

Multi-year Expert Meeting  
On Transport and Trade Facilitation:

**Maritime Transport and  
the Climate Change Challenge**

16-18 February 2009

**Expanding Green Energy Finance through  
Public Private Action**

Presentation by

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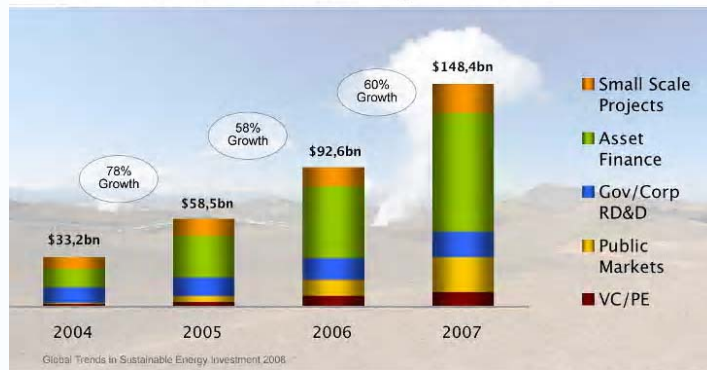
## Expanding Green Energy Finance through Public Private Action

*Expert Meeting on Transport and Trade Facilitation:  
 Maritime Transport and the Climate Change Challenge*

United Nations Environment Programme Finance Initiative


**Current Investment Trends -  
 Before The Crisis**

New Investment in Sustainable Energy 2004–2007



**Dynamic and sustained growth over the last 5 yrs.**

***Current Investment Trends in  
Light of the Economic Crisis –  
A Matter of Interpretation***

**“Financial crisis hinders renewable energy projects  
The global financial crisis has left a void in the world of  
renewable energy financing.”** Portland Business Journal,  
Nov 7th

**“Seeing opportunity for renewable energy in financial crisis”**  
The Jakarta Post , Oct 10th

**“Winds Shift for Renewable Energy As Oil Price Sinks,  
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**“China's clean energy sector shielded from financial crisis”**,  
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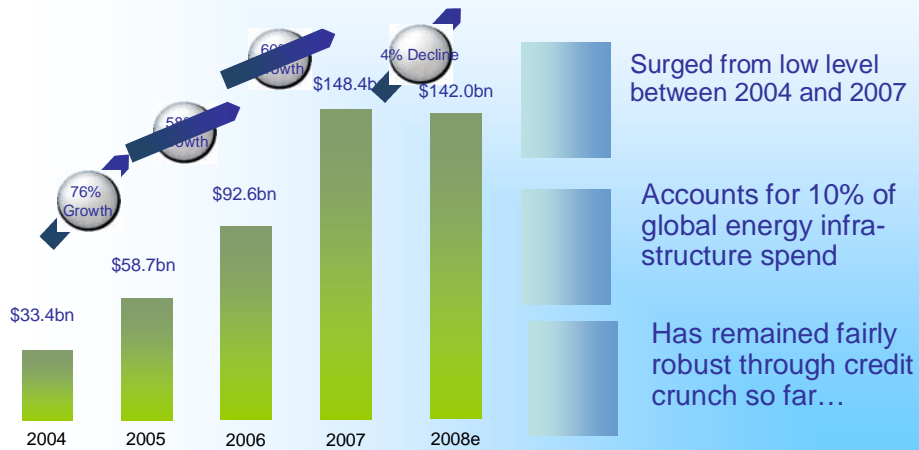
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## Only a matter of interpretation?



## The Positive News....

- Low interest rates
- Commodities cheaper
- VC/PE growing
- US tax credits
- Employment opportunities
- Fundamental drivers still exist – climate change, energy security...



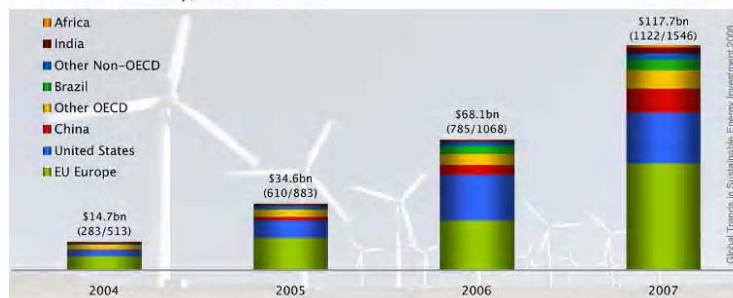
## The Bad News....

- Debt finance hard to get
- No long-term interest rates
- Equity more expensive
- Lower share prices
- Lower carbon prices
- Lower oil price
- Budget deficits take priority



## Geographic Imbalance 1

New Investment by Region (VC/PE, Public Markets and Asset Finance), 2004 - 2007



***Lion share of growth in OECD, w/ share of BRICS rapidly increasing, Africa not on investors' radar.***

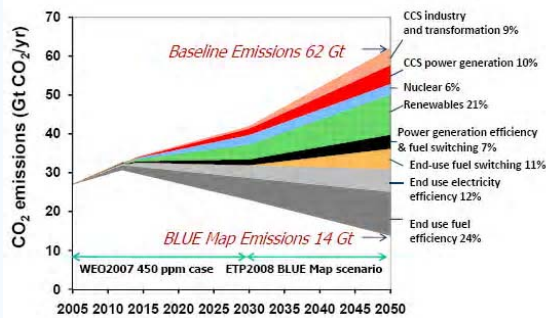
## Geographic Imbalance 2: CDM Projects by Country



**Africa and SE Asia continues to be bypassed by the carbon market.**

## Sectoral Imbalance: Energy Efficiency

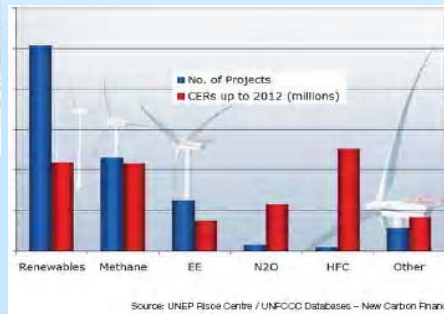
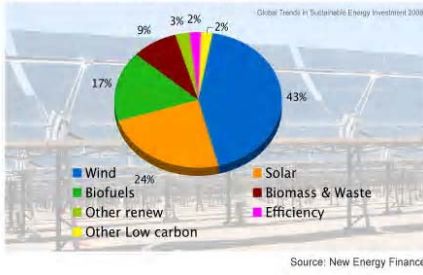
### A New Energy Revolution: Cutting Energy Related CO<sub>2</sub> Emissions



**Energy efficiency improvements are expected to contribute to more than half of all emission reductions needed to achieve a 50/50 target.**

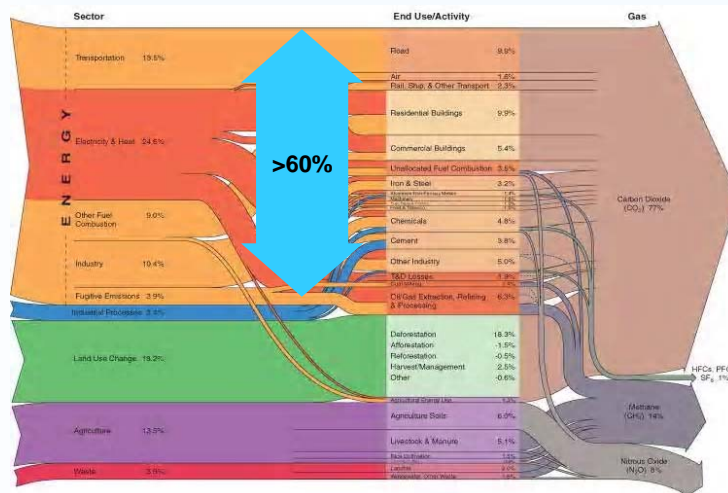
## Sectoral Imbalance: Energy Efficiency

Global Investment by Technology, 2007



**Yet, energy efficiency finance lags massively behind renewable energy.**

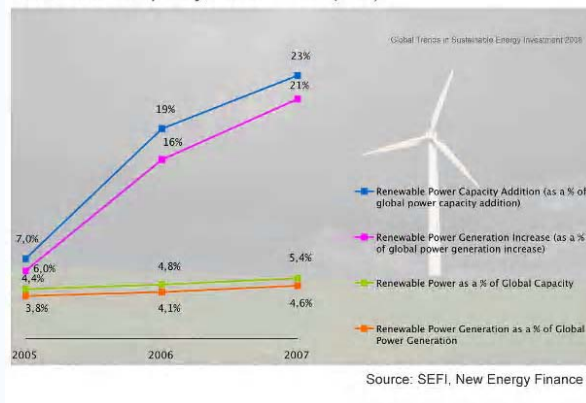
## The Big Picture – The Importance of Clean Energy



**Clean Energy as the key component of any Climate Change Strategy.**

## The Big Picture – Renewables and Global Supply

Renewable Energy Capacity as a proportion of Global Power Generation Capacity, 2005 - 2007 (GW)



**Renewables have gained significant momentum, but remain a small part of the big picture.**

## The Projections....

- Clean energy market will grow, though more slowly, with greater consolidation and sharper focus on businesses with greater returns
- Investors will become more selective
- Large utilities and other companies with deep pockets will buy up RE developers
- Banks will play smaller role
- There will be a shift in investments toward energy efficiency
- „Green New Deal“ ?





## The Importance of the Developing World - Access to Electricity

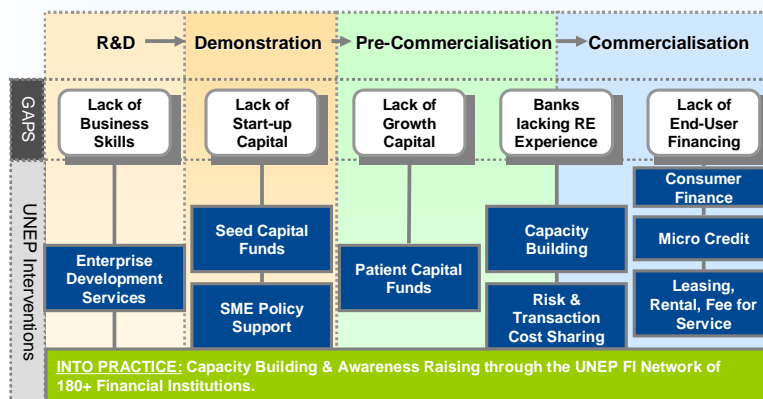


- 1.6 billion people still don't have access to electricity.
- 2.6 billion people still depend on traditional biomass fuels for heating and cooking.

*The scale-up is still bypassing most of the developing world*



## UNEP Clean Energy Finance – Gaps and Interventions



*Working to build a continuum of financial services to foster clean energy technologies and business models.*

## UNEP FI: Reaching out to the Financial Mainstream

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Allianz/Dresdner</li> <li>• Aviva</li> <li>• AXA</li> <li>• Bank of America</li> <li>• Caisse des Dépôts</li> <li>• Calvert Group</li> <li>• DBSA</li> <li>• Fortis</li> </ul> | <ul style="list-style-type: none"> <li>• HSBC</li> <li>• Insurance Australia Group</li> <li>• JBIC</li> <li>• Munich Re</li> <li>• Standard Chartered</li> <li>• SAM</li> <li>• Swiss Re</li> <li>• UBS</li> </ul> |
|---|--|

**Key Financial Players make up the Climate Change Working Group of UNEP FI**

## UNEP FI's Track Record in Climate Change: CoP 9 in Milan



✓ The liquidity and hence the success of the carbon market depends on the involvement of the financial sector.

✓ The carbon markets bear opportunities for the sector: trading, brokerage, supply of certificates, hedging products, portfolio management, etc.

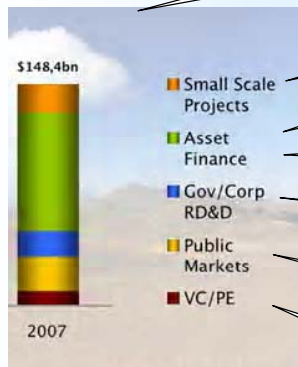
## UNEP FI's Track Record in Climate Change: CoP 13 in Bali



✓ Formulates and quantifies the contribution of the finance sector to climate change mitigation and adaptation.

✓ Provides concrete examples of who has done what.

## Global Scale up – Recap of Main Challenges



Source: New Energy Finance

What's going on with Energy Efficiency Finance?

Key for Developing World and Energy Access

End-User Finance opps remaining untapped

Carbon Investment bypassing Africa and SE Asia

Need for New Public Financing Tools

Volatile policy environment creating volatile markets

Early Stage/Risk Capital Gap

## ***UNEP FI's Track Record in Climate Change: Now – Energy Efficiency***

### **1) What's the problem with EE finance?**

- Issues identified:
  - The **Lack of Visibility** of Energy Efficiency Finance;
  - The **Lack of Scale**: 'too small to be interesting';
  - The **Revenue Problem** - cashflows from saving energy are not conventional revenues;
  - The **Lack of Dedicated Time and Resources** - to develop EE capacity and activities in-house.

## ***UNEP FI's Track Record in Climate Change: Now – Energy Efficiency***

### **1) Recommendations for FIs:**

- Formulate board-level recognition and policies;
- Formulate a mandate and establish dedicated EE resources;
- Explore “Energy Efficiency Audits”
- Develop EE Standards per Sector



## **UNEP FI's Track Record in Climate Change: Now – Energy Efficiency**

### **1) Recommendations for Policy Makers:**

- Ensure Consistency towards EE through an integrated sustainable energy policy framework; Get rid of perverse incentives.
- Formulate board-level recognition and policies within public FIs;
- Induce demand for EE services and products through EE activity in “controlled” MUSH markets - *Municipalities, Universities, Schools and Hospitals*
- On the supply-side: decouple the profits of utilities from their sales.