

Top-down approach from global GHG emission reduction and
bottom-up approach from country reduction target

Toshihiko MASUI (NIES)

NIES: J.Fujino, T.Hanaoka, K.Takahashi, Y.Hijioka, Y.Kanamori

Kyoto Univ.: Y.Matsuoka, R.Kawase, G.Kurata

MHIR: G.Hibino, T.Ehara, K.Fujiwara, Y.Motoki

And other research collaborators in NIES, KU and MHIR

Asia LCS scenarios and Actions

International Conference Hall, JICA Research Institute

February 22, 2011

Toward Low Carbon Society

■ From global viewpoints

- Below 2°C
- Reduction by half of GHG emissions in 2050
- ...

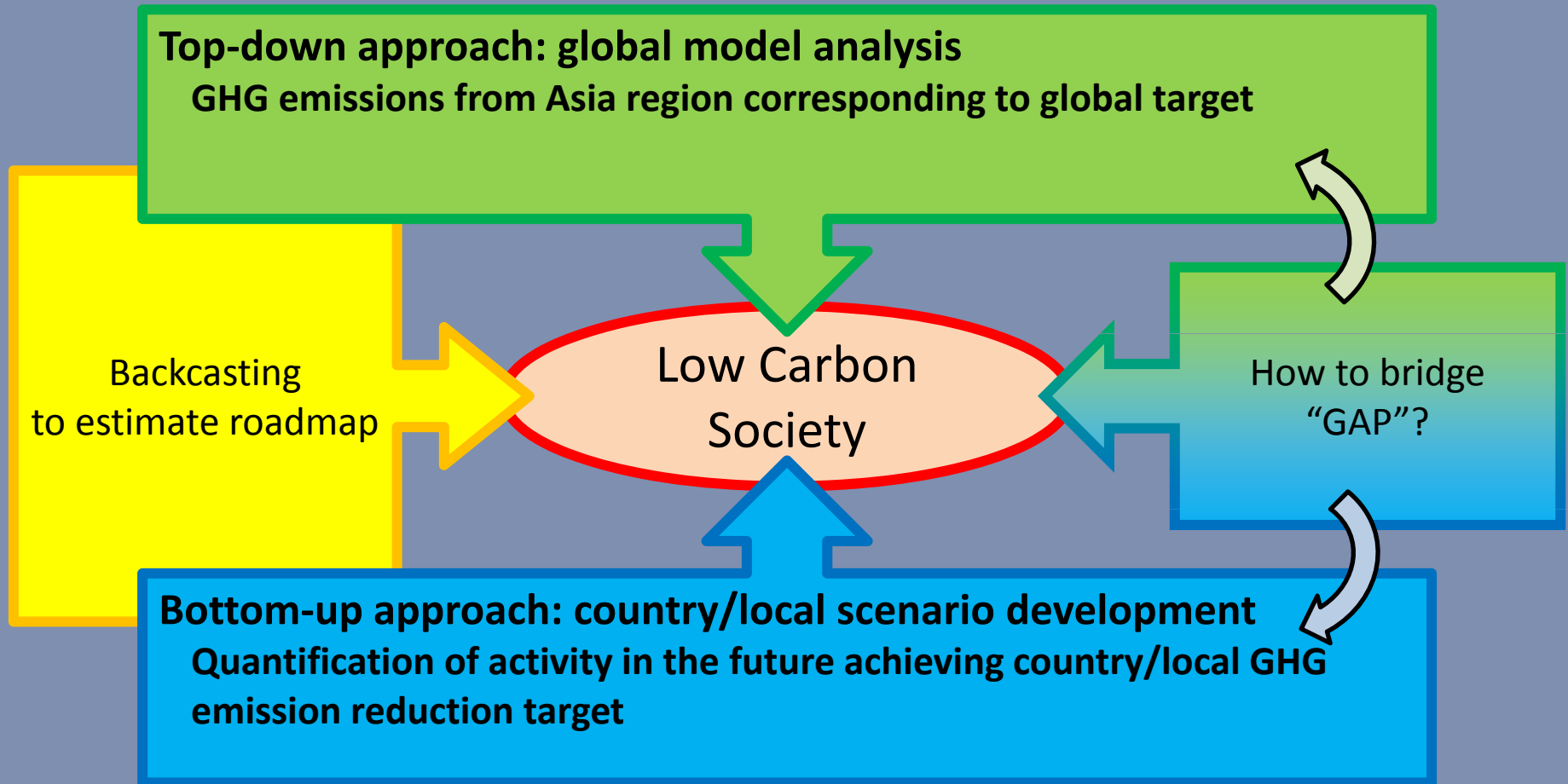
→ Representing importance of role of Asian region

■ From country/local viewpoints

- Copenhagen Accord
 - Japan: 25% of GHG in 2020 compared with 1990 level
 - China: 40-45% improvement of carbon intensity between 2005 and 2020
 - ...

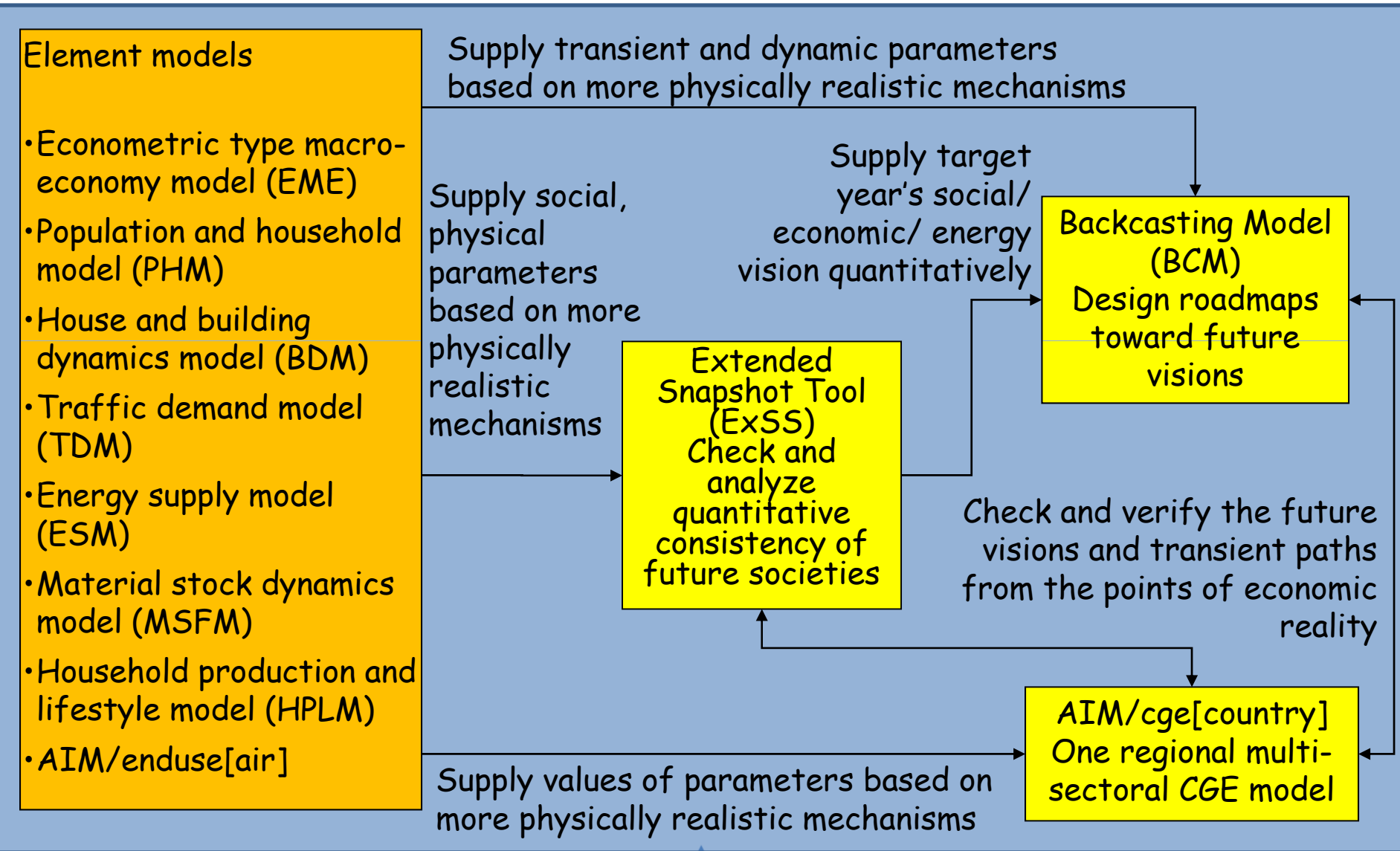
→ Developing country/local LCS scenarios with each country's researchers and decision makers

2 approaches toward Low Carbon Society



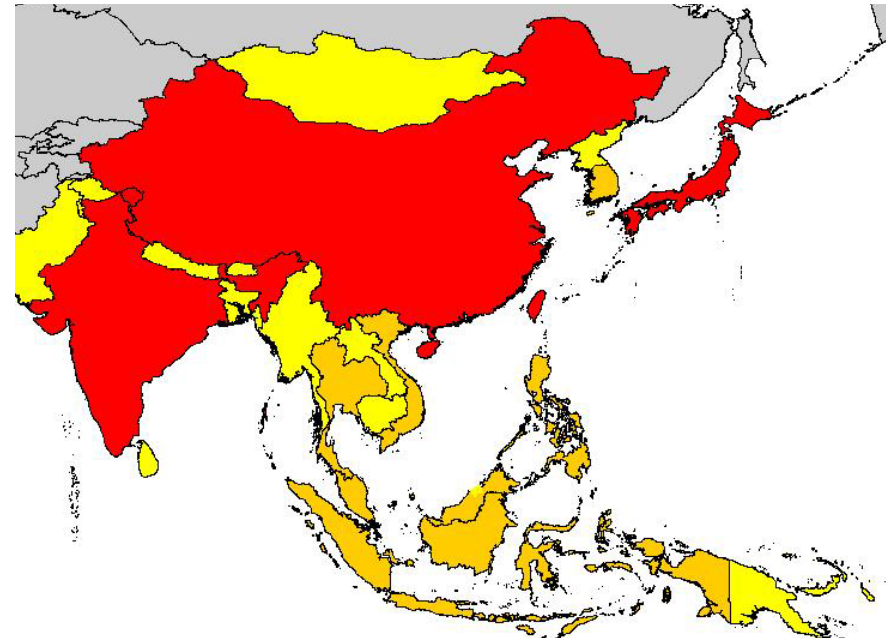
Capacity building for young researchers in Asian countries

Models and tools to assess Low Carbon Society in this research

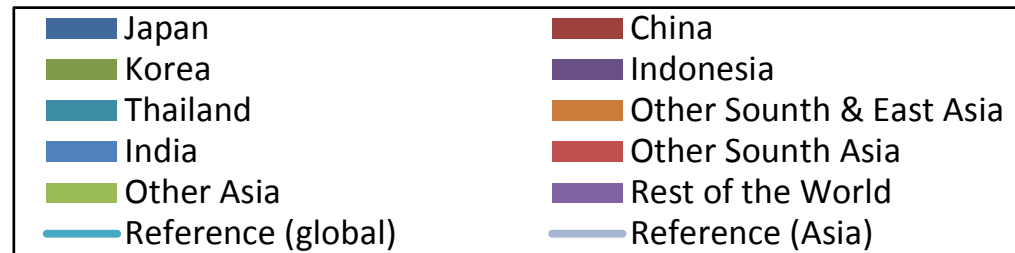
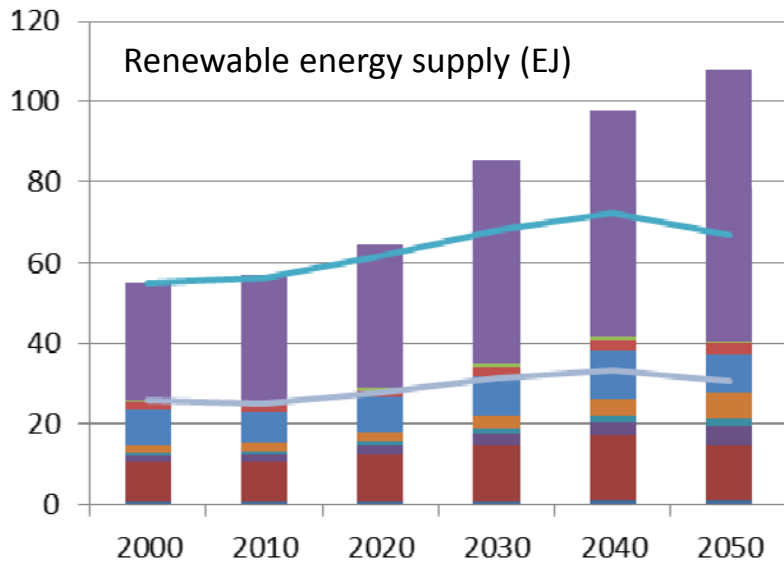
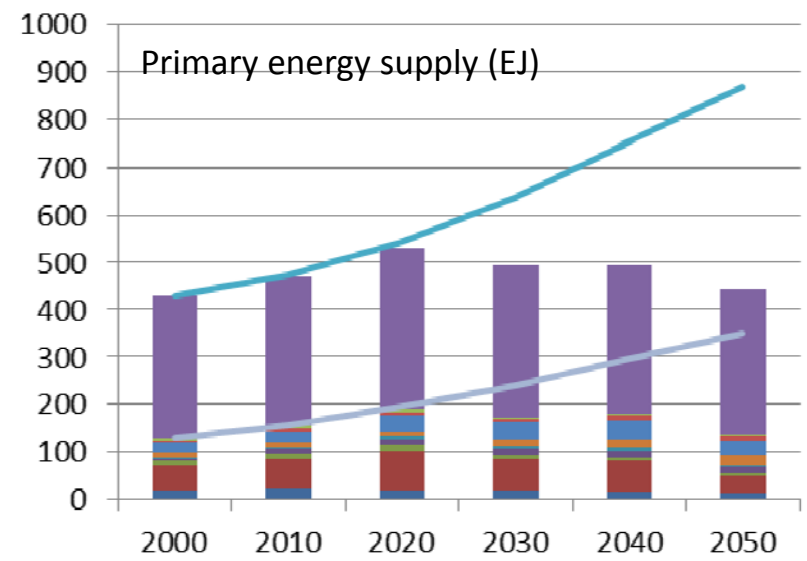
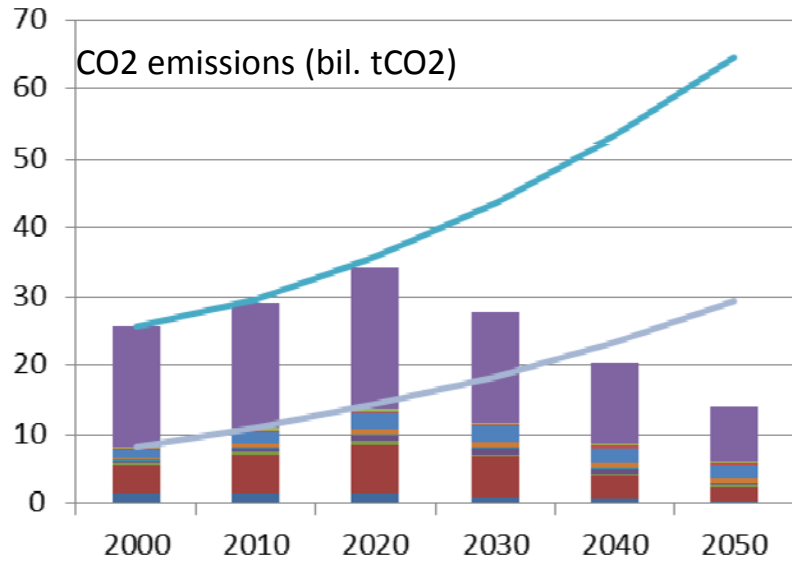


Country/Region	Level 2.5 (28 regions)	Level2 (15 regions)	Level 1 (4 regions)
Japan	JPN	JPN	JPN
China	CHN	CHN	CHN
Taiwan	TWN	TWN	
India	IND	IND	IND
Indonesia	IDN	IDN	ASIA
Malaysia	MYS	MYS	
Philippines	PHL	PHL	
Korea, Republic of	KOR	KOR	
Singapore	SGP	SGP	
Thailand	THA	THA	
Viet Nam	VNM	VNM	
Korea, DPR	PRK	XEA	
Mongolia	MNG		
Lao PDR	LAO	XSE	
Myanmar	MMR		
Brunei	BRN		
Cambodia	KHM		
Timor-Leste	TLS	XSA	
Bangladesh	BGD		
Bhutan	BTN		
Nepal	NPL		
Pakistan	PAK		
Maldives	MDV		
Sri Lanka	LKA	XOC	
Afghanistan	AFG		
Fiji	FJI		
Papua New Guinea	PNG		
Marshall Islands	MCR		
Micronesia			
Palau			
Kiribati	XOC		
Nauru			
Samoa			
Solomon Islands			
Tonga			
Tuvalu			
Vanuatu			

Research Area in this study



Asia in scenario of global GHG emission reduction by half



Examples of country/local LCS scenarios

