Supporting change through green investments

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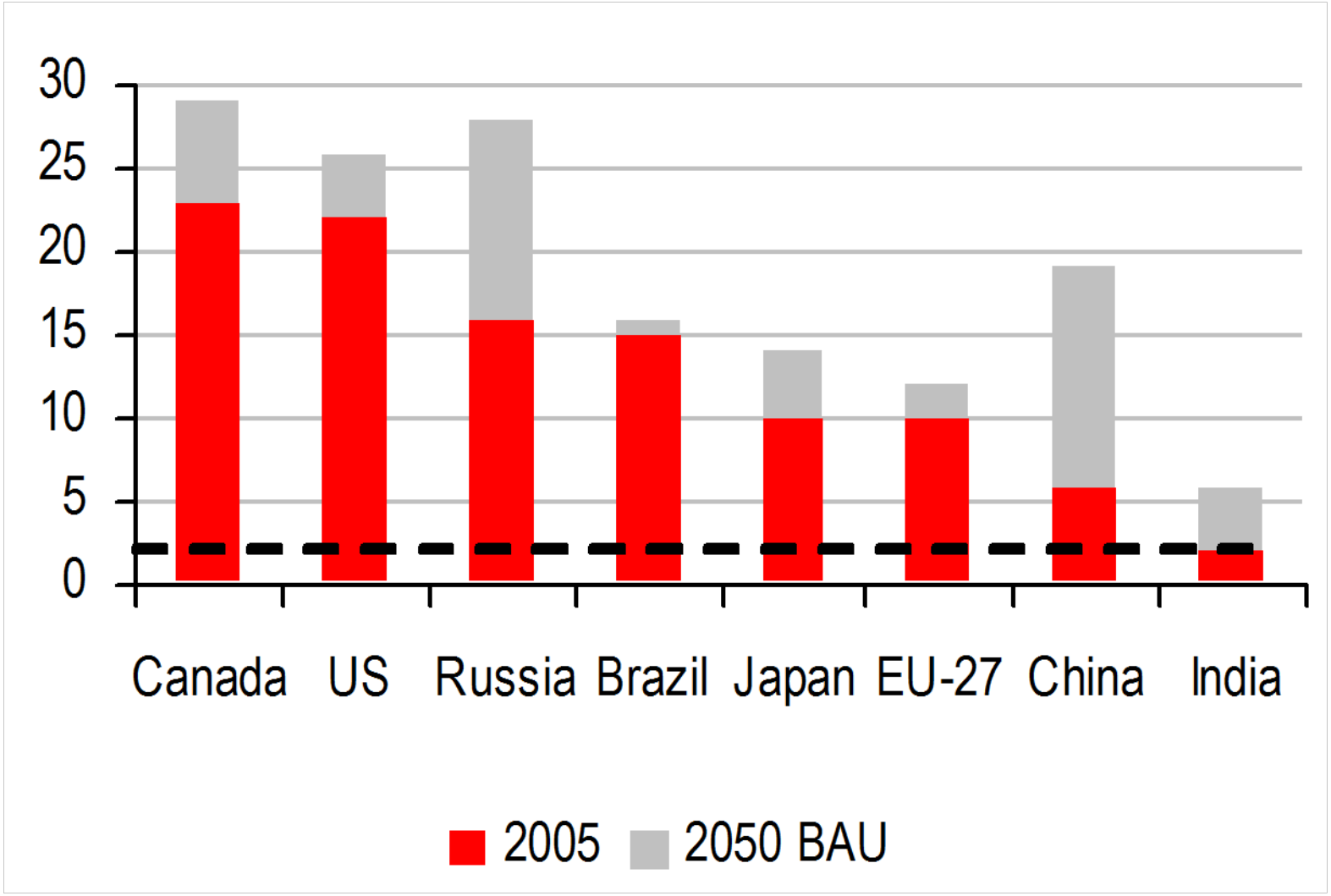
HSBC Climate Change

HSBC Global Research

Why is Copenhagen important for investors?

- Designed to set medium- (2020) and long-term (2050) GHG reduction targets, which will
  - Drive growth rates for clean energy solutions (energy efficiency & renewables)
  - Define extent of carbon risk for key sectors: energy, metals, transport, utilities
  - Determine the extent of physical risks: droughts, floods, sea level rise etc

A soft consensus: halving emissions by 2050



Source: The Climate Group, Breaking the Deadlock, 2008

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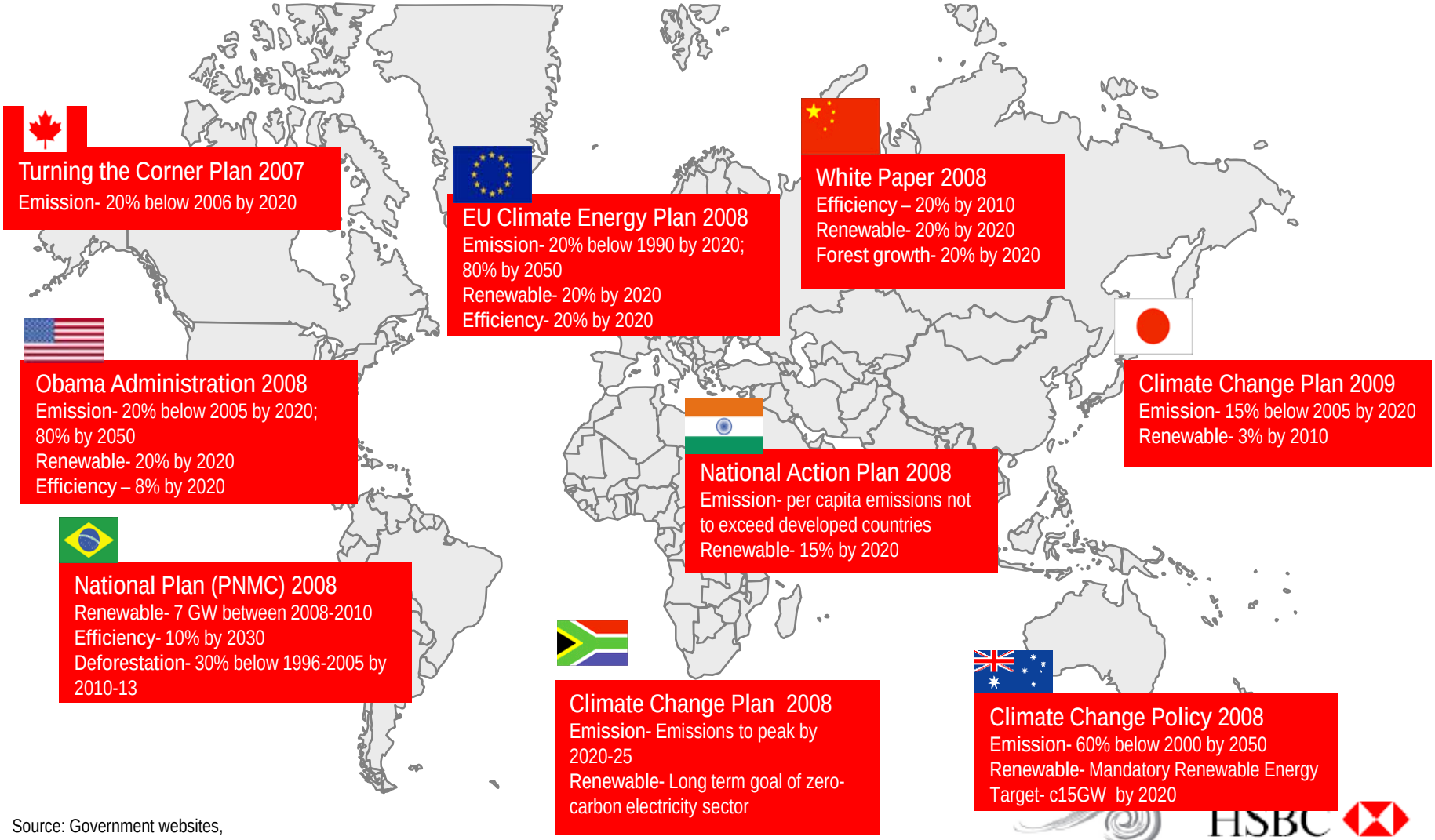
Growing international climate commitment since 2007

Copenhagen conference expected to confirm this trend



Source: Government websites, others

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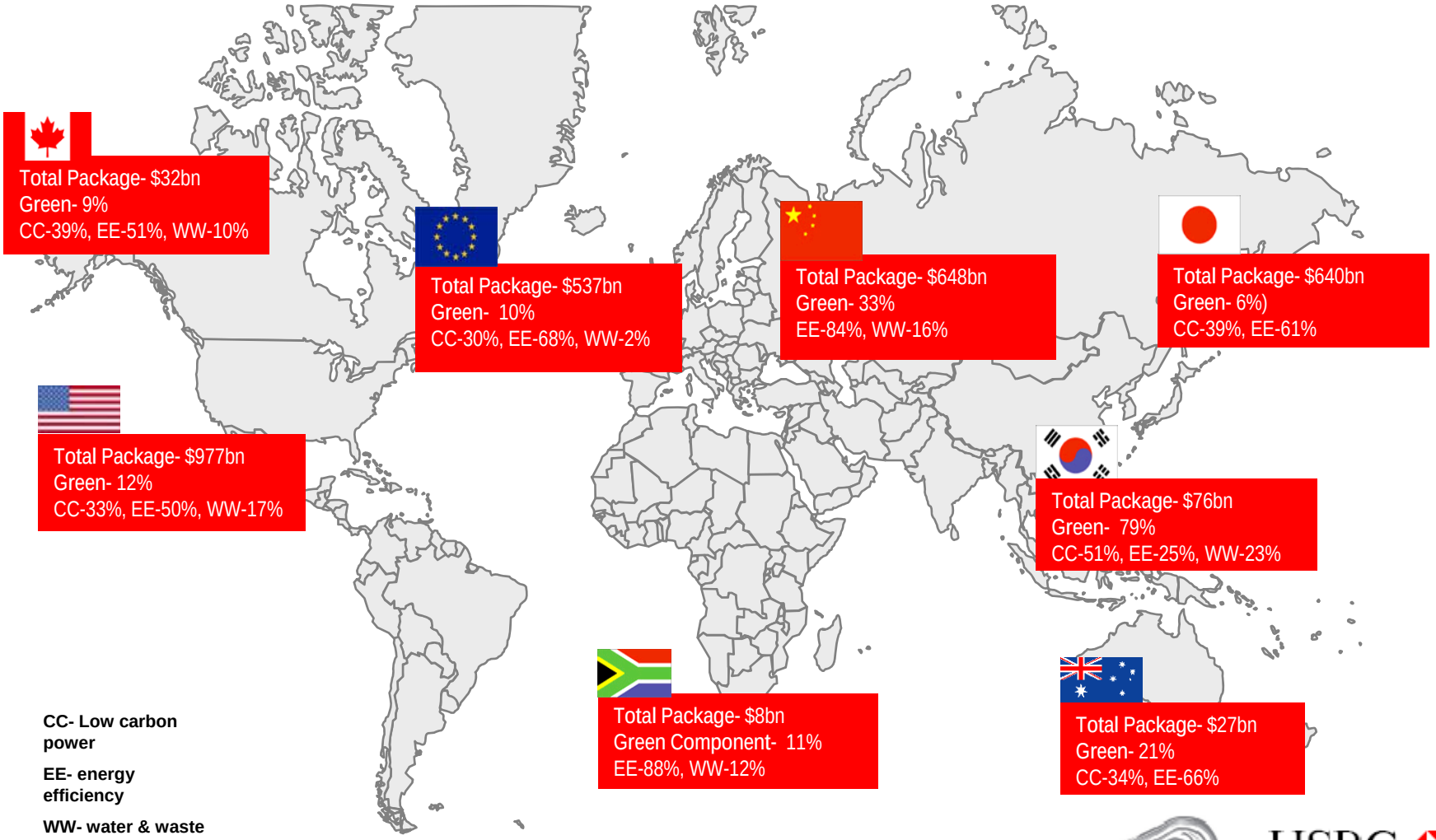
Building a green recovery - USD512bn allocated

Asia leads the way with almost 2/3rd of green stimulus



CC- Low carbon power

EE- energy efficiency

WW- water & waste

Source: HSBC estimates, government websites, others

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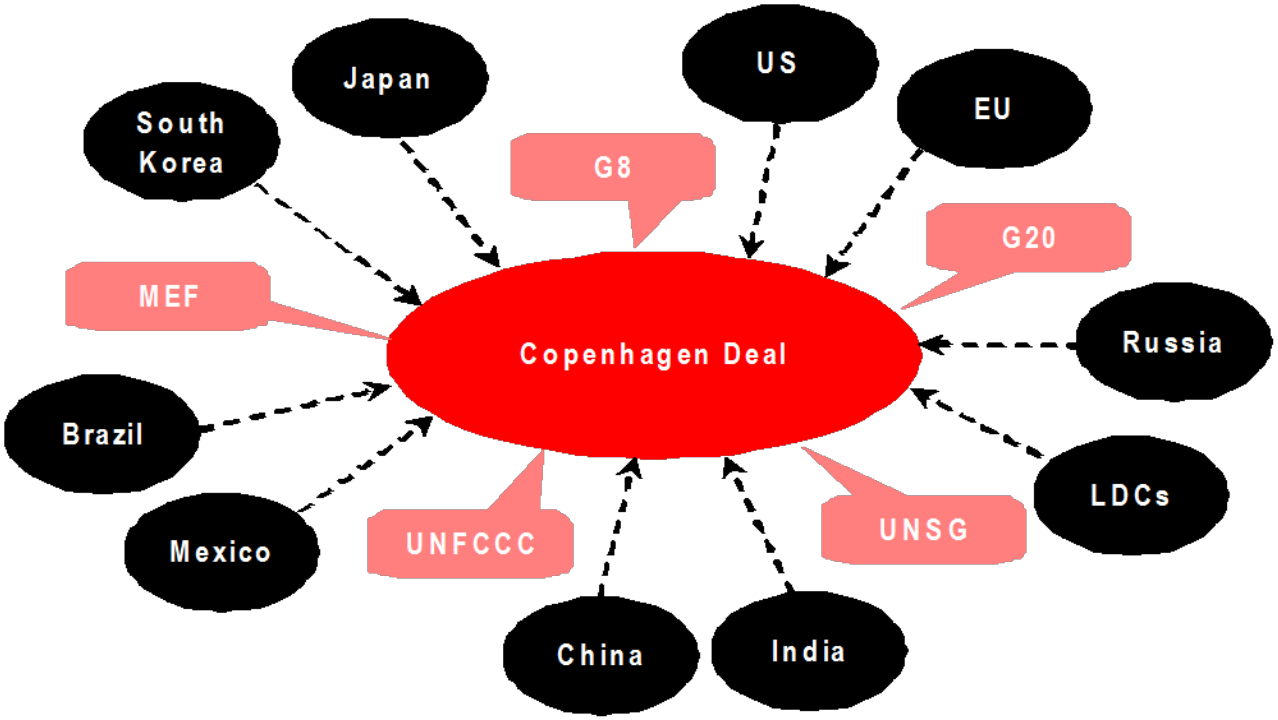
Many roads to Copenhagen

The Copenhagen Constellation



Source: HSBC

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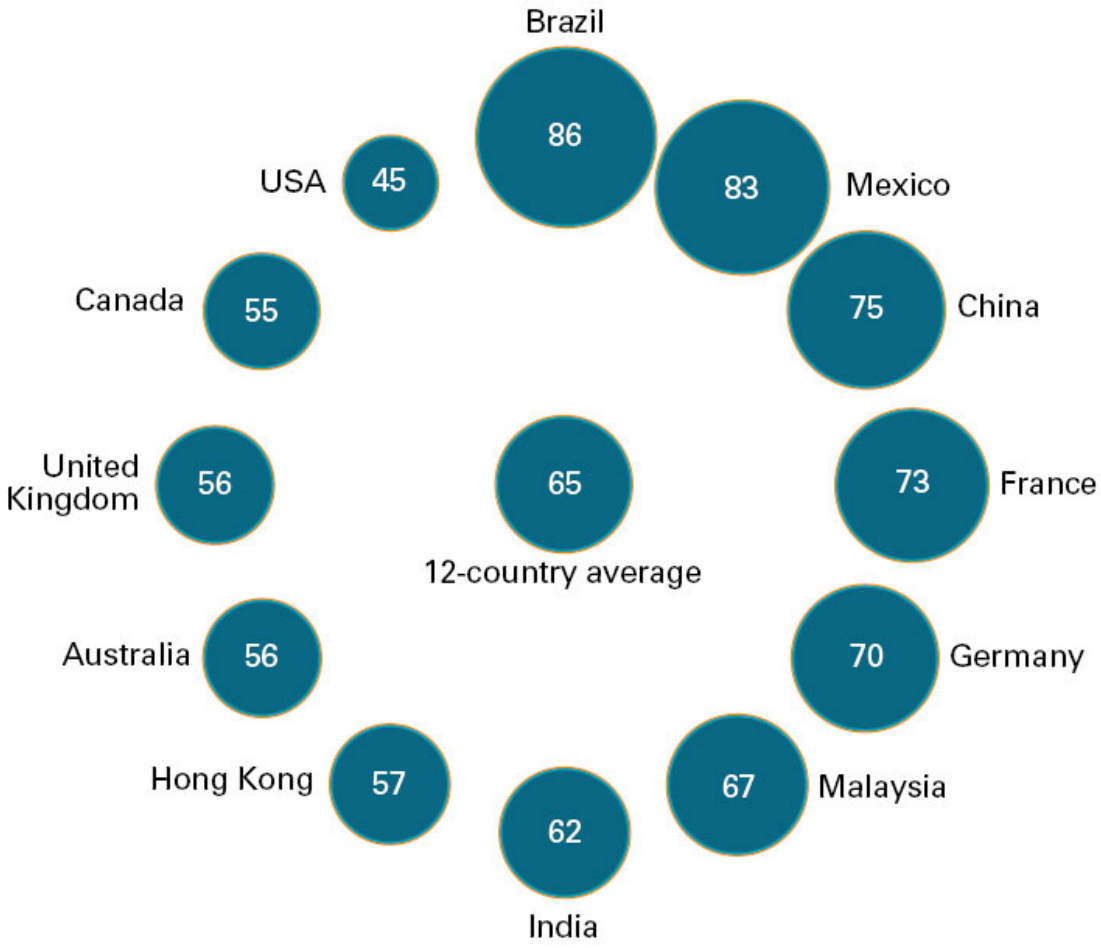
Two-thirds of people worldwide support a global deal

Results of HSBC Climate Change Monitor, 12 countries, 1000 people each



Source: HSBC, 2009

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Closing a deal in Copenhagen

1. Long-term targets: 2 degrees
2. 2020 targets for industrialised countries: 15-20%
3. Low carbon growth for emerging markets
4. Taking action on tropical forests
5. Adapting to climate impacts
6. Promoting clean tech cooperation
7. Mobilising public and private capital
8. Reforming carbon markets
9. Closing the loophole for international transport
10. Avoiding ‘carbon protectionism’

A close run thing…but a deal will be done

Capturing the Climate Change Equity Opportunity

The HSBC Climate Change Index

Launch Date:
24 September 2007
Market Cap of USD1,400bn
ie 2.5% of Global market cap.

Comprises companies that are focussed on addressing, combating or developing solutions to offset and overcome the effects of climate change. It defines for the first time the Global Opportunity Set and includes companies that have the potential to be leaders and corporations best placed to benefit from successful mitigation, reaction and adaptation.

- Modified market capitalisation index
  - Stock weights are modulated by revenues associated with climate change related activities
- Minimum market capitalisation and trading turnover
- Quarterly review of index components

Exposure factors are reviewed on an annual basis.

HSBC Global Climate Change Index
(at launch September 2007)
x 300 Constituents
> USD500m plus Mkt Cap inclusion
> 10% plus Rev from the 18 themes
> Total Mkt Cap USD1,400bn

Identified Universe
990 Constituents > USD10m+ mkt cap
Circa 10% > Revenue from the investment themes

HSBC Index Database – Edinburgh, Scotland
Established 1985/65,000 constituents with USD10m+ mkt cap
Contains – Open/High/Low/Close/Dividends/Corp Actions /Free Float/Index Attributions

Source : HSBC Quantitative Research

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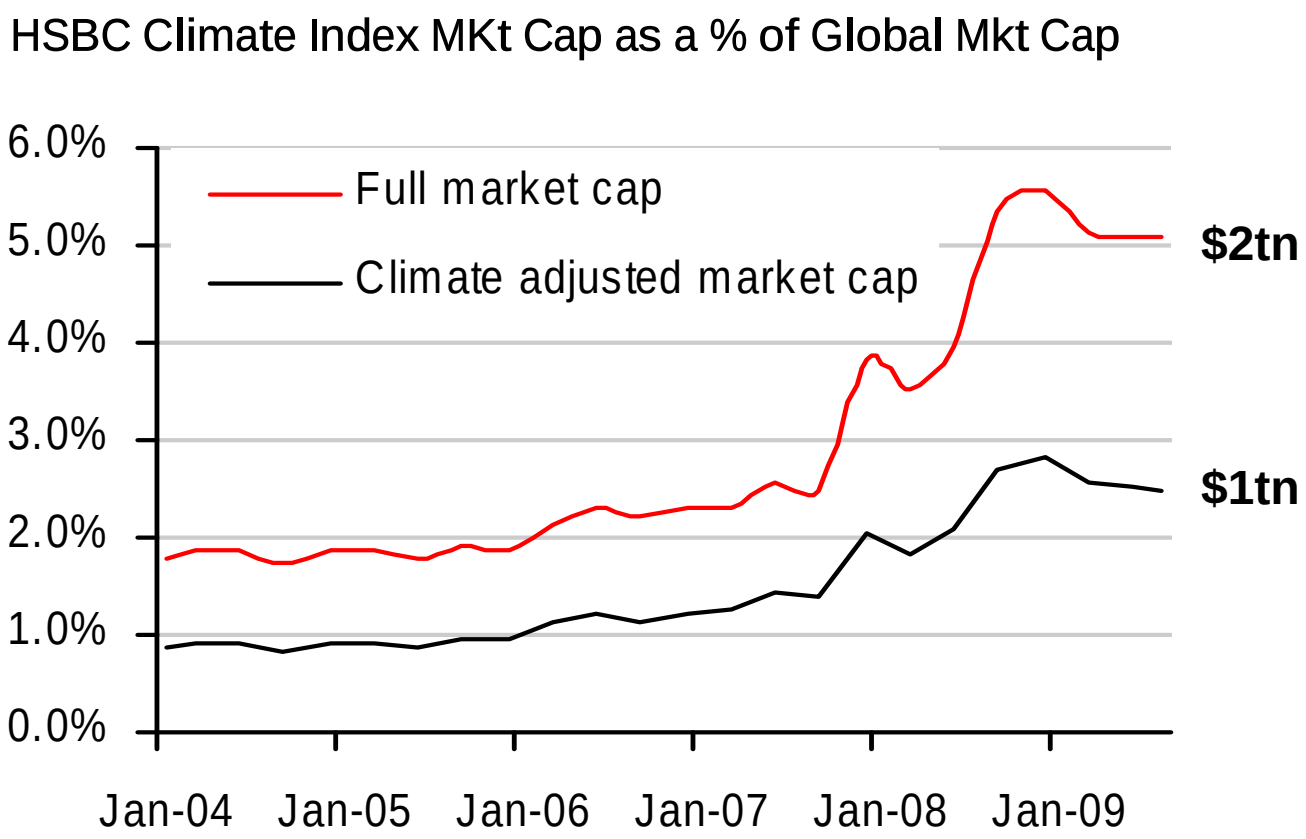
Growing global market cap for climate opportunities



Global Market Capitalization: $41.62tn (Sept 2009)

Source : HSBC Quantitative Research

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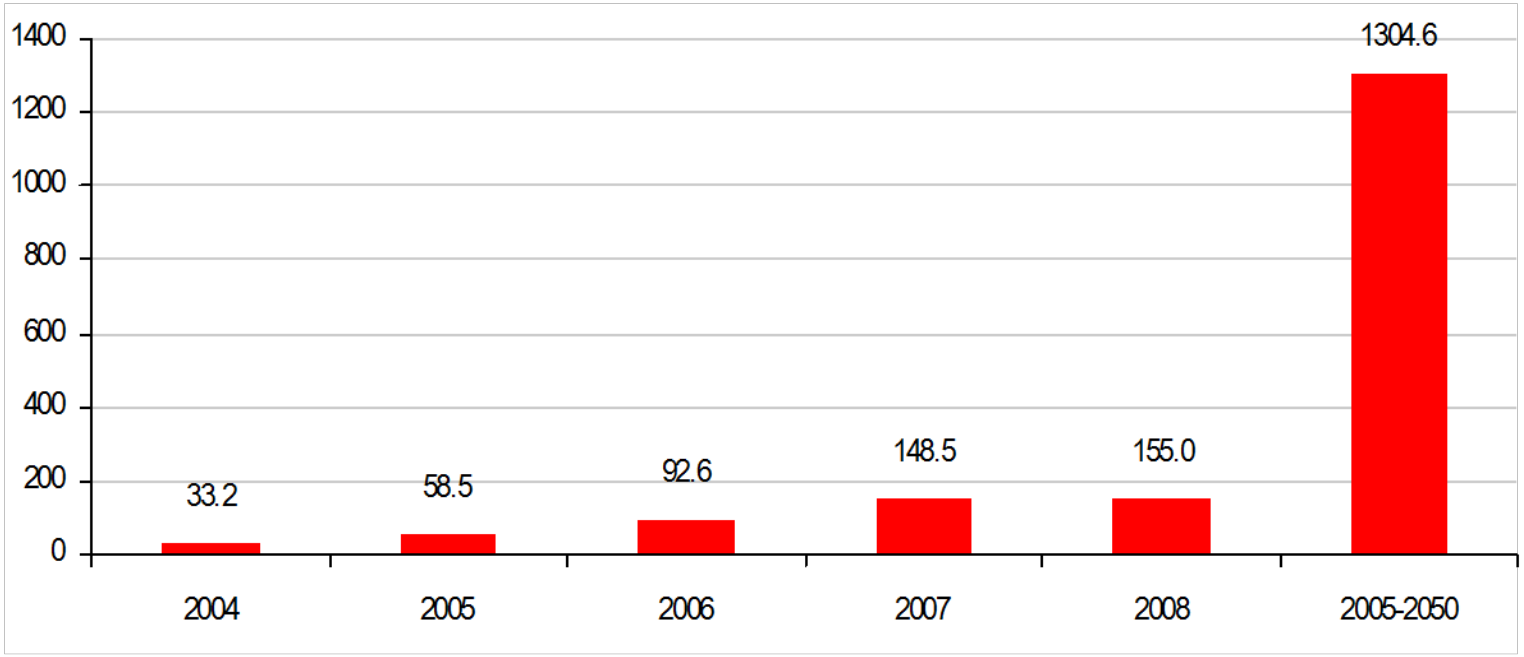
A revolution in investment required



Source: IEA, Energy Technology Perspectives, 2008; UNEP/NEF, Global Trends in Sustainable Energy Investment, 2008

Clean energy x9 2007 levels; energy efficiency x50

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New asset opportunities: climate bonds?

- Global bond market increased 6% in 2008 to $83 trillion*
- Where they exist, most bond products remain screened
- Repackaging existing debt: WB Green Bonds ($350mn)
- Frontloading public spending: IFFIM, REDD?
- Securitising clean energy revenues: solar bonds?
- Hedging policy risk: index-linked bonds?

Source: Bank for International Settlements, 2009

New asset opportunities: environmental infrastructure?

- Growing specialist funds for renewables, waste etc
- 77% energy infrastructure needed in 2020 yet to be built – a challenge of refocusing, scaling up & risk management
- World Economic Forum proposes a suite of public-private low carbon infrastructure funds:
    - Challenge funds could catalyse USD10bn in 5 regions every 3 years from 2011 based on bidding out preferential access to PFMs to fund managers
    - Cornerstone funds could catalyse USD50-75bn per region each 3 years based on anchor equity from major investors leveraged by fund managers
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Beyond Copenhagen

- Deepening the equity integration
- Realising the potential in bonds and infrastructure
- Exploring viable public-private partnerships
- Innovation to counter market short-termism
- Building resilience ahead of climate shocks

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