

A large, blue, serif 'APN' logo is centered on the slide. A horizontal line passes through the middle of the letters, with the text 'Asia-Pacific Network for Global Change Research' written in a smaller font along this line.

Asia-Pacific Network for Global Change Research

Dr. Graeme Pearman

APN Scientific Planning Group Member (Australia)
Chair Capacity Building Committee, APN CAPaBLE Program
Monash University, GP Consultants

Outline of Presentation

- APN - a brief overview
- APN activities update:
 - Funded Projects
 - CAPaBLE Programme
 - Publications
 - Synthesis Activities
 - Science-Policy Links
 - Evaluation of APN and Second Strategic Plan

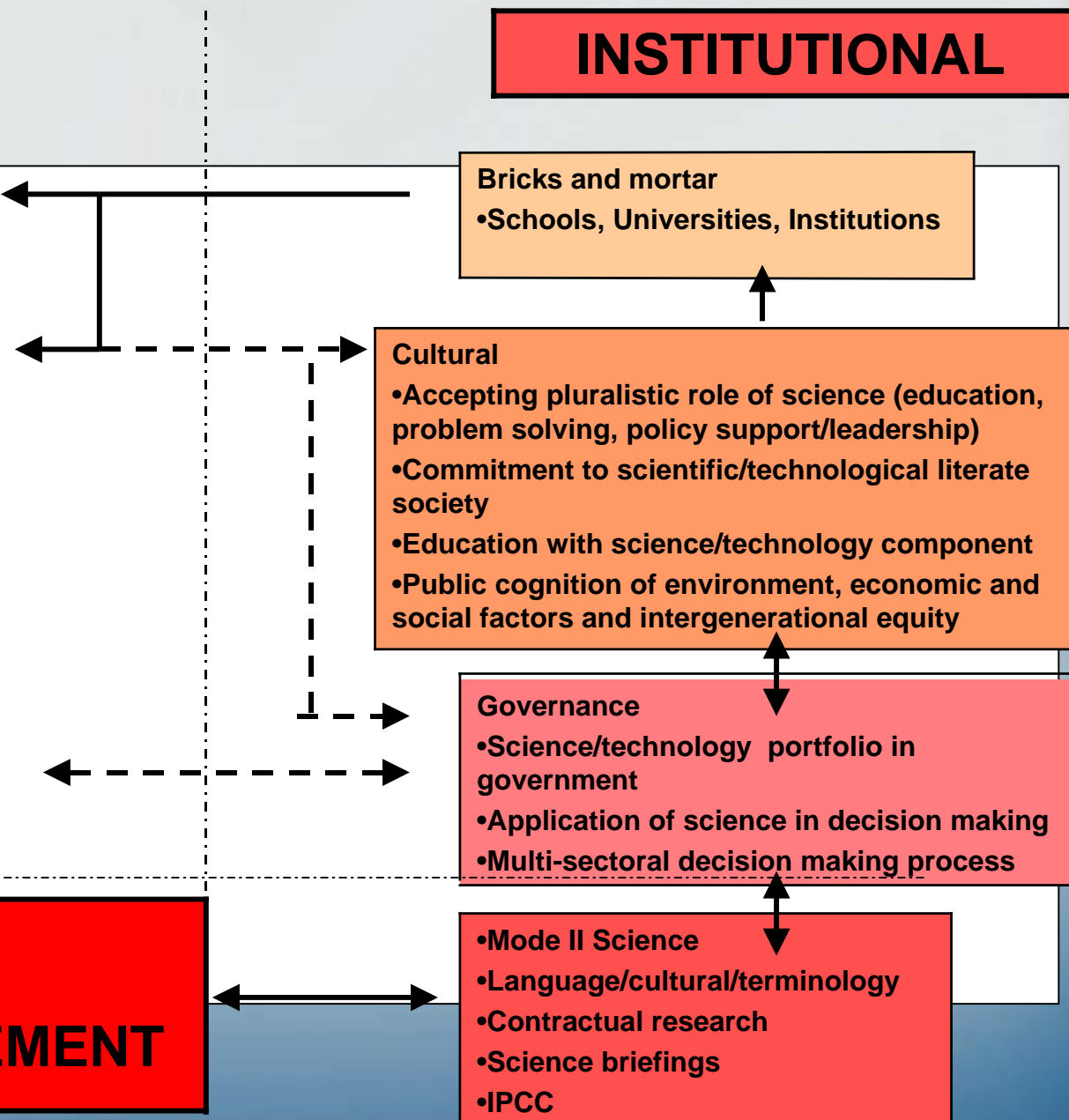
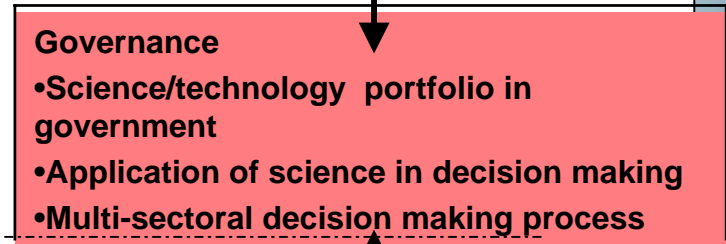
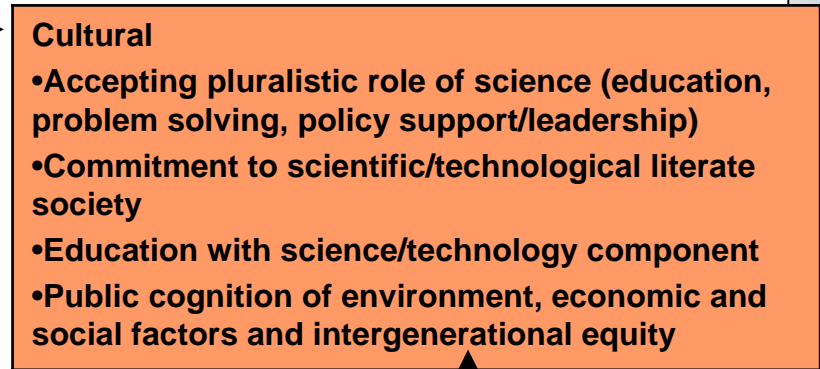
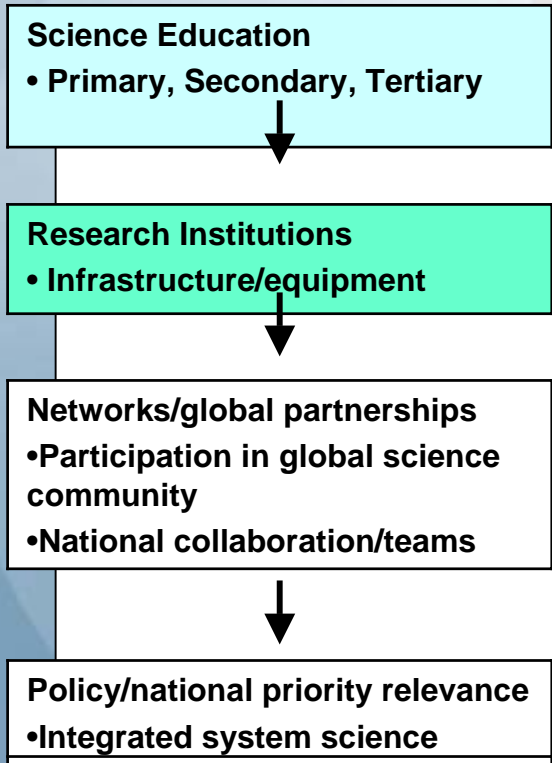
What is the APN?

Inter-governmental network in the Asia Pacific Region with the priority goals of:

- Fostering global change research through regional cooperation and partnerships
- Increasing developing-country participation in global change research through networking/capacity building
- Strengthening interactions between the natural and social sciences in global change with the policy- and decision-making community

SCIENCE

INSTITUTIONAL

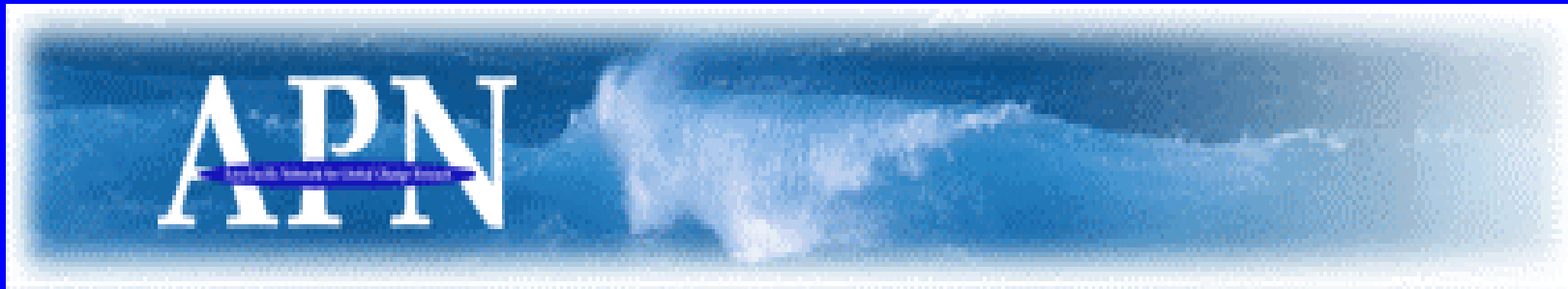


Who are the members of APN?



Current member countries of the APN:
 Australia, Bangladesh, Cambodia, China, Fiji, India, Indonesia, Japan, Lao People's Democratic Republic, Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Republic of Korea, Russian Federation, Sri Lanka, Thailand, United States of America and Viet Nam.

Who sponsors APN?



National Science Foundation, USA

The Global Change Community

Scientific Community Programmes

IGBP

IHDP

WCRP

DIVERSITAS

START

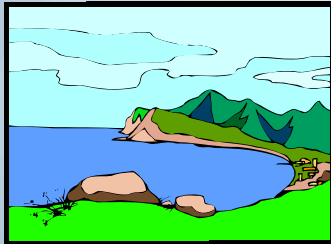
Inter-Governmental Networks

IAI

APN

EU

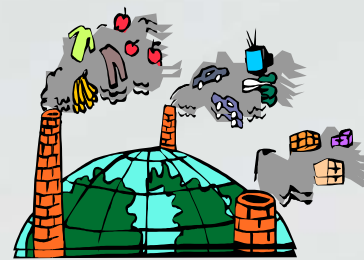
APN Research Framework



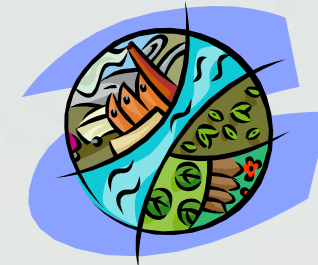
Changes in Coastal Zones & Inland Waters



Climate Change & Variability



Changes in Atmospheric Composition



Changes in Terrestrial Ecosystems & Biodiversity



Integration of the findings of natural science with social and economic factors



Input to policy making and implementation

Human Dimensions of Global Change





Select Examples of APN Funded Projects (2004/2005)

- **Water Resources in South Asia**
- **Inventory of Glaciers and Glacial Lakes and the Identification of Potential Glacial Lake Outburst Floods**
- **Building Local Capacity for Global Change Research: Millennium Ecosystem Assessment**
- **Carbon Management into Development Strategies of Cities**
- **Integrated Regional Studies of Global Change in Monsoon Asia**
- **Climate Interactions and Marine Ecosystems**
- **Globalization and Food Systems**

APN and Sustainable Development

CAPaBLE

APN and Sustainable Development

CAPaBLE

**Capacity Building and Enhancement for
Sustainable Development**

● Main Activities under Phase I

- Capacity Enhancement: research projects planned and implemented by leading developing country scientists targeting specific topics related to climate change.
- Capacity Building: activities for aspiring scientists.
- Dissemination: activities for policy-makers, decision-makers & for civil-society.
- End-Product: an APN publication as an end-product (synthesis book that will synthesise the activities and outcomes that resulted from this Programme).

Comprehensive Research Projects

- **CRP-Theme I: Enhancement of National Capabilities in the Application of Simulation Models for the Assessment of Climate Change and its Impacts on Water Resources and Food and Agriculture**
- **CRP-Theme II: Integrated Assessment Model for Developing Countries and Analysis of Mitigation Options and Sustainable Development Options**



Capacity Building Activities

CB-01	Building Capacity of Mekong River Countries to Assess Impacts from Climate Change
CB-02	Training Institute on Climate and Extreme Events in the Pacific
CB-03	CB for GHG Inventory Development in A-P Developing Countries
CB-04	Creating Climate Knowledge Networks through Strategic, Global Linkages (with IAI)
CB-05	Climate Change Mitigation with Locally Owned Technology and Systems
CB-06	UNFCCC Training Workshop on National Communications
CB-07	National CB Workshop on GC Research
CB-08	RCM/CLIVAR Workshop

- α Capacity enhancement of leading researchers in developing countries to produce comprehensive *scientific results* on climate change impacts, vulnerabilities, adaptation and mitigation strategies.**
- β Capacity building of *aspiring scientists* through sharing of knowledge, experience, scientific information and data collection on climate change impacts, vulnerabilities, adaptation and mitigation.**
- γ Improvement of *informed decision-making* in developing countries by dissemination of the outcomes of research activities to policy-makers, decision-makers and civil society.**



APN Global Change Coastal Zone Management Synthesis

APN Coastal Synthesis - Rationale

- Coastal zone is focus area for APN activities
- The coastal zone in the A-P region subject to significant and complex pressures of resource use
- Better approach needed to achieve sustainable development in the A-P coastal zone
- Synthesis approved at 8th APN Inter-governmental meeting
- Completion of synthesis by 10th anniversary of APN



APN Global Change Coastal Zone Management Synthesis

APN Coastal Synthesis - Objectives

- a) Evaluate achievements and present status of APN coastal zone projects by reviewing past projects.
- b) Review present status and major problems of the coastal environment and identify urgent research needs
- c) Identify a future research direction for coastal environments that is relevant to the region.
- d) Report results to the APN Intergovernmental meeting for review to determine future APN policy.

APN Global Change Coastal Zone Management Synthesis

Outline of Synthesis Book Chapters

1. Introduction
2. State of the environment and global change in a-p coastal zone
3. Value of the A-P CZ
4. Approaches to coastal zone management
5. How are catchments (and their management) interacting with A-P CZ ?
6. The history of coasts in the Asia-Pacific region
7. Human response to coastal change
8. Where are the hotspots of urbanization and population growth A-P CZ?
9. Coasts in non-urban areas
10. How are organic and inorganic pollutants impacting on the A-P CZ?
11. Coastal ecosystems
12. Conclusions/synthesis/future direction of global change coastal research

APN Global Change Coastal Zone Management Synthesis

CONCLUSION - Synthesis links to key APN Aims

- To foster global change research in the Asia-Pacific region (*by identifying research gaps and new directions*)
- To strengthen links between the science community and policy makers (*through outputs as science book and management document*)

- APN effectively brought their national focal points and scientists together this year by holding joint sessions at the 9th IGM/SPG Meetings in Canberra.
- This effort will be continued in all future annual meetings.



“As a regional forum bringing together policy-makers and researchers on practical, policy-relevant research and capacity building, the APN is making an invaluable contribution to our ability to respond to global change.”

(Statement: Howard Bamsey, CEO, Australian Greenhouse Office)

Asia-Pacific Network for Global Change Research (APN)¹
 Australian Greenhouse Office (AGO)

**Free, one-day symposium on
 GLOBAL CHANGE RESEARCH**

March 23, 2004, 10am to 5.30pm
Theatrette, Australian Greenhouse Office,
John Gorton Building,
King Edward Terrace, Canberra

Observations of the world's physical and biological environment have shown clearly that change to these earth systems is underway. In the first instance, issues such as ozone depletion, climate change, salinisation of soils and waterways, etc. have grown out of observations and process studies of these systems. Similarly, attention to the biological systems has shown issues relating to the loss of biodiversity, deterioration of ecosystem function and feedbacks between the biology and the physical systems are matters of global and regional change. Somewhat more recently, the connection of these changes to the human dimensions of population growth and resource demands have been studied. All of this work, referred to as *global change science*, underpins our potential to provide integrated and sustainable options for the future.

This Symposium is a celebration of the achievements of the Australian global change research community, presenting a small set of examples of achievements and aspirations.


We invite colleagues from the global change research community and those with policy development responsibilities to join us in this celebration on the occasion of the just annual meeting of the APN Governmental Management Group and its Scientific Steering Committee.

The program will include:

- **Australia's approach to climate change**
Howard Benney, AGO
- **Science of Australia's greenhouse accounting system** Dr Gary Richards, AGO
- **Cape Grim: a 25-year record of the atmosphere**
Dr Graeme Pearman, CSIRO
- **Coral reefs and global change: emerging knowledge and management responses.**
Dr Paul Marshall, Great Barrier Reef Marine Park Authority
- **Changing landscapes – emerging issues.**
Dr Graham Harris, CSIRO
- **Climate modeling in Australia.**
Dr Mike Manton, Bureau of Meteorology
- **Global change and the carbon cycle**
Dr Michael Rassekh, IGBP Project Office
- **Adaptation, vulnerability and integrated risk assessment** Dr Roger Jones, CSIRO

Participants and their institutions are encouraged to bring materials to the Symposium that promote and display their respective contributions to Australian Global Change research. If you are interested in providing such material, please contact Dr Graeme Pearman (grape@csiro.au) about how this might be best achieved.

¹The APN is an intergovernmental mechanism for building scientific research capacity through the Asia-Pacific region for the purpose of addressing the issues surrounding global change at both the global and regional scale.
 For more details on APN see www.apn.org

A decorative banner at the top of the slide, consisting of several rectangular panels. The first panel on the left is the APN logo. The subsequent panels show a blurred, colorful image of a crowd of people, possibly at a conference or event.

APN's continued participation at the APCC is hopefully an indication of APN as a leading network that promotes climate change research and enhances the scientific capabilities of countries in the Asia-Pacific region



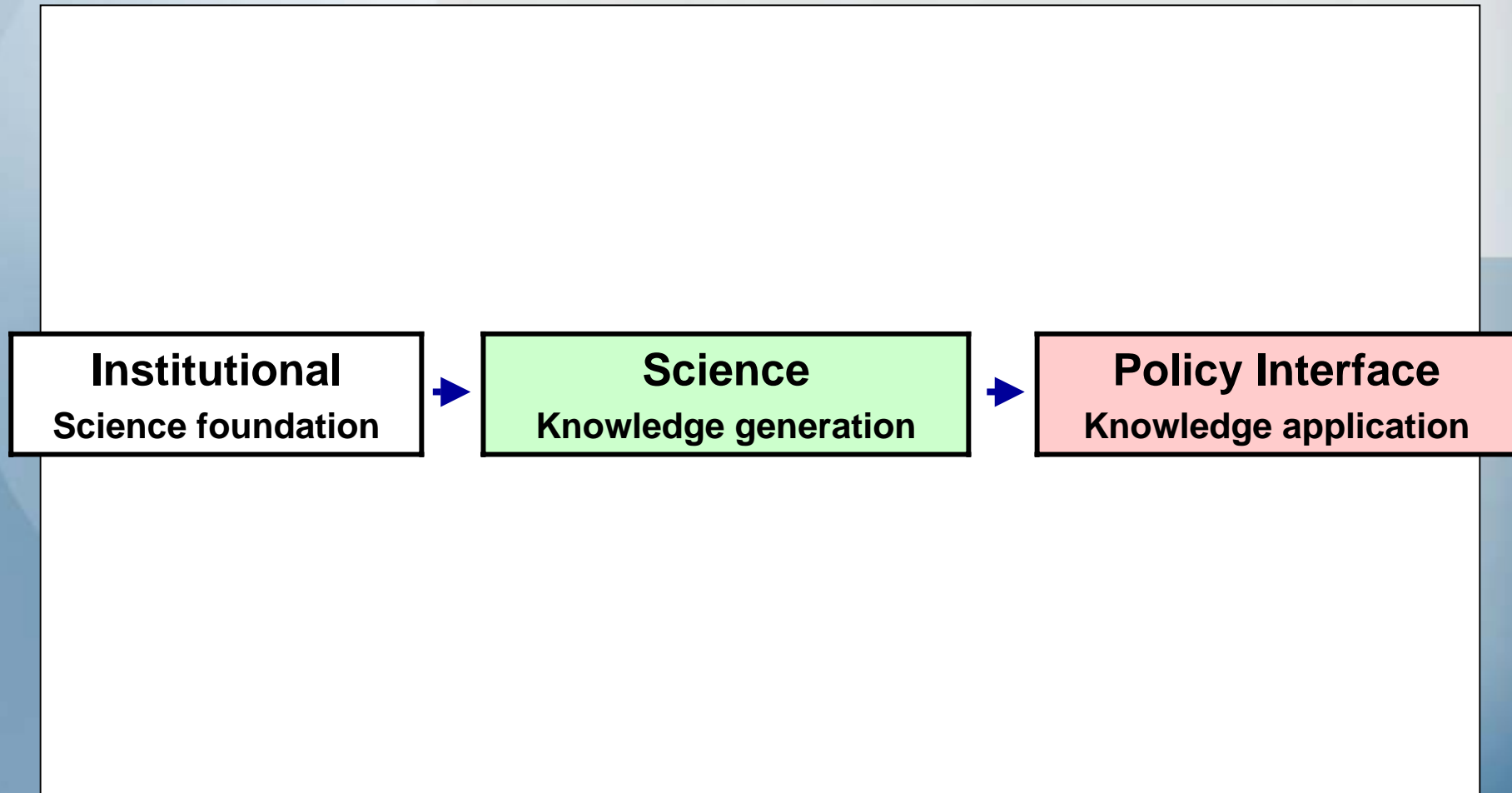
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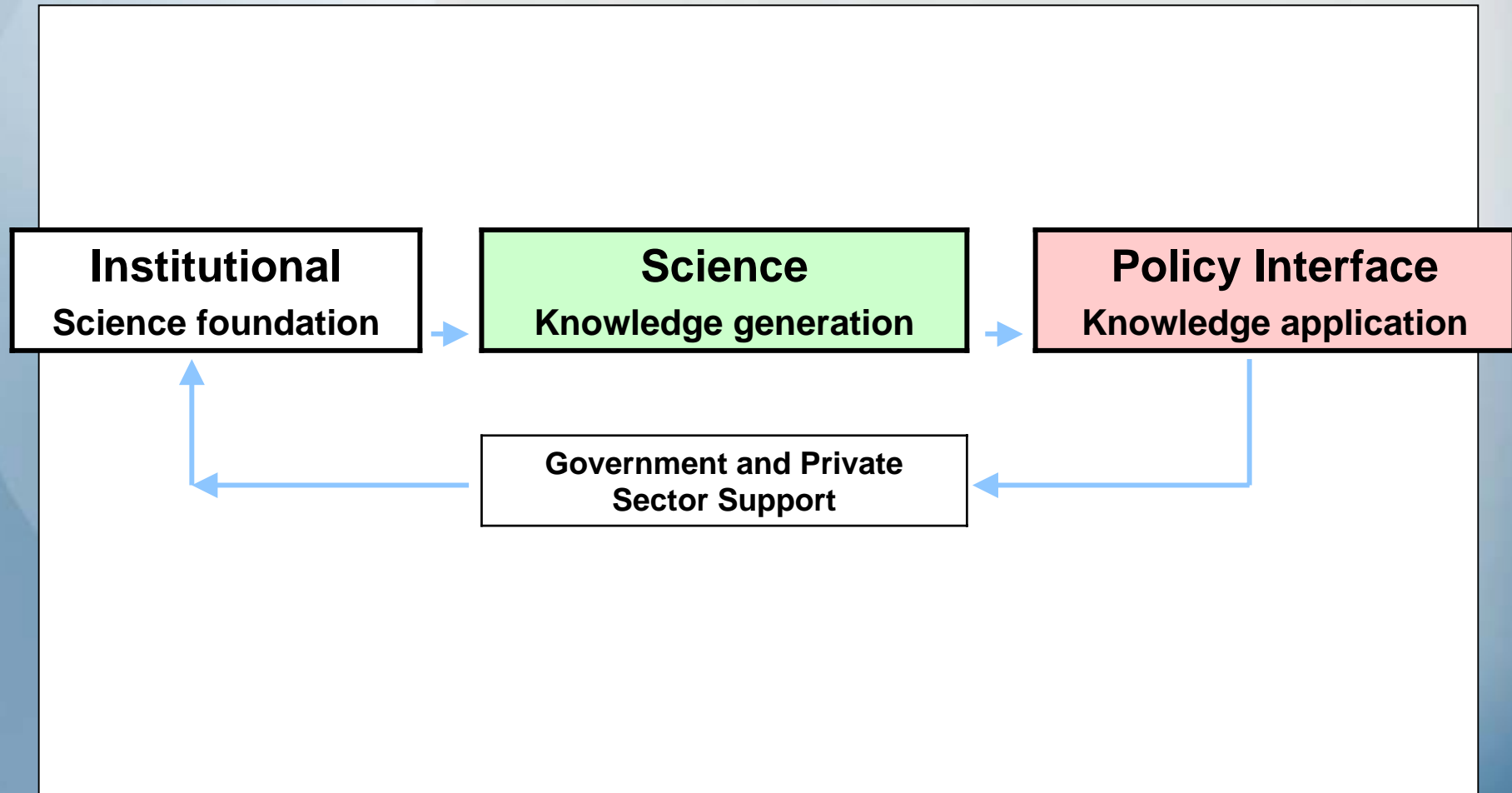
History of the APN

- 1990 White House Conference on Science and Economics Research Related to Global Change
- 1992-95 Planning Workshops
- 1996 Official Launch
- 1997 First Call for Proposals
- 1999 Adoption of the APN Strategic Plan 1999-2004
- 1999 Dedicated Secretariat Established in Kobe
- 2000 Initiation of Networking and Capacity Building Programme
- 2002 Adoption of the 'Framework of the APN'
- 2003 Launch of the CAPaBLE Programme
- 2004 Evaluation Process and Second Strategic Plan

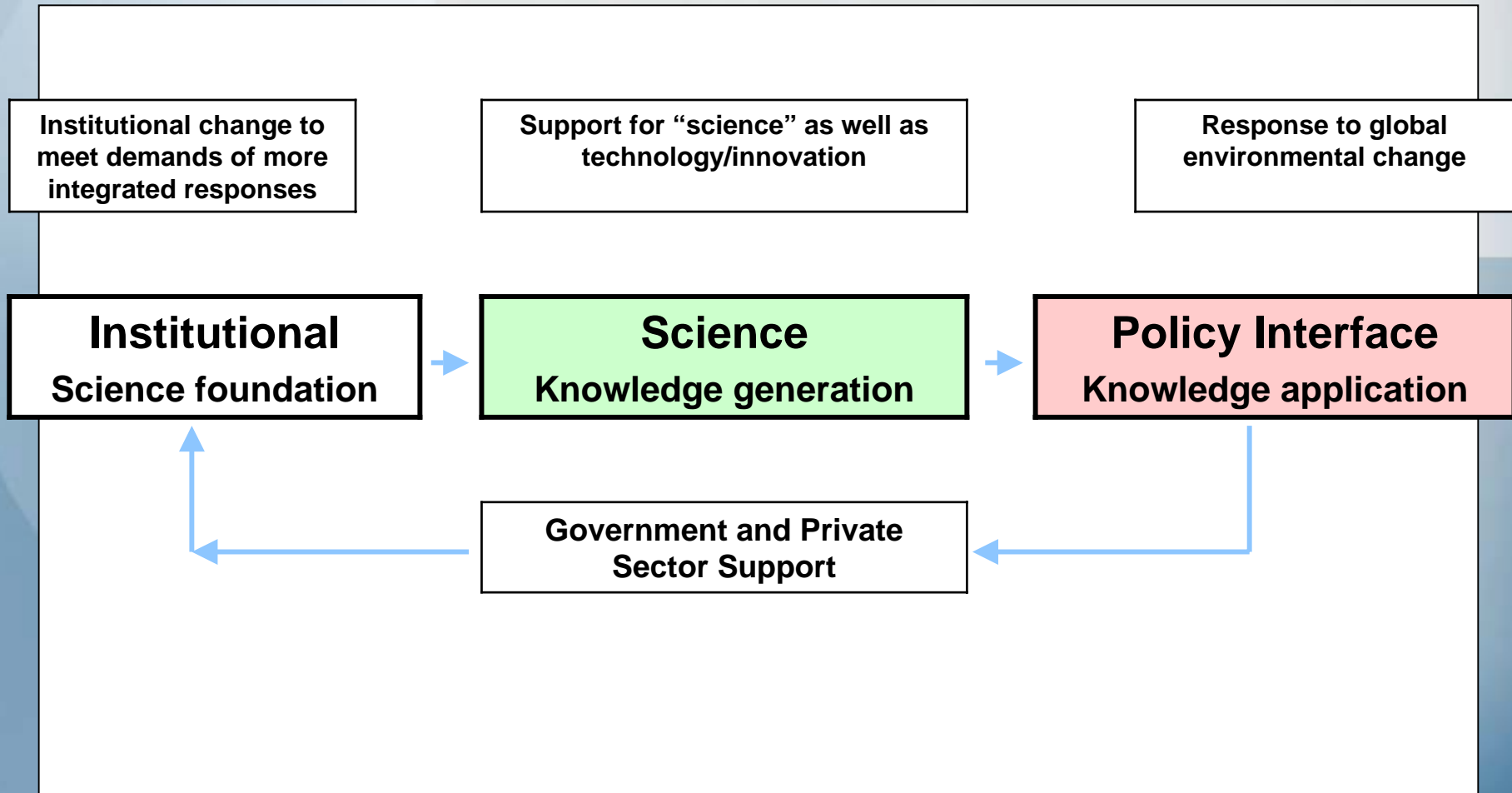
Components of scientific/technical capacity



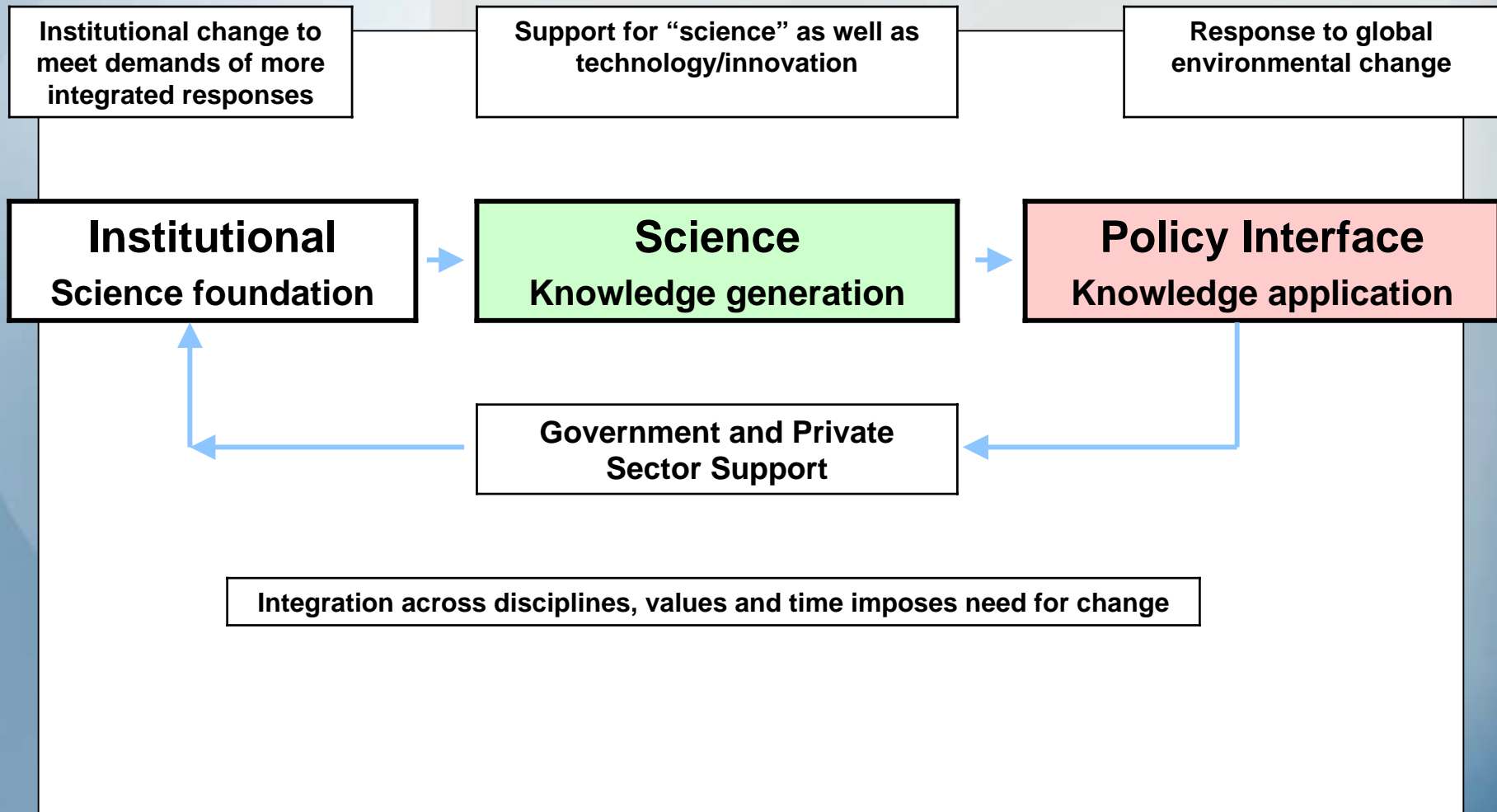
Components of scientific/technical capacity



Components of scientific/technical capacity



Components of research capacity



Evaluation of APN Activities (First Phase, 1995-2004)

Objectives:

- 1) to review and summarise APN activities
- 2) to assess the strengths and weaknesses of APN activities (scientific and institutional)
- 3) to reflect the lessons learnt and incorporate them into the second strategic plan

Second Strategic Plan (2005-2009)

Objectives:

- 1) to update the vision shared by stakeholders for APN's mission, priorities, activities and funding
- 2) to identify key issues for the improvement of APN operations based upon past experience of the APN
- 3) to work out how identified issues are best addressed and tackled in consultation with stakeholders
- 4) to establish a more sound basis for APN's short- and long-term operations