

Scenario Planning

An Introduction

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Typical Timelines for Strategic Plans



SDV Cluster Sectorial Objective Policies



Present

2030+



Where were you 20+ years ago?

What can you remember of the last twenty plus years?

What unexpected / unpredicted events have occurred in the last ~25 years +?



**Earth Summit &
UN Framework
Convention on
Climate Change**



**Asian Financial
Crisis**



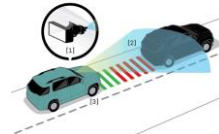
**North American
Great Ice Storm**



**Facebook
live**



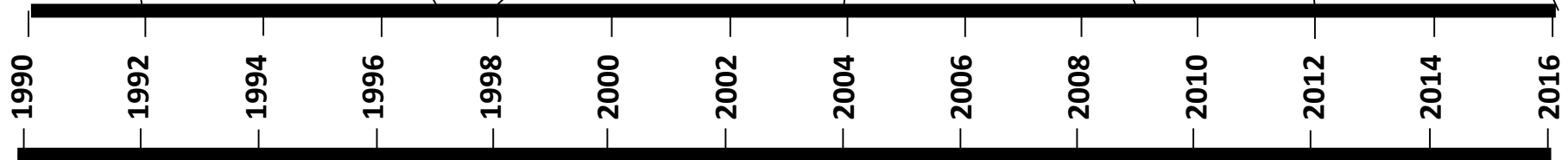
**Worst Mongolian
Flood in 40 years**



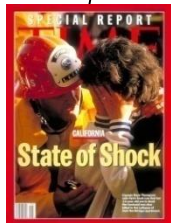
**GM crash
avoidance
system**



**Alberta
Forest
Fires**



**World Wide Web
launched**



**Californian
Earthquake**



**Dolly – 1st
cloned mammal**



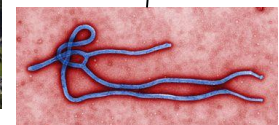
**Sept 11 WTC
Attacks**



**Apple
iPhone**



**7.0 Earthquake
- Haiti**



**Ebola virus
epidemic
West Africa**

Planning through a Vortex of Uncertainty

Climate Change

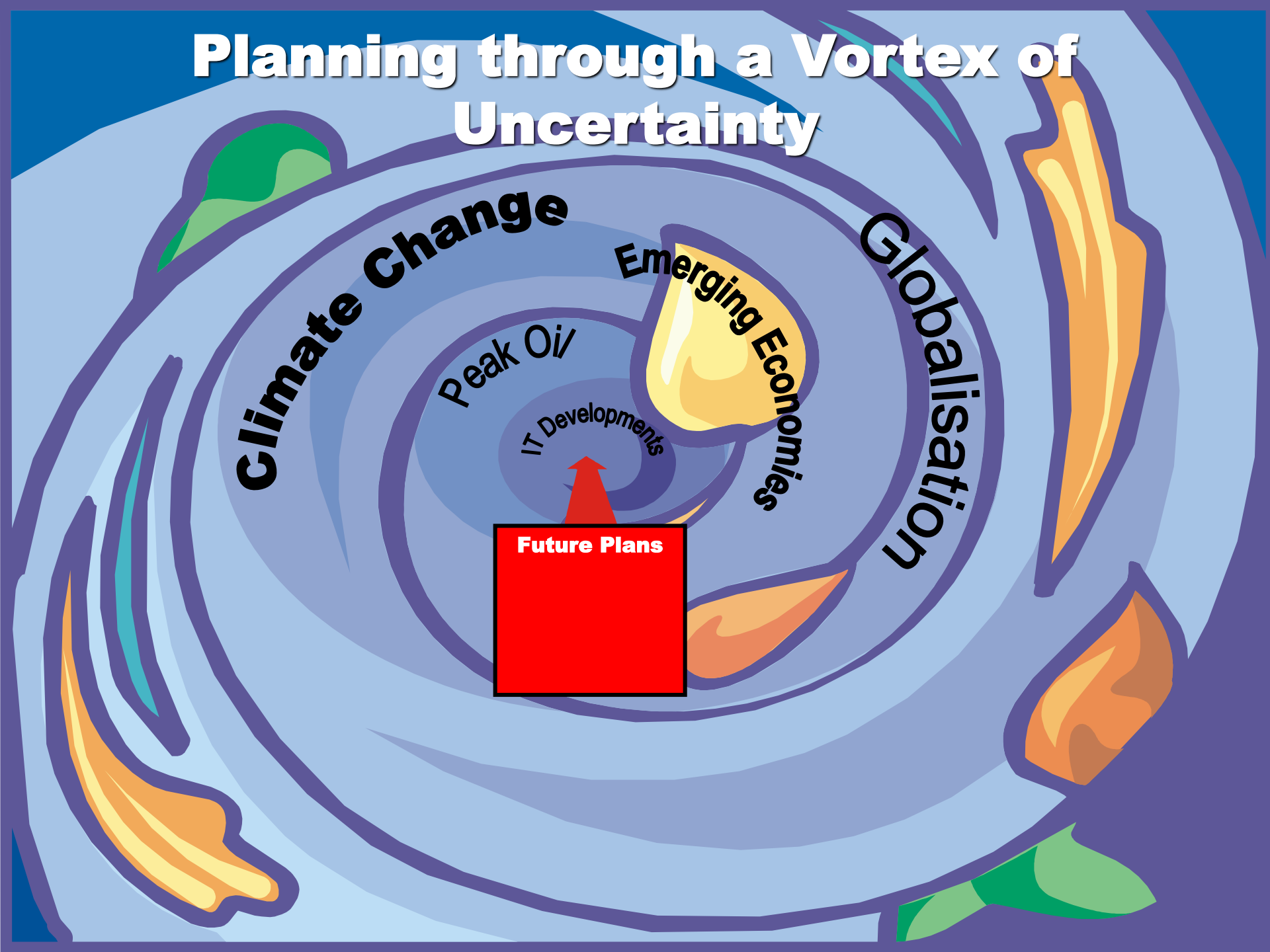
Emerging Economies

Globalisation

Peak Oil

IT Developments

Future Plans



Plan making requires a process and a methodology that:

- can deal with long term issues in an uncertain future
- will allow us to plan with the uncertain and evolving scientific evidence (eg climate change science)

A Scenario Planning Approach



Scenario Planning

... based on the premise that the future is not “knowable” – statements, stories, narratives or scenarios about the future are hypothetical possible futures that may or may not be realised

(O’Brien, 2000)

... a systematic way to develop and test plans and strategies (and decisions) in uncertain times by creating possible futures to test them

(O’Brien, 2000)

Scenario Planning

■ What is scenario planning?

- **Scenarios:** *structured accounts of possible futures; not predictions of a particular future (nor outputs of modelling)*
- **Scenario planning:** *method for thinking creatively about possible complex and uncertain futures*

■ Why use scenario planning?

- *Most useful when there is a high level of uncertainty*
- *Creative, flexible way of preparing for uncertain future*
- *Exploration of possible futures rather than a single predicted future*
- *Provides framework for development & assessment of policies & strategies*
- *Works best when participants are key decision makers*

Categories of Scenario Planning

Predictive Scenarios (*What will happen if the most likely development unfolds?*): examine likely impacts and outcomes of future events in the short to mid-term. Scenarios can use modelling and trend analysis and describe how a future can emerge from the present (eg IPCC work).

Explorative Scenarios (*What can happen?*): explore future situations characterised by uncertainties and drivers of change and their possible implications for decision making and strategy development – they generally seek to include a variety of perspectives.

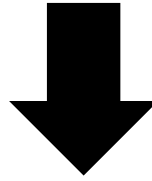
Exploratory scenario methodologies are typically based on four assumptions:

- The future can be shaped by human choice and action.
- The future cannot be foreseen or accurately predicted.
- Uncertainty requires us to consider a variety of future possibilities.
- Scenario development requires interactive and participative processes (Mietzner and Reger, 2005).

Normative Scenarios (*How can a specific target be reached?*): assist the development of plans and strategies to meet pre-specific goals / targets through controllable adjustments to the current situation. Scenarios represent adjustments to actions and/or policies (eg 'backcasting' - scenarios represent a future defined time horizon in which important problems have been solved or targets reached)

Testing of Future Policy Options

Policies supporting SDV Cluster Sectorial Objectives



**“Wind Tunnel” Test
of Intended Actions**

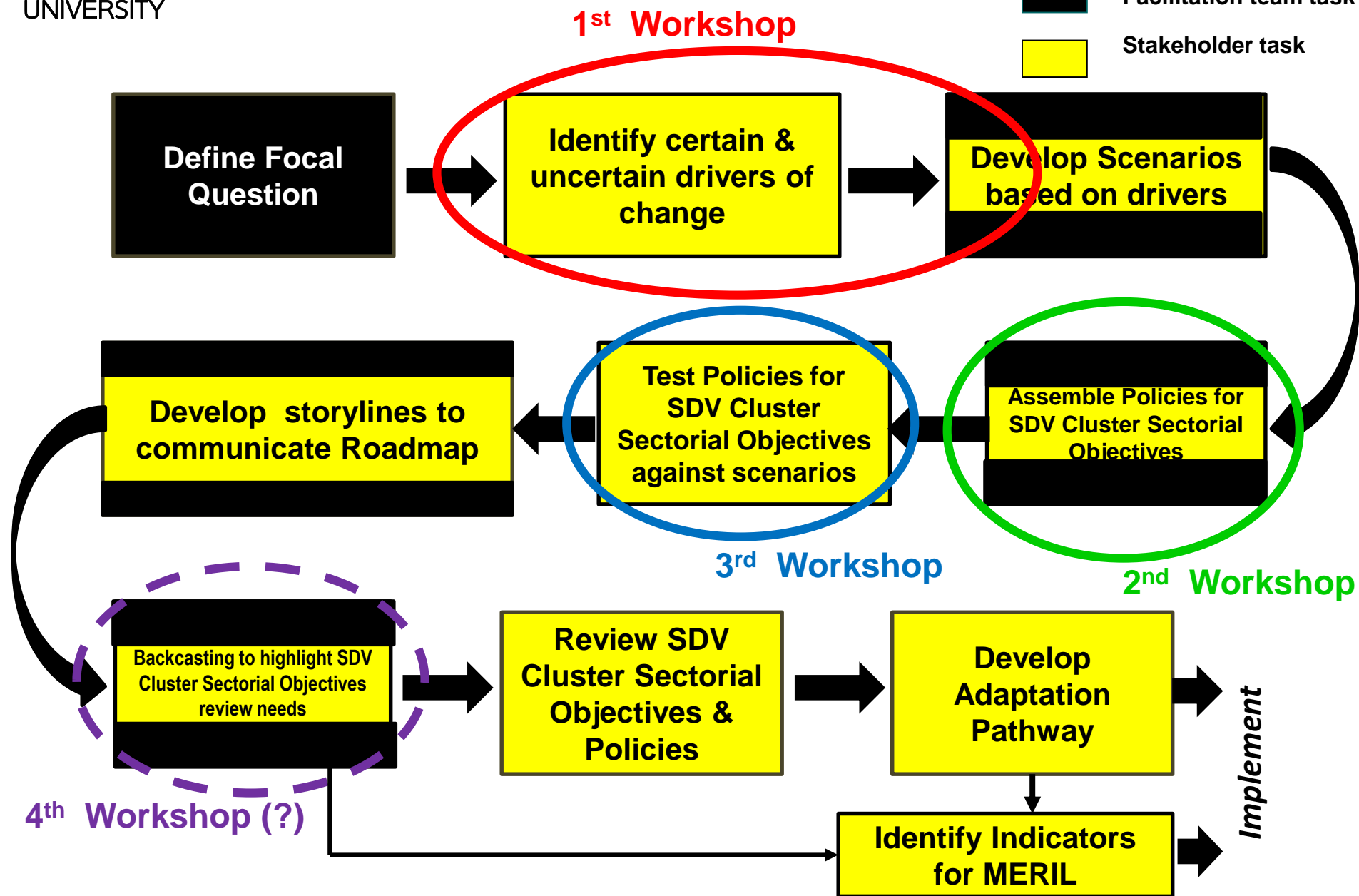


Scenario 1



Scenario 2

Scenario Planning Steps



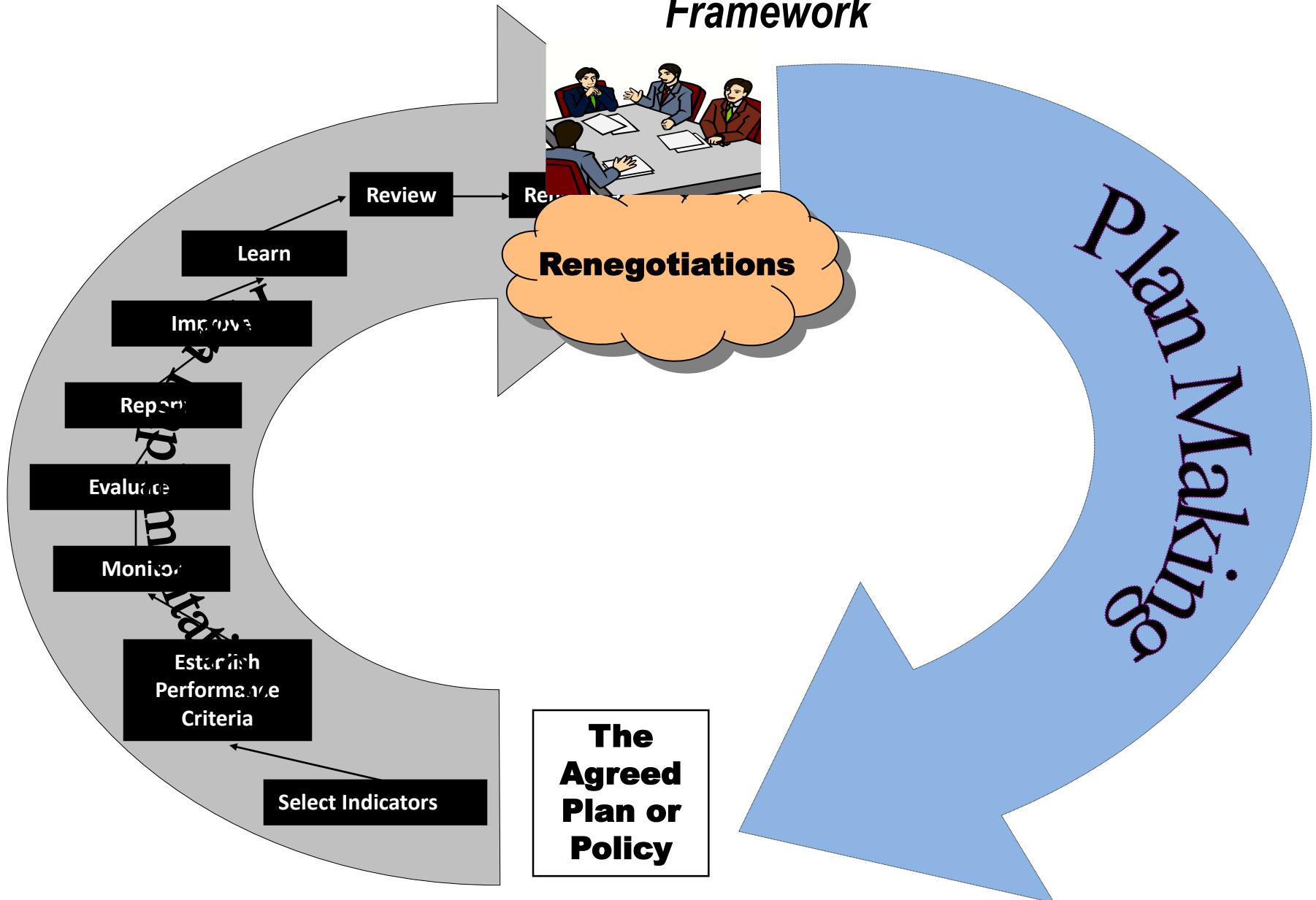
Implementation of Scenario Planning Outputs

Cyclic (Continuous) Planning

SURVEY → *ANALYSIS* → *PLAN*

Traditional Linear Planning Process

Cyclic (Continuous) Planning Process: Steps in the Implementation Phase including an Adaptive Management Framework



Limitation of Scenario Planning

- **Biased scenarios can undermine their capacity to investigate multiple plausible futures.**
- **Potential for conflicts to emerge during participatory scenario planning processes as well as underrepresentation of stakeholder groups.**
- **Requires time, commitment and energy from participants and acknowledgement of multiple perspectives.**
- **Many technological support innovations still being developed.**
- **Requires full institutional support for any highlighted institutional innovation and change.**

Benefits of Scenario Planning

➤ Improves decision-making processes:

- brings together participants to collectively explore multiple plausible futures
- can identify new issues or challenges that may develop in the future
- can find creative and flexible ways to meet goals and address future vulnerabilities.

➤ Involves multiple sectors:

- its interdisciplinary nature promotes the inclusion of a diversity of worldviews, stakeholders and information across multiple spatial, temporal and institutional scales.

➤ Appropriate for engaging a wide range participants and community:

- its outputs and processes can involve a range of methods, tools and formats (including emerging combinations of quantitative and qualitative information and visually dynamic representations for communication
- enhances the ability to deal with uncertainty and inform long-term strategic decisions involving otherwise complex information that is not easily understood by a wide range of people.

A detailed illustration of a futuristic city at sunset. In the background, a dense cluster of tall, metallic, and organic-looking skyscrapers rises against a sky of orange and red. In the foreground, a large, sprawling industrial or research facility is visible. It features several large, dome-shaped structures, some with glass panels, and a complex network of walkways and platforms. Two tall, thin, spire-like structures with pointed tops stand out. The overall scene is bathed in the warm, golden light of the setting sun, which is visible as a bright orb on the right horizon.

Thank You!

Questions?

Scenario Planning: *Summary*

Category	General Applicability	Applicability for shock and resilience testing
Predictive scenarios	<ul style="list-style-type: none"> • Deals with foreseeable challenges (e.g., population growth) • Informs planning for future developments • Limited application to deal with deep uncertainty (for which relative probabilities are unknown) 	<ul style="list-style-type: none"> • May hold historical biases as they cannot address complex interactions between future drivers of change
Exploratory scenarios	<ul style="list-style-type: none"> • Enables participatory decision- making • Can be tailored to target specific social groups (e.g., business owners, residents, policy makers) • Explores consequences of alternative developments under deep uncertainty 	<ul style="list-style-type: none"> • Provides a wide range of future possible changes that are outside the remits of previous experiences • Enables the consideration of multiple futures to advance conventional practice for many organisations • Assists decision-makers to select options/ policies that are likely to have better performance (more robust and flexible options) under different future uncertainties • The resilience of some strategies may not be compatible with any of the scenarios
Normative scenarios	<ul style="list-style-type: none"> • Deals with deep uncertainty • Informs the development of alternative pathways • Assists in the operationalization of adaptive management practices • Supports anticipatory approaches that address future developments, challenges and opportunities 	<ul style="list-style-type: none"> • Creates pathways to achieve intended outcomes that can take shocks and surprises into account • A vision of a resilient system in its most extended/ holistic form can guide the development of pathways