

# Supporting Activities related to MRV



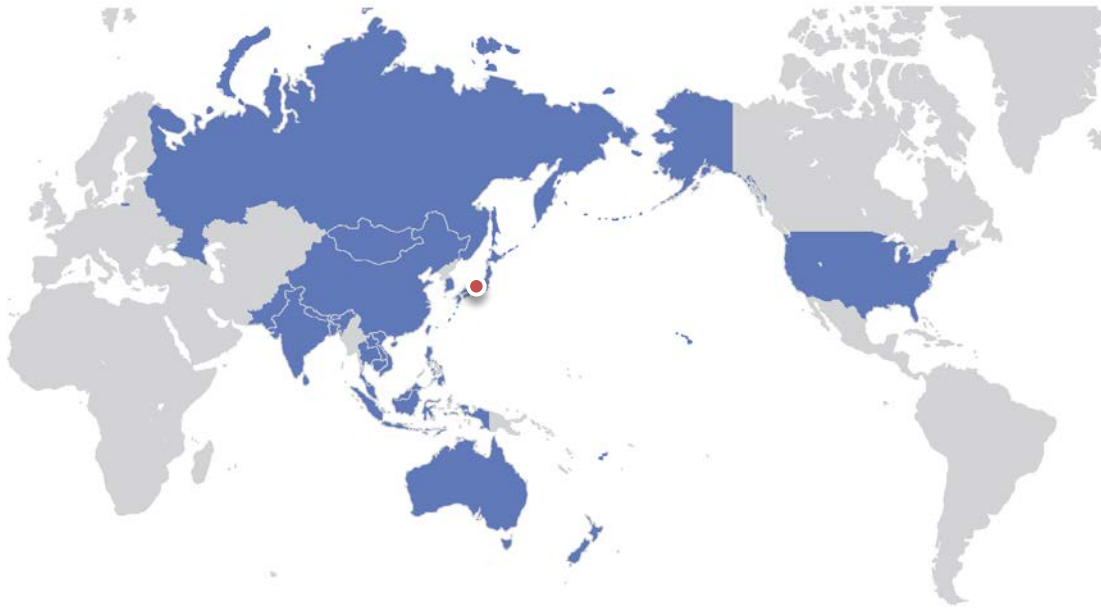
Bridging Science & Policy  
for a Sustainable Asia-Pacific



Part 1

# APN OVERVIEW

- An inter-governmental network of 22 countries in the Asia-Pacific to foster global change research in the region



*\* Pacific Island Countries, Singapore, Myanmar and Maldives are approved countries whose scientists are eligible to receive funding under APN awards.*

- Established **1996**
- Secretariat in **Kobe**, Japan since 1999
- Financial contribution from four donor countries: **Japan, USA, Republic of Korea, New Zealand**
- Financial Resources: **US\$ 3.4 Million** (2013/14)

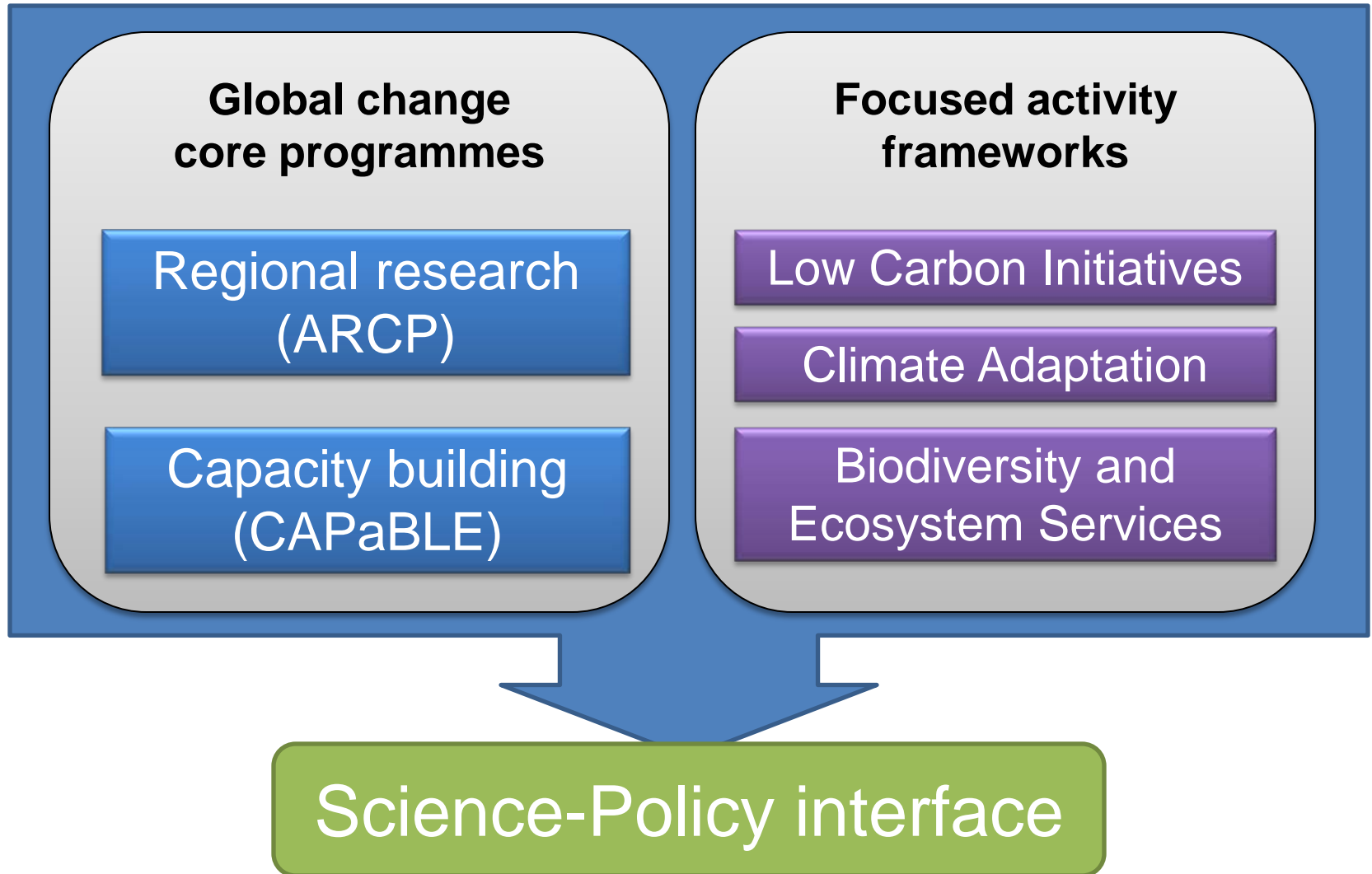


# APN Goals

- Supporting **regional cooperation** in global change research on issues particularly relevant to the region
- Strengthening appropriate **interactions among scientists and policymakers**, and providing scientific input to policy decision-making and scientific knowledge to the public
- Improving the **scientific and technical capabilities** of nations in the region including the transfer of know-how and technology
- Cooperating with **other global change networks and organisations**

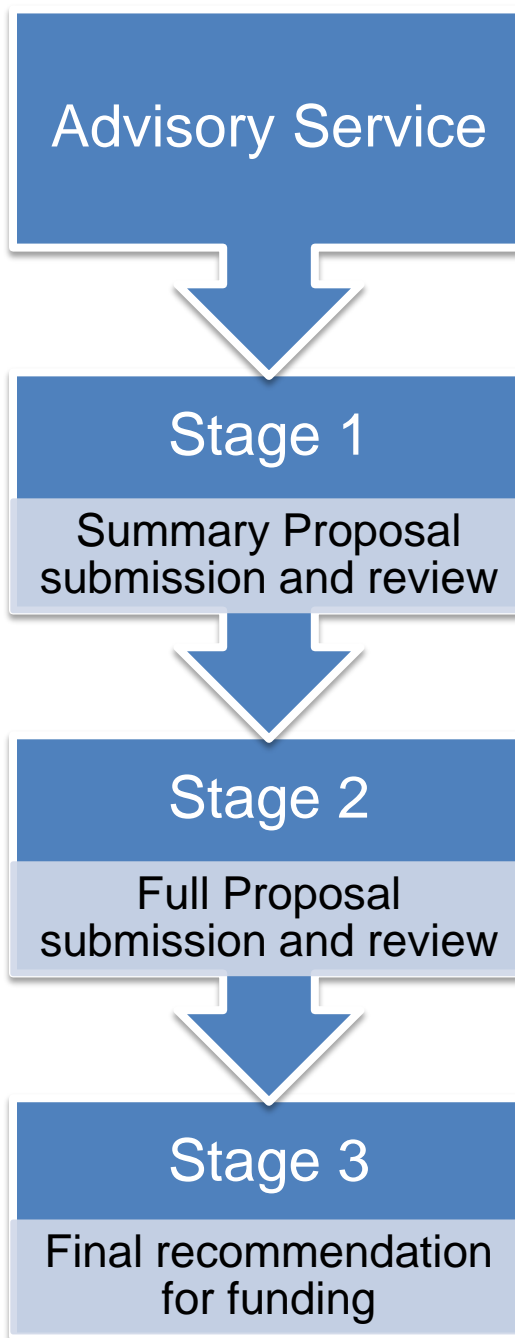
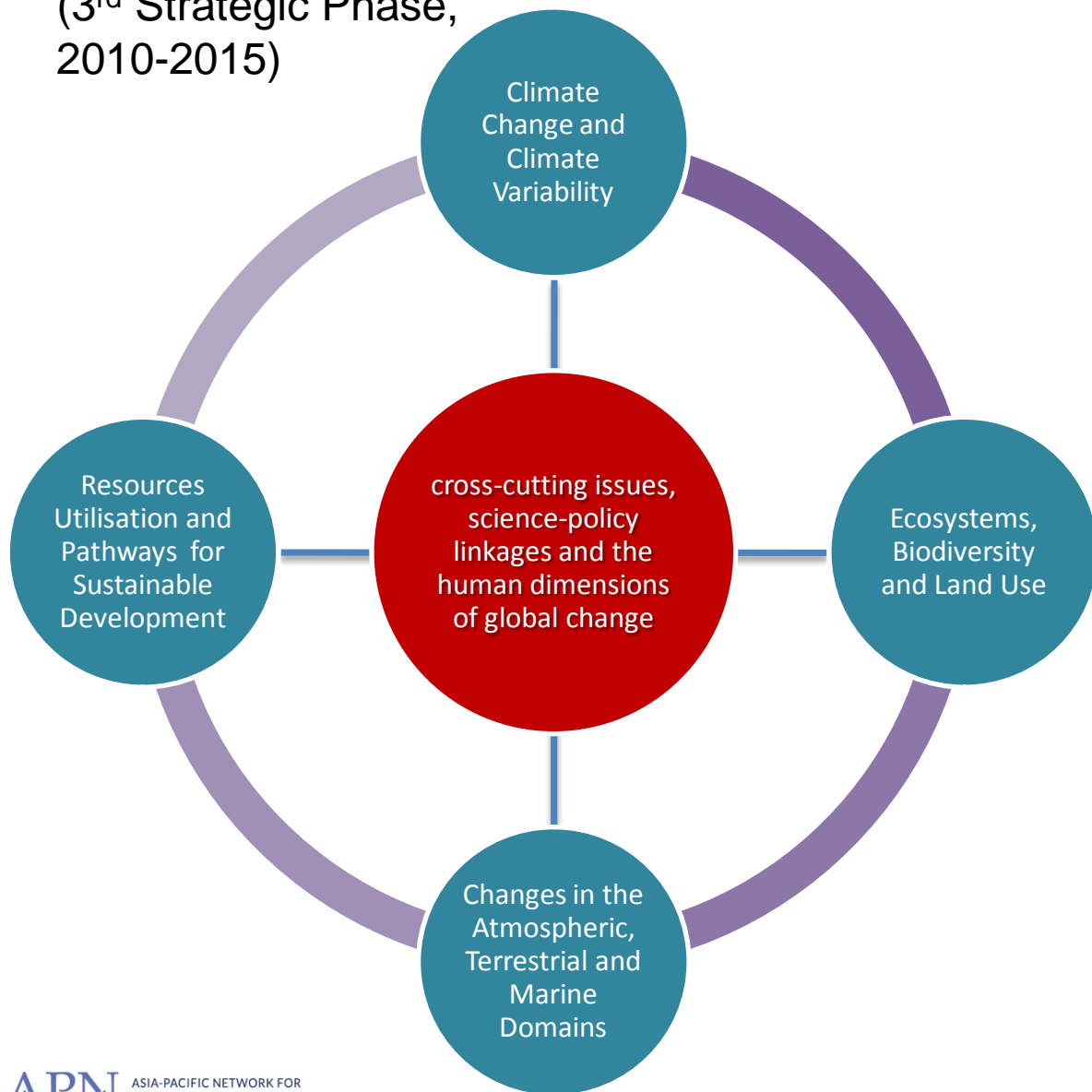


# Key Activities



# Science Agenda

(3<sup>rd</sup> Strategic Phase, 2010-2015)



**1999-2004**  
First Strategic Phase

**2010-2015**  
Third Strategic Phase

**Total 349**  
**Projects**

1996

1996-2004  
First Evaluation

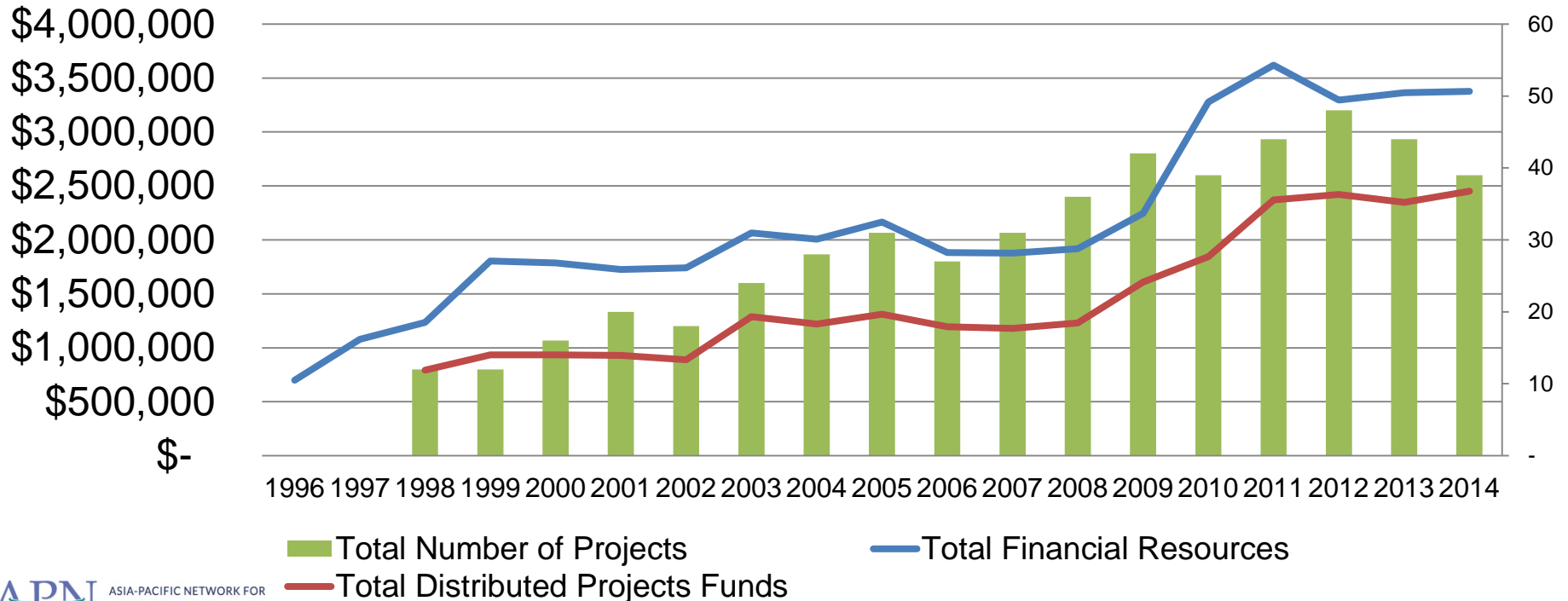
2005-2010  
Second Evaluation

2010-2015  
Third evaluation

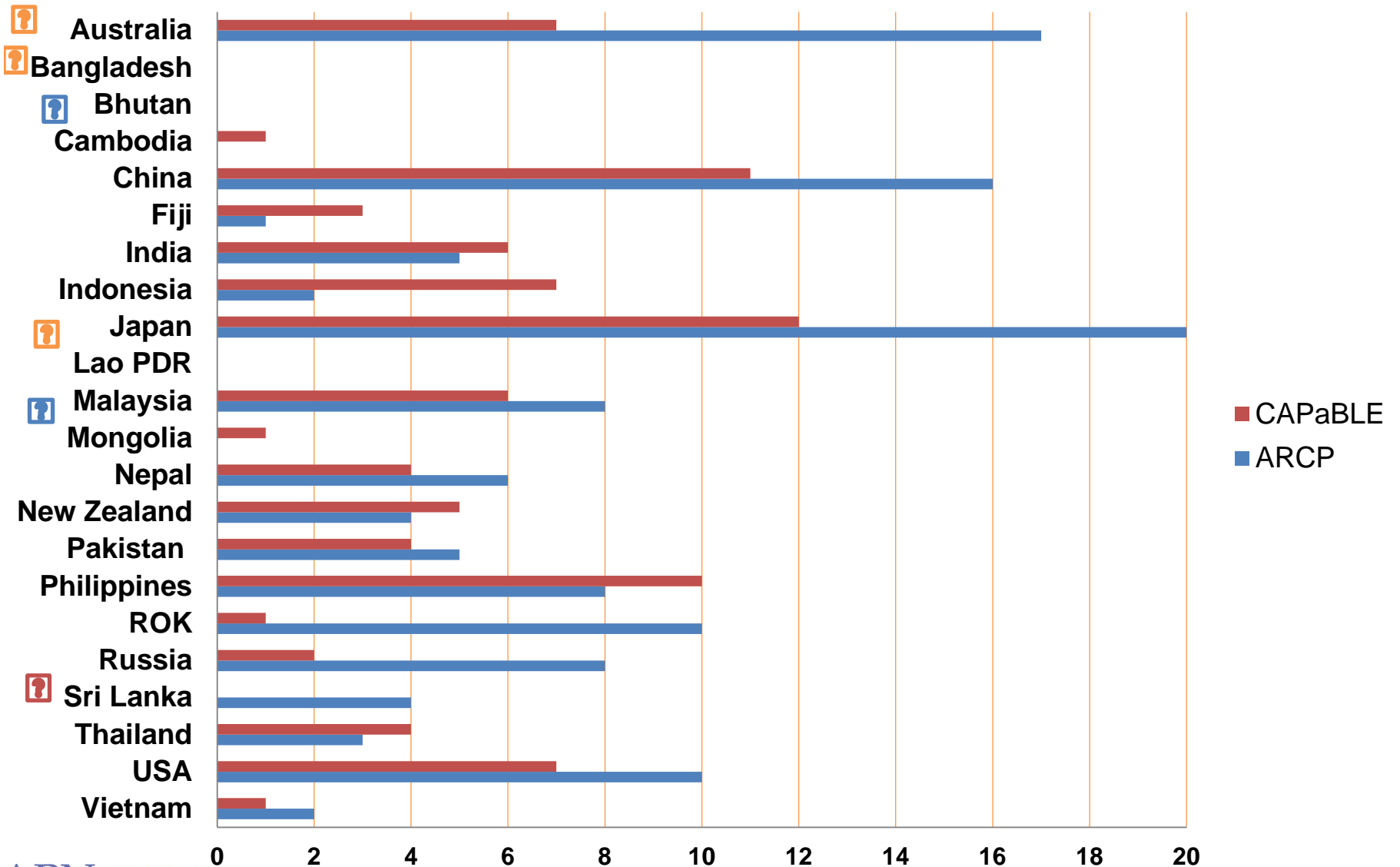
**2005-2010**  
Second Strategic Plan

**2015-2020**  
Fourth Strategic Plan

## APN Financial Resources Distribution & Number of Projects



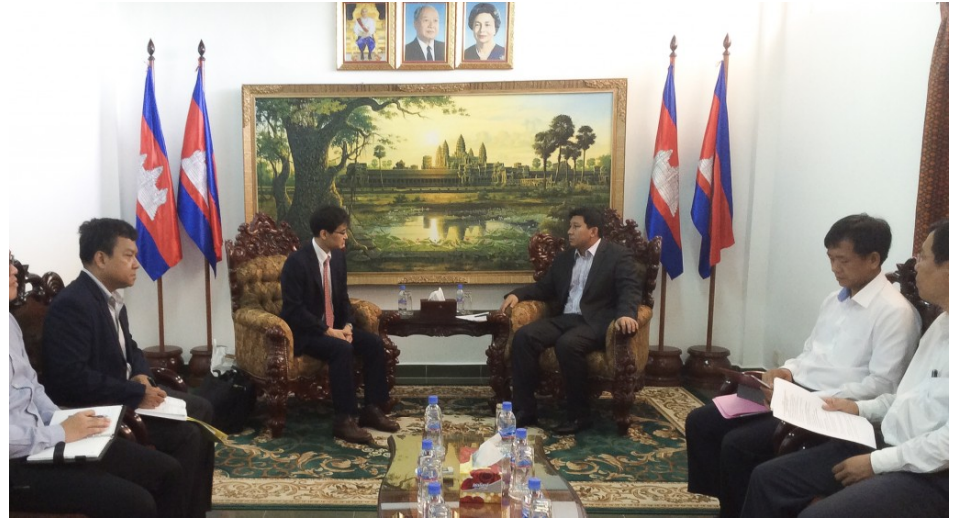
# 2008-2013 APN-funded Projects: Country of Project Leaders





# Cambodia-APN Co-Finance Partnership

- Cambodia: first country to enter a co-finance partnership with APN
- Provides direct funding support to Cambodian-led projects approved by the APN
- New resources to benefit Cambodia and all APN members
- Makes use of APN's strong review and management process



# Climate Adaptation Framework

- Developed at a scoping workshop in Kobe, Japan, 2012
- Activities of high priority
  - Development of high-resolution **observational, model and downscaled datasets** that can contribute to filling data gaps
  - Sharing of **needs-oriented data**
  - **Calibration and validation** of regional climate models; and **analysis** of projections and **assessment** of uncertainties
  - Development and utilisation of **impact, vulnerability, risk and economic assessments**
  - Improvement of **communication skills** of scientists and practitioners with stakeholders
  - **Utilisation** of available information including climate data in applications for adaptation
- Partnership Development
  - ADB, ICAS-Ibaraki University, Ministry of Interior of Thailand, UNU, WCRP, ICCCAD, APCSS, CCI-ANU

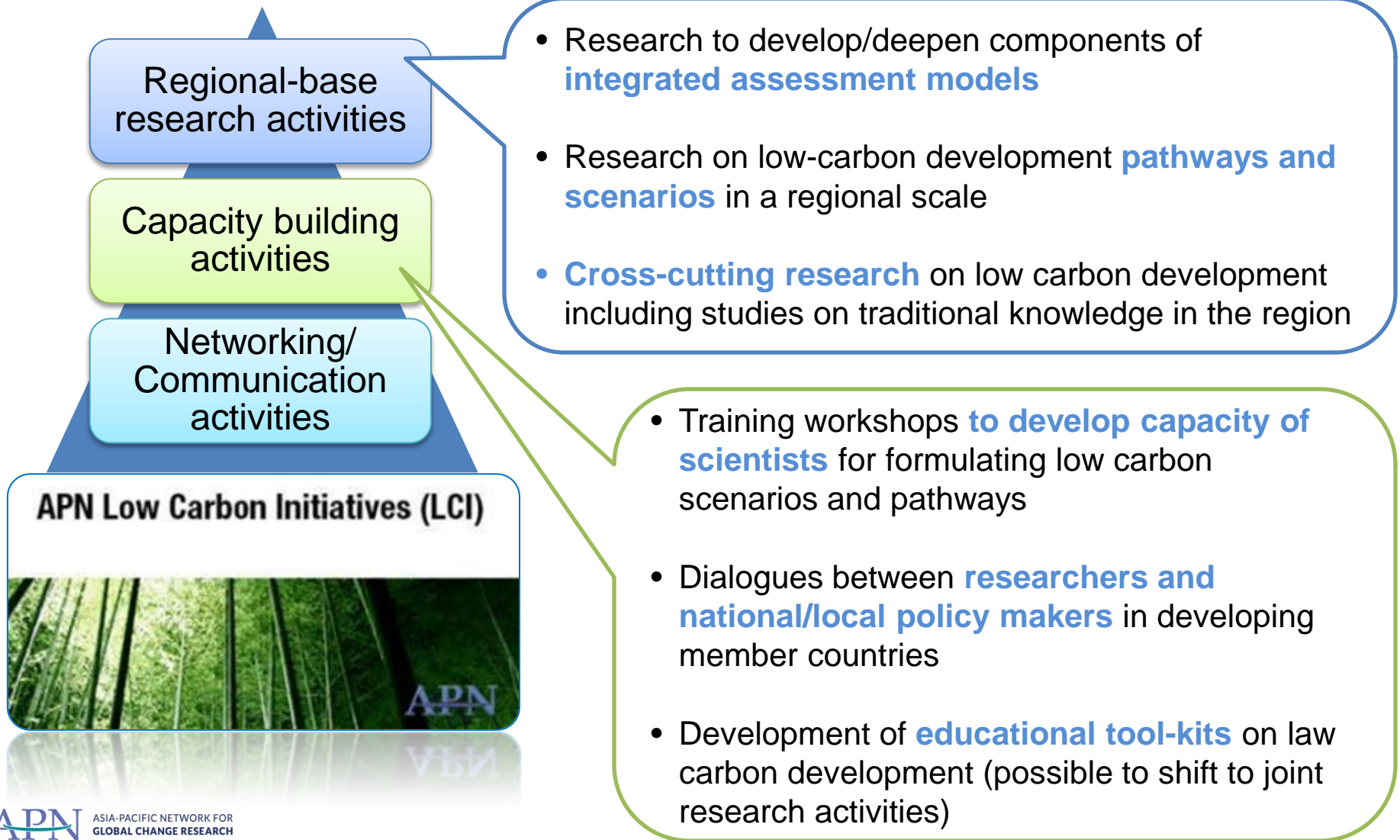
# New Activities: Adaptation, Disaster Risk Reduction, Loss and Damage

- Earmarked financial support from Ministry of the Environment, Japan (MOEJ), aiming at Contribution to NFFCC/COP19
- Enhancing the understanding of:
  - The risk of **slow onset events**, and approaches to address them;
  - **Non-economic** losses and damages;
  - Impacts on **most vulnerable** and the approaches
  - Identify and develop **appropriate approaches** to address slow onset events and extreme weather events, including through risk reduction, risk sharing and risk transfer tools;
  - Approaches to address impacts to be **integrated** into climate-resilient development processes;
  - How impacts of climate change are affecting patterns of **mitigation, displacement and human mobility**;
- Supporting data collection, enhancing coordination, strengthening regional collaboration, capacity-building, strengthening institutional arrangements



Photo: ADB

# Low Carbon Initiatives Framework



# Low Carbon Initiatives Framework

- **Call for Expressions of Interest for a Focussed Activity on Low Carbon Initiatives (LCI)** launched on 9 July 2012.



- Under the LCI Framework as a networking and communications activity, APN is also collaborating with the **International Research Network for Low Carbon Society (LoCARNet)** in promoting research networks in the region.



	Project Reference	Title
<b>Capacity Building</b>	LCI2012-01NSY(C)-Maeda	Capacity Building for Implementing a “Measurable, Verifiable and Reportable (MRV)” Model in a Mid-Sized Thai Municipality
	LCI2012-02NSY(C)-Guerrero	Strengthening Community Voices In REDD+ Policy
<b>Regional Research</b>	LCI2012-01NMY(R)-Lakshmi(Nagrath)	Identification of Policy and Institutional Gaps, Drivers and Strategies to Scale-up Low Carbon and Energy Efficient Technology Application in the Construction and Infrastructure Sectors in South Asia
	LCI2012-02NMY(R)-Dhakal	Understanding and Quantifying the Water-Energy-Carbon Nexus for Low Carbon Development in Asian Cities
	LCI2012-03NMY(R)-Lopez	Assessment of Carbon Sequestration through Vermitechnology in Organic Farming
	LCI2012-04NMY(R)-Macandog	Integrated Sustainability Assessment of Bio Energy Potentials in Asia: an Application of a Hybrid Approach on Trade-offs and Pathway
	LCI2012-05NMY(R)-Jupesta	Low Carbon Urban Infrastructure Investment: Cases of China, Indonesia, and Japan

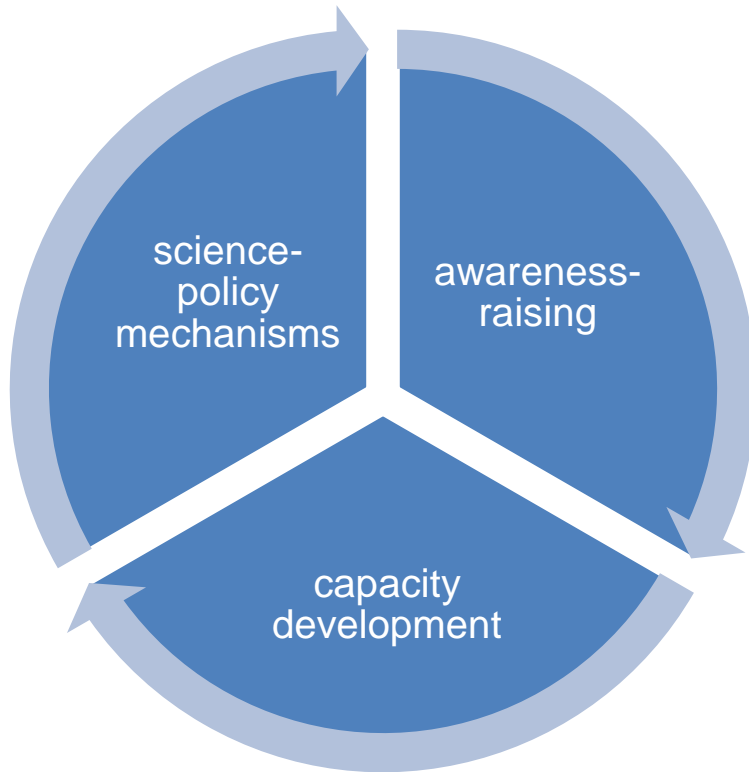


# Biodiversity and Ecosystem Services Framework

- **Inviting stakeholders to propose and engage in** collaborative activities with the APN in key thematic areas under its framework for biodiversity and ecosystem services
  - Identification of **drivers and pressures** for biodiversity change that influence ecosystem services
  - Assessment of the **impacts** of biodiversity loss and **vulnerability** to the shrinking of ecosystem services
  - Prediction of changes in biodiversity and ecosystem services through **model-based scenarios**
  - **Adaptation, response and mitigation** of the depletion of biodiversity and ecosystem Services



# Emphasis on Science-Policy Interaction



Science-Policy is emphasised:  
Links with IPBES, UNFCCC;  
UNCBD; Rio+20 etc.









Part 2

# SUPPORTING ACTIVITIES ON MRV

# EBLU2010-04NMY(C)-Skole

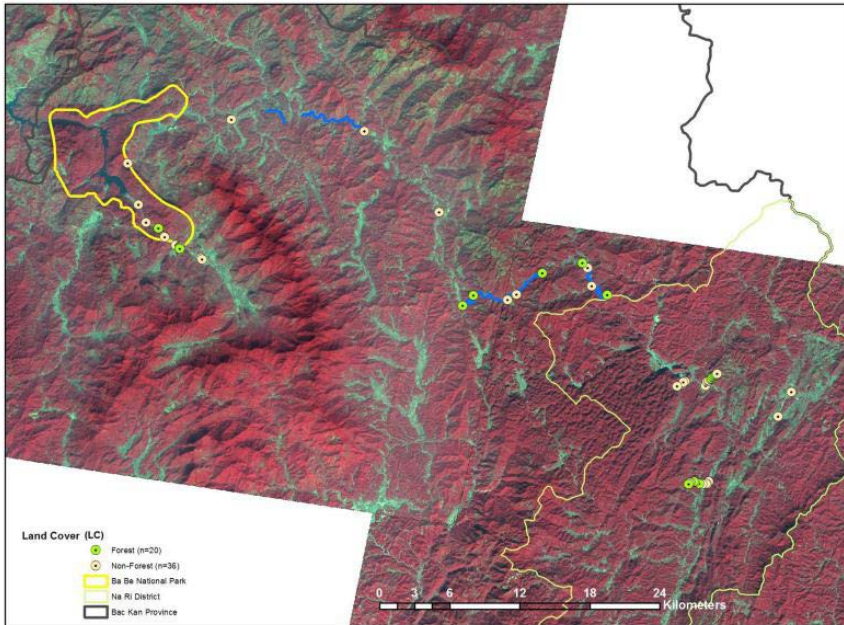
- MRV system for REDD+: Scaling up from project level to a national level REDD+ MRV systems for Laos and Viet Nam

Project leader: Dr. David L. Skole, Michigan State University, USA

<http://www.apn-gcr.org/resources/items/show/1708#.U8kABkDzmM8>

- 1) training and capacity building in basic concepts of REDD, REDD+ and MRV systems,
- 2) development and testing of scalable MRV methods based on current IPCC guidelines using remote sensing satellite data and geospatial technologies,
- 3) technology transfer of national level MRV systems for REDD+.

# EBLU2010-04NMY(C)-Skole



- **Pilot study sites:** Laos / Viet Nam
- **Data collection:**
  - Field level data for validation with remote sensing data
  - Standard forest plot inventory methods
- **Forest carbon mapping**
  - Developed a method for analyzing medium resolution
- **Training and capacity building**
  - Scientists
  - Government agency personnel
  - University staff and students



# EBLU2010-04NMY(C)-Skole



## ***On-line forest carbon MRV/M&E system***

The MRV system is designed as a project management system, more in the line of an enterprise application. Data are stored in a relational database which has redundant back-up and the application has bi-monthly system snap-shots for restore capabilities. Website: <http://mrv.carbon2markets.org>

# LCI2012-01NSY(C)-Maeda

## Capacity Building for Implementing a "Measurable, Verifiable and Reportable (MRV)" Model in a Mid-Sized Thai Municipality



Mr. Toshido Maeda, IGES (Kitakyushu), Japan  
<http://www.apn-gcr.org/resources/items/show/1913#.U8kFJkDzmM8>

# LCI2012-01NSY(C)-Maeda

- build the capacity of a selected mid-sized Thai municipality to develop and implement an MRV framework.
- enable accounting for actual GHG emission reduction to be achieved by a local municipality,
- help devise effective low-carbon city policies and promote the framework's linkages with national initiatives and upcoming carbon market mechanisms.

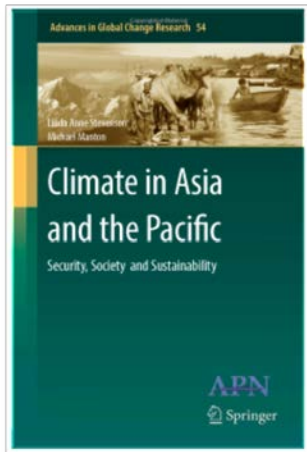


# Related projects

- Developing an MRV system for REDD+: Scaling up from project level to a national level REDD+ MRV systems for Laos and Viet Nam ([EBLU2011-02CMY\(C\)-Skole](#))
- Strengthening Community Voices in REDD+ Policy ([LCI2012-02NSY\(C\)-Guerrero](#))
- Project Scoping and Training Workshop for REDD in Indonesia, Cambodia, and Lao PDR ([CBA2009-03NSY-Bishry](#))
- Capacity Building for Implementing a "Measurable, Verifiable and Reportable (MRV)" Model in a Mid-Sized Thai Municipality ([LCI2012-01NSY\(C\)-Maeda](#))
- Critical analysis of effectiveness of REDD+ for forest communities and shifting cultivation based on lessons learnt from conservation efforts in Laos and Thailand ([EBLU2010-02NMY\(R\)-Takeuchi](#))
- Integrated Prediction of Dipterocarp Species Distribution in Borneo for Supporting Sustainable Use and Conservation Policy Adaptation ([ARCP2010-02CMY](#))
- Evaluation of Trade-offs between conservation and development- Case of land use change in Malaysia and Indonesia ([EBLU2010-01NSY\(R\)-Suneetha](#))
- Carbon Governance in Asia: Bridging Scales and Disciplines ([CBA2010-04NSY-Dhakal](#))
- Sediment Dynamics and Downstream Linkages in Tropical Streams as Affected by Projected Land-Cover/Land-Use and Climatic Change ([ARCP2008-01CMY](#))



# Recent/Upcoming Publications



## Climate in Asia and the Pacific: Security, Society and Sustainability

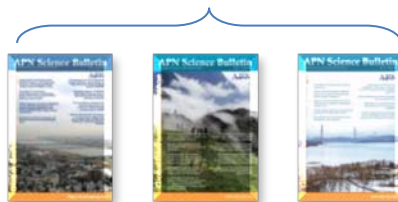
- 31 authors from the global change community;
- To be published in mid 2013;
- Main chapters:
  - Climate change & climate variability;
  - Urbanisation;
  - Security: food, water, energy;
  - Society: governance, remote communities, human health;
  - Sustainability: energy, ecosystems services.



### Synthesis and evaluation



### Science Bulletin



### Policy Briefs



## APN E-Lib:

Archive of publications, completed/ongoing project metadata and outputs

[www.apn-gcr.org/resources](http://www.apn-gcr.org/resources)

# For more information...



## APN Website:

News, announcements and global change community updates

<http://www.apn-gcr.org/>



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# Thank you!