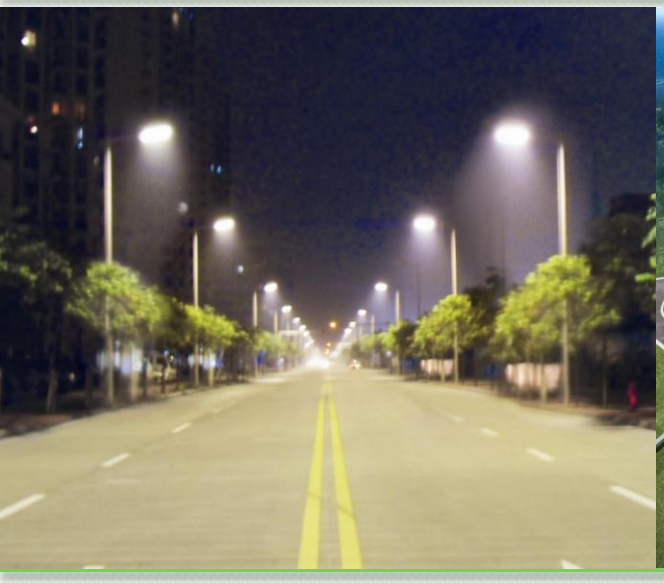
IEA workshop - Fuelling the Future with Energy Efficiency

Realizing Asia's Energy Efficiency Gains – Challenges and Way Forward



Ashok Bhargava

Tokyo, 10 May 2012

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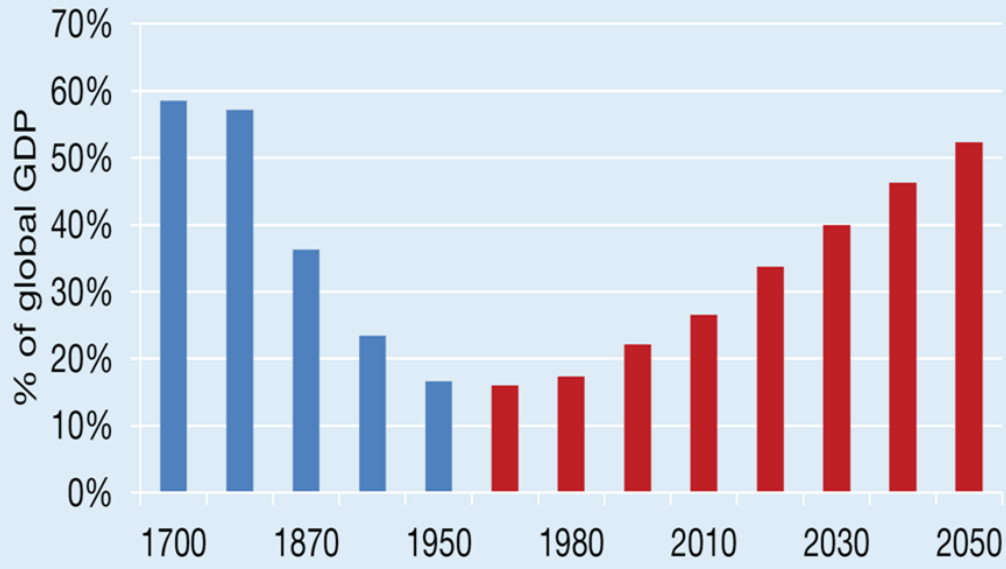
Asia's Economic Growth and Energy Challenges

Asia is in the midst of a historic transformation

- **If current trend continues, per capita GDP will rise to Europe level by 2050**
- **It will double its share of global GDP to 52% by 2050**

Asia's share of global GDP, 1700–2050



Source: Maddison (1700–1950) (2007); Centennial Group International estimates (1951–2050) (2011). Data for 1750–1790 are PPP and data for 1991–2050 are ir market prices.

But the current energy and carbon intensive growth is unsustainable. Due to large fossil fuel dependency, region's energy security is fragile.

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Energy Efficiency - A core part of the Energy Mix

"Negawatt" rather than Megawatt approach

- **Significant co-benefits**
- **But… significant barriers have to be surmounted**

- Energy efficiency is the least-cost option to meet energy demand. It provides "new" capacity at half the cost
- Enhanced energy security, reduced emissions, long-term competitiveness
- Still there is over emphasis on supply side solutions slowing the investment on energy efficiency

Benefits of energy efficiency at macro level are understood but only limited investments are flowing in to support demand side energy efficiency project due to many barriers

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Large Investment Need but Significant Barriers for Energy Efficiency Investment

- **Significant efficiency gains (10 – 25%) possible using best available technology**
- **Additional investment in trillion dollar range will be needed over next 30 – 40 years**

- Poor awareness among energy users of available energy efficiency options
- High risk perception of commercial banks
- Relative poor credibility and weak track record of energy service providers
- Insufficient capacity to audit, monitor, and verify energy use and energy savings

Need is to bring together commercial banks and energy service companies. Governments have to formulate right incentives and regulations

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Conclusions

Emerging economies of the region recognize benefits of EE improvement

- There is a room to accelerate EE improvements across the region

- Political and policy support exist for energy efficiency across most of the region. But investments are low.
- EE efforts are in early stages with large work in progress; higher benefits can be expected in few years time
- Currently, market acceptance and financing mechanisms are weak; tighter regulations and targeted incentives are needed

While energy efficiency improvement has made a sluggish start there are reasons to remain optimistic

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Way Forward

Correction in energy pricing is overdue across the region

- Lending instruments need to evolve to support EE
- Private capital demand predictability and
- Transparency

- Energy pricing must be rationalized, comprising elimination of fossil fuel subsidies and bringing electricity tariffs to cost recovery level
- More innovative lending instruments are needed for EE project keeping their unique nature in mind
- More market-based mechanisms and smart regulations needed to catalyze private investments

Energy efficiency must be mainstreamed in economic policy

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Thank You!

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