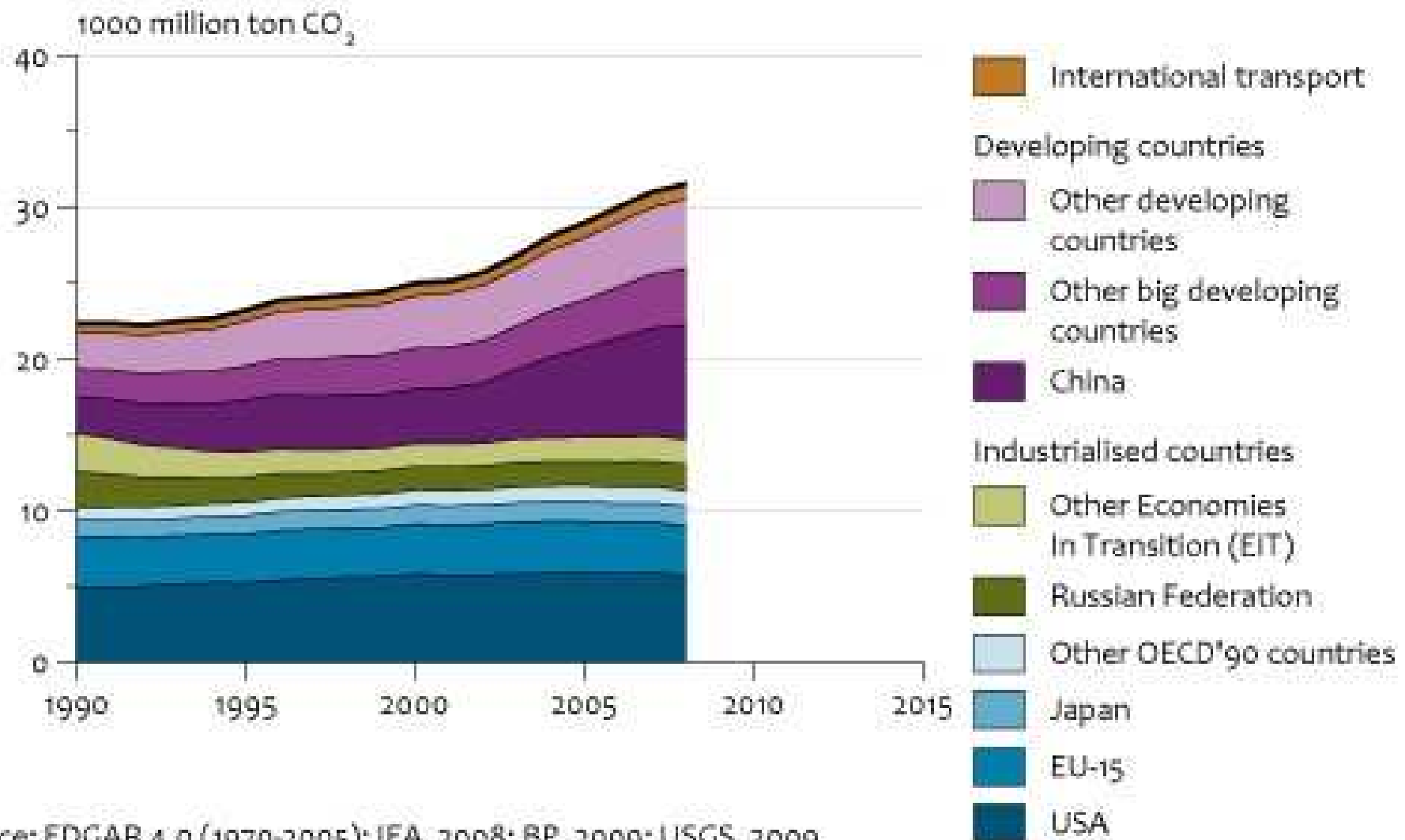


Climate Politics in the Megacities of Today and Tomorrow

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Global CO₂ emission from fuel use and cement production by region



Source: EDGAR 4.0 (1970-2005); IEA, 2008; BP, 2009; USGS, 2009, WSA, 2009, CGFR, 2008.

Copenhagen Accord

2 degrees C limit

Basic agreement on need for reporting and verification of actions

\$30 billion in new and additional resources in 2010-2012

\$100 billion a year in public and private finance by 2020 to help developing countries reduce emissions, preserve forests, and adapt to climate change

Criticisms of Copenhagen

- No commitment to international legal agreement
- No binding targets
- No concrete financial pledges
- No timetables
- No agreement on forests or REDD (reforestation of deforested and degraded areas)
- A non-inclusive decision-making process

What possibilities are there outside of an international climate agreement?

- Voluntary innovators
- Agreements tied to renewable energy targets, energy efficiency targets
- Emission trading programs
- Financial system innovations
- Green growth, industrial innovation
- Regional activism
- **Local/Urban climate action**
- NGO activism

Cities...

consume approximately three-quarters of the world's energy and produce about 80 percent of anthropogenic greenhouse gas emissions.

Urban Population in East Asia

- China 40.5%
- India 30%
- Japan 65.7%
- South Korea 80.8%



The need for a new model



Green
Growth



Industrial Innovators

Green Growth

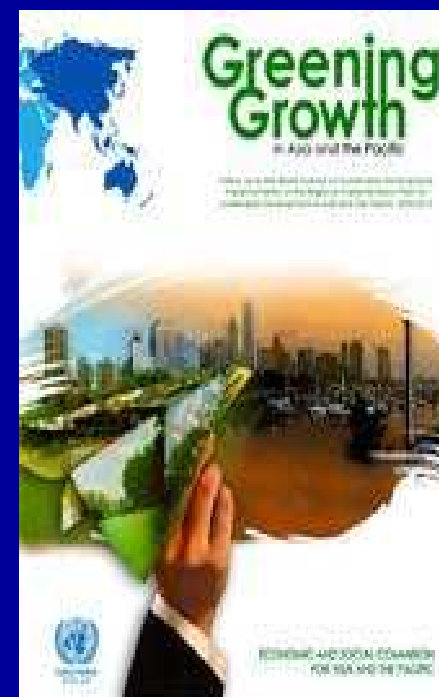
Green Jobs

Recycling Society

Renewables

Energy Efficiency

Low Carbon Cities



Kyoto Global Warming Countermeasures Ordinance

- -10% of 1990 levels by 2010
- Modal shift from automobiles to public transportation (new subways, light rail transit, barrier-free transport)
- Renewables
- Green roof tops

Tokyo Climate Initiative

Tokyo Metropolitan Government established a 10-Year Project for a Carbon-Minus Tokyo in June 2007.

The plan calls for a reduction in Tokyo's greenhouse gas emissions by 25 percent from the 2000 level by 2020.

(per capita CO₂ emissions in Tokyo are already 20-30 percent lower than in New York and London)

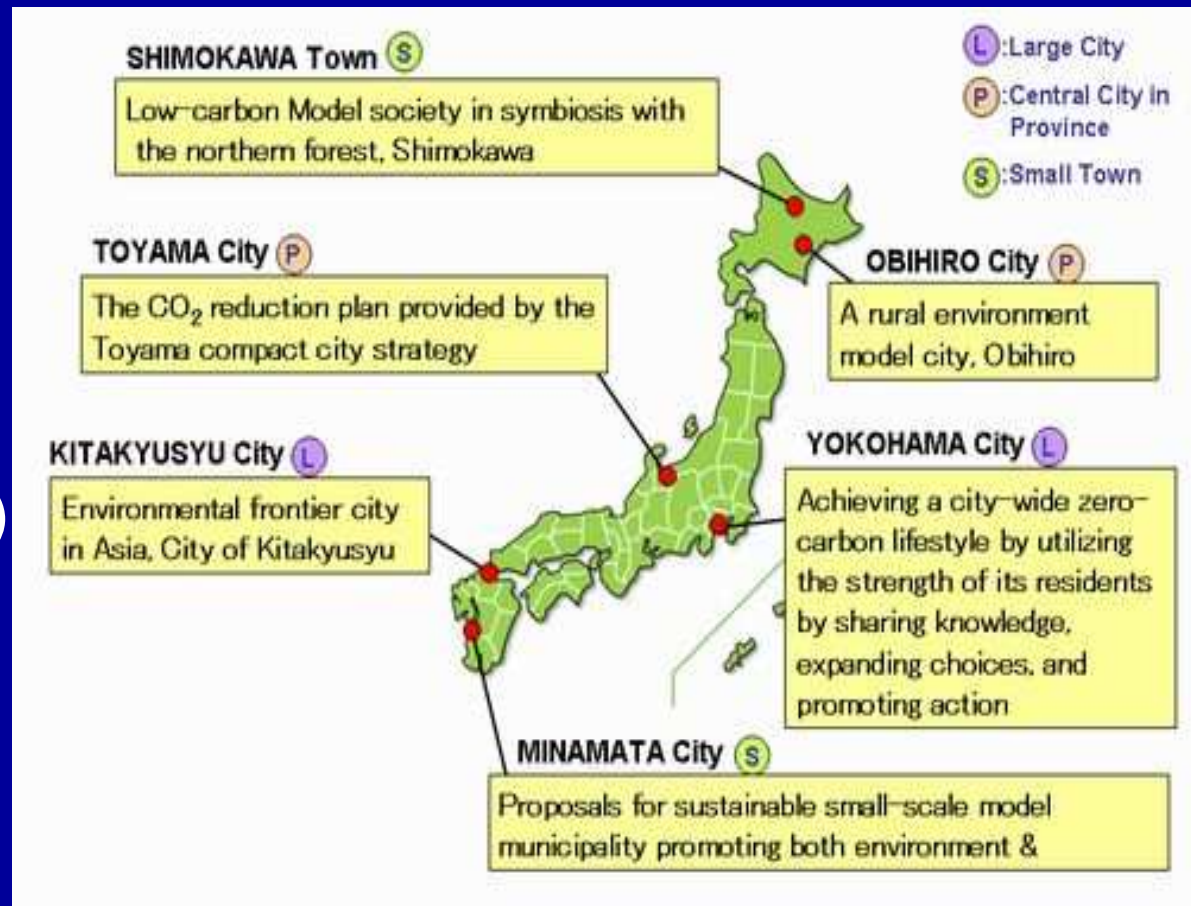
Local Action across Asia

Prefectural and local action plans (but need new plans for 2020!)

Model Cities
(but need monitoring)

Low Carbon Cities
(but need better data)

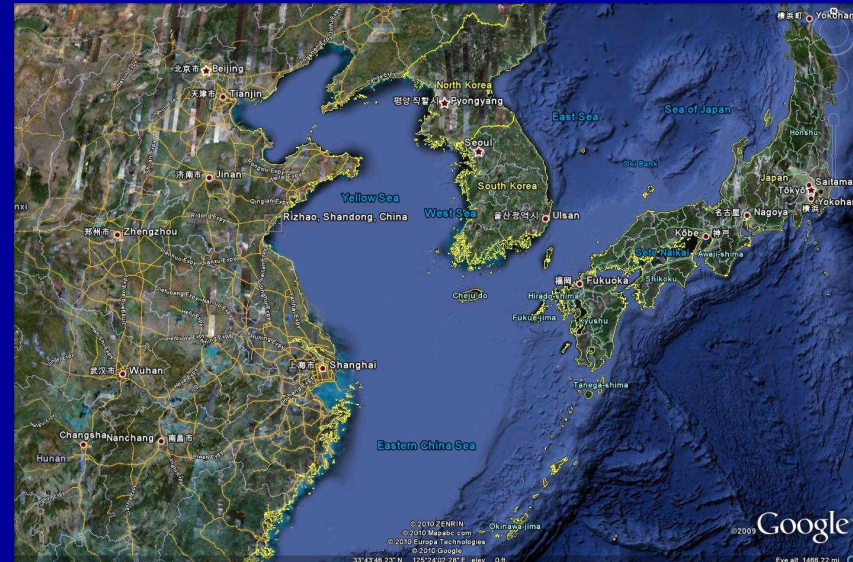
Need more information
exchange across region



China

- National Leading Groups
- Provincial and Municipal Leading Groups for Energy and Environment
- Xinjiang 20% improvement in energy intensity between 2005 and 2010 and 6% water efficiency improvement target

Model Cities: e.g. Rizhou, China's Sun City



International Networks for Climate Change/Sustainability Activities

Clinton Climate Initiative (CCI)- (C40 Large Cities Climate Leadership Group)
ICLEI – Local Governments for Sustainability (Cities for Climate Protection™ (CCP))

World Mayors Council on Climate Change (WMCCC)

The Brundtland City Energy Network (BCEN)

Sustainable Cities: PLUS Network

United Cities and Local Governments (UCLG)

Metropolis

European Sustainable Cities and Towns Campaign

Energie-cités

Eurocities

The Climate Group

Mayors Climate Protection Center

Reset net

Cities Development Initiative for Asia (CDIA)

Asian Cities Climate Change Resilience Network

Asian Cities in ICLEI – Local Governments for Sustainability

China: Shenyang

Taiwan: Kaohsiung, Taipei City, Taipei County

Japan: Aichi Prefecture, Fujisawa, Hiroshima, Hokuto, Itabashi City, Kanagawa Prefecture, Kasai, Kawagoe, Kawasaki, Kitakyushu, Kobe, Kumamoto City, Kyoto City, Musashino, Nagoya City, Sapporo, Sendai, Sumida, Ube, Yamanashi Prefecture

Republic of Korea: Ansan, Bucheon, Buk-Gu, Busan, Changwon, Chungnam Province, Daegu, Damyang County, Gangneung, Gangwon, Geumsan County, Gimpo, Gumi, Gwacheon, Gwangju, Gyeonggi Province, Gyeongsangnam Province, Hadong County, Hoengseong County, Incheon, Jeju Province, Jeju, Jeongseon, Jeonju, Jinhae, Pyeongchang County, Seongnam, Seoul, Sokcho, Suncheon, Suwon, Ulsan, Wonju, Yangpyeong County, Yong-in

Indonesia: Balikpapan, Bogor, Cilegon, Medan, Semarang, Surabaya, Yogyakarta

Philippines: Baguio, Batangas, Bohol Province, Dagupan, General Santos, Iloilo, Linamon, Makati, Munoz, Muntinlupa, Naga, Puerto Princesa, Quezon, San Fernando, La Union, San Fernando, Pampanga, Tubigon, Tuguegarao

Thailand: Bangkok, Muangklang, Phuket

Bangladesh: Rajshahi

India: Ahmedabad, All India Institute of Local Self Government, Bhubaneswar, Coimbatore, Delhi, Greater Visakhapatnam, Guntur, Gwalior, Hyderabad, Jabalpur, Kalyan Dombivali, Madurai, Mumbai, Nagpur, Rajkot, Shimla, Thane, Vadodara, Vijayawada

Nepal: Kathmandu, Municipal Association of Nepal, Pokhara

Sri Lanka: Matale

C40 Large Cities in Asia

Bangkok, Thailand	8,160,552
Beijing, China	15,380,000
Delhi NCT, India	17,000,000
Dhaka, Bangladesh	6,700,000
Hanoi, Vietnam	3,399,000
Hong Kong, China	6,985,000
Jakarta, Indonesia	8,389,000
Karachi, Pakistan	16,500,000
Mumbai, India	13,000,000
Seoul, South Korea	10,300,000
Shanghai, China	18,450,000
Tokyo, Japan	12,800,000



Governance Challenges

- Need for better frameworks (financial and legal) for local governments to be able to act
- Need for more horizontal and vertical coordination
- Improving accountability and transparency
- How to improve sharing of information
- How to scale-up action

- Diffusion
- Learning

- What are the transmission belts?
- Effectiveness of transition belts?
- Focus of transition belts? (What lessons are being taught)