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Low Carbon Green Growth:
An integrated policy approach to climate change mitigation



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Overview

1. Why Low Carbon Green Growth in Asia-Pacific?

2. Low Carbon Green Growth: system change for sustainability

3. A Low Carbon Green Growth Roadmap for Asia-Pacific

1. Why Low Carbon Green Growth in Asia-Pacific?

A changing policy landscape

- Policymakers in Asia-Pacific face a changing policy landscape defined by economic, social and environmental risk and uncertainty

- Multiple challenges are now converging

- Three main crisis:
  - Economic – shaky financial system
  - Resource – peak oil
  - Ecological – climate change

Asia-Pacific most vulnerable

Economic Crisis:
Fast growth led by export

Resource Crisis:
Energy importing and material intensive economies

Ecological Crisis:
Most vulnerable to climate change impacts

- More than 21 million went back into poverty in 2009-10
- Long term & fundamental impact but hard to detect (e.g) climate change

A new economic reality

Assumptions of conventional economics	Current reality
Labour & Capital: scarce inputs	Labour & Capital: serious unemployment and huge liquidity
Environment: unlimited and free inputs	Environment: scarce goods and services

→ The way we operate our economy should reflect this changed reality

→ Market prices should reflect ecological scarcity

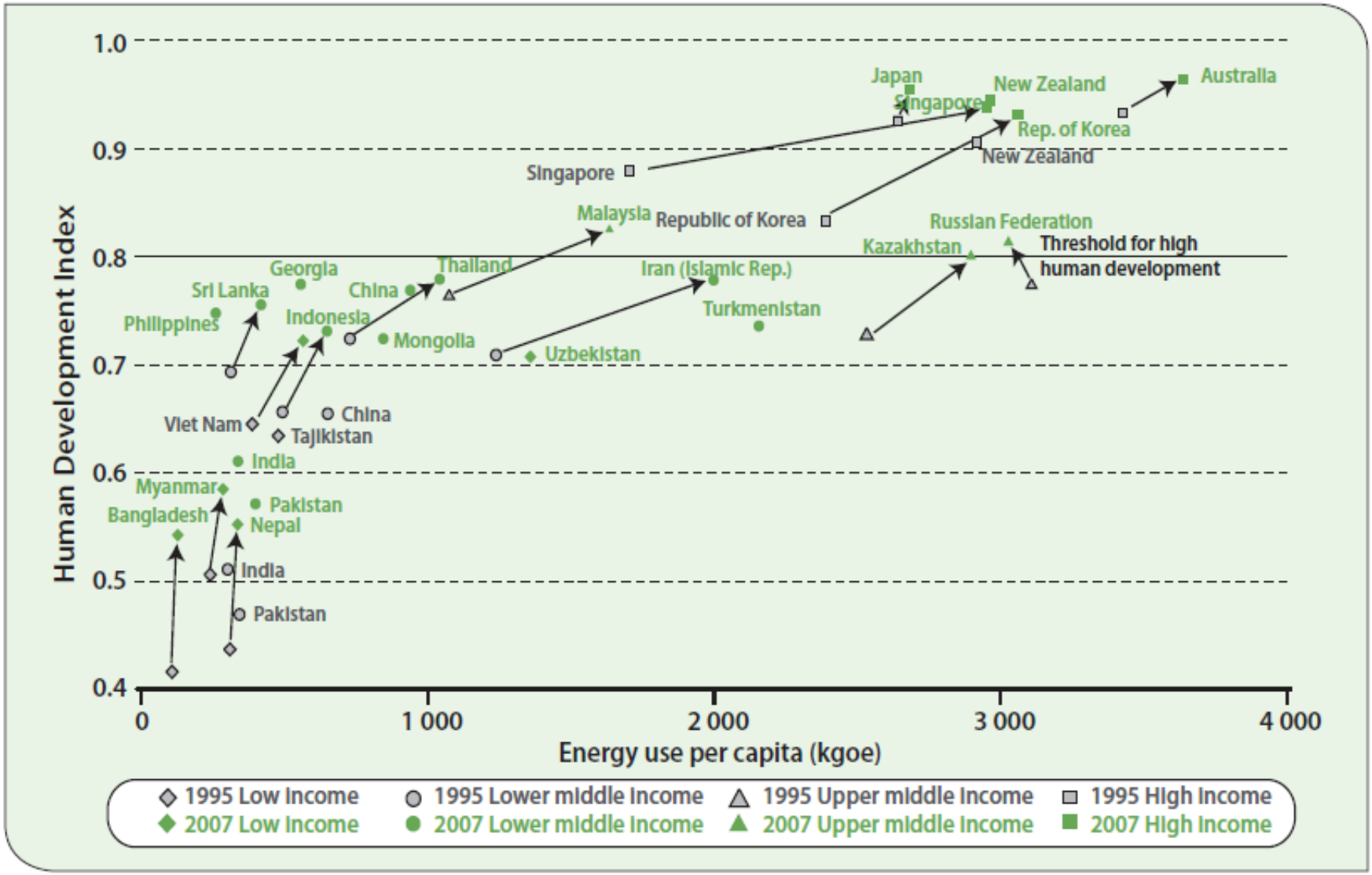
Unique situation in Asia-Pacific

- Asia-Pacific has huge unmet development needs
  - 930 million without electricity
  - 600 million without safe water
  - 1.8 billion without proper sanitation
  - 30% of urban population in slums

- Asia-Pacific has the lowest carrying capacity
  - Population density 1 ½ times the global average
  - Freshwater available: 3,920m3/cap/yr vs. South America 38,300m3.cap/yr.
  - Productive area available per capita: 60 % of the global average
  - Arable land per capita: 80 % of the global average

- Asia-Pacific cannot repeat the conventional “grow first, clean-up later” development path

Figure 2.10: Human Development Index and energy use per capita, 1995 and 2007



Source: Human Development Index: United Nations Development Programme (UNDP), Human development report 2009. Energy use per capita; based on data from International Energy Agency and World population prospects: The 2008 revision population database, http://esa.un.org/unpp

Green Growth born in Asia-Pacific

March 2005
Green Growth adopted as key strategy at MCED 5

2005-2010
Several countries adopt Green Growth strategies:
China, Cambodia, Kazakhstan, Korea, etc

Sep 2010
Astana Green Bridge Initiative adopted at MCED 6

2007-2008
Financial crisis
Food-fuel crisis

2008
Green New Deal
UNEP Green Economy

2009
OCED Green Growth Declaration

2. Low Carbon Green Growth: system change for sustainability

Green Growth: a new growth paradigm

Green Growth is one of the strategies to achieve sustainable development that focuses on greening conventional economic systems and developing a green economy, where economic prosperity can go hand-in-hand with ecological sustainability

Driver of Green Growth: Ecological efficiency (eco-efficiency)

- Internalize ecological prices
- Maximize resource efficiency
- Minimize pollution impact

Recalibrating the economy

- A shift towards Green Growth requires a fundamental system change by restructuring both the visible as well as the invisible systems of the economy
  - The *visible systems* are those tangible patterns that affect the way we produce and consume, such as urban design and planning, the built environment, transport systems, energy systems, water systems, technologies, etc
    → These need to be restructured and re-designed based on ecological efficiency and sustainability
  - The *invisible systems* are those intangible patterns that affect the way we produce and consume, such as market prices, fiscal policy, financial systems, regulations, social values, life-styles, know-how, etc
    → These need to be re-aligned based on ecological prices that recognize the real value of ecological resources and services

Jump-starting Green Growth

- The process of greening economy will not happen automatically and cannot be driven by the market: Only government can make it happen
- This is mainly due to two gaps
  - *time gap* between short term costs and long term benefits
  - *price gap* between current market prices and ecological prices
- In the longer run, Green Growth will be driven by the private sector and by markets
- In the short and medium terms, however, Green Growth requires government to drive the process and manage the transition
- It requires strong government leadership and political commitment

An integrated policy approach

- Low Carbon Green Growth seeks synergies between environmental sustainability and economic growth
  - e.g. sustainable transport can enhance economic competitiveness, liveability, inclusiveness and employment
- Developing these synergies requires a cross-sectoral and multi-disciplinary approach
- Green growth requires an integrated and holistic approach to policy making
  - e.g. transport + land use + energy + pollution + health
- Green growth requires change in planning practices, from current policy, led by short-term goals and one planning period after the other, to the adoption of transition management, with short terms goals linked to long-term goals, driven by a strong vision

Governance

- The Low Carbon Green Growth agenda needs to be driven by the top level of government, to create the appropriate legal and institutional platforms
  - Republic of Korea - Framework Act on Low Carbon Green Growth and Presidential Committee on Green Growth
  - Cambodia - Green Growth Inter-Ministerial Working Group
- The current government structure based on line ministries is not geared towards the holistic policy approach and needs change
  - China – NDRC – all different departments within one institution
- Need for vertical integration for effective decentralization
- Need for partnership between government, businesses and people

3. A Low Carbon Green Growth Roadmap for Asia-Pacific

5-track Roadmap for Low Carbon Green Growth

1. Shift from Quantity to Quality of Growth
2. Integrate Ecological Prices
3. Promote Sustainable Infrastructure
4. Turn "Green" into a Business Opportunity
5. Promote Low Carbon Economics

1. Shift from quantity to quality of growth

- Focusing only on increasing growth (i.e. increasing GDP), will in the long run undermine the prospects of sustaining it
- Rapid growth in Asia-Pacific was allowed lifting millions out of poverty, but in many placed inequalities have increased and natural capital eroded
  - Including soil fertility, water quality, fish stocks
- Countries in the region need to shift to a paradigm of quality of growth
  - China's 12th Five-year national plan
- Three qualities of growth
  - Economic
  - Social
  - Ecological

2. Integrate ecological prices

- The ecological crisis is happening because we do not assign a price to ecological goods and services - but these are becoming more scarce and valuable
- A fundamental change of the price signals is essential in order to shift our economy on a sustainable track
- This change in price signals must not hamper competitiveness, reduce prospects of economic growth and affect the poor
- This requires policy tools such as Ecological Tax Reform (ETR) and Ecological Fiscal Reform (EFR)
  - Shift tax base from goods (labour, corporate tax) to bads (pollution, carbon)
  - Revenue neutrality
  - Double dividend (more growth and jobs, less pollution)

3. Promote sustainable infrastructure

- The way infrastructure is designed and built is critical in determining the eco-efficiency and competitiveness of a country
  - Buildings: 30% GHG emissions, 40% energy use
  - Transport: 23% CO2 emissions, main consumer of fossil fuels
- Not just environmental problems: energy security, economic competitiveness and human security – e.g. food and fuel crisis of 2008
- Infrastructure investments in Asia-Pacific must reach an estimated US$ 10 trillion over the next ten years
  - Such investments will lock Asia-Pacific economies into patterns of energy use and GHG emission
  - Unique window of opportunity to develop sustainable infrastructure
- Investing in sustainable infrastructure will be a key driver for economic growth and employment
- Providing clean energy, safe drinking water, mobility and adequate sanitation and housing will also contribute to meeting the MDGs

4. Turn “green” into a business opportunity

- Investing in natural capital, sustainable infrastructure, clean energy and ecological efficiency represents an opportunity for new economic growth that is green and can create employment
- The world market of low carbon and environmental goods and services has already reached 4.7 trillion USD in 2008, up 5% from the previous year, and is one of the most dynamic and promising sectors
- But the extent to which green business will increase and drive growth and employment depends greatly on the regulatory framework and on market prices for energy and natural resources
- Governments need to create a favorable environment to promote green business and technology and redirect private investment towards green sectors by improving regulations and standards, pricing energy and natural resources correctly, providing support to R&D, adopting green public procurement practices, and also by promoting Corporate Social Responsibility (CSR)

5. Promote low carbon economics

- Climate change mitigation need not be an added cost and a burden on the economy: it can be turned into a driver for economic growth enabling the creation of new employment, technological innovation and business opportunities
- Pursuing a development path with consideration of low carbon economics will note only address climate change challenges, it will also contribute to enhancing the energy security leading to improved economic resilience
- Putting a price on carbon is the central factor for achieving win-win situations
- National low carbon development strategies can provide the basis for Nationally Appropriate Mitigation Actions (NAMAs)

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