

Mark Kenber, Policy Director The Climate Group



SUSTAINABILITY IN RETAIL

Retailing in the Green Economy: Getting Serious about Sustainability

The Climate Challenge

Mark Kenber, Policy Director
THE CLIMATE GROUP



SUSTAINABILITY IN RETAIL
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Independent NGO based Europe, North America, Australia, China, India

Focus on promoting leadership on climate & influencing change

Develop & disseminate best practice

Positive approach – low carbon prosperity

Network & incubator for new initiatives - Together.com, Voluntary Carbon Standard, Breaking the Climate Deadlock

Membership drawn from Fortune 100, States, Cities

ABOUT THE CLIMATE GROUP

- International, non-profit organization that works with government and business to accelerate the transition to a prosperous, low carbon future.
- Founded 2003, launched by Tony Blair & 20 CEO/VIPs in April 2004.
- Offices in London, New York, California, Melbourne, Beijing , Hong Kong and India.
- Over the next 5 years, aim is to make a significant and measurable contribution towards shifting the world economy onto a low carbon pathway.
- We are working towards this goal by building a leadership coalition of the world's most influential businesses and governments committed to tackling climate change.

THE CLIMATE GROUP



THAT THE CLIMATE IS
CHANGING AND THAT HUMANS
ARE RESPONSIBLE IS NOW
BEYOND DOUBT...

Global temperature change (relative to pre-industrial)

0°C

1°C

2°C

3°C

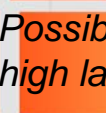
4°C

5°C

Food



Falling crop yields in many areas, particularly developing regions

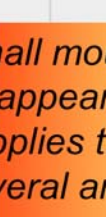


Possible rising yields in some high latitude regions



Falling yields in many developed regions

Water



Small mountain glaciers disappear – water supplies threatened in several areas



Significant decreases in water availability in many areas, including Mediterranean and Southern Africa



Sea level rise threatens major cities

Ecosystems



Extensive Damage to Coral Reefs



Rising number of species face extinction

Extreme Weather Events



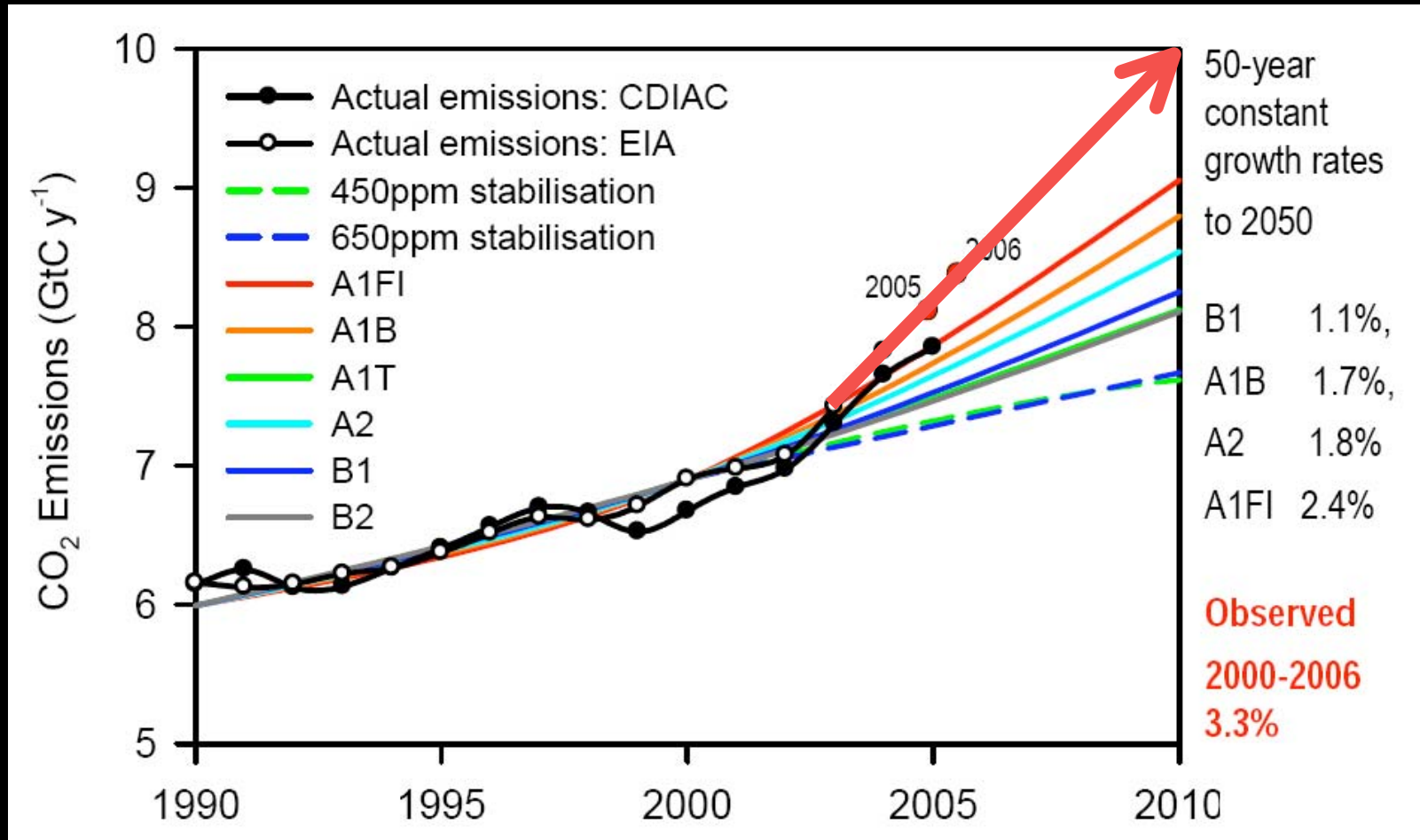
Rising intensity of storms, forest fires, droughts, flooding and heat waves

Risk of Abrupt and Major Irreversible Changes



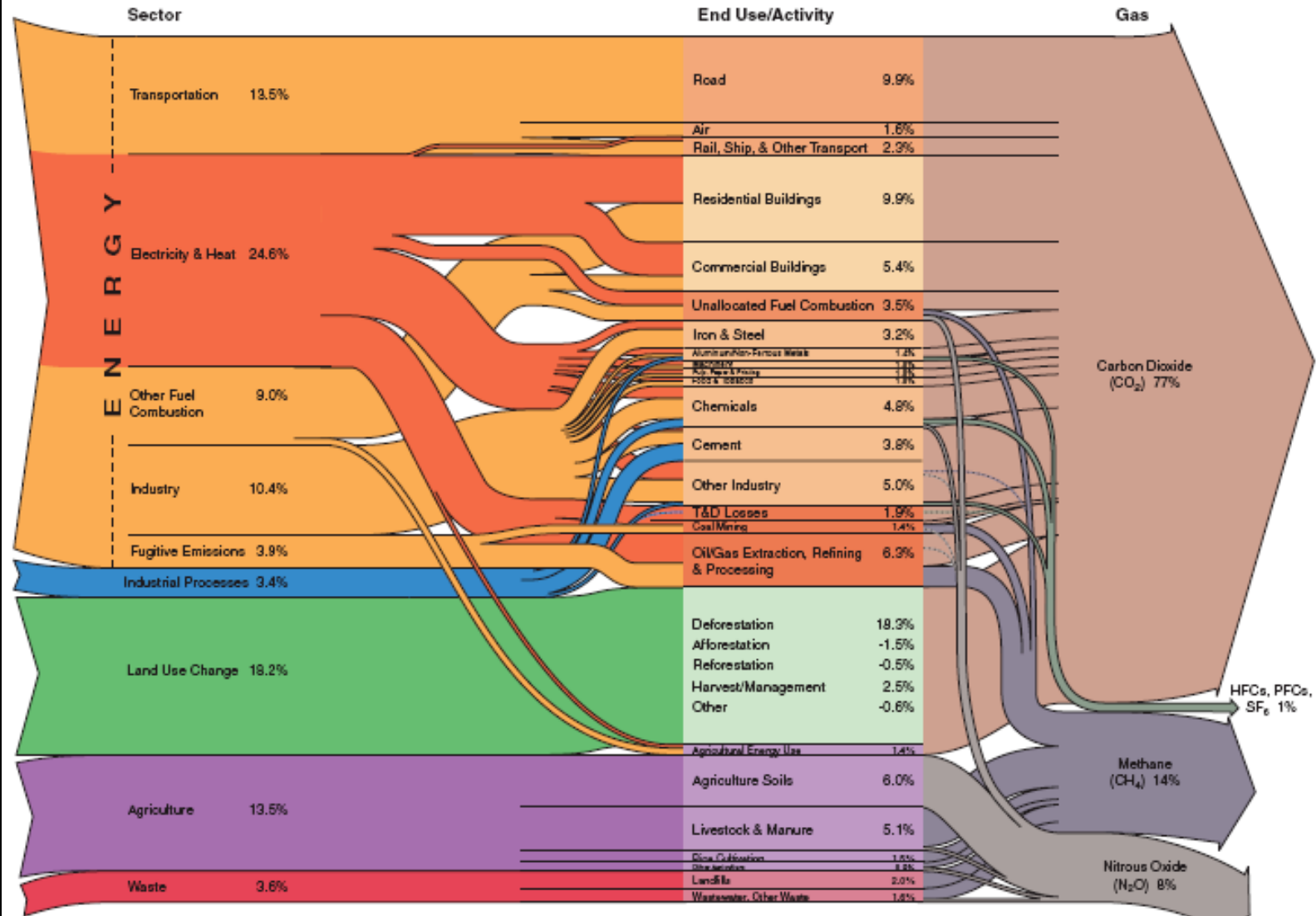
Increasing risk of dangerous feedbacks and abrupt, large-scale shifts in the climate system

EMISSIONS RISING FASTER THAN WE THOUGHT



"Global and Regional Drivers of Accelerating CO₂ Emissions," by Michael R. Raupach at the Global Carbon Project., 2007, <http://www.pnas.org/cgi/reprint/0700609104v1>

World GHG Emissions Flow Chart

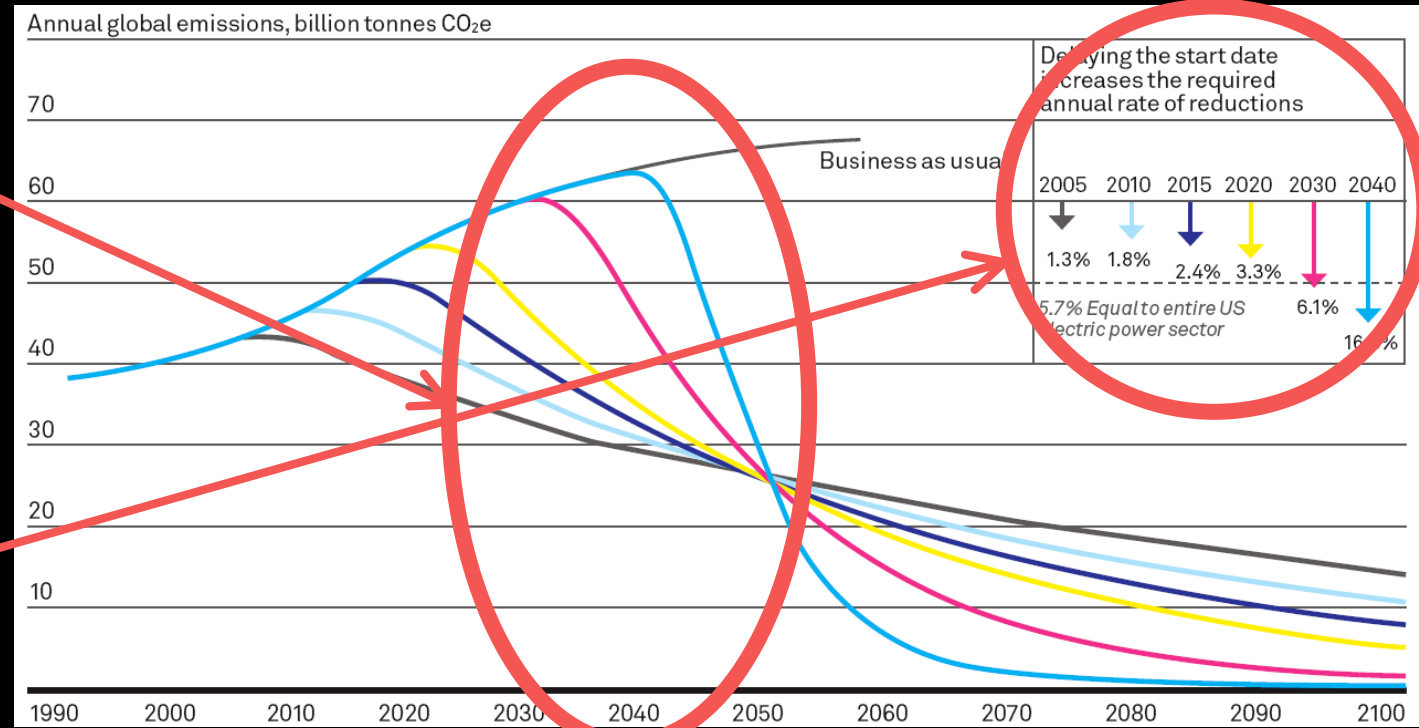


Source: & Notes: All data is for 2000. All calculations are based on CO₂ equivalents, using 100-year global warming potentials from the IPCC (1996), based on a total global estimate of 41,755 MCO₂ equivalent. Land use change includes both emissions and absorptions; see Chapter 16. See Appendix 2 for detailed description of sector and end use/activity definitions, as well as data sources. Dotted lines represent flows of less than 0.1% percent of total GHG emissions.

WAITING IS RISKY AND EXPENSIVE

Less time for businesses and consumers to adjust

Increased annual rate of emission reductions



The longer we wait:

- The more potential damages and irreversible effects we will face
- The more expensive emission reductions and adaptation will get
- The more effort we will have to make in less time
- The greater the risk will be of “locking in

Source: Keohane and Goldmark (2008)

THE CHALLENGE CAN BE MET

We can act now:

- > We already have 70% of the needed technologies available today.

Acting now could yield many benefits:

- > It would increase the potential of an economically-friendly low carbon future;
- > It would reduce the potential level of damage;
- > 50% of potential abatement actions result in increased energy security - the rest is energy security neutral.

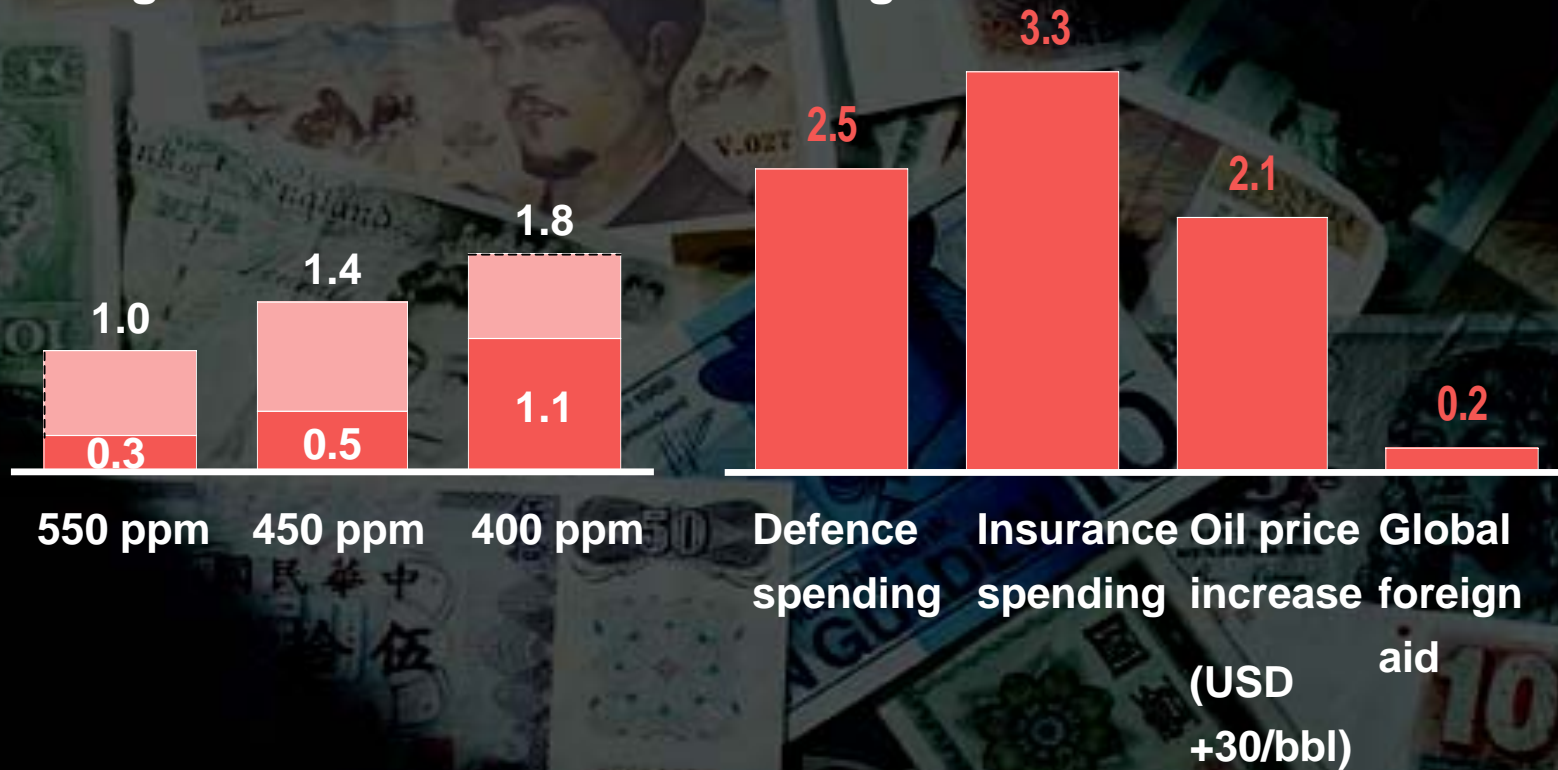
Contrary to what is often thought:

- > Global GDP is not likely to be severely affected;
- > This low-carbon economy will create jobs

COSTS ARE RELATIVELY LOW

Total cost of abatement*
% of global GDP 2030

Comparables
% of global GDP 2005



* Lower boundary: opportunities addressed in order of increasing cost; upper boundary: average cost EUR 40/ton

EVEN IF THE RESPONSE IS
STILL NOT COMMENSURATE
WITH THE SCALE OF THE
CLIMATE CHANGE PROBLEM

...

... CLIMATE MITIGATION
POLICIES ARE BEING PUT INTO
PLACE ...

THE KYOTO PROTOCOL DRIVES NATIONAL AND REGIONAL POLICIES

- Kyoto Protocol sets caps on most OECD countries and creates the basis for international emissions trading
- “Kyoto countries” have implemented domestic policy measures to ensure compliance
- EU ETS, most significant measure, creates a cap on emissions of 11,500 installations, roughly 50% of EU emissions, leading to the emergence of a carbon price.
- Countries also use voluntary agreements, Kyoto mechanisms, standards and taxes
- Many also set medium/long-term targets e.g. EU

OUTSIDE KYOTO, POLICIES ARE ALSO BEING PUT IN PLACE

- **CALIFORNIA:** AB 32 stabilises and then cuts state-wide emissions 80% by 2050 – trading a possibility
- **NE US:** RGGI creates a an emissions trading scheme for large emitters across 9 US states
- **32 STATE US REGISTRY**
- **SOUTH AUSTRALIA:** 60% GHG reduction target by 2050
- **CHINA:** 20% renewables target

... AND BUSINESS ACTION ON
CLIMATE CHANGE IS SPEEDING UP

...

COMPANIES RECOGNISE CLIMATE CHANGE AS A RISK AND OPPORTUNITY

- The importance and urgency of addressing climate change is **no longer in doubt**
- Some companies respond strategically to climate change, others compliance obligations
- Many electric utilities and big energy users now have carbon management systems
- Increasingly see climate change as an **opportunity**:
 - internal efficiency and productivity gains,
 - improved reputation,
 - low carbon products and services.

COMPANIES ARE CUTTING EMISSIONS

- **ALCOA:** 37% CO2 reduction 1990-2004
 - **ARCELOR:** 23% CO2 reduction 1990-2005
 - **ASTRA ZENECA:** 63% CO2 reduction 1990-2005
 - **BAT:** 34% CO2 reduction 2000-5
 - **BSKYB:** 20% CO2 reduction 2004-6
 - **BT GROUP:** 35% CO2 reduction 1996-2006
 - **CATALYST PAPER:** 71% CO2 reduction 1990-2005
- etc. etc. ...

LOW CARBON INVESTMENTS ARE RISING

- **WIND:** capacity growing at 20% a year
- **SOLAR:** \$69bn a year investment by 2020
- **BIOMASS, GEOTHERMAL, SMALL HYDRO:** Use up 50% by 2010
- **CLEAN FUELS:** market to grow 3x in 10 years
- **CLEAN TECH:** 5th largest VC sector in US
- **CARBON MARKETS:** \$5bn in 2005, 1b tonnes CO₂e in CDM pipeline

... BUT IN MOST CASES
KYOTO, THE EU ETS AND
CARBON PRICING ARE NOT
THE MAIN DRIVER ...

CARBON PRICING IS RAISING AWARENESS BUT NOT DRIVING INVESTMENT

- Carbon prices drive short term optimisation in electric utilities and some large energy users
- Carbon pricing requires firms to understand carbon management, trading and client needs

However,

- C price is too low to lead to major shifts – for many seen as <1-2% production tax
- Lack of price certainty post-2012 is already creating a 'wait and see' impact on utility investment decisions

BUSINESS ACTION DRIVEN EQUALLY BY OTHER POLICIES AND INCENTIVES

- National policies (e.g. UK's RO, EEC) as important as ETS in driving utility decisions.
- Renewable incentives decisive for RE
- Security of supply concerns and high gas prices drive search for alternatives, diversification
- Other legislation - impact at the margins e.g. biofuels, CHP, energy services directives

STRATEGIC INVESTMENT DECISIONS DRIVEN BY OTHER CONSIDERATIONS

- Some bigger multinationals and other leaders driven by own assessment & need to understand business implications of CC:
 - > Litigation risk
 - > Prepare for long-term regulation
 - > Pressure from investors
 - > Pressure from customers & CSR concerns
 - > Cost savings, especially from energy efficiency
- Most importantly a shift from seeing CC as business risk to business opportunity

CARBON DOWN PROFITS UP

Of 137 organisations surveyed:

- 102 (74%) organisations using five or more different measures.
- 126 organisations (92%) used energy efficiency
- Over 100 (73%) - renewable energy
- 77 (56%) improved waste management

Most follow Efficiency → Clean Energy → Offset

CARBON DOWN PROFITS UP

The gains can be significant:

- 33 companies saved \$9.3 billion
- Dow Chemicals - US\$4 billion 1994-2005 from reduced energy use
- DuPont - US\$3 billion between 1990 and 2005.
- Catalyst Paper saved \$4.4m in 1 year

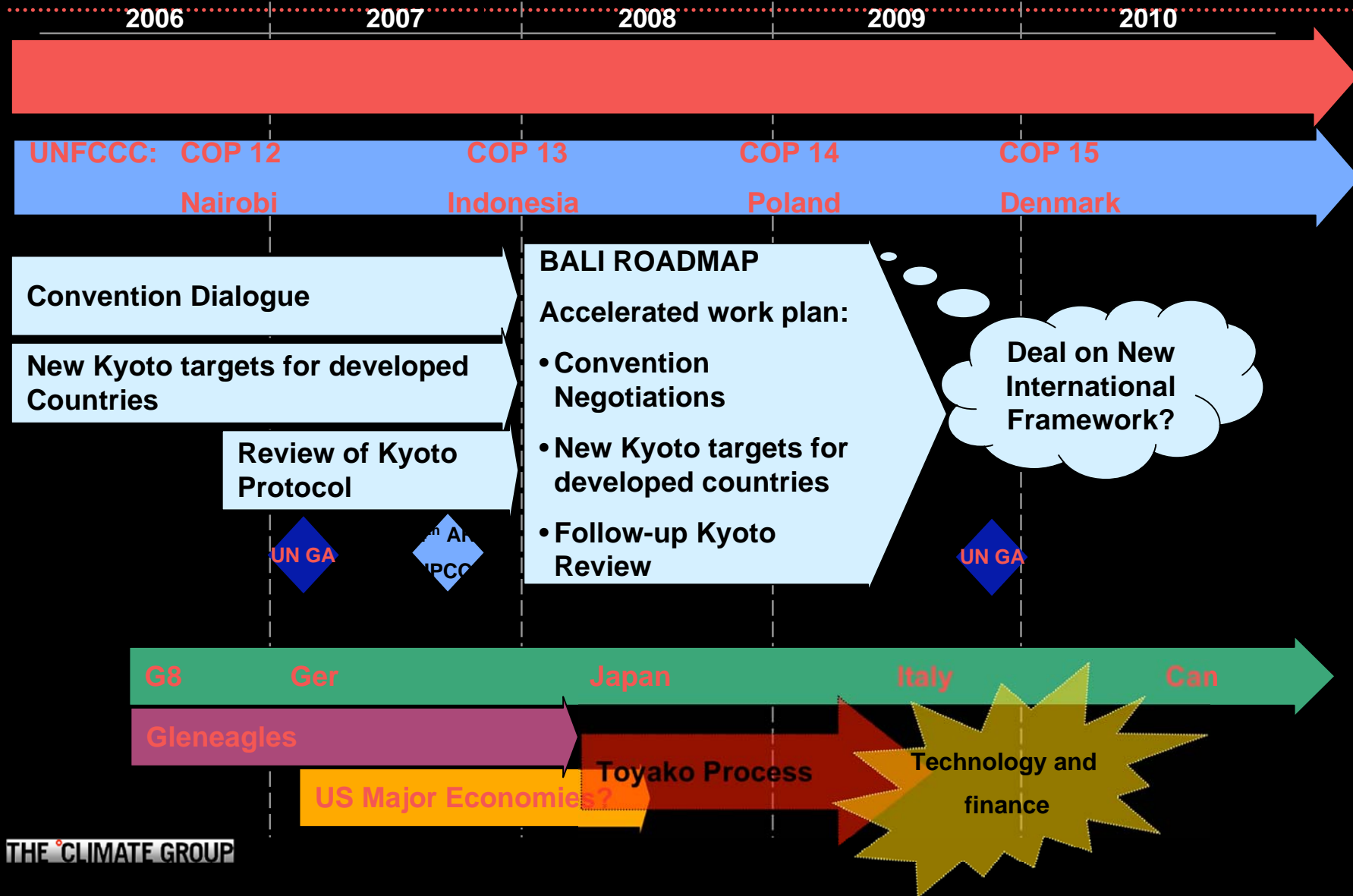
With energy efficiency the most profitable approach

OPPORTUNITY: GAINS FROM ENERGY EFFICIENCY

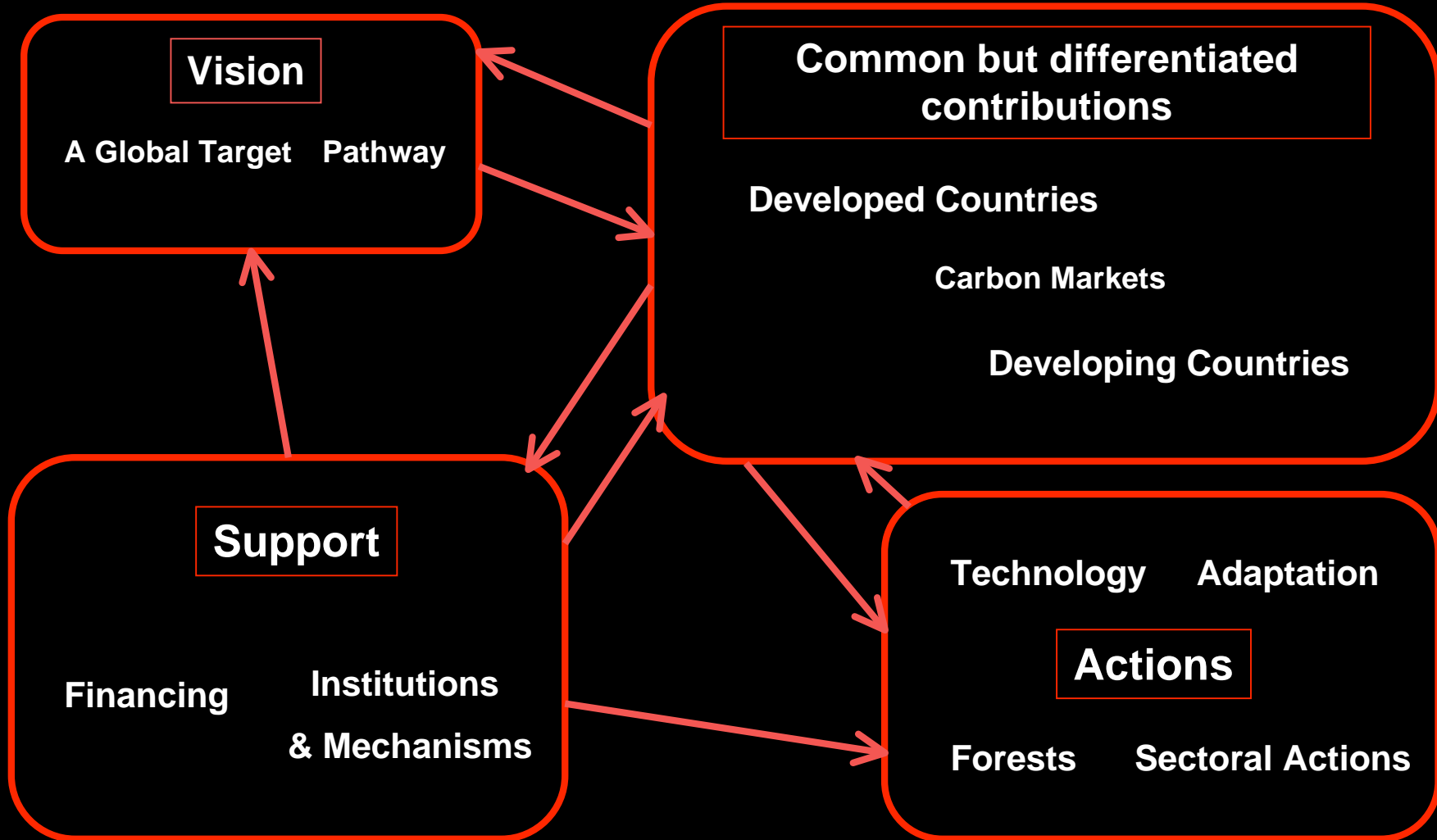
Company	Measure Undertaken	Dates	Savings
Boeing	Lighting		53% ROR
General Electric	Lighting	2005	\$12.8m
Alcoa	Energy surveys	2002 -4	\$20m pa
BP	Efficiency, energy mgmt	1998 - 2005	\$1,000m
Eastman Chemical		1995 - 2005	\$800m
General Motors	Lighting	2005	\$2.7m
Kimberly - Clark		2000 -5	\$70m pa
Pfizer	900 projects	2002 -5	\$30m pa
IBM	Real-time elec. monitoring	2005	\$747,000
DuPont		1990 - 2005	\$3,000m
Deutsche Telekom	Service contracts	2001 - 2005	\$35.3m
Caterpillar	Diesel fuel conservation	2004	\$2.8m
Catalyst	Reduced fuel consumption 2%	2005/6	\$5m
Allergan	Cogeneration & efficiency in R&D bldg.	2001 -5	\$2,300,000
ABM Amro	Communication	2004 -8	\$3.5m

... AND A NEW INTERNATIONAL
FRAMEWORK IS NEEDED...

THE LONG ROAD TO COPENHAGEN



THE GLOBAL DEAL'S BUILDING BLOCKS



IN SUMMARY

- The science debate is over (nearly)
- Politics has shifted
- More policies are in place – but gap remains large
- Investment is flowing into Clean Energy (\$149 Billion in 2007 – up 60% on 06) – but not yet enough
- Climate change is clearly a risk but also a major opportunity for business.
- The technologies and tools for reducing emissions already exist – many are also profitable
- Businesses that show leadership can reap many benefits - efficiency, new products and services.
- Inaction is bad for the climate and bad for business



IN SUMMARY

- Climate change is clearly a risk but also a major opportunity for business.
- The technologies and tools for reducing emissions already exist - many are also profitable. **Energy efficiency** is a win-win for all sectors
- Businesses that show leadership can reap many benefits - efficiency, productivity new products and services.
- Inaction is bad for the climate and bad for business



**GLOBAL LEADERS FOR
CLIMATE SOLUTIONS**