AR5: Overview and Structure of the WG III Contribution

Scoping Meeting for the Synthesis Report (SYR)
25-27 August 2010, Liege, Belgium

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WMO UNEP

“Policy relevant but not policy prescriptive“

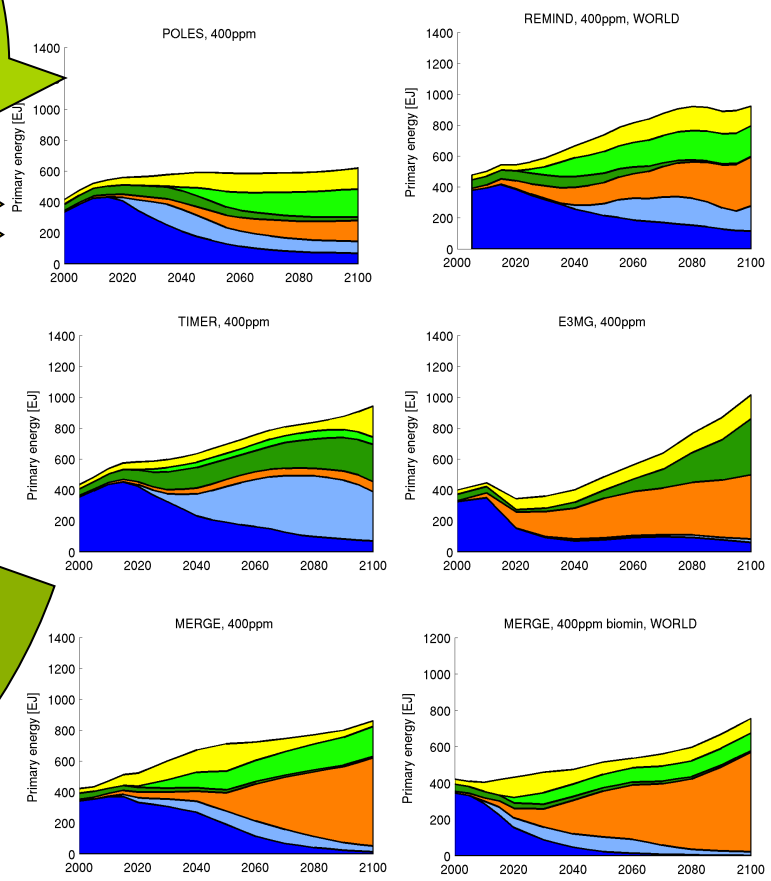
Science

Goal-setting by politics

Data

2°C Target

Science: Scope of options



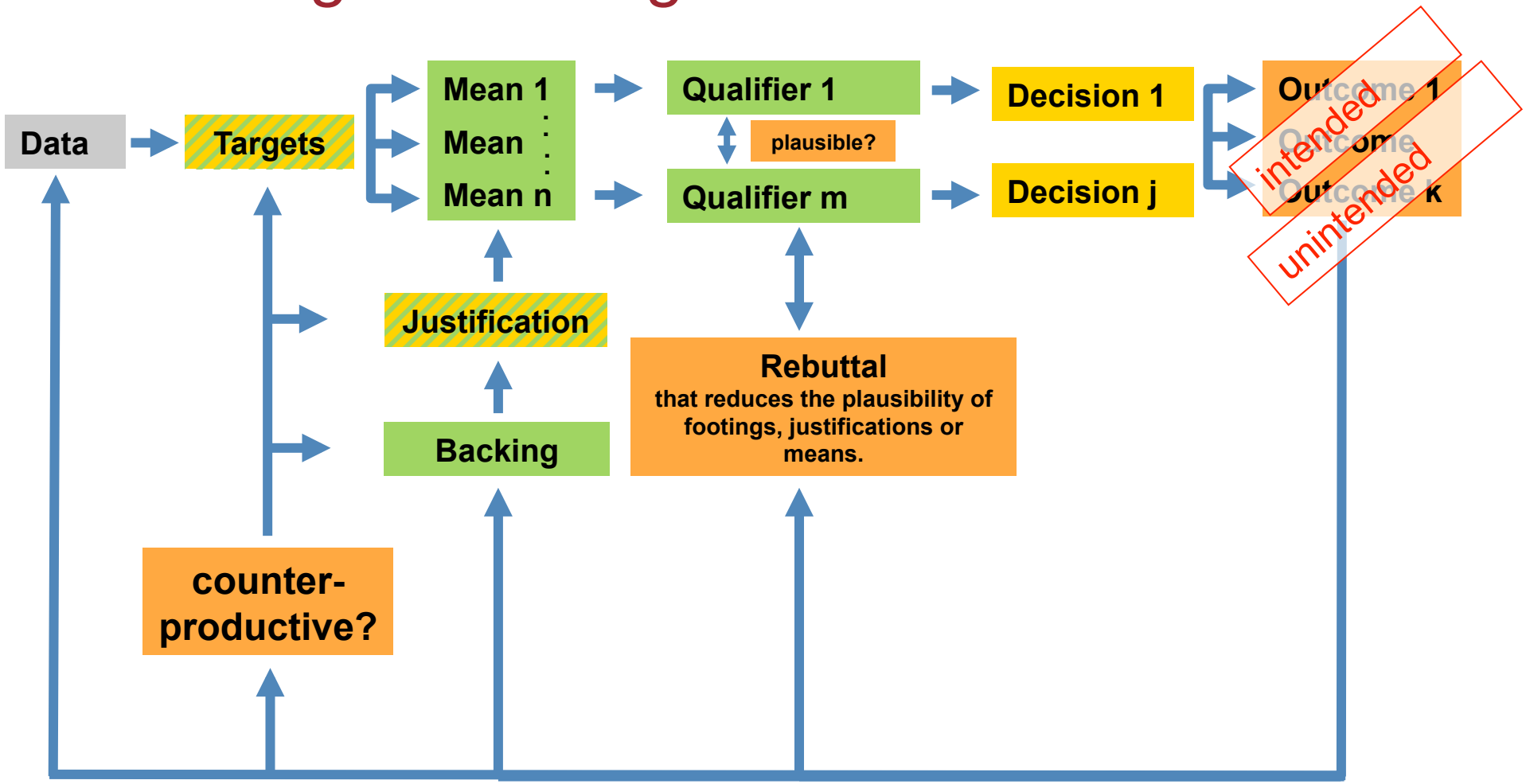
Such as impacts from excessive use of biomass or geoengineering

Consideration of unintended side-effects of BECS / Geo-engineering

ipcc
INTERGOVERNMENTAL PANEL ON climate change

WMO UNEP

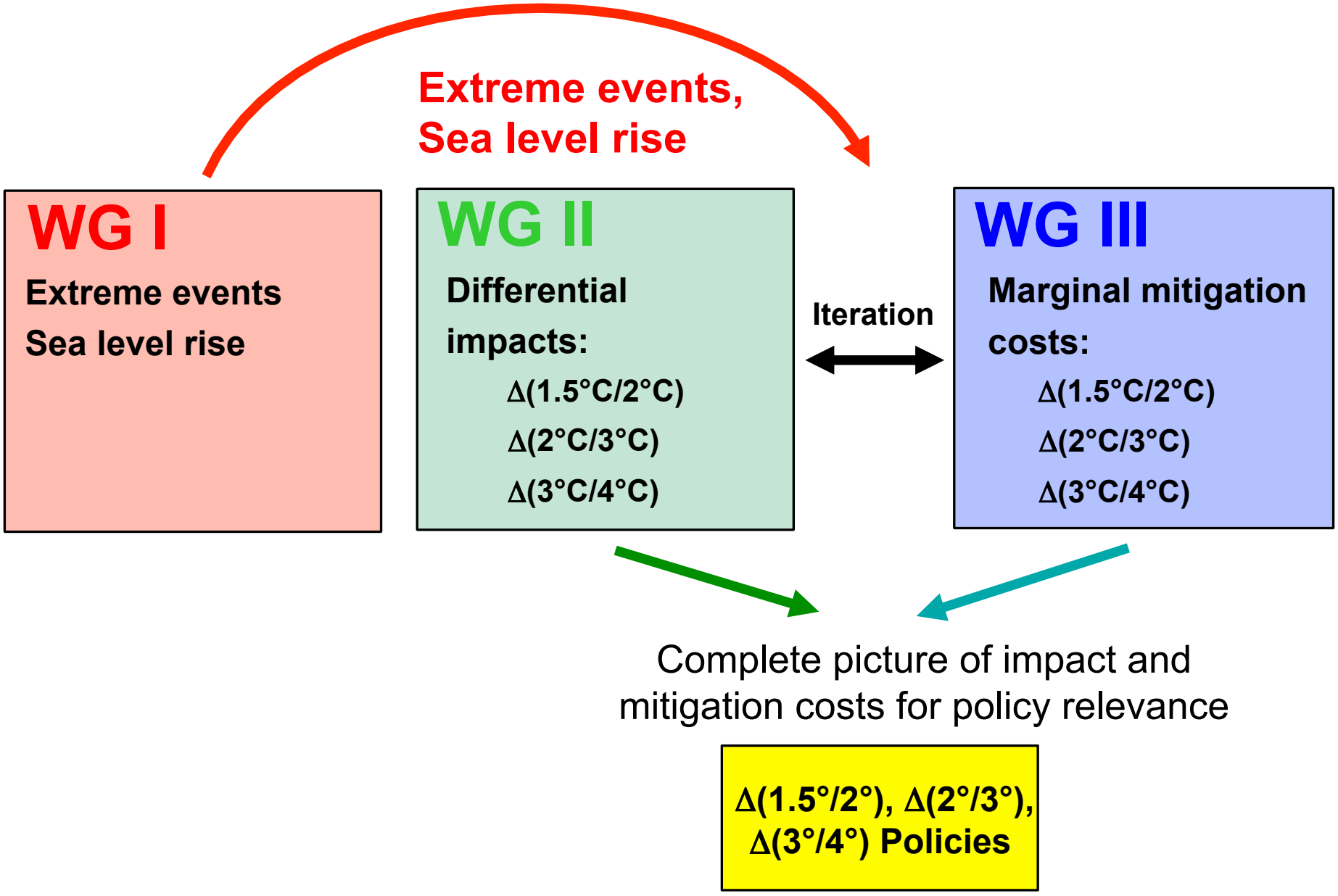
The Pragmatic-Enlightened Model



Legend:

- Policy Makers
- Science
- Outcome

Implications for the Scenario Process

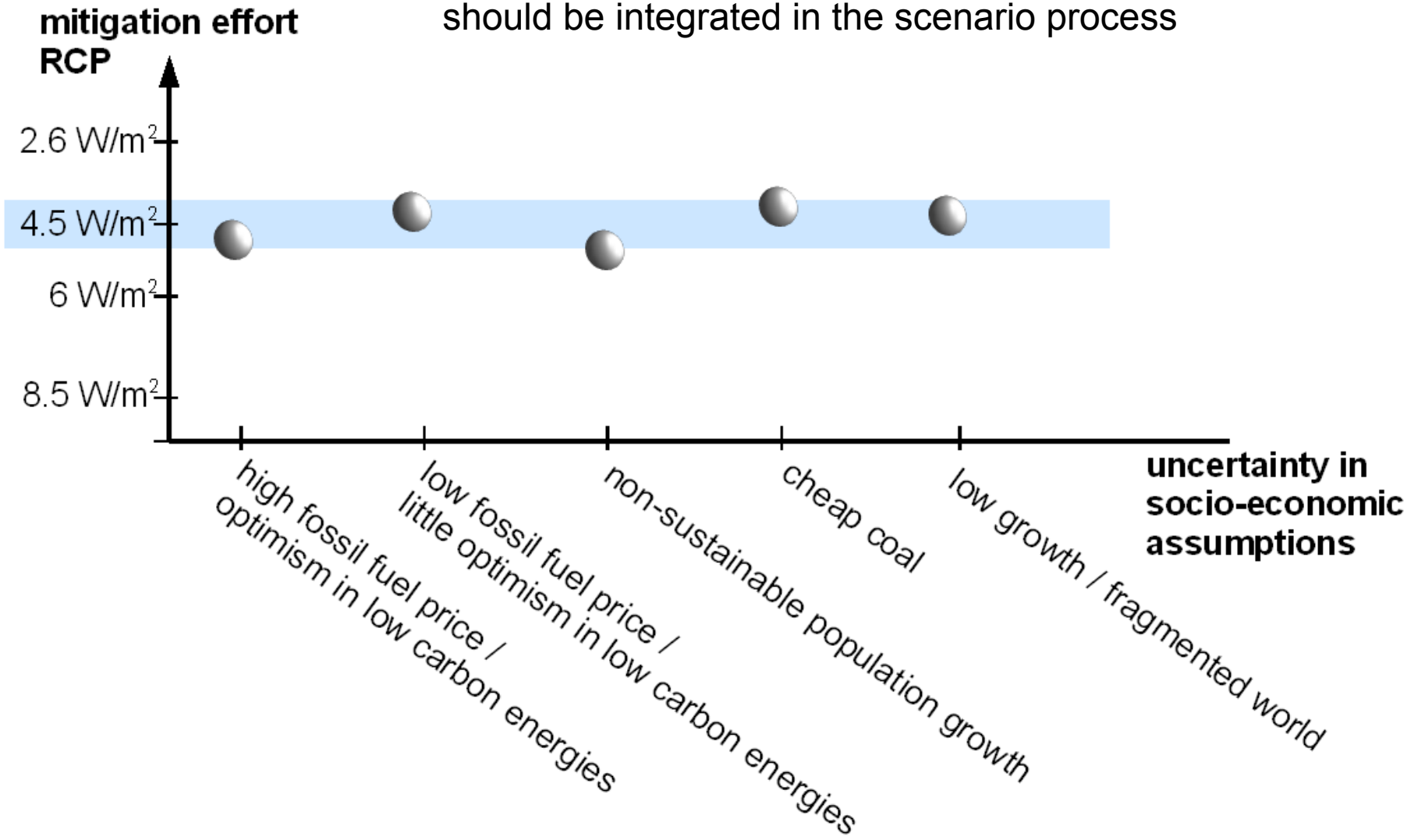


The Research Challenge

- Low Stabilisation Scenarios which identify the technical and institutional requirements
- Exploring the costs, benefits and risks of different mitigation options
- Identifying differential impacts and develop a classification of risks comprising tipping points in the natural environment and also in society.
- Second best: More realistic policy cases through consideration of effects of fragmented carbon markets & technology failures

Assess Scenarios in AR5

Idea for the conceptualization of scenarios, which should be integrated in the scenario process



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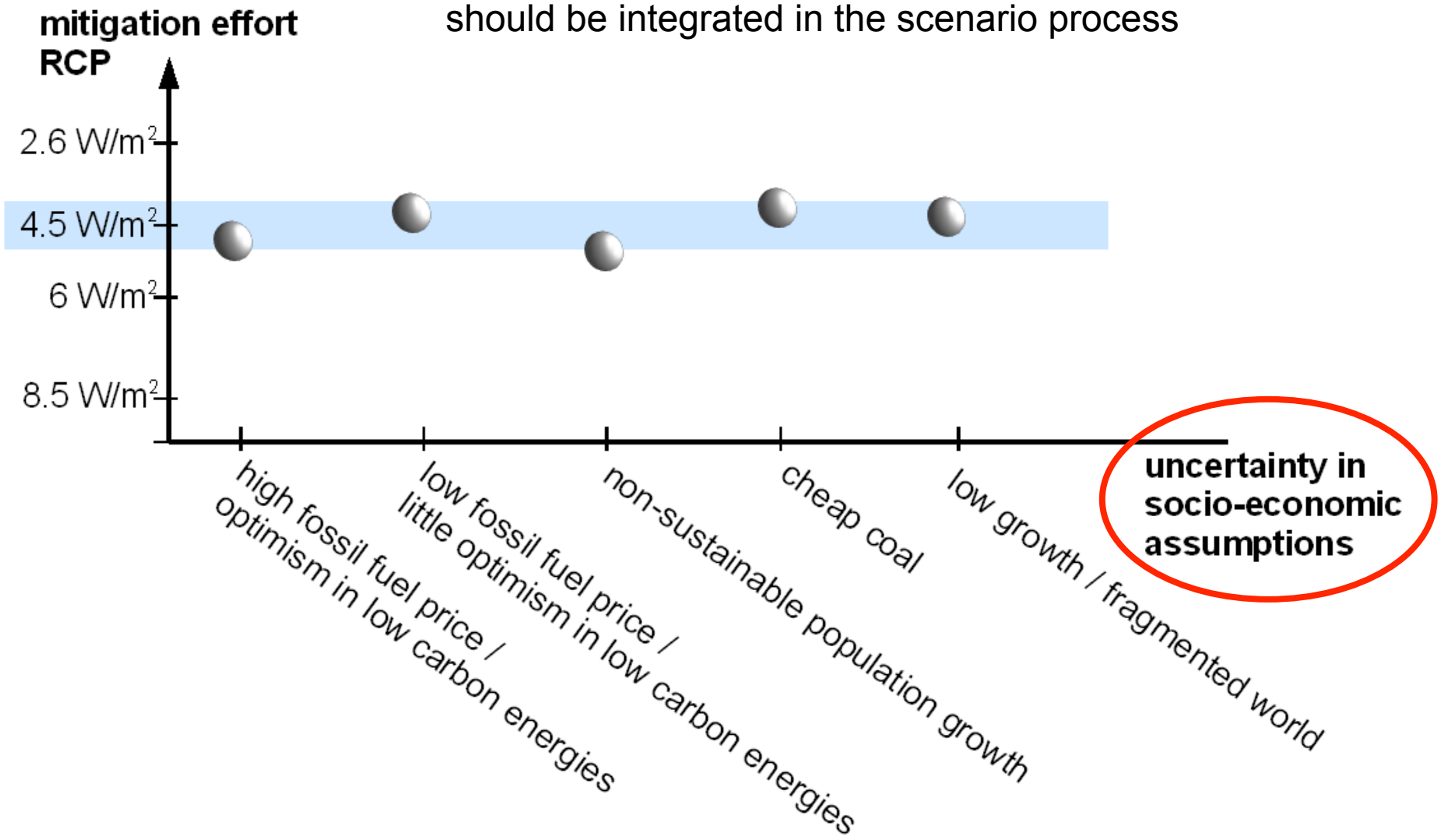
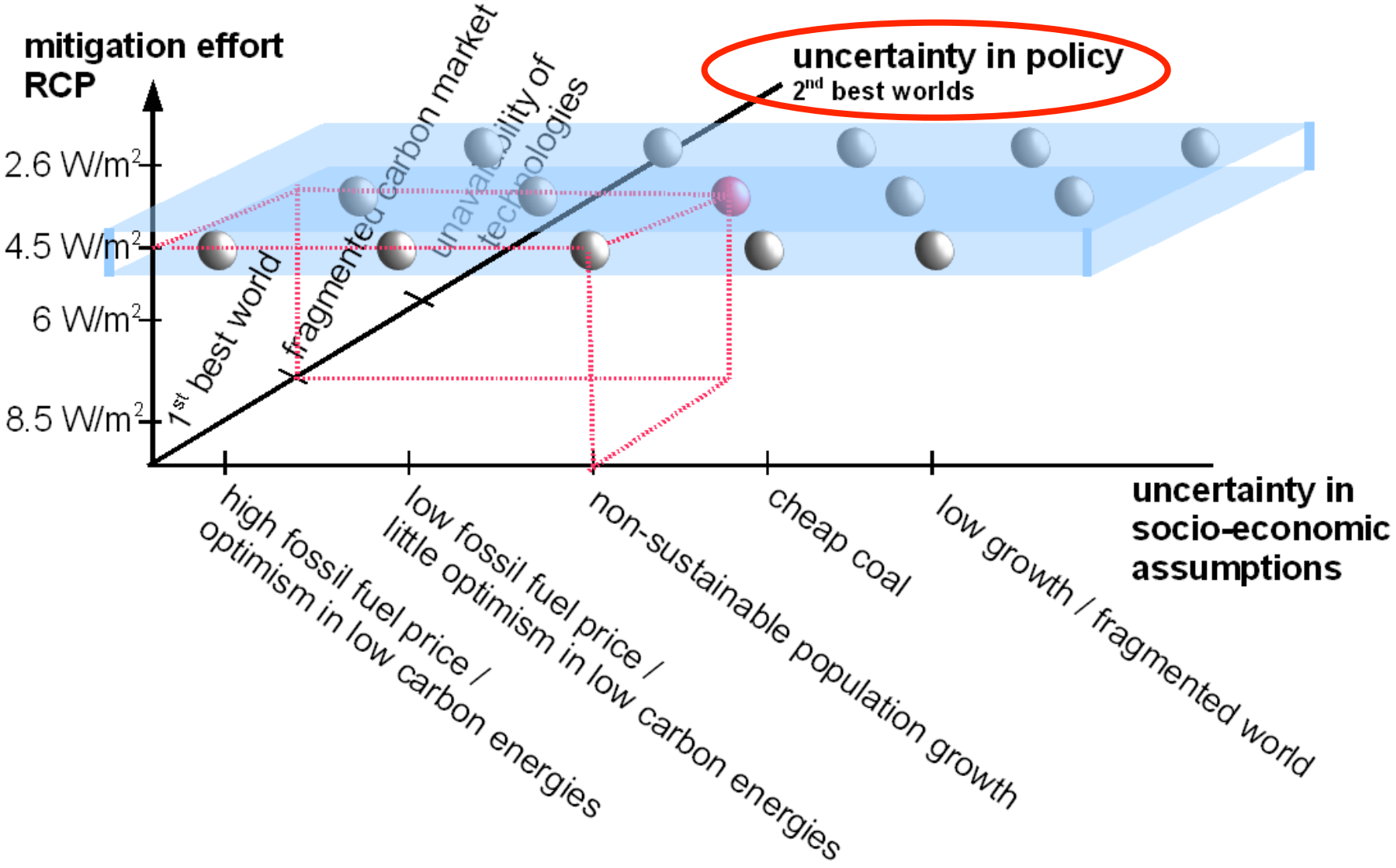
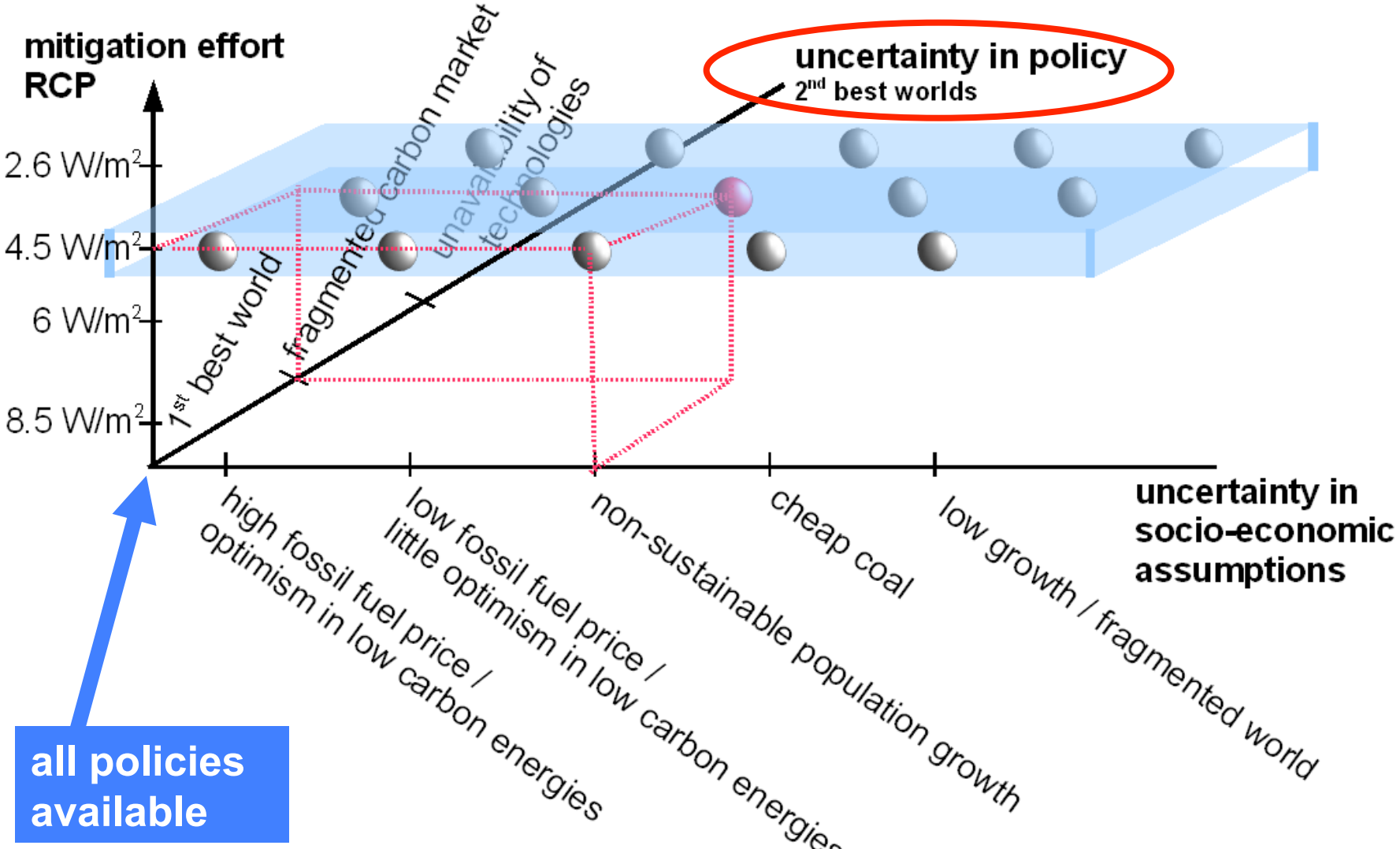


Socio-economic assumptions should be self-consistent

Assess Scenarios in AR5



Assess Scenarios in AR5



The Parts of the WG III AR5 Outline

Part I
Introduction

Part II
Framing Issues

Part III
Pathways for Mitigating Climate Change

Part IV
Assessment of Policies, Institutions and Finance

AR5 WG III Outline

I: Introduction	1. Introductory Chapter
II: Framing Issues	2. Integrated Risk and Uncertainty Assessment of Climate Change Response Policies 3. Social, Economic and Ethical Concepts and Methods 4. Sustainable Development and Equity
III: Pathways for Mitigating Climate Change	5. Drivers, Trends and Mitigation 6. Assessing Transformation Pathways 7. Energy Systems 8. Transport 9. Buildings 10. Industry 11. Agriculture, Forestry and Other Land Use (AFOLU) 12. Human Settlements, Infrastructure and Spatial Planning
IV: Assessment of Policies, Institutions and Finance	13. International Cooperation: Agreements and Instruments 14. Regional Development and Cooperation 15. National and Sub-national Policies and Institutions 16. Cross-cutting Investment and Finance Issues

SYR outline – iii. Response

Solution space	1
Risk Management & response (incl. Art 2)	**2**, 6
Effect of existing climate-related policies	13-15
Adaptation options	4, 7-12, 15
Mitigation options	overarching
Co-benefits & externalities	3, 5-12
Bottom-up & top-down Integration	6, 7-10
GHG metrics	3, 5
Multi-metric valuations	3, 5
Reduction of scientific uncertainty	overarching
Investment in R&D	3, 5, 6, **15**, 16
Geoengineering	5
Equity & sustainable development dimensions	**3**, 4, 6, 14
Interactions: adaptation, mitigation & development	4, 7-12, **14**, 15, 16

SYR outline – iv. Transition & Transformation

Pace and scale (dynamics)	6
Equity dimensions, time & space scales	3, 4
Development pathways & global transition	4, 6, 14
Behavioural & societal changes	4, 5
Benefits & costs (including co-benefits)	3, 5-12
Governance and institutional arrangements	13-16
Investment needs	6, 13-15, **16**,
Development issues	4, 6, **14**, 15

The Philosophy of the WG III AR5 Outline

Part I
Introduction

Part I
Introduction

Part II
Framing Issues

Part III
Pathways for Mitigating Climate Change

Part IV
Assessment of Policies, Institutions and Finance

To set the stage for the subsequent chapters

- Lessons learned from AR4
- New challenges for AR5
- Mitigation Challenges

The Philosophy of the WG III AR5 Outline

Part I
Introduction

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Framing Issues

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Pathways for Mitigating Climate Change

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Assessment of Policies, Institutions and Finance

Part II
Framing Issues

To lay the methodological foundations and underlying concepts for the subsequent chapters.

Short and concise chapters that will explore general themes and provide insights to Parts III and IV.

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Pathways for Mitigating Climate Change

Part IV
Assessment of Policies, Institutions and Finance

Part III
Pathways for Mitigating Climate Change

To provide an integrated assessment of sectors (from a bottom-up perspective) and transformation pathways (from a top-down perspective).

The Philosophy of the AR5 WG III Outline

I: Introduction

1. Introductory Chapter

II: Framing Issues

2. Integrated Risk and Uncertainty Assessment of Climate Change Response Policies
3. Social, Economic and Ethical Concepts and Methods
4. Sustainable Development and Equity

Chp 6: Assessing Transformation Pathways

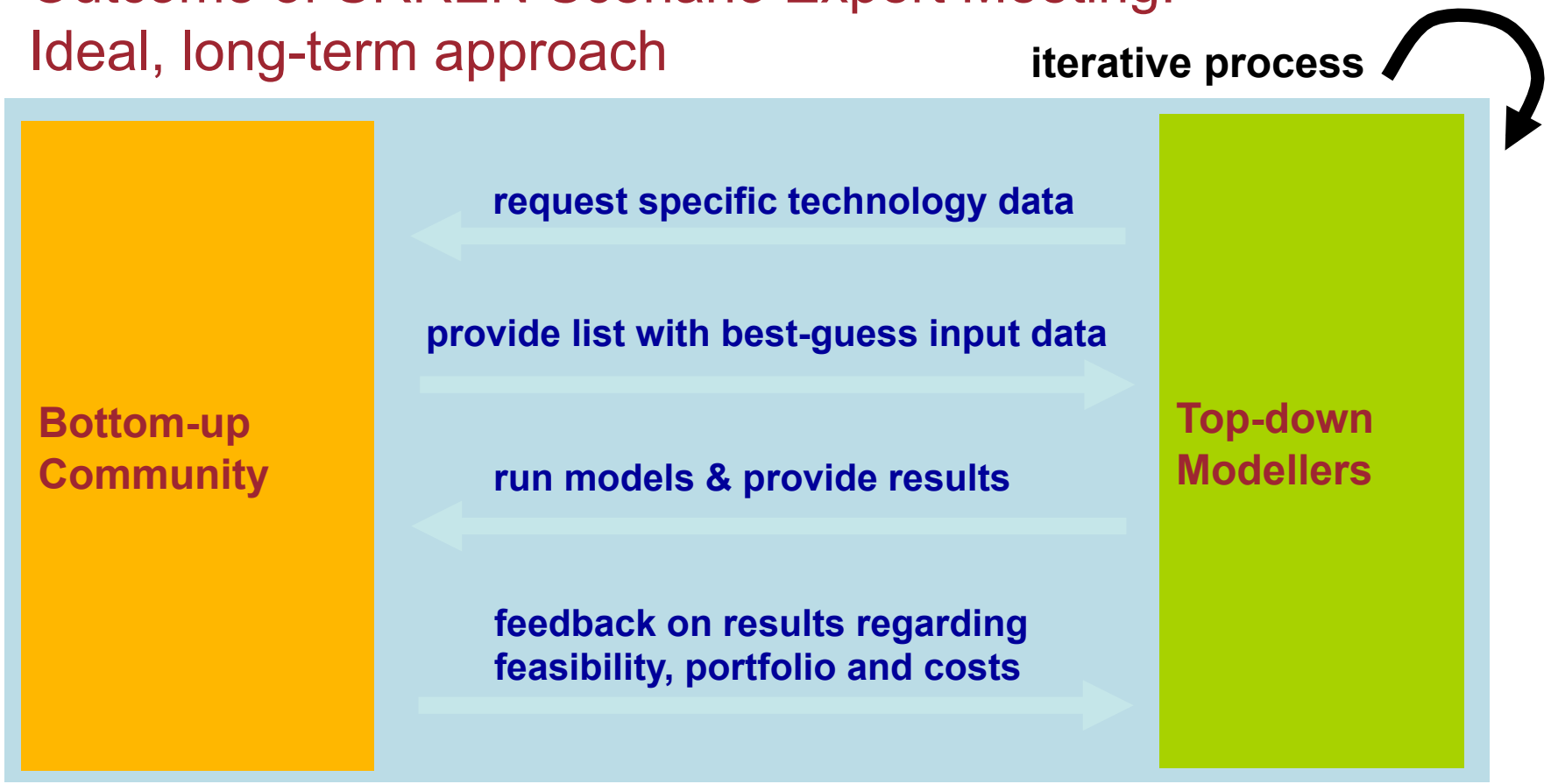
Scenarios are the backbone of consistency between WG II and WG III.

IV: Assessment of Policies, Institutions and Finance

13. International Cooperation: Agreements and Instruments
14. Regional Development and Cooperation
15. National and Sub-national Policies and Institutions
16. Cross-cutting Investment and Finance Issues

AR5 Run-up: Bottom-up – Top-down Interaction

Outcome of SRREN Scenario Expert Meeting: Ideal, long-term approach



Goal: More realistic representation of policy space.

The Philosophy of the WG III AR5 Outline

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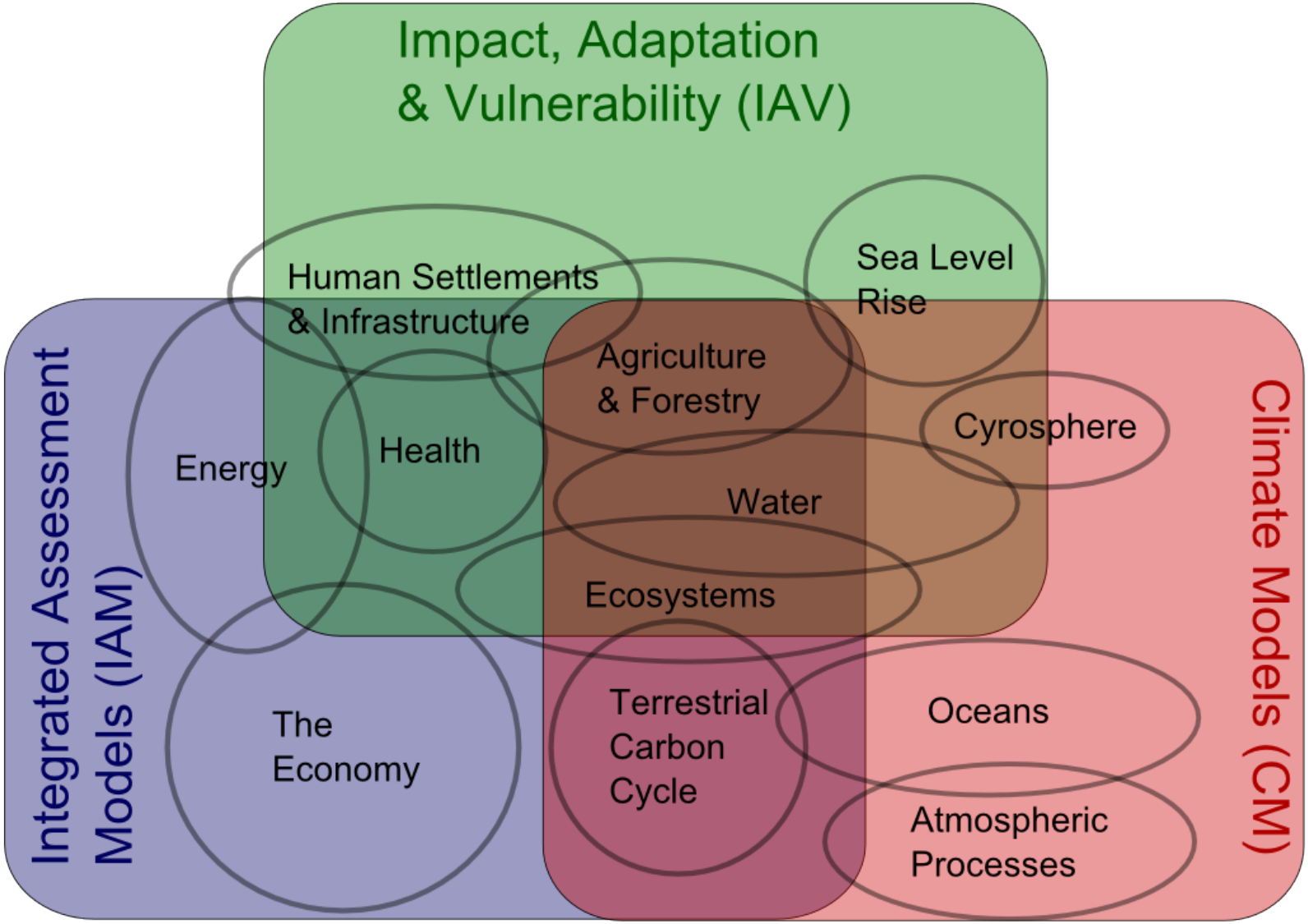
Assessment of Policies, Institutions and Finance

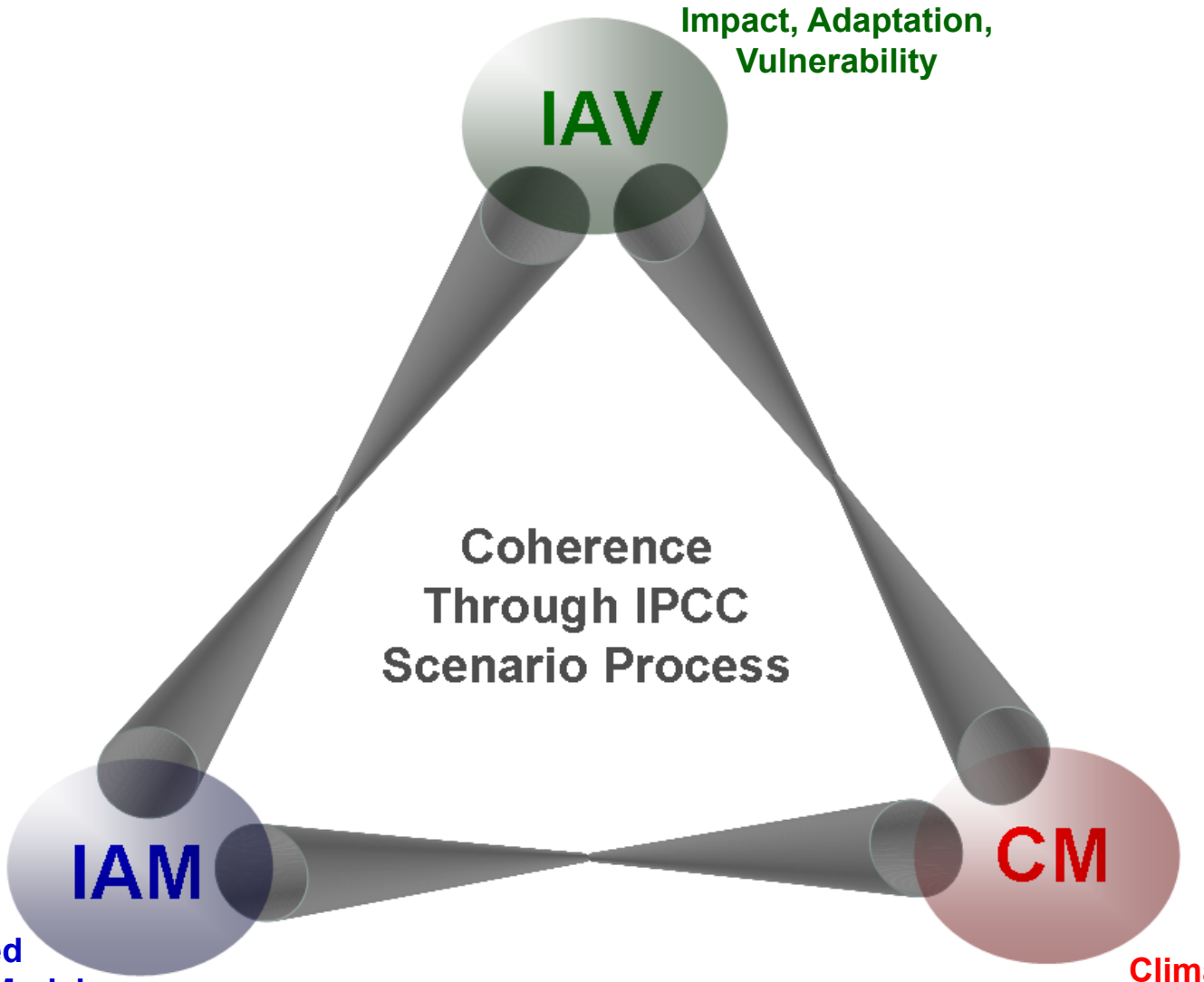
To assess policies on all scales, from international to sub-national, and the role of investment and finance for mitigation.

Assessment Communities

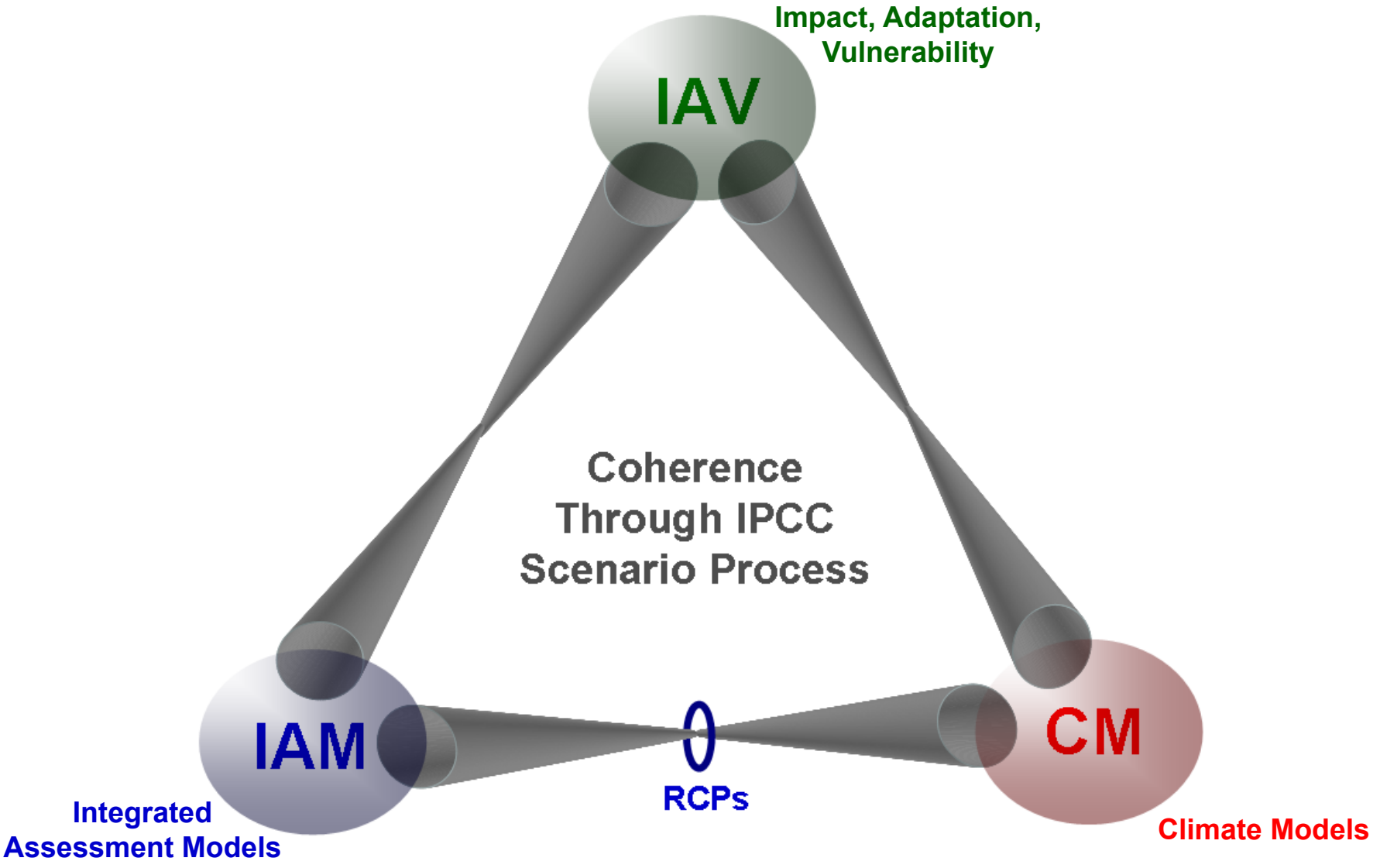


Modified from Graphic by John Weyant (2009)

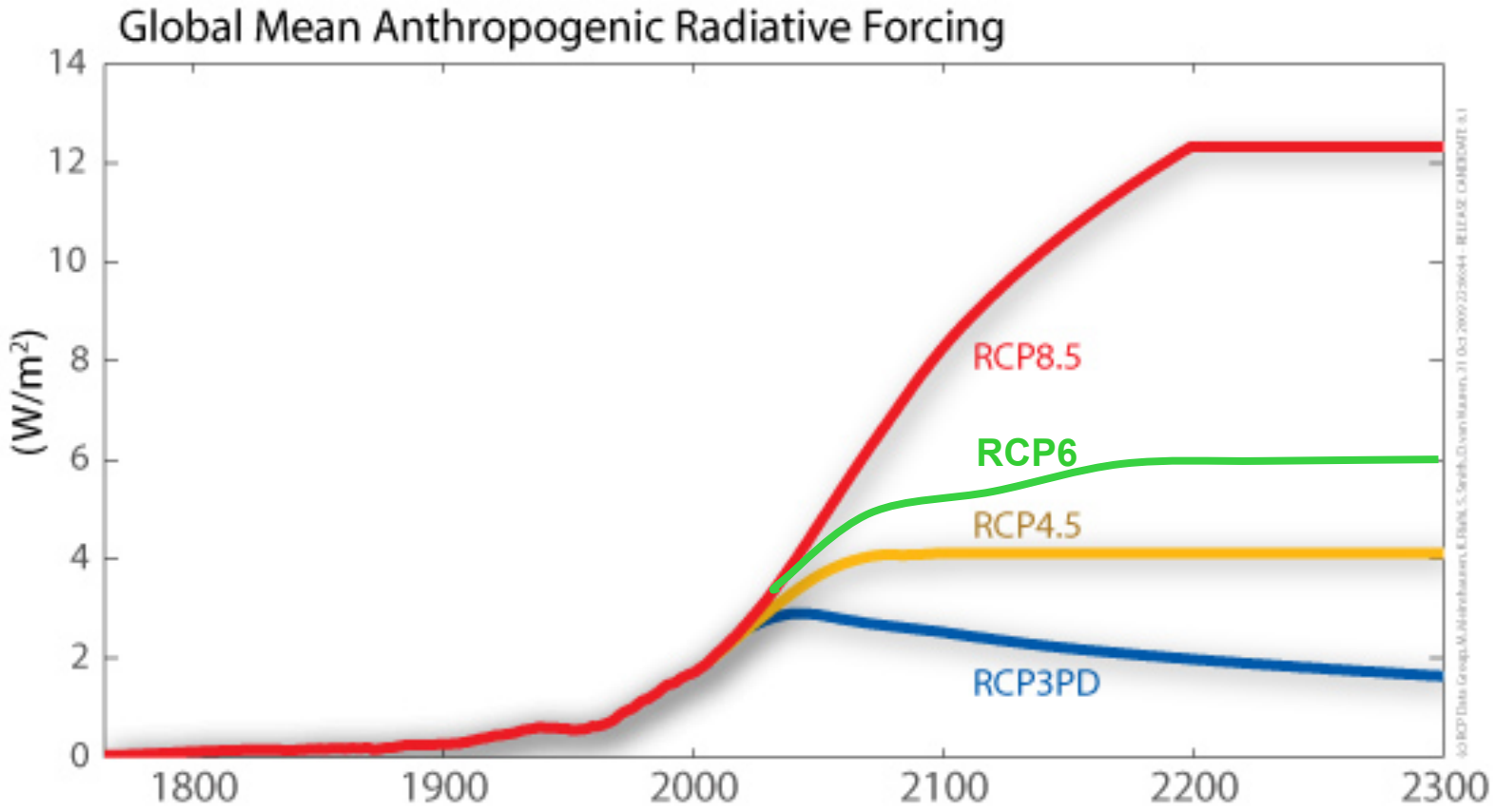
IPCC Scenario Process



IPCC Scenario Process



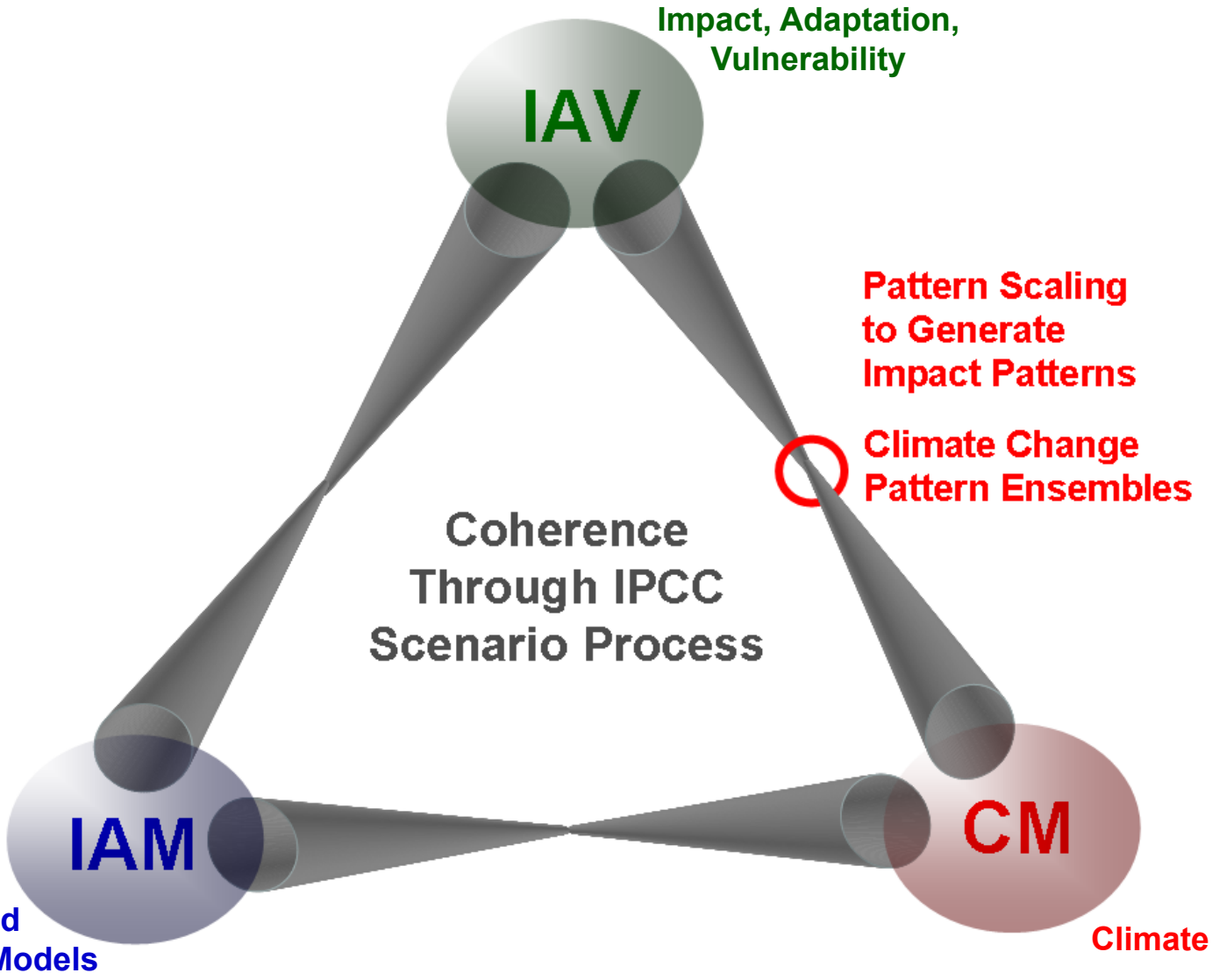
Representative Concentration Pathways (RCPs)



All Data available at
http://www.pik-potsdam.de/~mmalte/rcps/

Meinshausen (2009)

IPCC Scenario Process



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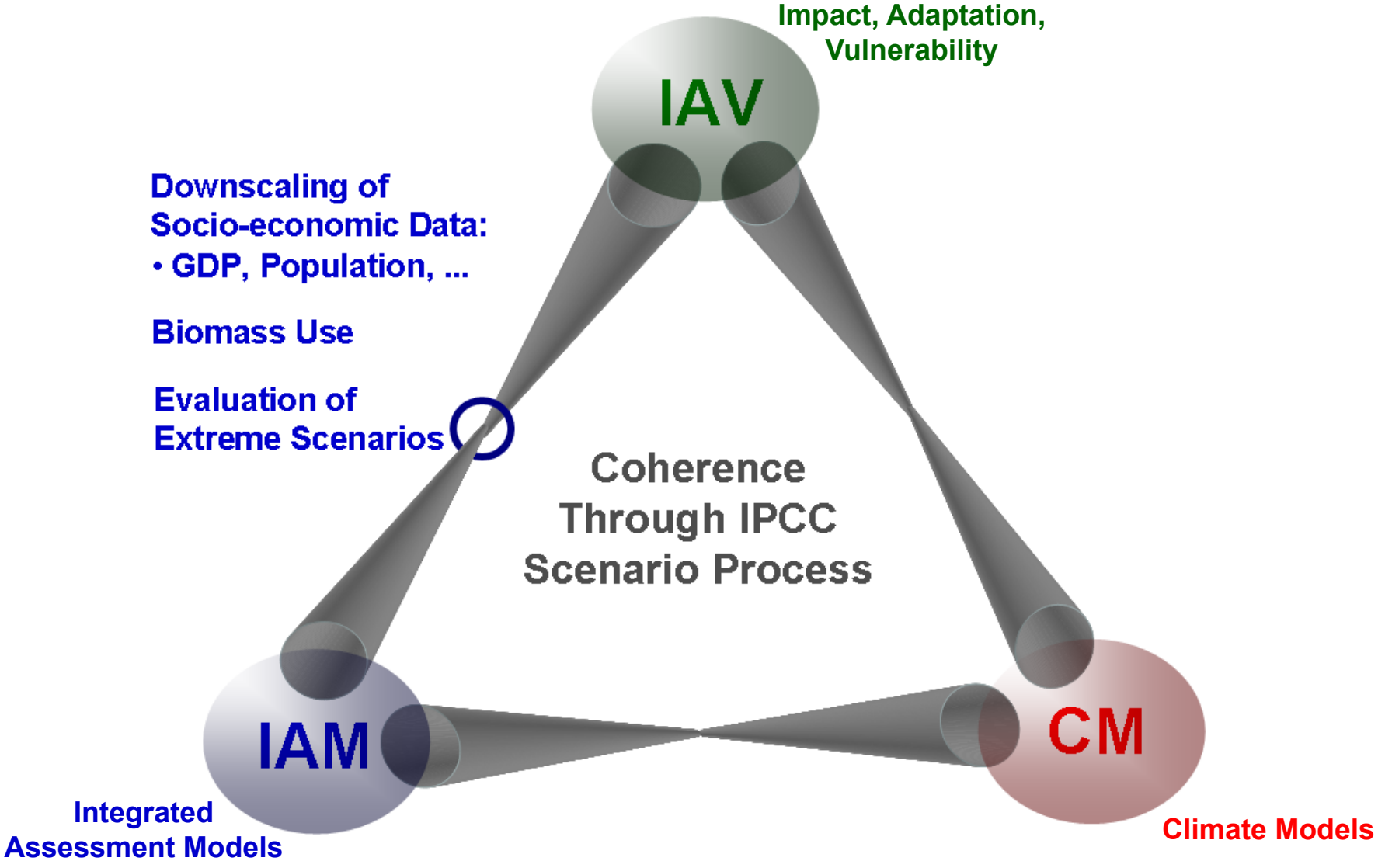

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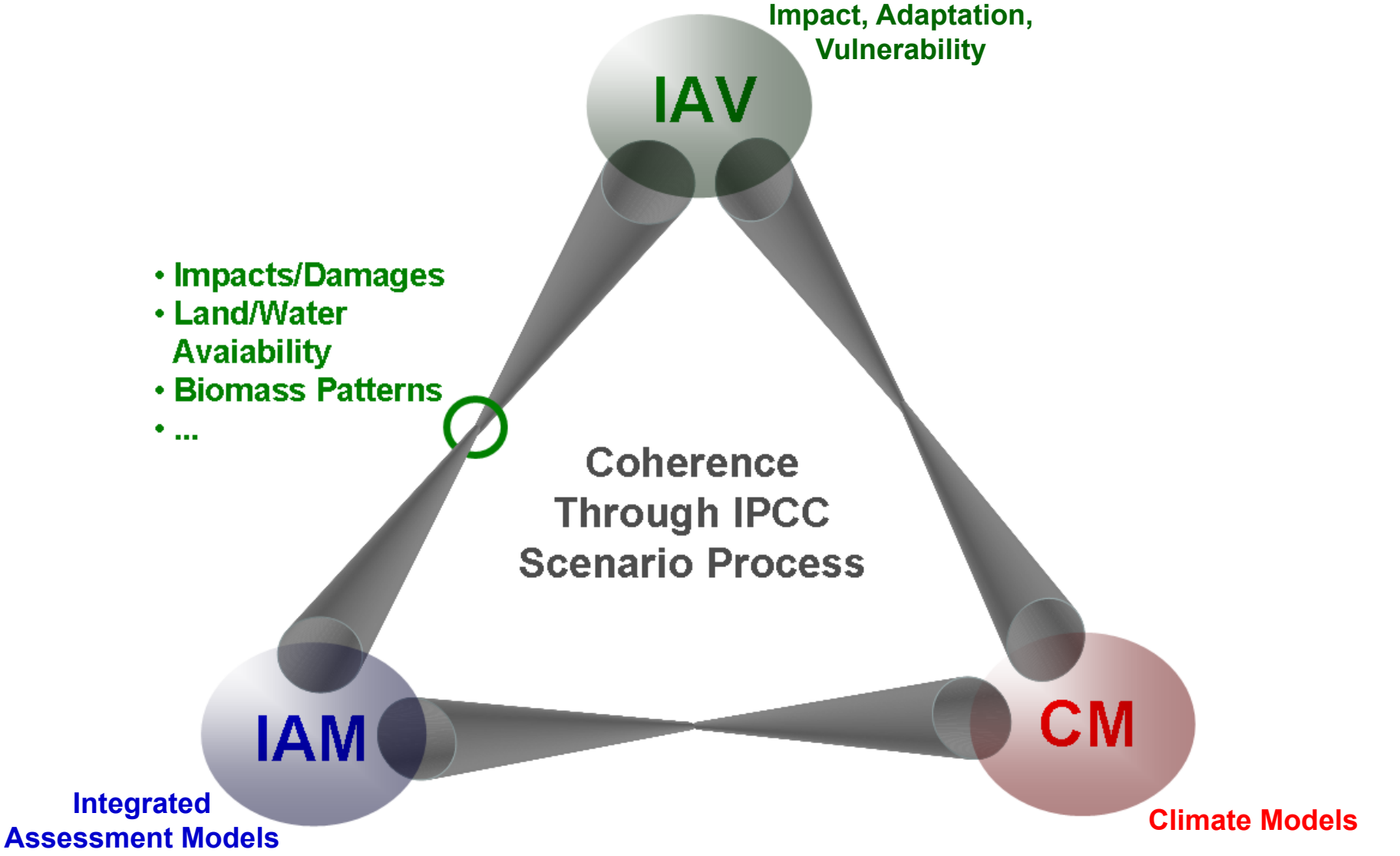

Final Remark

The IPCC is the honest broker between experts and decision makers in business, politics and civil society.

The IPCC should be policy relevant without being policy prescriptive.