Building Performance Best Practices

Pacific Cities Sustainability Initiative Annual Forum, Hong Kong

February 2013
Our mission is to significantly reduce greenhouse gas emissions associated with building energy use by transforming policies and markets.

**GBPN**

- **Harvesting** best practices policies in building energy efficiency and performance.
- **Connecting** regional institutions, and share the best thinking building energy and GHG policy.
- **Communicating** progress toward achieving the GHG abatement potential of the building sector.
- **Advancing** policies and programs that promote low carbon, energy & efficient buildings.
- **Offering** world class energy efficiency expertise to policy makers and business leaders.

**Global Center**

- Conducting cross-cutting research and analysis.
Agenda

• Building Performance & Best Practice: What do we mean?
• What are the opportunities & challenges in Asia?
• What does business think?
Editt Tower – Singapore – Ken Yeang
What do we mean by best practices?

Where are the best policies?

What's happening in Asia?

Where are the 'savings'?

What does business think?
Global world building final energy use (for heating, cooling & water heating) can be reduced by about one-third ... despite an increase in floor area of nearly 130% by 2050.
The Deep Scenario

Goal: 2.1 Gt of CO₂ by 2030 & 3.2 Gt CO₂ by 2050

Building regulations must adopt state-of-the-art performance levels for their climate zone … Even if it is not yet common practice

Integrated policy packages making today’s leading practices the standard by 2020:

New Buildings: Building Policies with Net Zero Energy Targets as minimum

Existing Buildings: Building Policies for Deep Retrofitting

Enablers:

• Financing & Co-benefits
• Performance data and mandatory rating & disclosure policies
• Policies for integrated renewable energy in building developments;
• Compliance with mandatory performance requirements.
Opportunities & Challenges in Asia?
Priorities for Progress in the World’s Fastest Growing Markets
India = Greatest Increase in thermal energy consumption

* Thermal Energy
India & China have the Most to Gain and Lose

- **China**: Lock-in effect = 414%
- **US**: Lock-in effect = 53%
- **EU 27**: Lock-in effect = 10%
China

Existing Buildings:
- Incentives for EE Renovation
- ESCOs

New Buildings:
- How to move toward net zero AT SCALE?
- Regional Capacity Building & Compliance
- Reaching the ‘Middle of the Market’

Thermal Energy Savings by Building Type in China by
India & S.E. Asia

New Buildings: ‘Keep it Simple’ EE codes for urban residential buildings
Base-lines and (NAMAs)
What do business think?

Carbon emissions reductions are a responsibility for us as a businesses

- 60
- 84
- 84
- 83

Energy efficiency legislation is a benefit to the buildings sector

- 73
- 80
- 80
- 66

- Energy usage is a major factor in our investment decisions
- Energy usage is not a major factor in our investment decisions

- 63
- 37
Summary

Net Zero buildings as minimum required performance:
  Asia has the most to gain from strong policy actions – at scale;

More and Deeper Renovation:
  Markets for Efficiency are improving but need development;

Real-estate investors and developers are ready to ‘go deep’:
  But need better information on costs & benefits and clear public policy

This is Urgent:
  The risks are multiplying every minute – HOW TO SCALE UP?
Thank you!
Let’s stay in touch …

Consult our web site:
www.globalbuildings.org

Follow us on Twitter: @GBPNetwork

Send us an email: info@gbpn.org