model”	Outcomes of interest

Elements of the scenario development

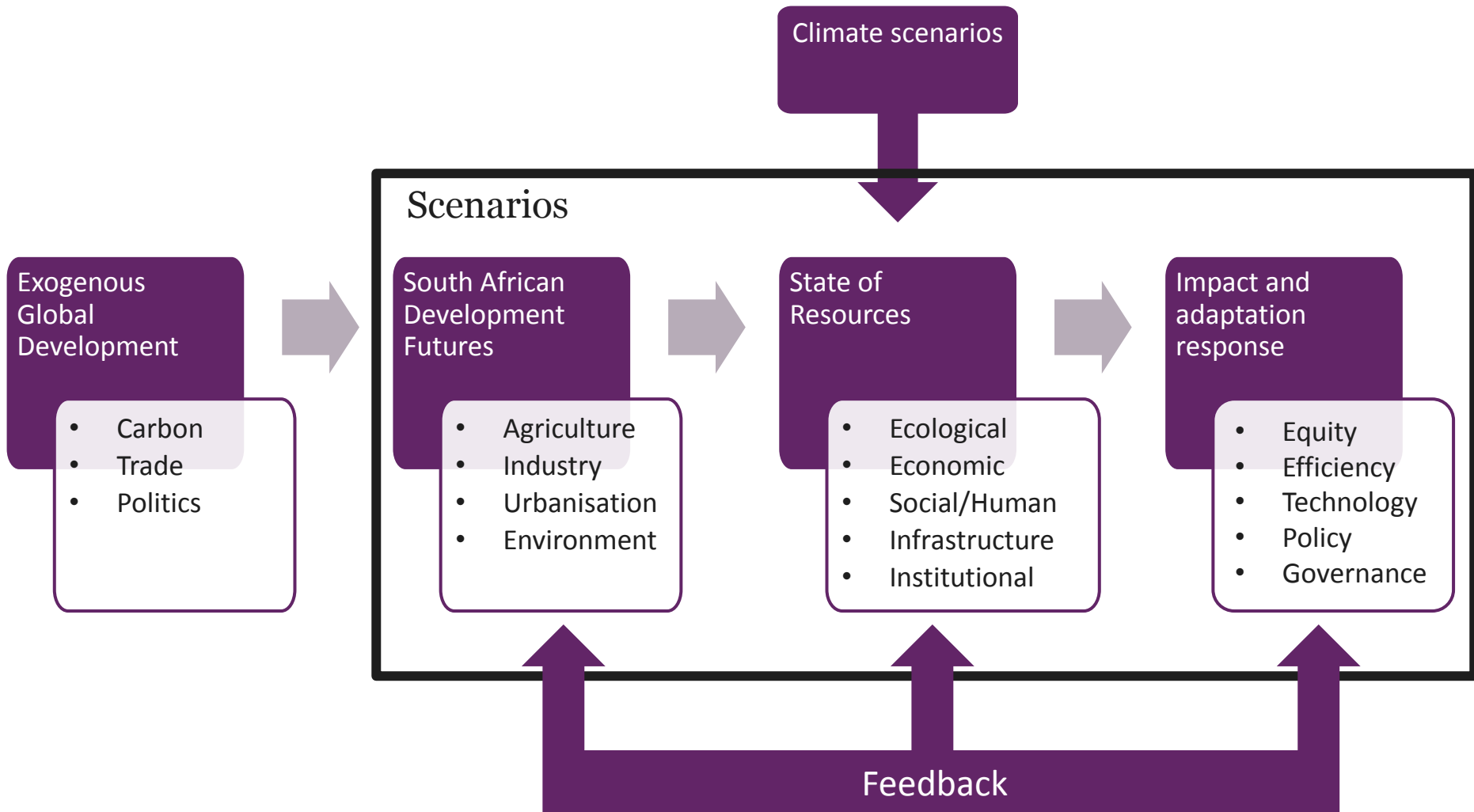


Lens for these scenarios



- ✦ Those aspects that are significant in terms of climate adaptation in the long term
- ✦ Understand the vulnerability of plausible development and climate futures
- ✦ Reflect aspects of current development discourse in South Africa (NDP, etc)
- ✦ Provide narrative illustrations of adaptation responses that are either robust or vulnerable to these futures

Conceptual unpacking

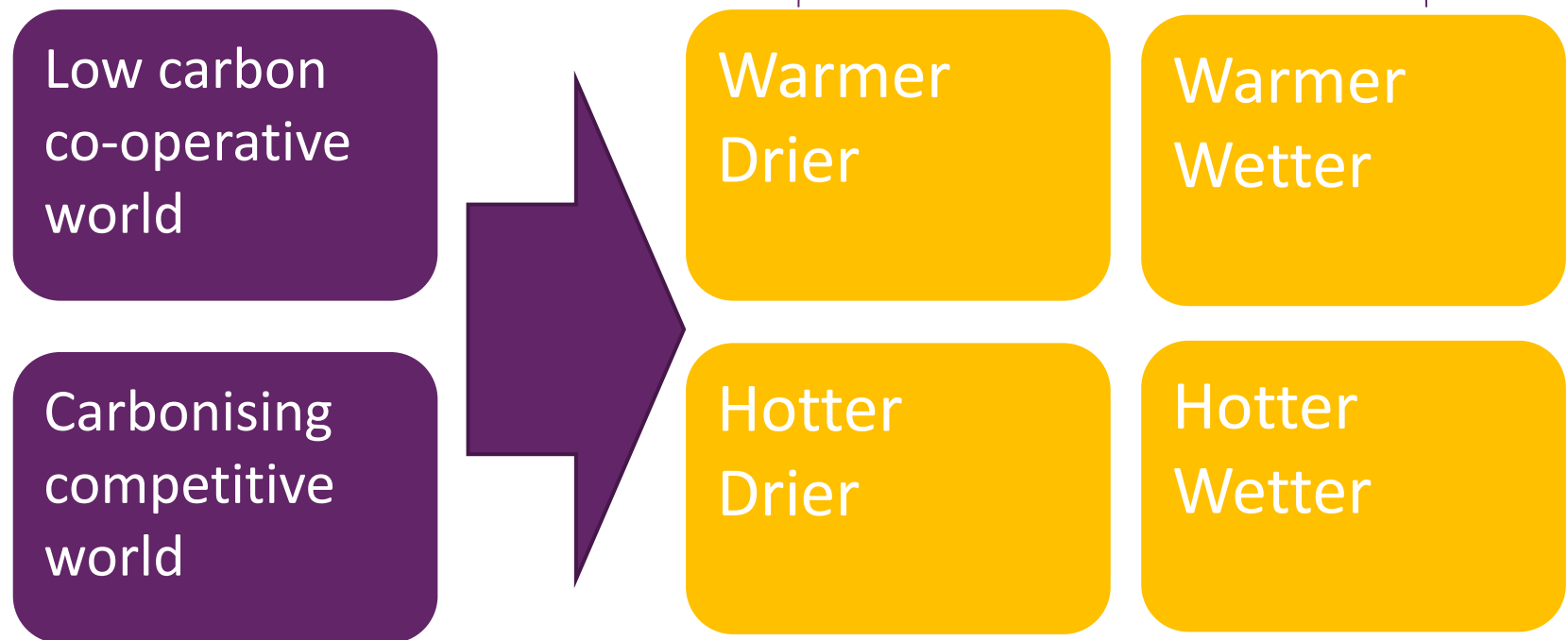


Global uncertainties



*Global
Futures*

*Climate
Scenarios*



Conceptual framing



Climate scenarios

Climate

Disaster

Water

Other aspects

Human settlement & demographic

Industry & Power

Agriculture & Food

Natural Environment

Development trajectories

Equity

Trade

Growth

Infrastructure

Adaptation responses

Policy

Capacity

Governance

Technology

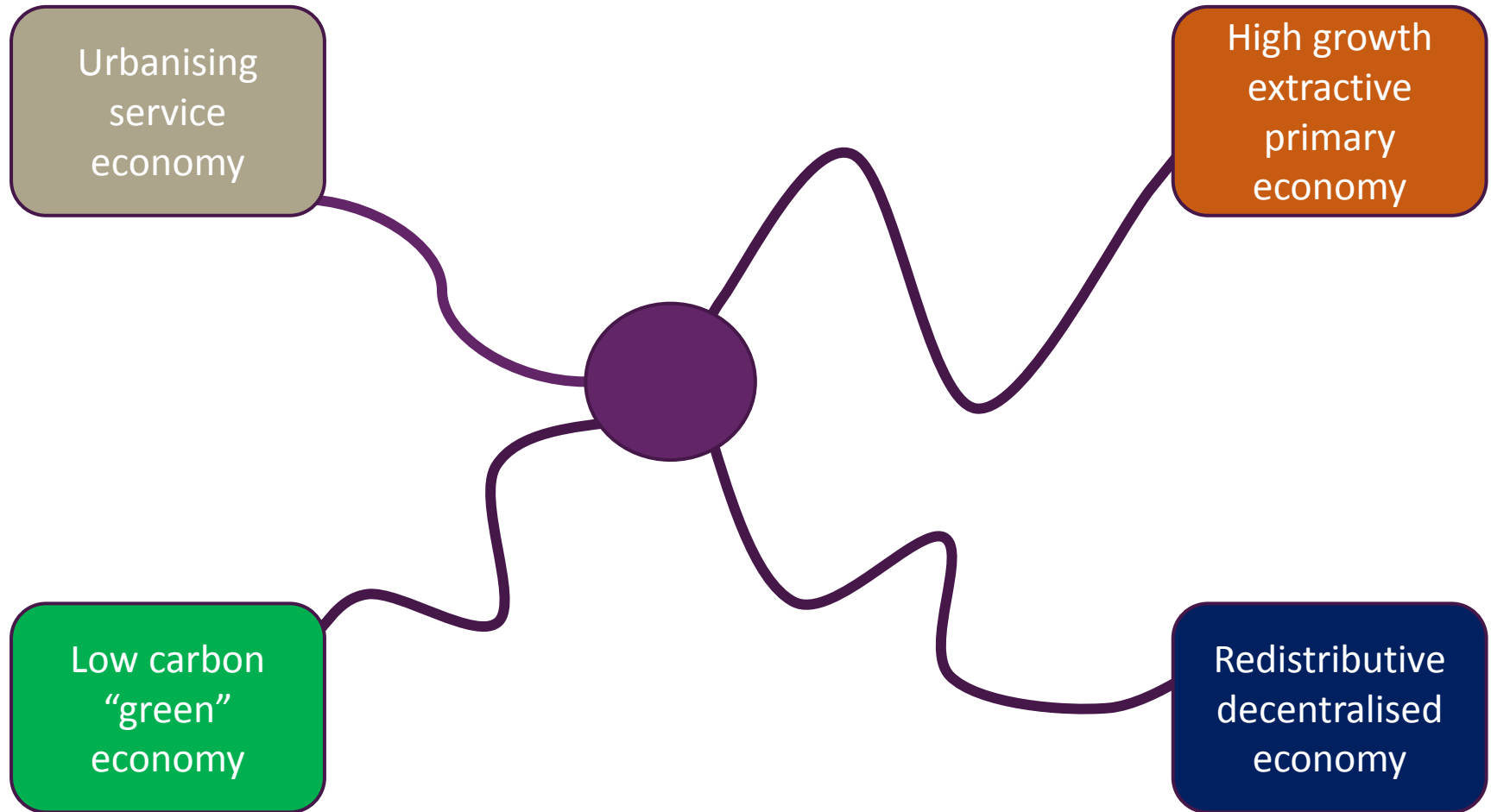
Global development

Development context



- ✚ National development objectives
- ✚ Developmental uncertainties / debates
 - Mechanisms for inclusion and equity
 - Mechanisms for environmental sustainability

Development trajectories



Development emphasis



Urbanising service economy

Tertiary & secondary economy

Peri-urban expansion?

High-growth primary economy

Industry & Agriculture

Resource exploitation

Low-carbon green economy

Cleaner industry

Renewable energy

Redistributive decentralised economy

Rural development

Agriculture . . .

Development trajectories



Urbanising service
economy

High growth
primary

Redistributive
Decentralised

Low carbon green

Human settlements &
Demographics

Agriculture

Industry

Natural Environment

Session 2: 10:45 – 12: 00pm



- ✓ Are you comfortable with the assumptions for this trajectory or do you want to modify these?
- ✓ What are the key aspects (quantitative & qualitative descriptions) of the these trajectories in terms of:
 - Human settlements and demographics?
 - Industrialisation and energy
 - Agriculture
 - Natural environment
- ✓ How do these evolve from 2030 to 2050

Session 3: 14:00 – 15:30



✓ Implications of climate and development



Water

Temperature

Wind

Urban &
Rural
Settlements

Agriculture

Industry &
Power

Natural
environment

Climate

Carbon/ De-
carbon