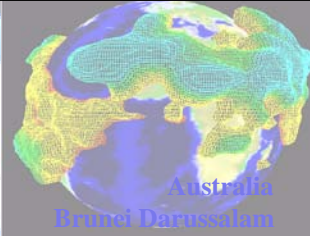


APEC Project Proposal (2010-2011)

Building Adaptive Capability to Extreme Climate Events through

Networking among APEC Economies, Relevant Organizations and Projects

5th Working Group Meeting, Singapore, 12-15 July 2009



Australia
Brunei Darussalam

Canada

Chile

People's Republic of China

Hong Kong, China

Indonesia

Japan

Korea

Malaysia

Mexico

New Zealand

Papua New Guinea

Peru

Philippines

Russia

Singapore

Chinese Taipei

Thailand

United States

Viet Nam

Asia
Pacific
Economic Cooperation

Climate

Center

Woo-Jin Lee
APEC Climate Center (APCC)





Objectives

➔ *To provide a forum for climate/weather forecast agency representatives, policy makers, researchers, decision makers in various business sectors to extend regional cooperation*

➔ *To promote best practices in enhancing disaster preparedness and management, and utilizing the climate information on climate-sensitive sectors in the APEC region: Special target area includes conservation of marine resource and facility, food and energy security*

➔ *To provide Member Economies with training program so as to build capacity*



- Sharing experiences in climate forecasting and application, state of the art knowledge in extreme climate research
- Discussing future steps to build an extreme event prediction system for APEC
- Creating a roadmap to implement a pilot demonstration project showcasing the benefit in selected APEC economies.



Approach

- **Upgrading the climate information service for extreme climate event prediction through the science and technology network**
- **Evaluation of climate information service and strategic planning for improvement**
- **Transfer scientific findings on operational service**
- **Promotion on application through outreach program**
- **Publishing proceedings**



Required Budget (2010-2011)

USD / 2 YEARS

Item \ Funding	APEC	Self-funding
Hosting and training materials	15,000 x 2YRS = 30,000	128,000 x 2YRS = 256,000
Travel (48 speakers or participants)	85,000 x 2YRS = 170,000	67,000 x 2YRS = 134,000
Production and dissemination of multi-model climate-model ensemble forecasts and technical support		1,200,000 x 3YRS = 2,400,000
Total cost of \$2,990,000 for two years	\$200,000	\$2,790,000



Expected End-of-project Proposal Target

Activities	2010	2011	2012	Remark
Development of best practice for extreme climate prediction	<ul style="list-style-type: none"> • Emergency preparedness and sustainability of marine and coastal resources • Energy security and efficiency • Food security and public health 			APEC funding & self-funding
Capacity building and application	<ul style="list-style-type: none"> • Incorporation of downscaling function in CLIK • Application of CLIK on regional extreme event prediction 	<ul style="list-style-type: none"> • Application of CLIK on regional extreme event prediction • Capacity building in dynamic regional climate modeling (RCM) for generation regional climate prediction 	<ul style="list-style-type: none"> • Application of CLIK on regional extreme event prediction • Climate applications and prediction, with emphasis on ISV prediction • Generating and evaluating climate change scenarios using the RCM 	Self-funding
Support for early warning system	<ul style="list-style-type: none"> • Monthly update and provision of 3~6 month climate analysis and forecast information for precipitation and temperature through APEC Climate Network • Operation of regional drought prediction • Development of prediction of extreme climate events in intraseasonal time scale 	<ul style="list-style-type: none"> • Monthly update and provision of 3~6 month climate analysis and forecast information for precipitation and temperature through APEC Climate Network • Operation of regional drought prediction • Test operation of extreme climate events prediction in intraseasonal time scale 	<ul style="list-style-type: none"> • Monthly update and provision of 3~6 month climate analysis and forecast information for precipitation and temperature through APEC Climate Network • Operation of extreme climate events prediction in intraseasonal time scale • Understanding the new challenges: Hotspots and their regional predictability 	Self-funding
Understanding the climate variability and predictability in monsoon Asia	<ul style="list-style-type: none"> • Analyses of large scale climate variability in Monsoon Asia with emphasis in Southeast Asia 	<ul style="list-style-type: none"> • Diagnostics to understand the physical mechanisms and focus on recent trends 	<ul style="list-style-type: none"> • Examination of regional monsoon predictability in GCMs • Recommendations for improving monitoring and prediction to facilitate better climate adaptation 	Self-funding
Monitoring and prediction of Extreme climate events	<ul style="list-style-type: none"> • Understanding the current levels of Extreme event predictability 	<ul style="list-style-type: none"> • Downscaling strategies 	<ul style="list-style-type: none"> • Hindcasting of extreme events • Regional forecasting of extreme events 	Self-funding
Web portal for climate variability and change	<ul style="list-style-type: none"> • collection of climate change information • organizing the web portal 	<ul style="list-style-type: none"> • Update of information and issues and maintenance 	<ul style="list-style-type: none"> • Update of information and issues and maintenance 	Self-funding



Expected Outcome

This project proposal involves a variety of deliverables and is expected to meet the needs of the targeted beneficiaries in several ways, including:

- **Promotion of application of climate information for various including emergency preparedness, energy efficiency, sustainable marine resource development, food security, and public health**
- **Sharing high-cost climate information to mitigate the negative effects of natural disasters such as floods, droughts, wild fires, and heat waves over the Asia-Pacific region**
- **Enhancing the capability in the monitoring and prediction of unusual climate and adaptation**



For Cooperation

- **The APCC invites the member economies to collaborate in this proposal for the APEC-wide societal benefits and capacity building**
- **We shall appreciate if the information can be passed to the Permanent Representatives with due recommendations**



Thank You