



Asia-Pacific Environmental Innovation Strategy Project



Endorsed at the ECO ASIA 2001

Ministry of the Environment, Japan

Background(1)

- Environmental conditions are **deteriorating in the Asia-Pacific region** expecting rapid population growth and economic development.
- The world needs **tangible answers to achieve sustainable development.**
- As one step toward sustainable development, ECO ASIA Long-Term Perspective Project (**LTPP**) provided policy-makers with **scientific basis for policy formulation.**
- The Launch of a **new project is needed** to achieve sustainable development in the Asia-Pacific region **as the next step of LTPP.**

Background(2)

- The launch of the Asia-Pacific Environmental Innovation Strategy Project (APEIS) was proposed at the ECO ASIA 2001.
- After a comprehensive discussion, the ECO ASIA endorsed with appreciation the launch of the APEIS.
- The ECO ASIA 2001 also endorsed the establishment of the ECO ASIA Panel, which will review, endorse and coordinate projects endorsed by the ECO ASIA.

Objectives and Key Concepts

- Objectives

- To develop **scientific knowledge-based tools and innovative strategy options** to promote informed decision-making
- To promote **environmental cooperation and capacity building**
- To propose a **model of regional initiative** for sustainable development



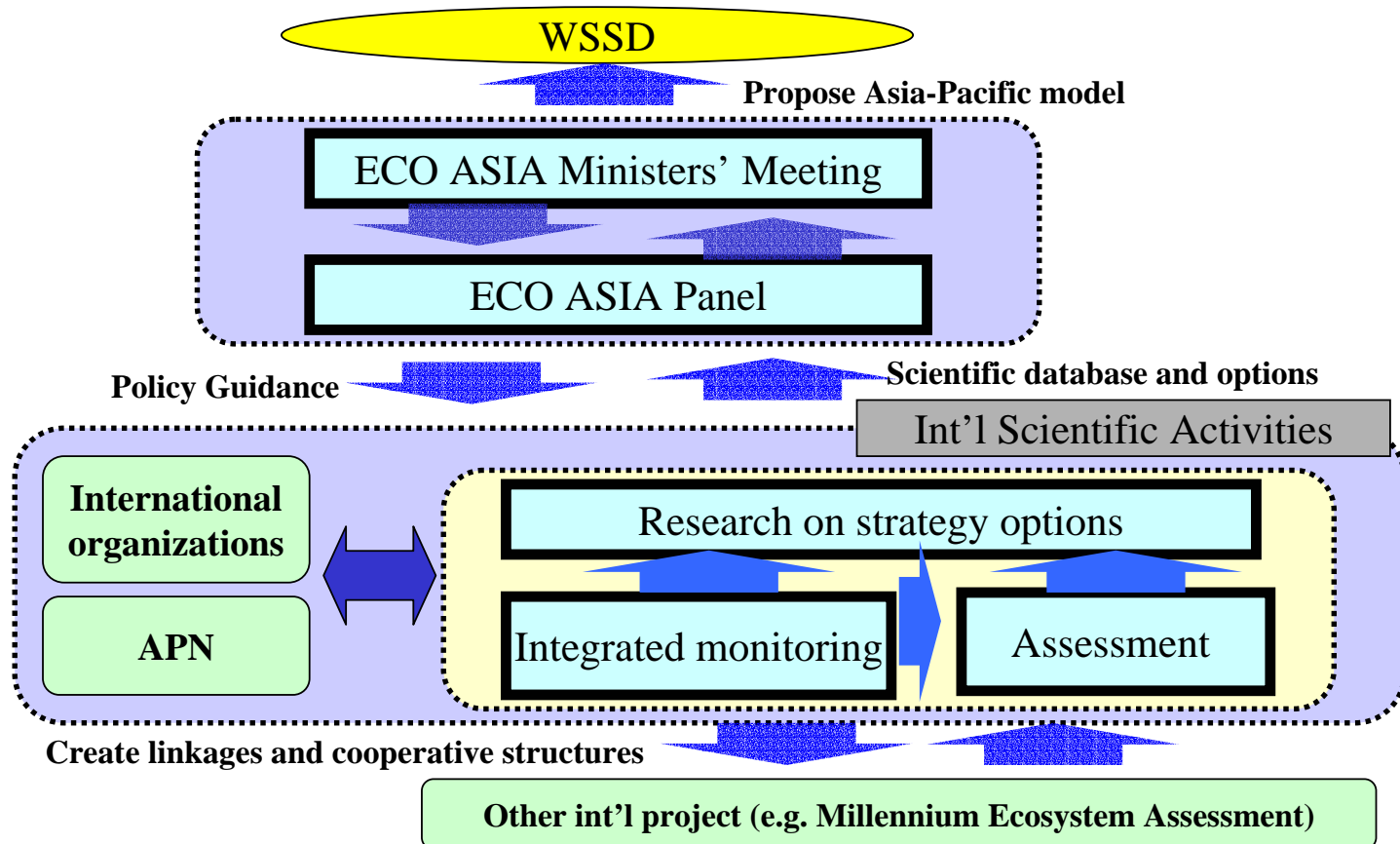
- Key Concepts

- Ensure the highest possible level of **participation and collaboration**
- Create a **framework** in which scientific activities and policy makers interact synergistically and constructively
- Fully incorporate and utilize **resources of existing regional activities**
- Consider and reflect **specific needs and diversified circumstances**

Why is this Project “innovative”?

- Objects and Processes
 - establishment of **scientific infrastructure** for policy-makers as a **regional common asset** through **dynamic interaction** between **scientific activities** and **policy makers**
- Outcomes
 - proposal of **innovative environmental strategy options** incl. environmentally sound/sustainable technologies and policy integration
- Technical elements
 - employment of **innovative methodologies**, e.g., satellite- and ground-based integrated monitoring and environment-economy integrated models

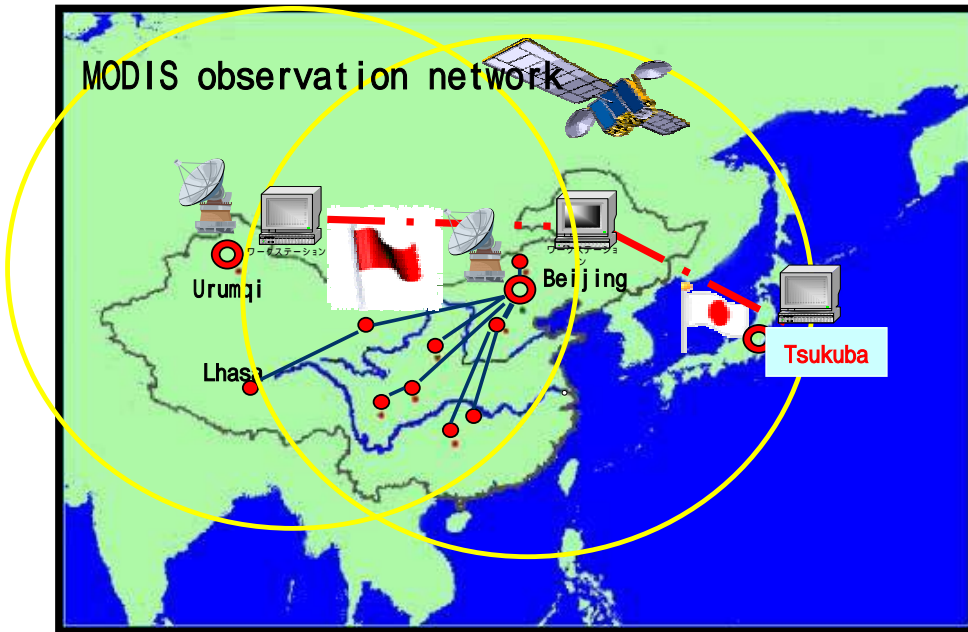
Framework of APEIS



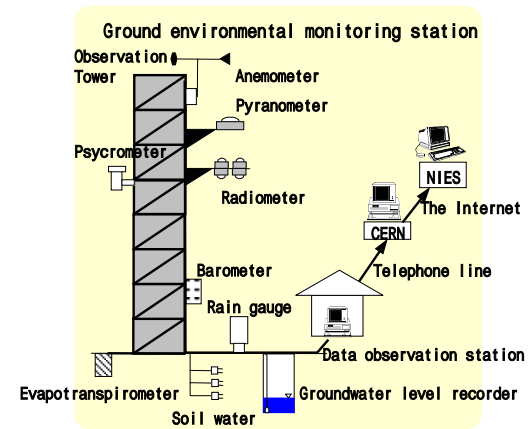
Integrated Environmental Monitoring (1)

- Main Components
 - Development of a MODIS data network covering the Asia-Pacific region
 - Development of a ground-based monitoring network to validate the satellite data
 - Establishment of a MODIS data analysis system
 - Development and application of methodologies for the analysis of satellite- and ground-based monitoring data
- Carried out by
 - Japanese National Institute for Environmental Studies and China's Institute of Geographical Sciences and Natural Resources Research

Integrated Environmental Monitoring (2)



● Ground environmental monitoring station

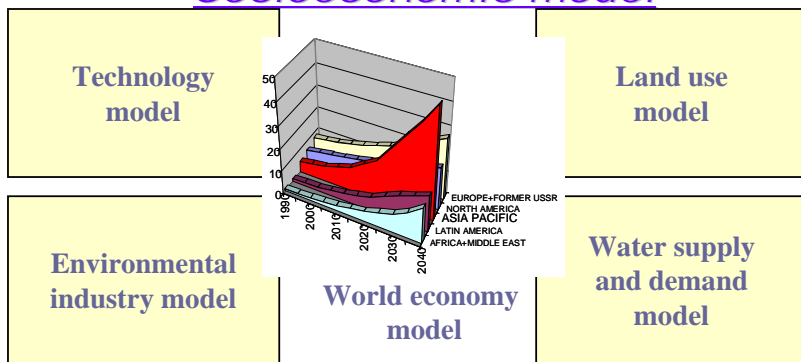


Environmental Assessments using Environment-Economy Integrated Models (1)

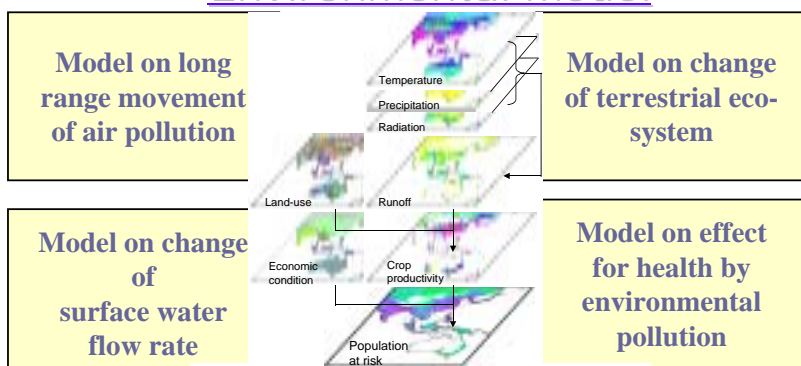
- Main Components
 - Development of an environment-economy integrated model
 - Development of an ecosystem assessment model
 - Development of indicators for assessing trends in natural resources and the status of implementation of environmental policies
 - Calculation of the status of above indicators and prediction of future trends
 - Development of a strategic database that links various types of supporting data and environmental indicator data, in order to provide useful data to policy makers
- AIM project will provide a good basis for this sub-project

Environmental Assessments using Environment-Economy Integrated Models (2)

Socioeconomic model

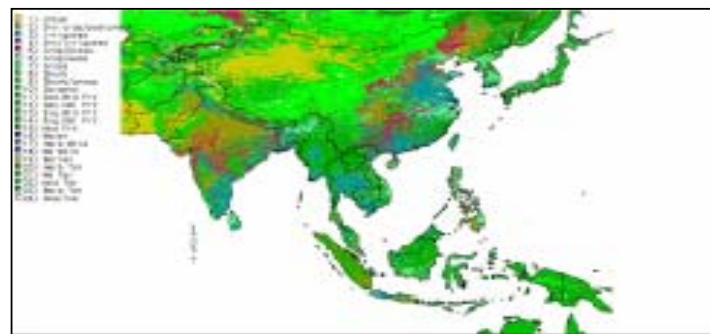


Environmental model

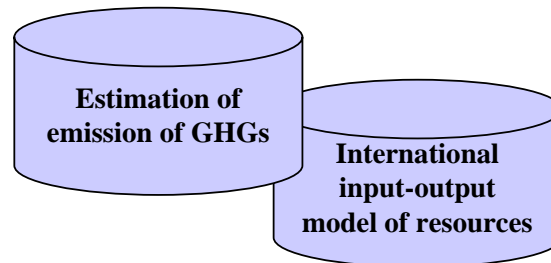


Climate change model and its impact

Strategic database



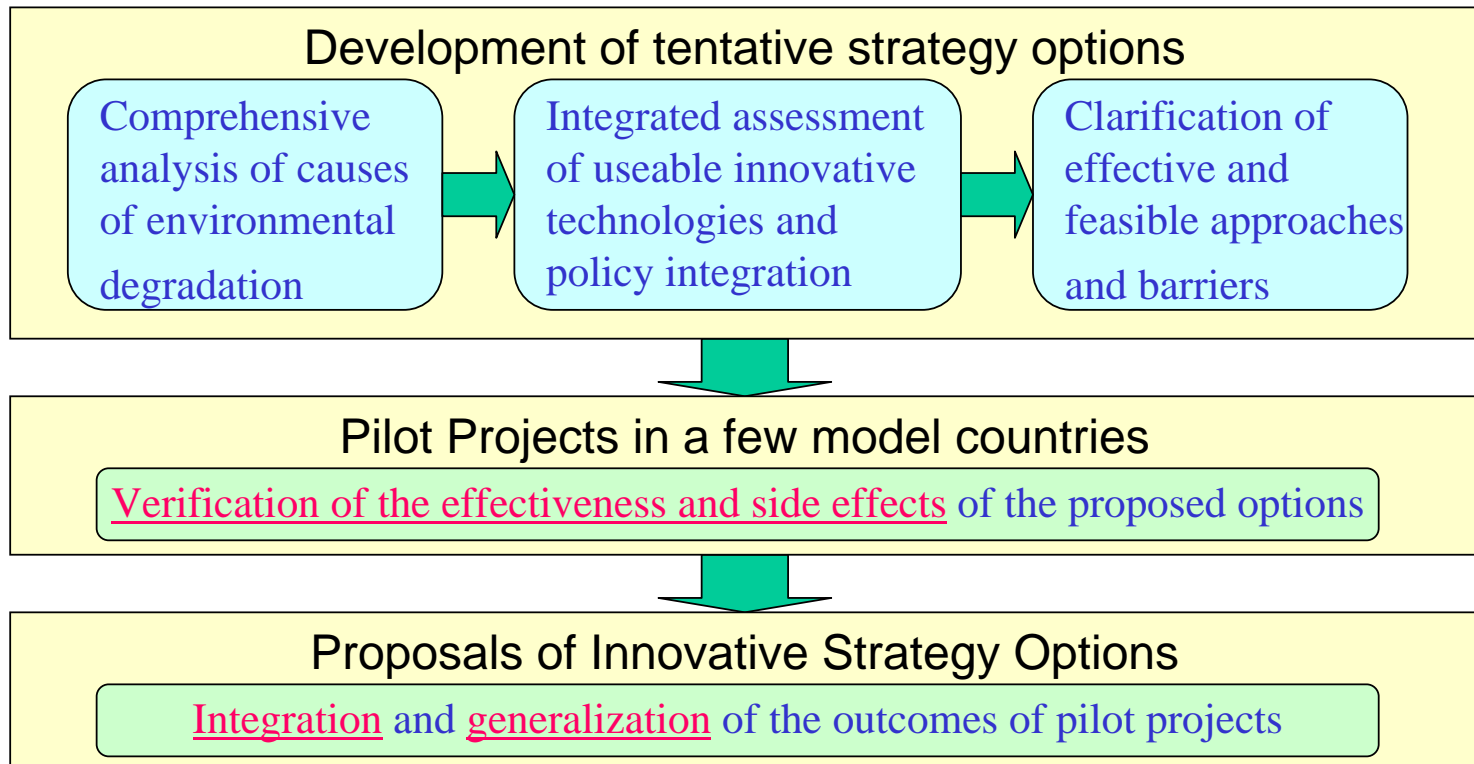
Data of change of land use



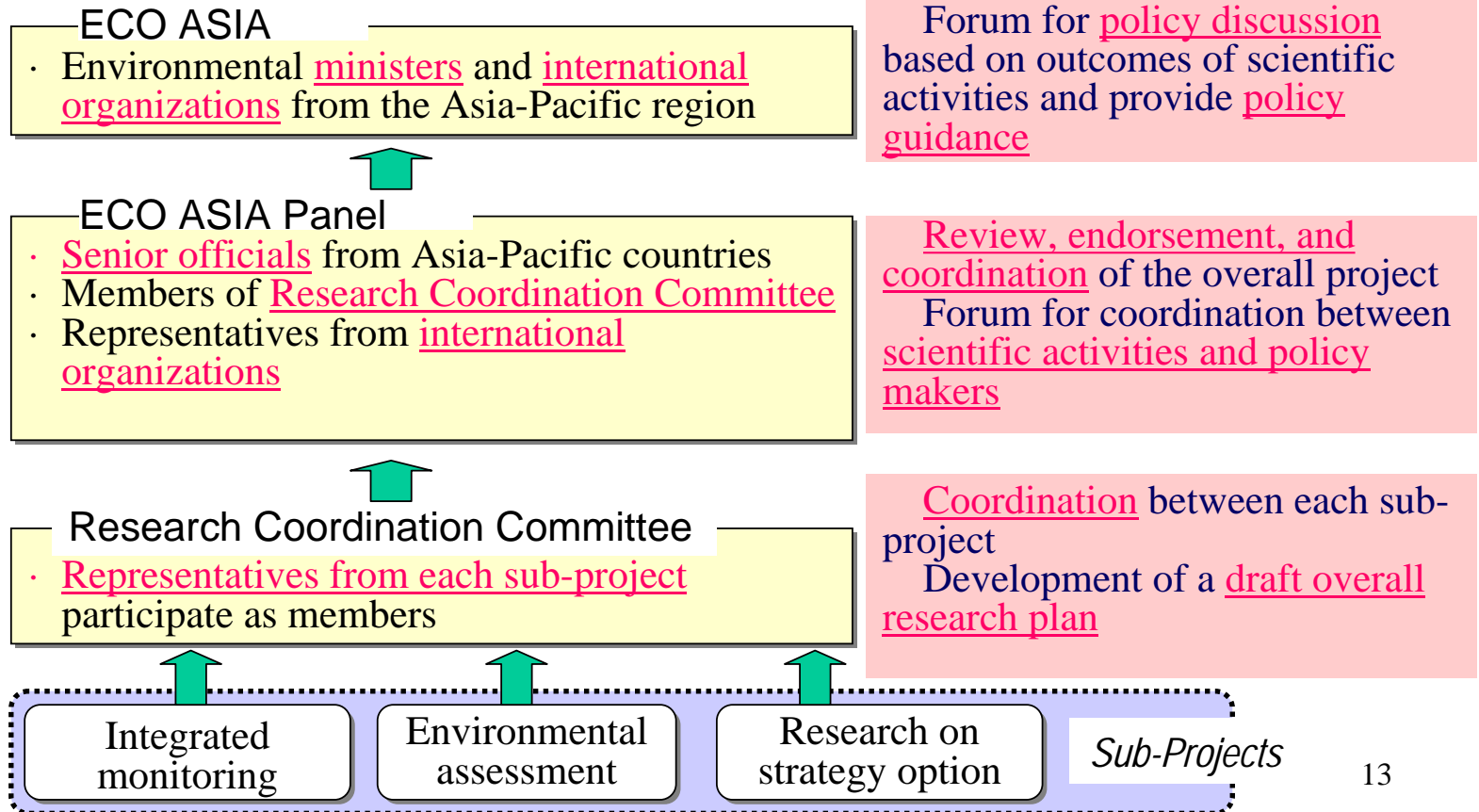
Research on Strategy Options (1)

- Conducted by international collaborative research group that will be launched in 2002
- Examples of options
 - Innovation in the environmental sector
 - Application of environmentally sound/sustainable technologies and information technologies
 - Promotion of eco-industry and eco-investment
 - Rediscovery and nurturing of traditional values and ways of life that protect the environment
 - Policy linkages and integrations
 - Local air pollution, climate change and acid deposition
 - Promotion of recycling and eco-industries
 - Encouragement of natural resource conservation and agriculture, etc.

Research on Strategy Options (2)



Management Framework



Budget and Schedule

- Budget

- 450 mil. Yen (\$3.75 mil.) for FY 2001
- 550 mil. Yen for FY 2002 (TBD)
- In-kind contribution from other research institutes
- Expansion by using GEF being discussed with UNEP and ADB

- Schedule (anticipated)

2001 Sep.	APEIS/MA joint workshop
Oct.	Endorsement of launching the Project at ECO ASIA 2001
2002 March	RCC develops a draft overall research plan
June	Review and endorsement of overall research plan at ECO ASIA PANEL

Expected Products of APEIS in the First Phase (2002-2004)

KNOWLEDGE-BASED TOOLS FOR DECISION-MAKING (selected countries)

PRIORITY STRATEGY OPTIONS (examples)

Integrated Monitoring Sub-project

- Environmental disaster monitoring methodologies & network
- Natural resources degradation monitoring methodologies & network

Integrated Assessment Sub-project

- Water resource-Agriculture model
- Environment-Economy model
- Ecosystem model
- Material flux model
- Sustainable development indicators
- Strategic database prototype

Innovative Strategy Options Sub-project

- Good practices inventory
- Innovative policy instruments inventory

Integrated monitoring & modeling approach

Integrated environment & economy modeling approach

Field-based case-study approach

Natural Resource Management

- Water management
- Food production
- Sustainable tourism

Environmental Market

- Environmental industry
- Environmental finance

Environmental Technology

- Renewable energy
- Information technology

Awareness & Education

- Eco-consciousness
- Environmental education
- Participation

Networking & Capacity Building

Tool development & utilization

Strategy option awareness & application

Information Outreach

Information sharing & outreach system for policy-makers, scientists and the public