



FROM GLOBAL TO LOCAL CLIMATE ACTION AND BACK

Dr. Jan Corfee-Morlot and Tadashi Matsumoto
OECD (jan.corfee-morlot@oecd.org)

Presentation at Low-Carbon Society, International Research
Network
15-16 June 2015, OECD, Paris



Outline

1. Bangkok Green Growth Case Study
2. How to enabling cities to go green?-- -- the role of the UNFCCC



Key messages

- Governance matters
 - *urgent need for multilevel governance to empower and support sub-national action*
- COP21 – UNFCCC could play a role
 - *using its power to influence collective action at the nation-state level*
- Tools need to be sharpened and used
 - *standardised GHG inventories*
 - *capacity for science policy assessment*



GREEN GROWTH IN BANGKOK, THAILAND

Tadashi Matsumoto
OECD

Presentation at OECD Working Party on Urban Policy
28 April 2015, OECD, Paris

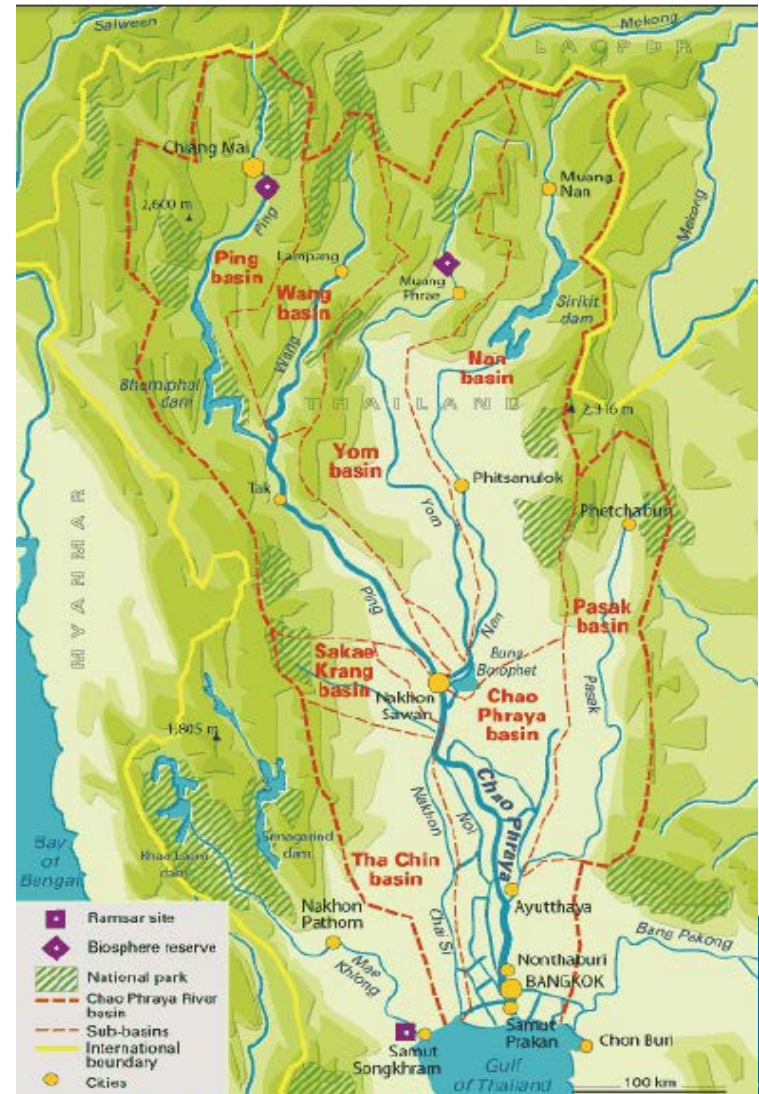


BMR: where it locates



Source: OECD Secretariat

Source: Marome, W. (2012), “Bangkok: Data on Coastal Cities, Needs, Opportunities and Challenges”, Presentation made at Academia Sinica, Taipei.





Green Growth in BMR: Potential and challenges

- **Strong long-term growth potential, but also challenges**
 - Catch-up held back by skill shortages
 - Income disparities undermine social cohesion
- **Obstacles to greener growth need to be overcome**
 - Increasing motorisation/urban sprawl
 - Rising energy consumption/reliance on fossil fuels
 - High flood risk
 - Relatively high levels of untreated wastewater
 - Landfilled solid waste

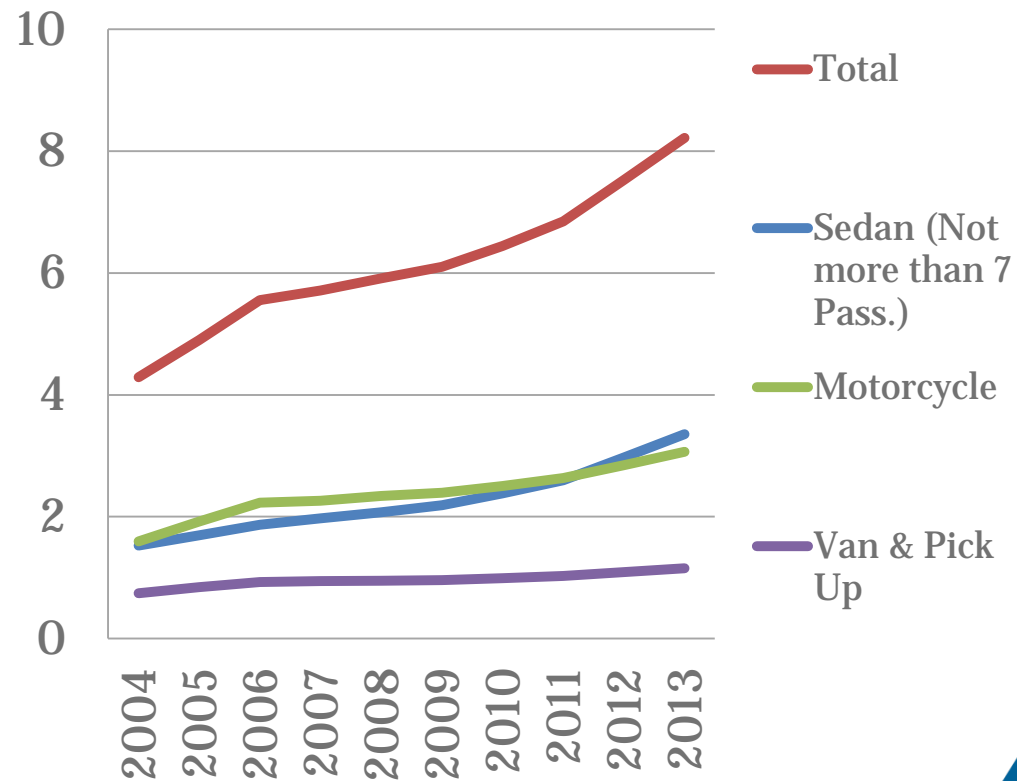


Improving public transport through metropolitan land-use policies

Key recommendations:

- Encourage **development along mass transit lines**
- Introduce **area development plans** for mass transit stations
- Promote greater reliance on **canal transport and bicycles**

Number of vehicles in Bangkok (in millions)



Source: Thailand's Department of Land Transport

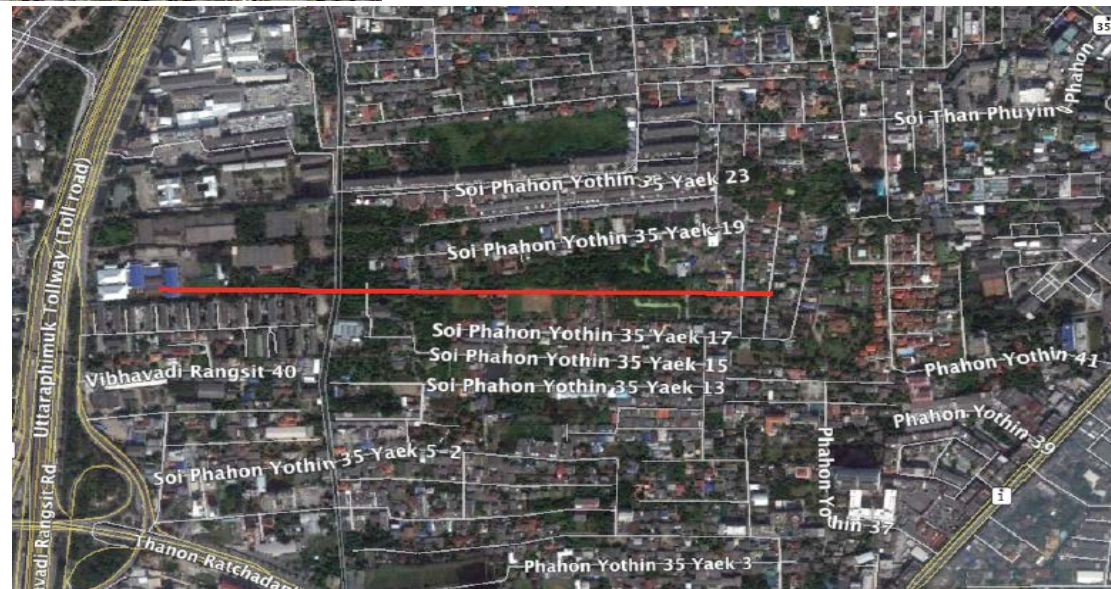


Street layout facilitates congestion



← Manhattan,
NYC

Bangkok →



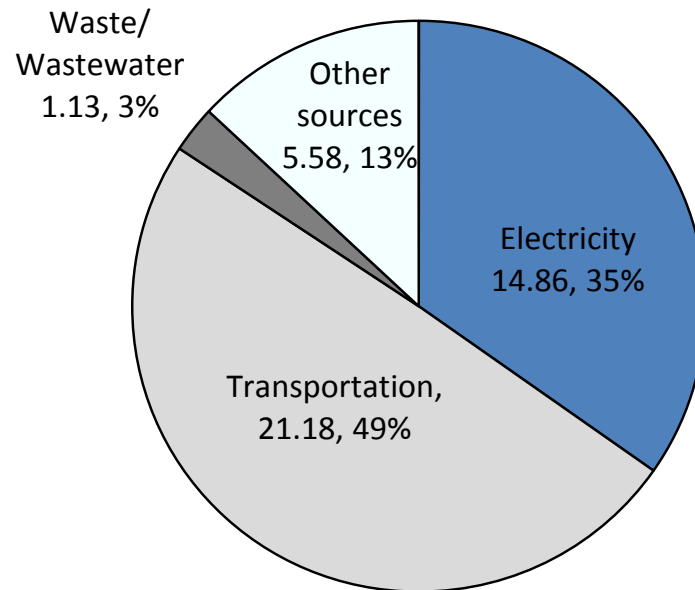


Fostering renewable energy use and energy efficiency in buildings

Key recommendations:

- Continue to phase out **fossil fuel subsidies**
- Encourage use of rooftop **solar panels** and **waste-to-energy plants**
- Encourage greater use of **green labelling**

GHG emissions (by sector) in Bangkok



Source: BMA (2008), The BMA Action Plan on Global Warming Mitigation 2007 – 2012.

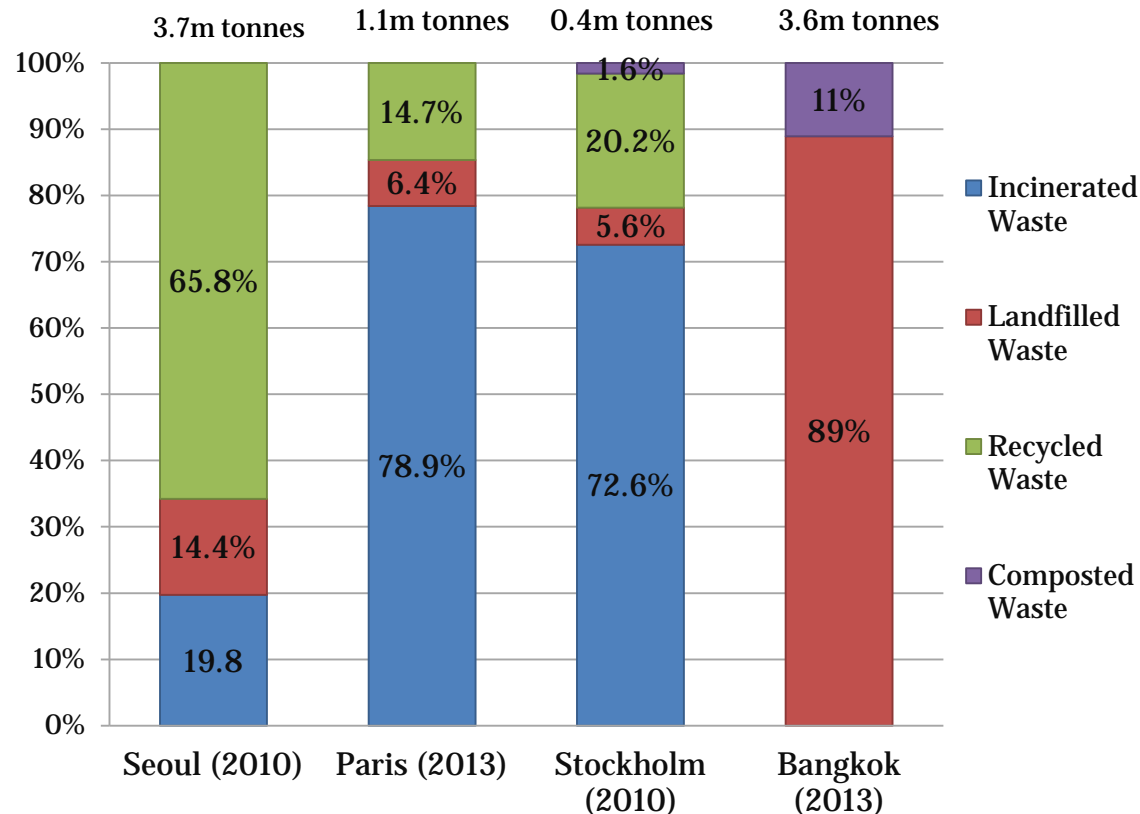


Improving solid waste management

Key recommendations:

- Accelerate **domestic solid waste separation**
- Improve and make greater use of **recycling**
- Promote **waste-to-energy plants**

Treatment of municipal solid waste collected



Source: Yoo and Yo (2014), "Evaluation and development of solid waste management plan: a case of Seoul for past and future 10 years", Springer Japan; City of Paris (2013), *Rapport Annuel sur le Prix et la Qualité du Service Public de Gestion des Déchets à Paris*, Paris, France; OECD (2013b), *Green Growth in Stockholm, Sweden*, OECD Green Growth Studies, OECD Publishing, Paris; Bangkok Metropolitan Administration (2014), Policy and Planning Division, Department of Environment, Data directly collected from BMA



Strategic and implementation levers

- **Metropolitan commissions** informed by BMR-wide performance indicators and supported by metropolitan funds
- **Community-based actions** to leverage local knowledge and expertise
- **Attracting private investors** (e.g. green municipal bonds) **and diversifying sources of revenue** (e.g. wastewater tariffs)



ENABLING CITIES TO “GO GREEN” -- WHAT ROLE FOR UNFCCC?

Dr. Jan Corfee-Morlot
OECD

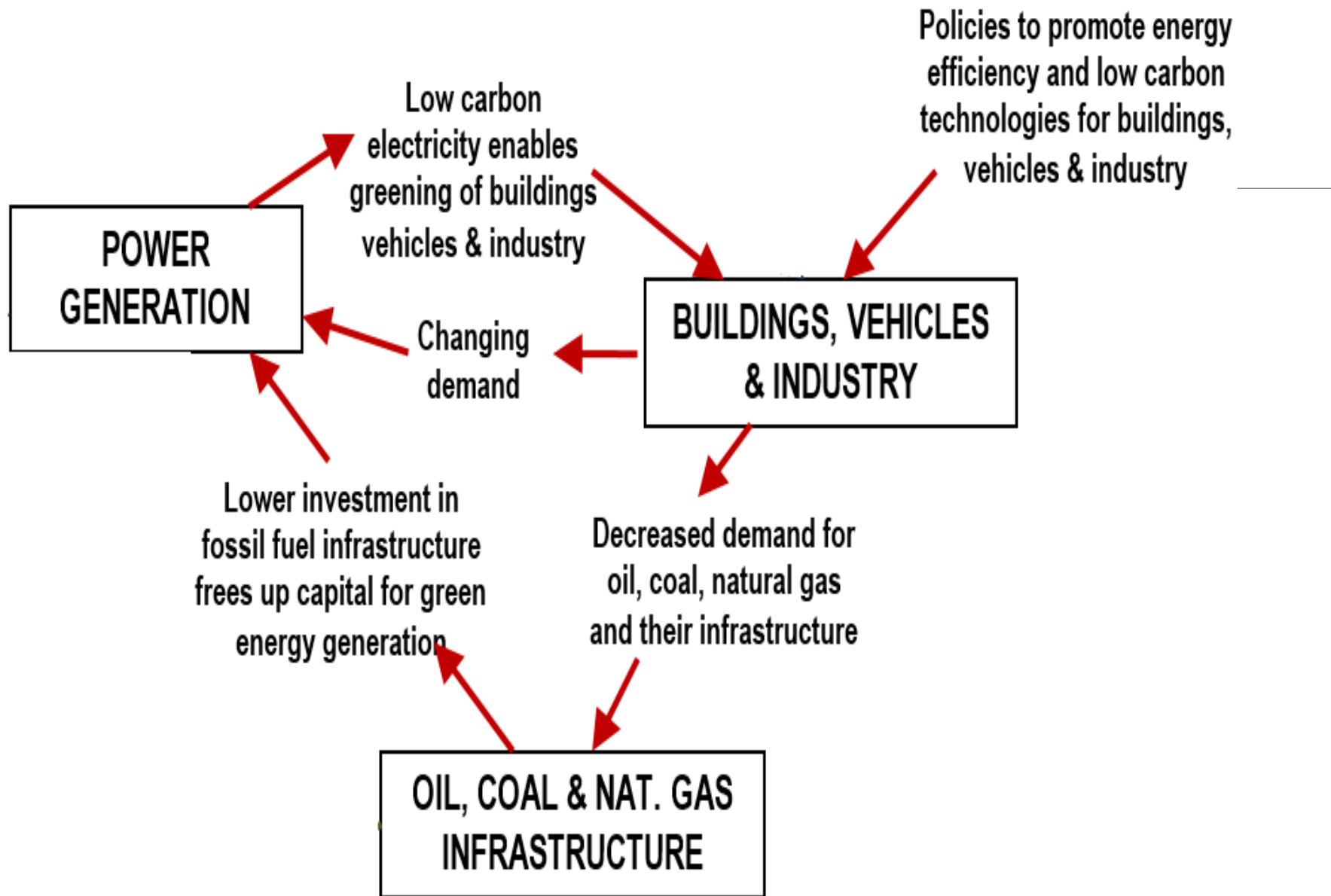


ELEMENTS OF A POLICY FRAMEWORK

Goal: Scale-up private investments in sustainable transport infrastructure, while ensuring the provision of social, economic and environmental public goals

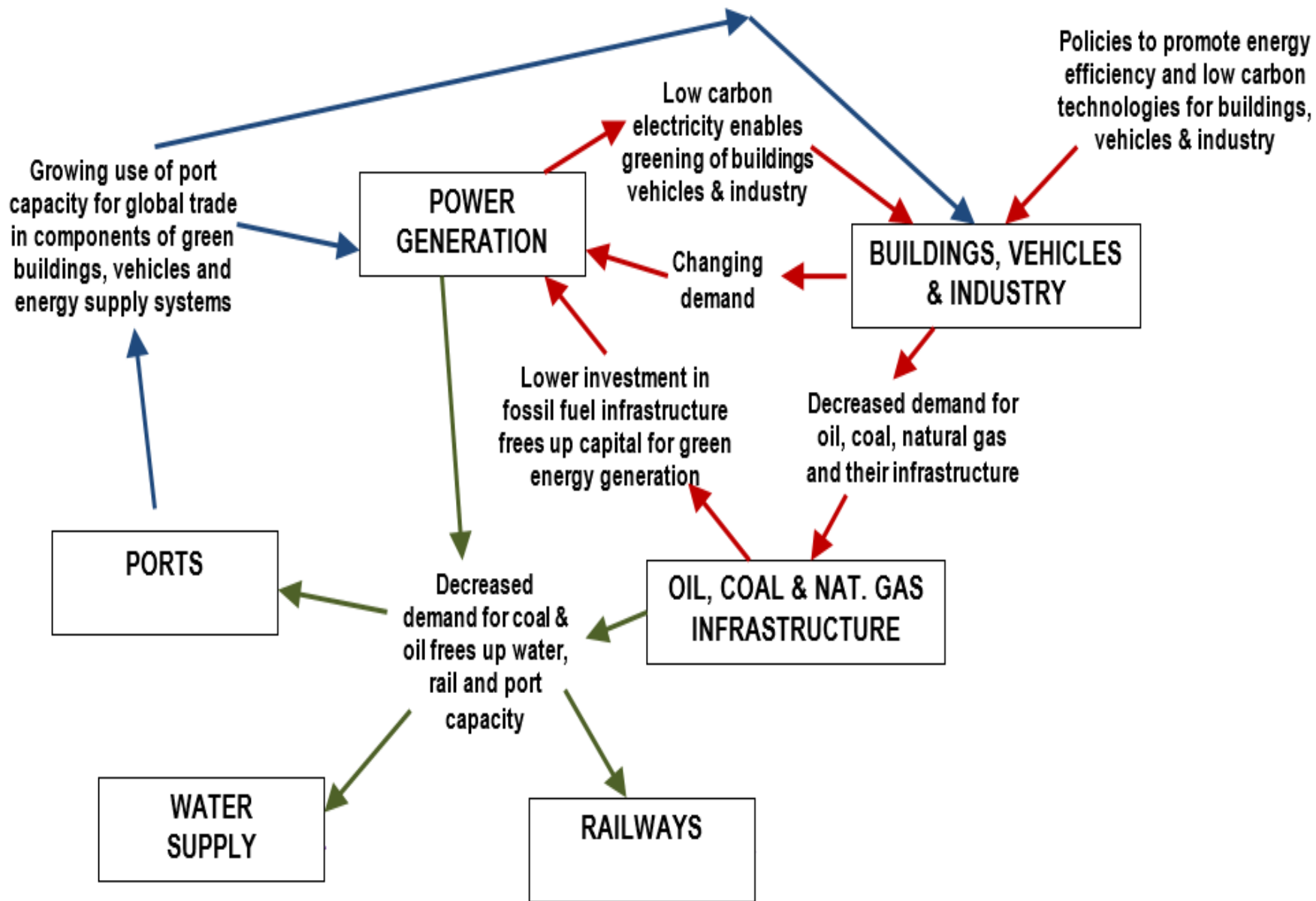
Policy checklist for action

1. Leadership, strategic goal setting and alignment for a green economy	• Long-term goal-setting
	• Policy alignment and multilevel governance
	• Stakeholder engagement
2. Strengthen markets and enabling policies to incentivise green infrastructure investment	• Sound investment policies
	• Market-based instruments
	• Standards
	• Land use planning and zoning policies
3. Adopt financial regulations and instruments to finance green investment	• Risk-sharing business models (PPPs)
	• Innovative financial tools (e.g. green bonds)
	• Land value capture and other incentives
4. Human and administrative capacity for green development	• Human resources, capacity building including in private sector
	• Administrative capacity, including compliance
	• Monitoring and evaluation, risk assessment, climate information
5. Promote green business conduct and consumer engagement	• “Soft” policy instruments e.g. education, information
	• Corporate reporting and goal-setting, consumer engagement



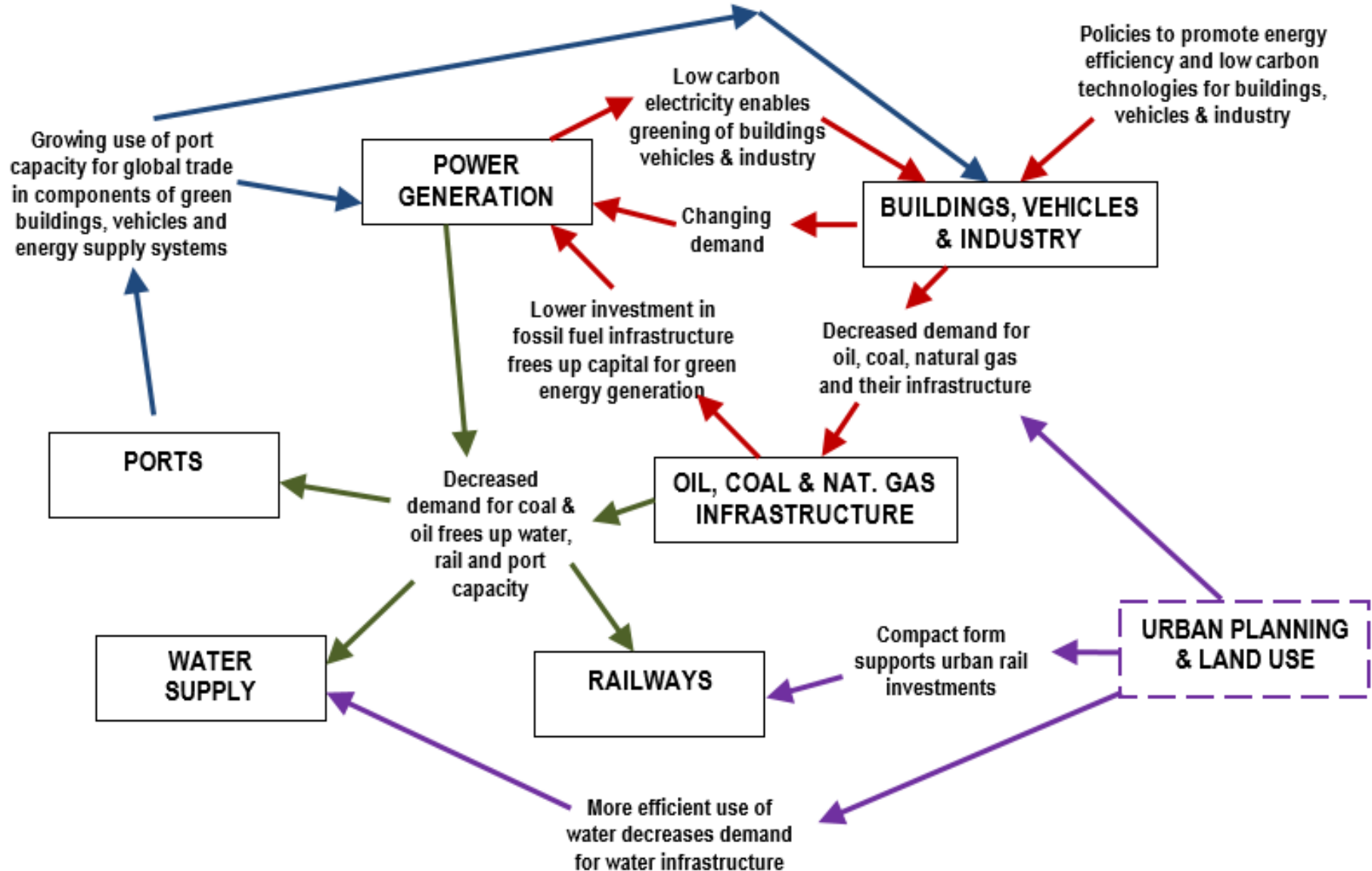
Interactions between Infrastructure Sectors in Virtuous Cycle of Low Carbon Growth in China

(adapted from Kennedy and Corfee-Morlot, 2012, 2013).



Interactions between Infrastructure Sectors in Virtuous Cycle of Low Carbon Growth in China

(adapted from Kennedy and Corfee-Morlot, 2012, 2013).



Interactions between Infrastructure Sectors in Virtuous Cycle of Low Carbon Growth in China
 (adapted from Kennedy and Corfee-Morlot, 2012, 2013).



Why can't cities do it alone?

- National or meso-level institutions essential authority, e.g.
 - Transportation and energy
 - Water basin management and land use
 - Access to capital markets, ability to tax and raise revenues
- Systemic changes in infrastructure outside of urban area
- Administrative boundaries vs need for metropolitan area-wide action as well as national action
- Political mandates of leaders and stability
- Nation-states negotiate and commit internationally
- Need for “fit for purpose” :
 - Institutions for multilevel governance
 - Tools (standardised GHG inventories; science-policy processes)



“Fit for purpose” institutions

-- multilevel governance

Vertical governance

- National governments empower, enable and support cities to act

Horizontal governance

- Local governments or communities unite to co-manage a single environment-development challenges in a single metropolitan area
- Engagement of full range of stakeholders (private and public, small and large, expert and non-expert)
- Networks of local governments form share experience and learn from each other (e.g. Covenant of Mayors, C-40, ICLEI, etc)



Global Protocol for Community Based GHG Inventories (GPC)

- Launched in Rio, December 2014
- Tested and piloted in more than 100 cities worldwide
- Has not (yet) gained international or national government recognition
 - An opportunity to support INDCs?
- Supports good data, robust measurement to better work with national government, private sector

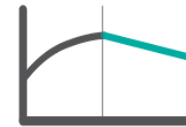
WITH GPC



One measurement



Consistently account for all emissions



Emissions trajectory well understood



Good data drives investment



Can measure city's contribution to national climate efforts



Science policy competence – what is needed?

- Two-way communication between users and producers of knowledge
- Build in local knowledge
- Partnerships with local universities
- Stable funding and mandates (eg from national government)
- Horizontal linkages across metropolitan areas



From two-step to three-step governance of climate change?

- Putnam: two-level game in international governance
 - national politics shape international agreements and vice versa
- >> *How to make this 3-level and do we want to?*
- Could national governments commit through UNFCCC :
 - to strengthen partnerships, recognise and empower local governments to “go green”?
 - to recognise GPC and promote and integrate it as a tool across its city governments?



THANK YOU

Visit OECD Green Cities website:

- www.oecd.org/greencities

On Bangkok case study, with special thanks to:

Bangkok Metropolitan Administration for leading the local team and for financial support

Japan (City of Yokohama) and US (Alliance for Regional Development) for their peer reviews

Germany (GIZ), Japan And Korea for their financial support