

“Tiden er inne for å levere!”

## Fra ord till Handling

2008-10-23

Dr. Göran Carstedt

Clinton Climate Initiative

# Leadership

Co-creating a desired future

A Meaningful Purpose

*A Learningful Culture*

# The New World

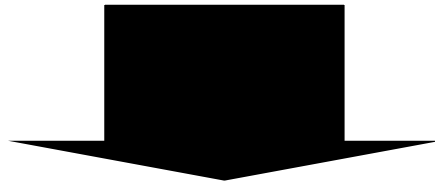
The electronic revolution – borderless, speed

New demographics – ageing babyboomers

New economics – prices down, capital abundant

New lifestyles – global and local

New psychology – people anxious



## New Rules of the Game

**IT**

Information Technology



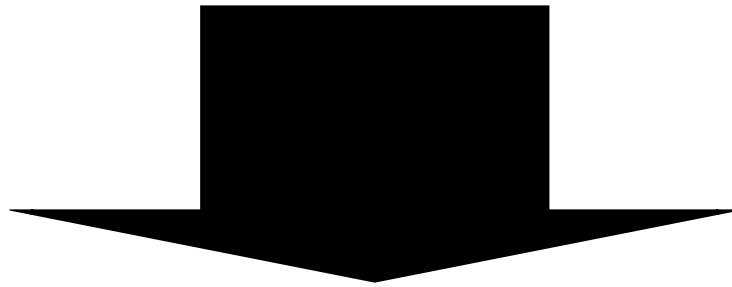
Interaction Technology

# A Graying Planet

( Retirees per 100 workers 1975-2025)

USA	16	29	
France	21	36	
Japan	12	49	
China	8	30	
Brazil	7	15	GC 2005

The real social revolution we are living through is from a life that is largely organised for us...



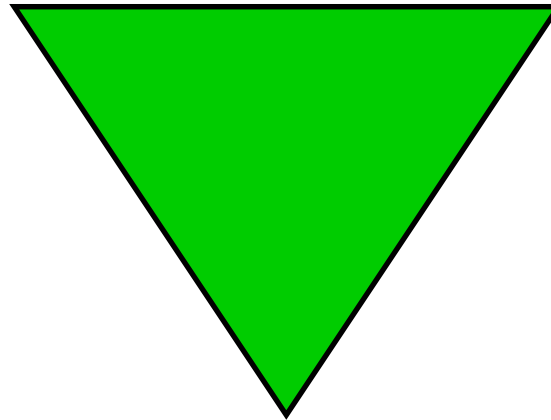
... to a world in which we are all forced to be in charge of our own destiny.

# The Equation

## Ecology

Life cycle theory  
Circular vs linear

**Sustainability**



## Economy

Production, Consumption  
Technology, Organization  
Resource creation

**Means**

## Anthropology

Roots, identity  
Family, society  
Culture

**Meaning**

*“He who has a why to live for  
can bear almost any how.”*

(Nietzsche)

# The organizing principle

What is good for our company?

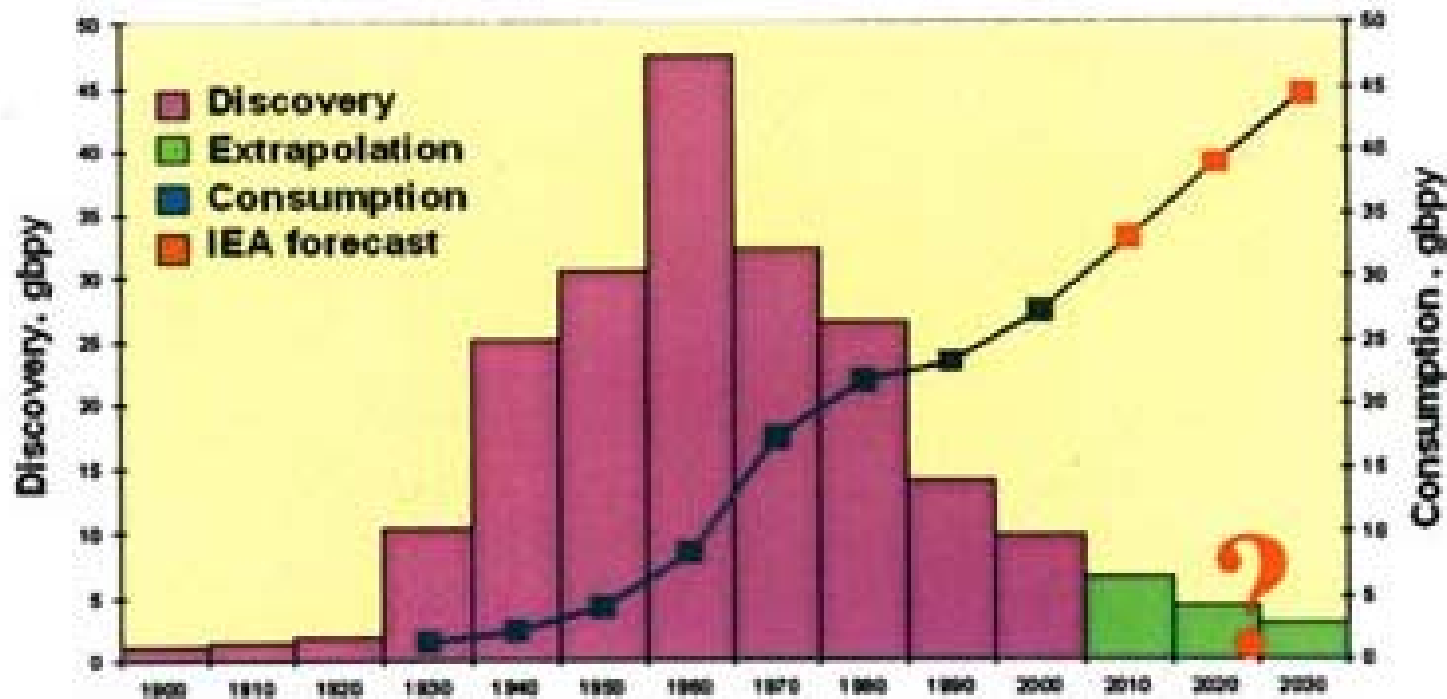
*or*

*What is our company good for?*



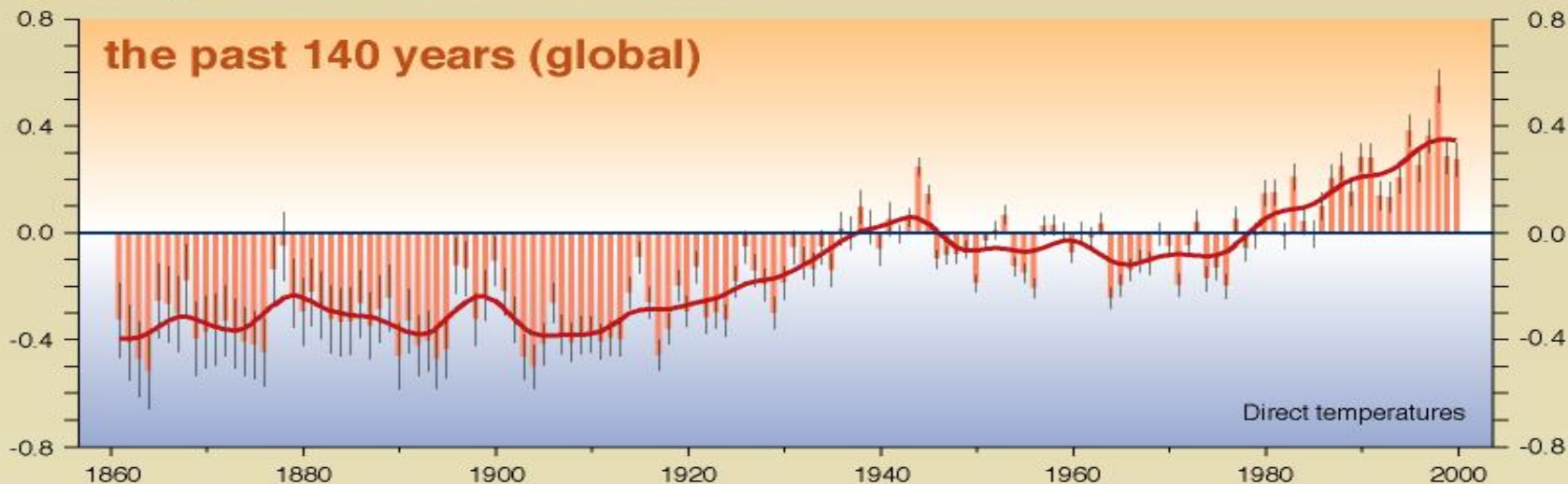
# Oil Usage! vs Discoveries?

Comparison between discovery and consumption

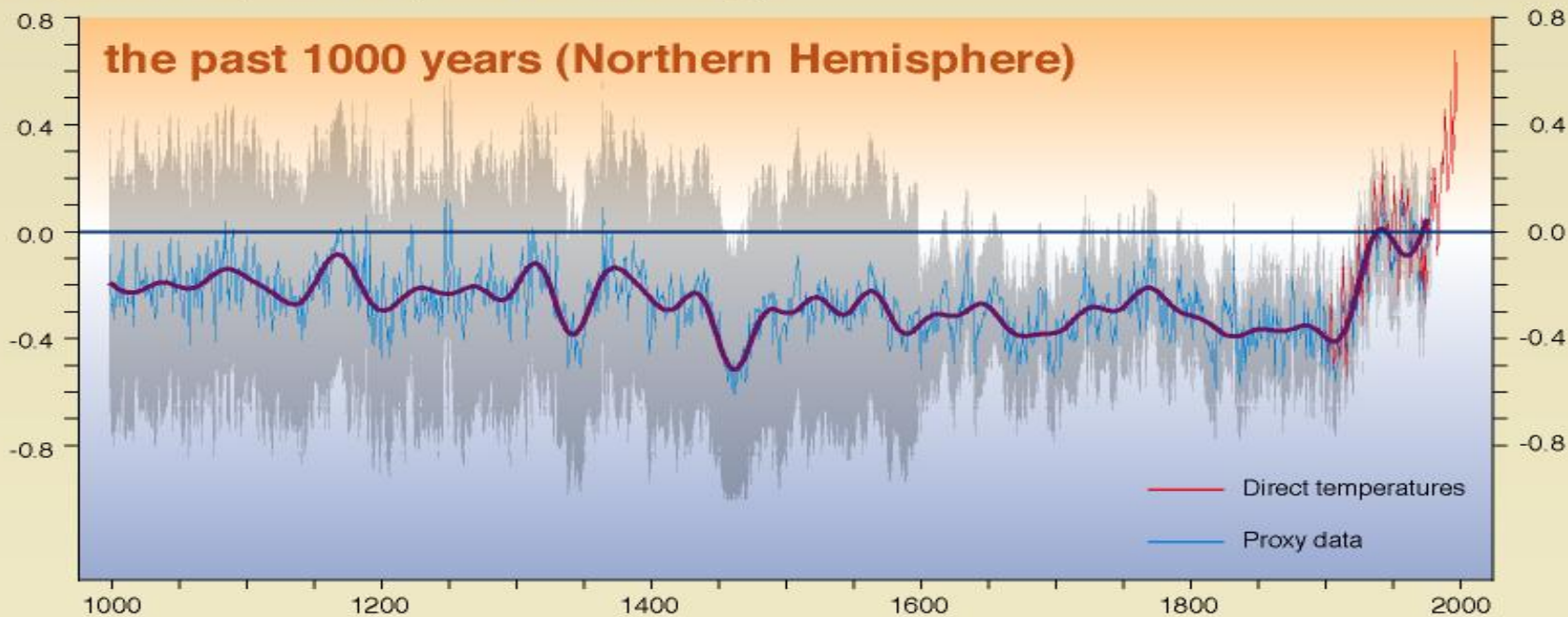


# Variations of the Earth's surface temperature for...

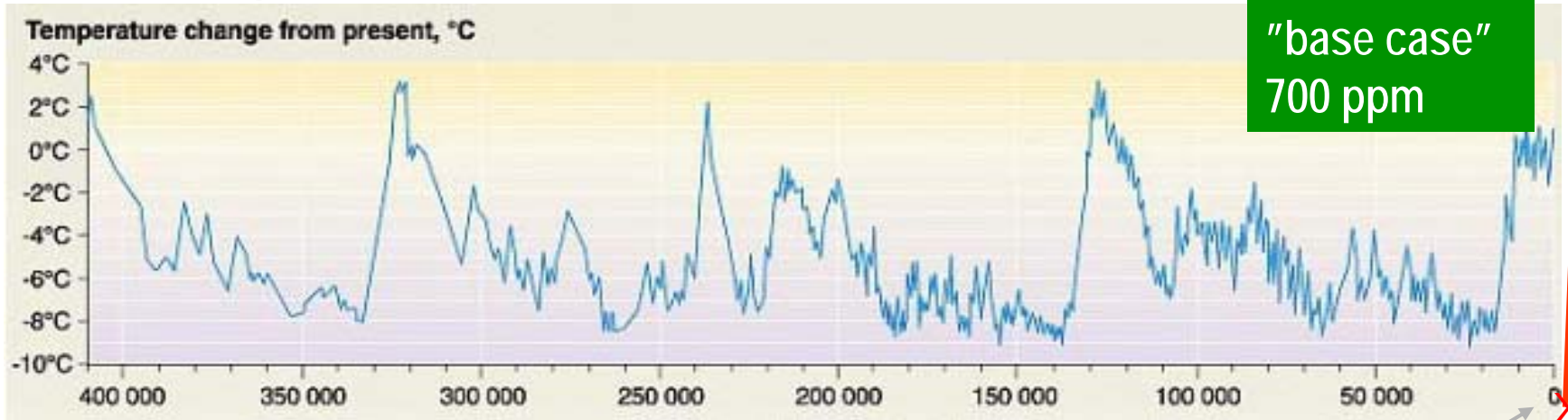
Departures in temperature in °C (from the 1961-1990 average)



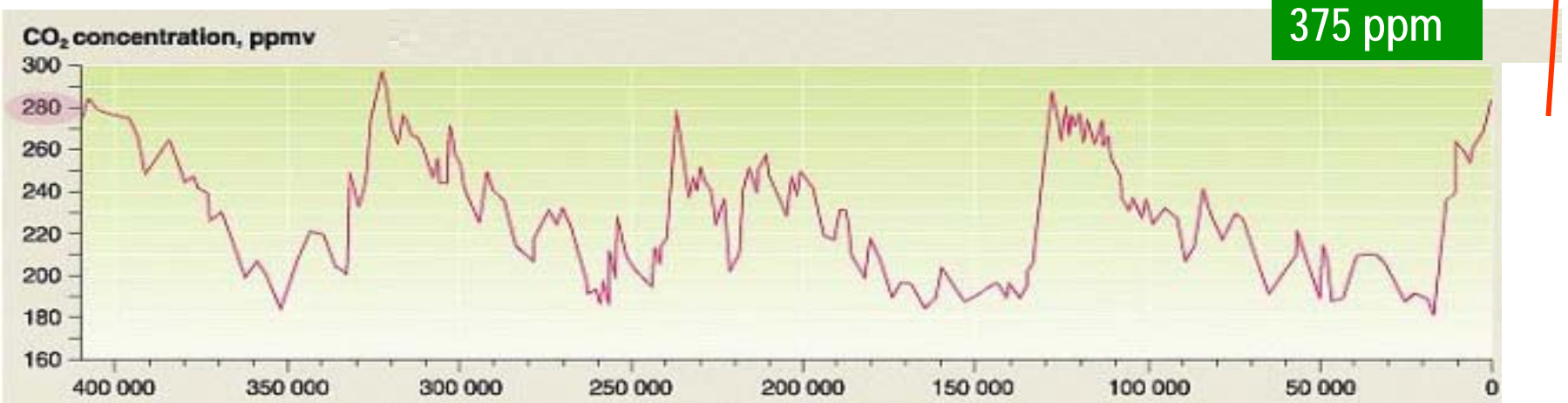
Departures in temperature in °C (from the 1961-1990 average)



# Past 400 000 years from "the Vostok Ice Core"

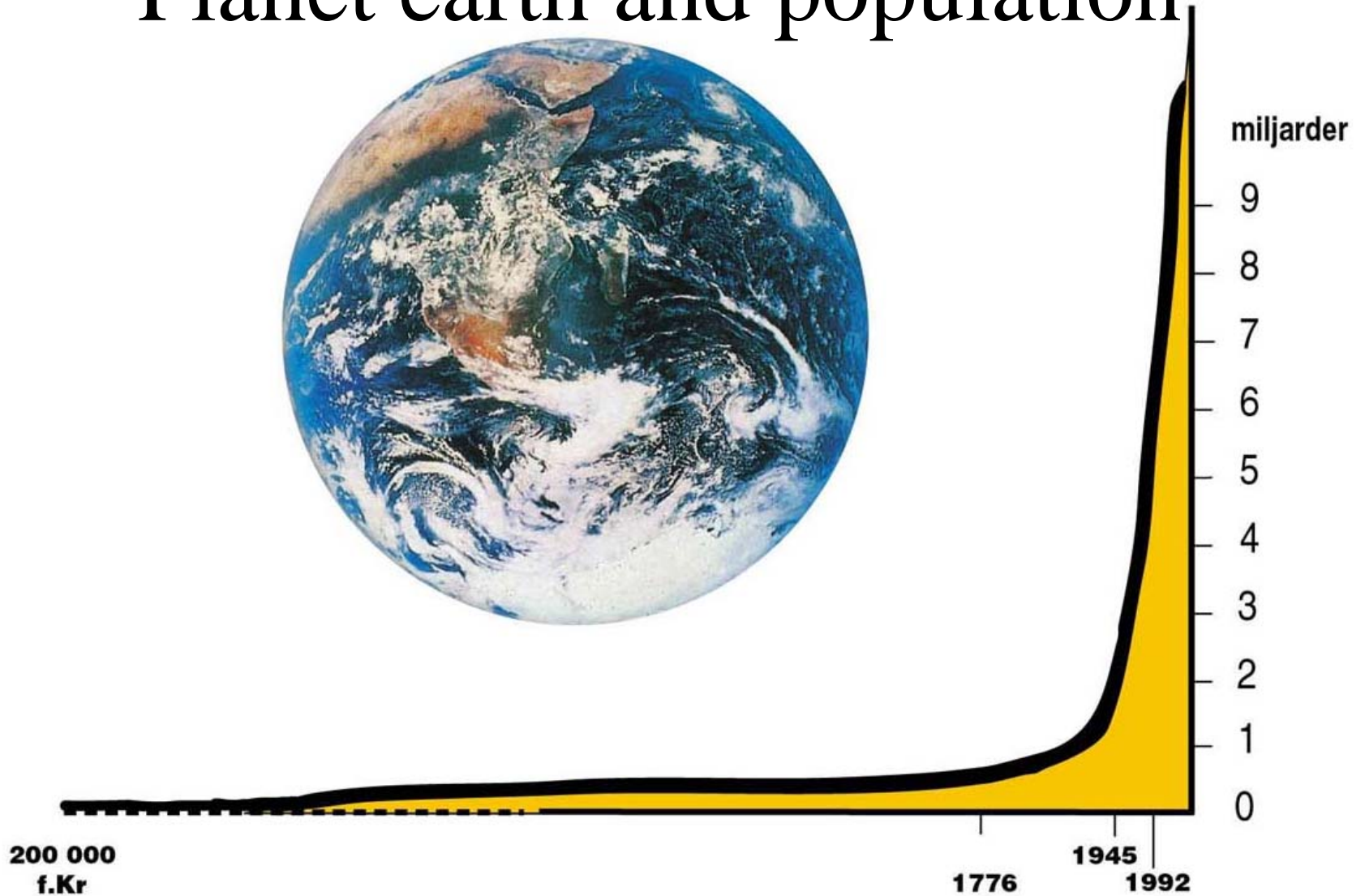


Year 2100  
"base case"  
700 ppm

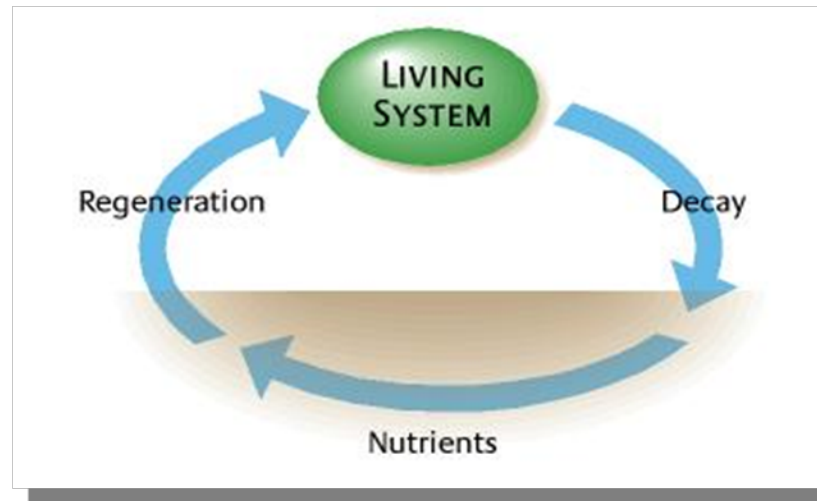


2004  
375 ppm

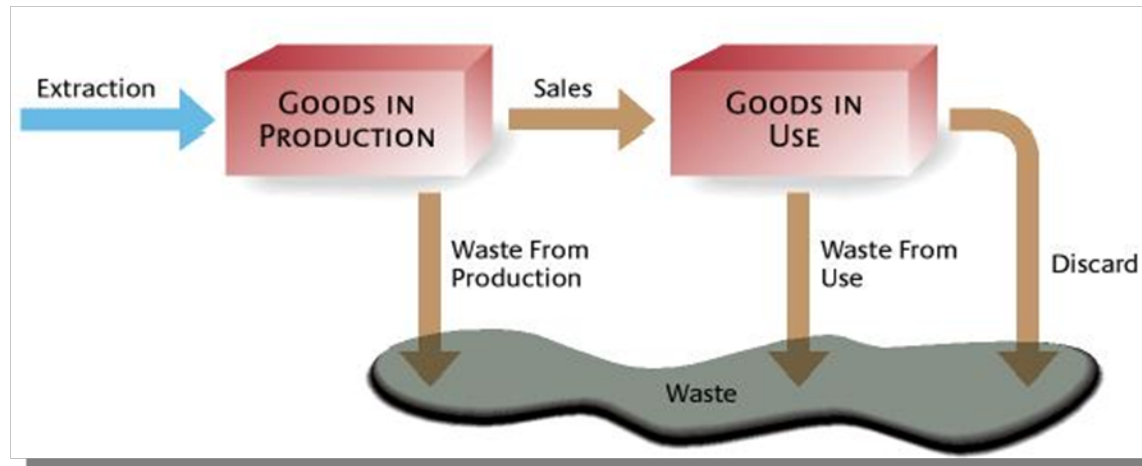
# Planet earth and population



# Living systems follow cycles



# Industrial-age systems do not



*We need a new way of thinking to solve  
the problems caused by the old way of  
thinking*

Albert Einstein

# Innovations for a sustainable society

- New products
- New processes
- New business models
- New forms of collaborations
- New ways of thinking

# *The challenge*

## Global GHG emissions

- Must be reduced 50-85% by 2050
- To limit global warming to +2°C

Source: IPCC (2007)



# GHG Emissions 1990-2004

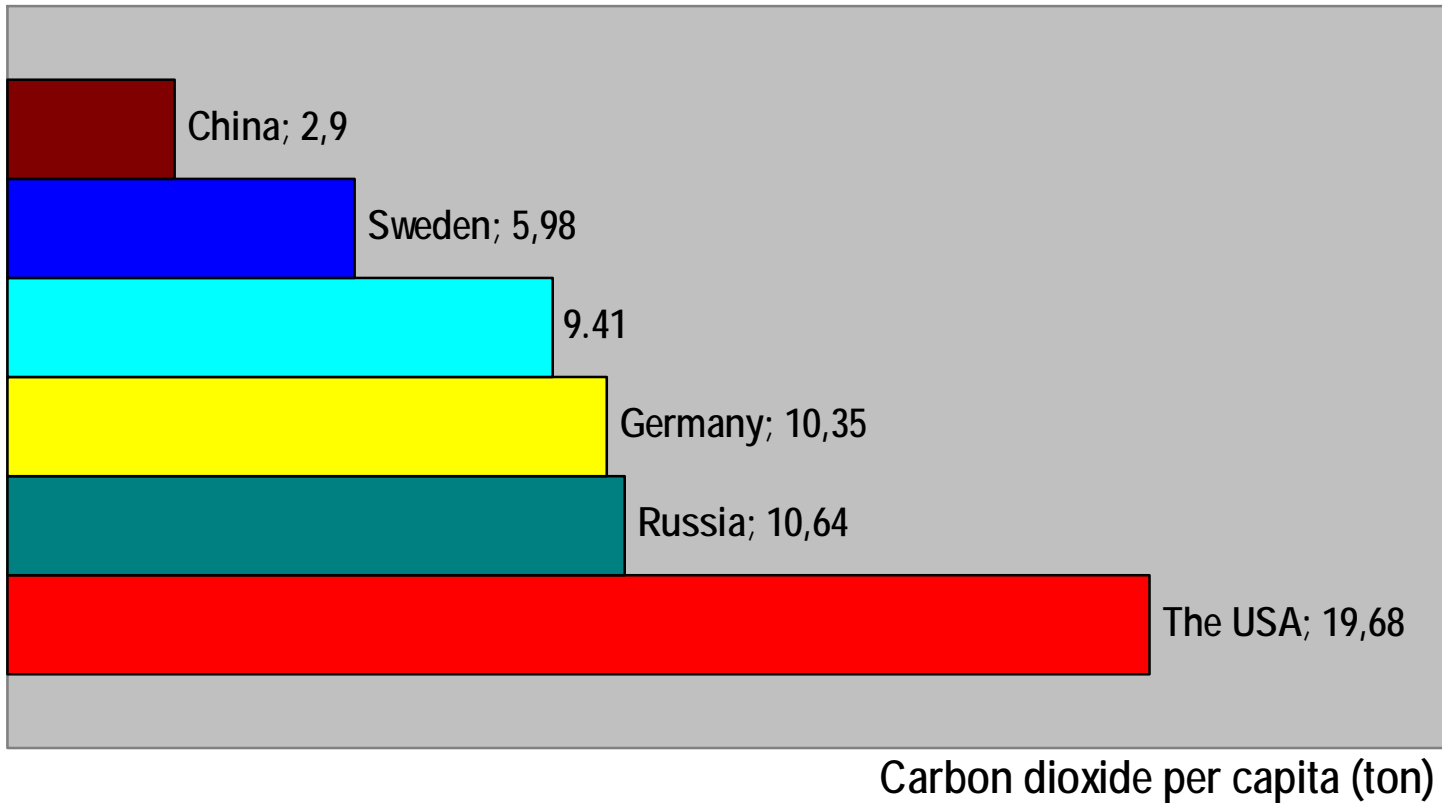
	<i>Change</i>	<i>Total</i>
Europe 15	-0.6%	4.2 bln tCO <sub>2</sub> eq
Japan	+6.5%	1.3 bln tCO <sub>2</sub> eq
USA	+16%	7.1 bln tCO <sub>2</sub> eq
Australia	+25%	0.5 bln tCO <sub>2</sub> eq
Kyoto objective	-8%	1990-2012:

# GHG Emissions Europe: 1990-2005

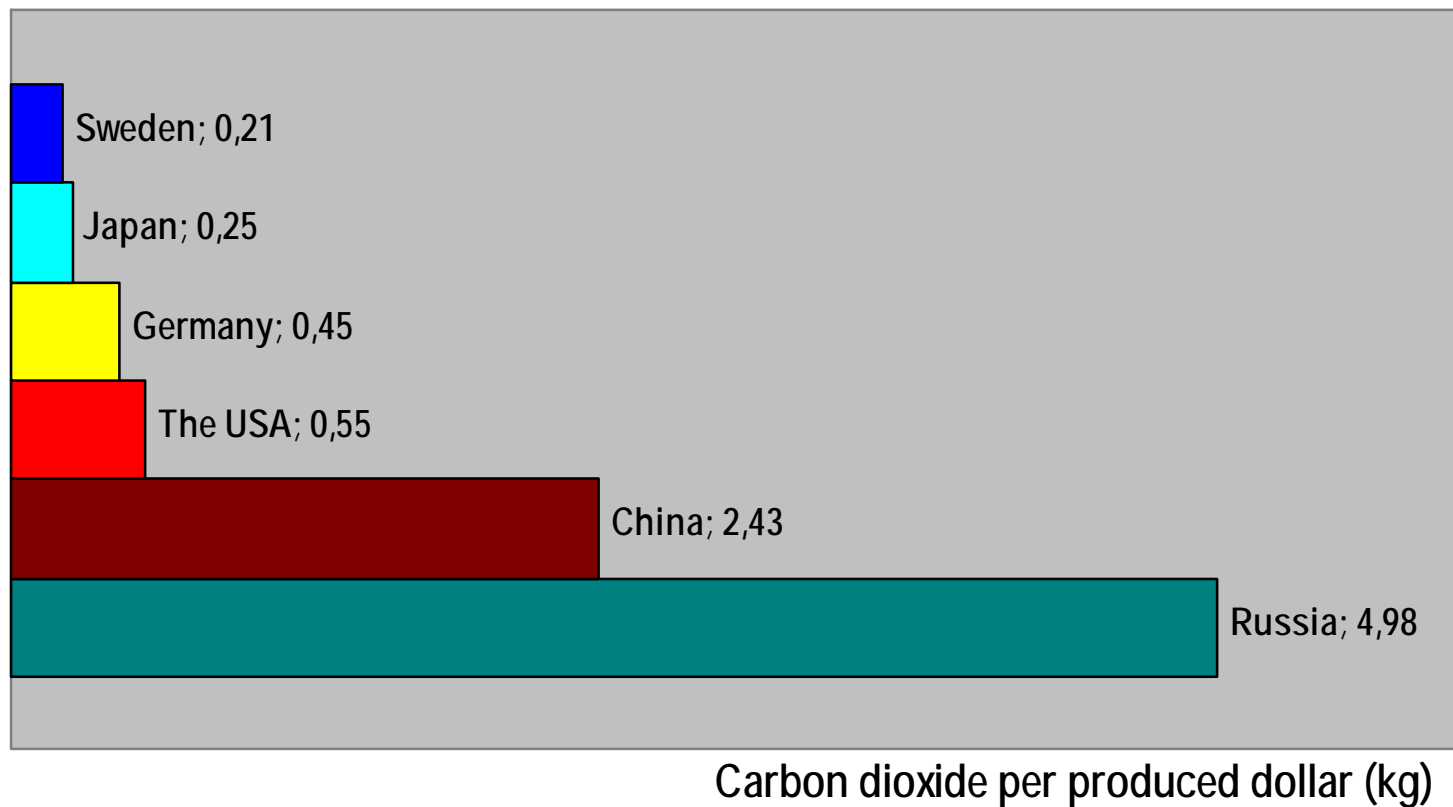
Germany	-18.7%
UK	-15.7%
Sweden	-7.4%
Italy	+12.1%
Ireland	+25.4%
Spain	+52.3%

Source: EEA (2007)

# CO2-emissions per person



# CO2-emissions per dollar produced



# Emissions – targets & commitments

EU27:	20%	2020 (1990)
Germany:	36%	2020 (1990)
UK:	26%	2020 (1990)
France:	25%	2020 (1990)
Sweden:	30%	2020 (1990)
Japan	6%	2012 (1990)

# Emissions – targets & commitments

California: 25% 2020 (1990)

London: 30% 2025 (1990)

*+30% EU & UK Government*

New York City: 30% 2030 (2007)

Paris: 75% 2050 (2004)

Stockholm: 60-80% 2050 (1990)

Tokyo: 25% 2020 (2000)

Fra ord till handling

Some examples

START YOUR OWN HEDGE FUND • THE FUTURE OF COMPUTING

# FORTUNE

PHOTO BY BOB SCHNEIDER FOR FORTUNE



## WAL-MART SAVES THE PLANET

Well, not quite. But CEO LEE SCOTT's green campaign, which started as PR, is becoming a force of nature.

What if thought was going to be a dominant strategy in business? Not by a long way.

FORWARD: PHOTOGRAPHY BY BOB SCHNEIDER FOR FORTUNE  
75 1,000 01 0 001 000  
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Lee Scott, Wal Mart

The environment is as Katrina  
– in slow motion

*“Environmental problems are our  
problems.”*

*There are not two worlds out there  
- a Wal Mart world and some other  
world...”*

Lee Scott, Wal Mart

# Our environmental goals at Wal Mart are from now simple and straightforward

- To be supplied 100 % by renewable energy
- To create zero waste
- To sell products that sustain our resources and environment

We will not be measured by our  
aspirations...

*“...We will be measured by our actions.”*

Lee Scott, Wal Mart

# Walmart – specific commitments (2006)

- Reduce company GHG emissions by 20% in the next 7 years
- Double the fuel efficiency of truck fleet within 10 years
- Reduce solid waste from US stores by 25% in 3 years
- Double offerings of organic foods at affordable prices within 6 months

# IKEA goes renewable!

- Reduce energy consumption in 350 buildings by 25% against 2005 level
- Remaining 75% energy = 100% renewable

## 1<sup>st</sup> Deadline

- 2009: 60% of buildings to use renewables and be 15% more energy efficient
- 2009: all home delivery trucks to use clean fuels

# Five stages of CSR

- It is not our fault – **defensive**
- We'll do only what we have to – **compliant**
- It's the business – **managerial**
- It gives us a competitive edge – **strategic**
- We need to make sure that everybody does it – **civil**



CLINTON  
**CLIMATE**  
INITIATIVE

# Clinton Climate Initiative (CCI)

“practical and measurable  
steps to reduce greenhouse  
gas emissions”



**C40CITIES**  
CLIMATE LEADERSHIP GROUP

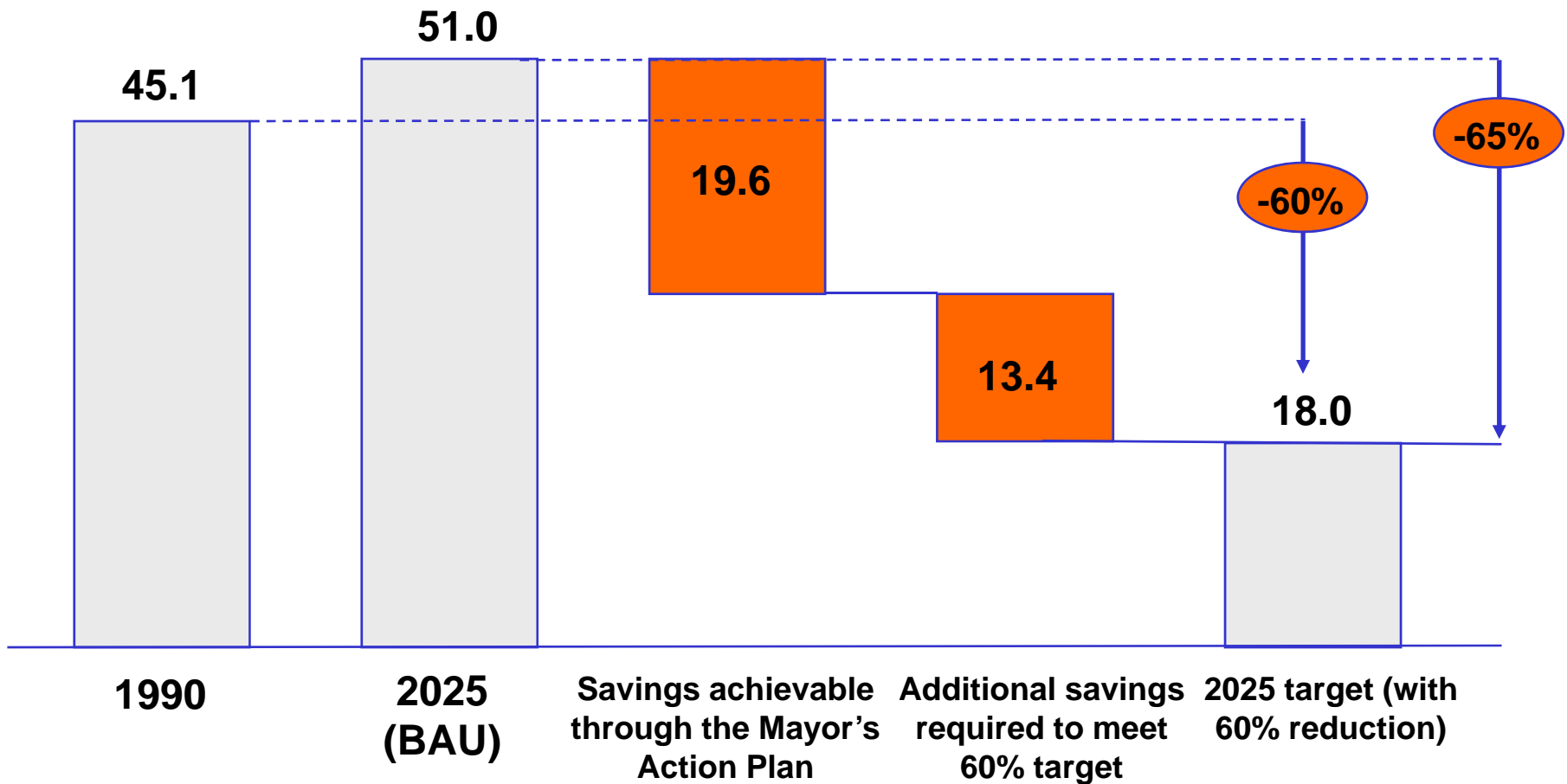
40 member cities and 13 affiliates

# C40 – CCI as the supporting agency

1. Help cities learn from each other – best practice, bench-marking, etc.
2. Provide technical assistance from best global experts and build local expertise
3. Organize global programs that pool the economic and political power of the participating cities

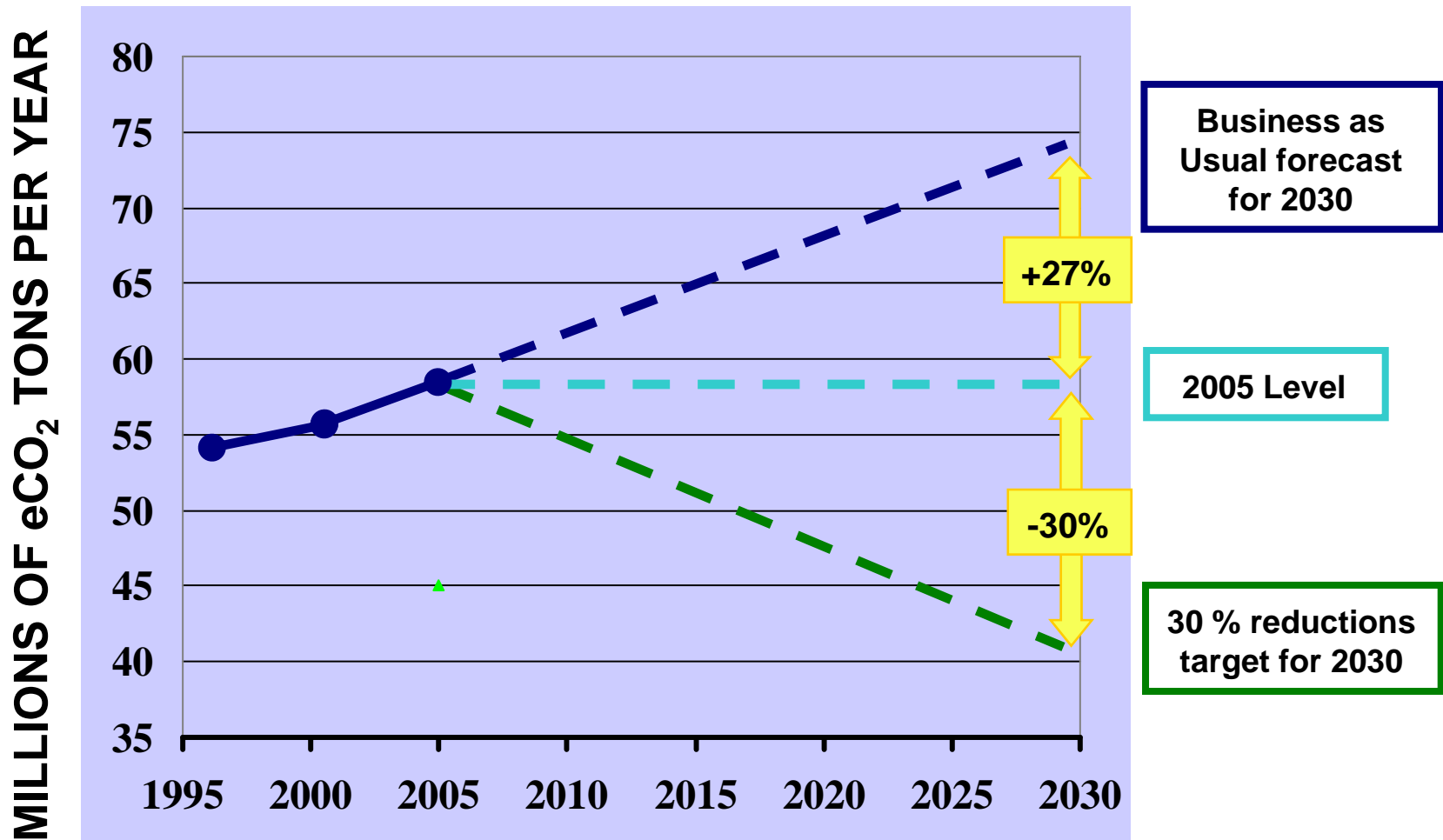
4. Negotiate with suppliers to obtain substantial price discounts and accelerate new technology
5. Provide assistance with mobilizing financing from private financial institutions, multilateral financing agencies and carbon markets
6. Develop and deploy measurement software and communications tools that enable cities to measure progress and share best practice
7. Full-time staff assigned to each city

# London's 2025 CO<sub>2</sub> reduction target (excluding aviation) Million tons of CO<sub>2</sub>

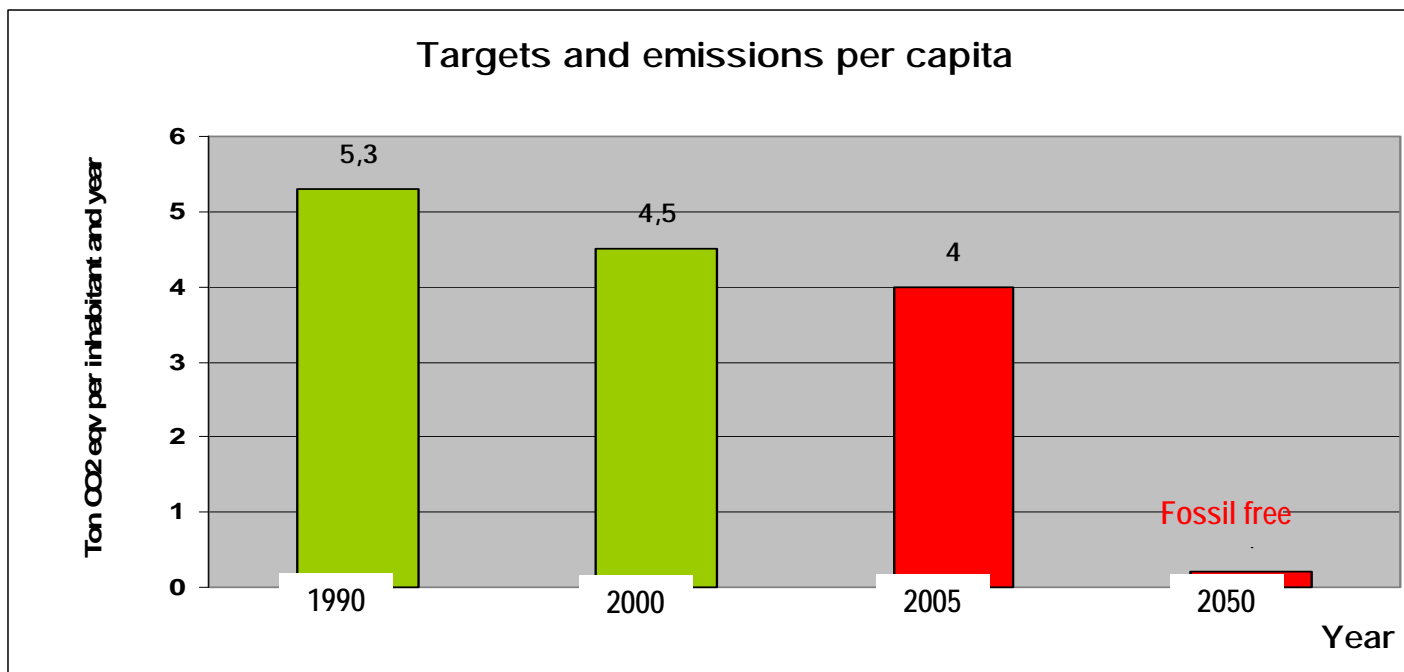


# New York City's Greenhouse Gas Emissions

## Citywide emissions

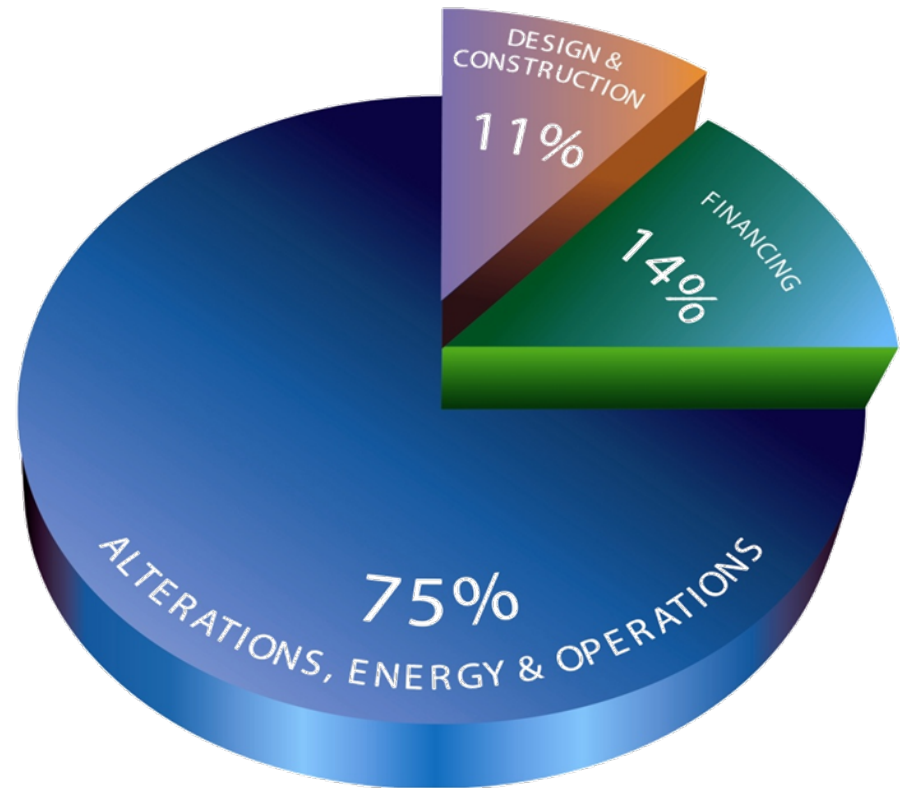


# Stockholm



# Why Existing Buildings?

- **Opportunity:** Buildings generally account for 40% of emissions and up to **70%** in big cities
- **Lifecycle cost:** 3/4 of costs of buildings occur after construction is complete
- There is excess energy and savings **trapped** in existing buildings



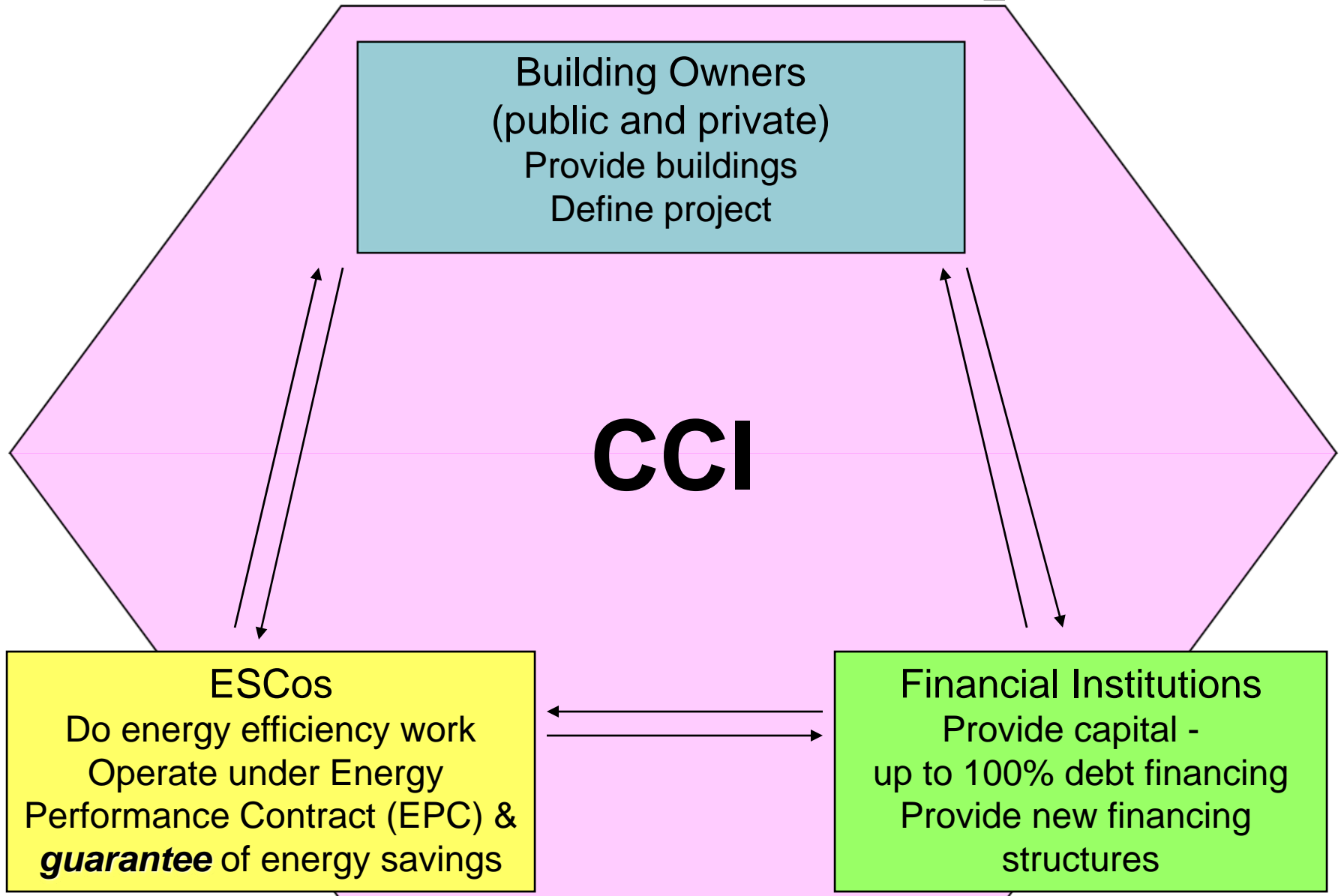
# Reducing Energy Use in Buildings:

## One solution yielding multiple benefits

- Wasted energy is wasted money
- Improve the organization's finances
- Improve occupant comfort, productivity, increase sales in retail spaces
- Retain wealth in the local community
- Improve the value of the real estate asset
- Improve image with real contributions to the environment
- And, yes, reduce GHG emissions

**So, how can building owners act on these opportunities?**

# EEBRP Partnership





# EEBRP: Active City Partners

## Energy Efficient Building Retrofit Program

### 20+ cities

- MUSH: **M**unicipal buildings, **U**niversities, **S**chools, **H**ospitals
- Private sector: building owners in any sector
  - Private schools
  - Offices
  - Retail
  - Industrial
- Commitments sought from Cities
  - Contribute city buildings to retrofit
  - Promote to private owners
  - Consider incentives/policies to encourage retrofits

#### Cities Include:

Bangkok  
Berlin  
Chicago  
Houston  
Johannesburg  
Karachi  
Melbourne  
Mumbai  
London  
New York  
New Delhi  
Paris  
Rome  
Sao Paulo  
Seoul  
Tokyo  
Toronto  
Warsaw



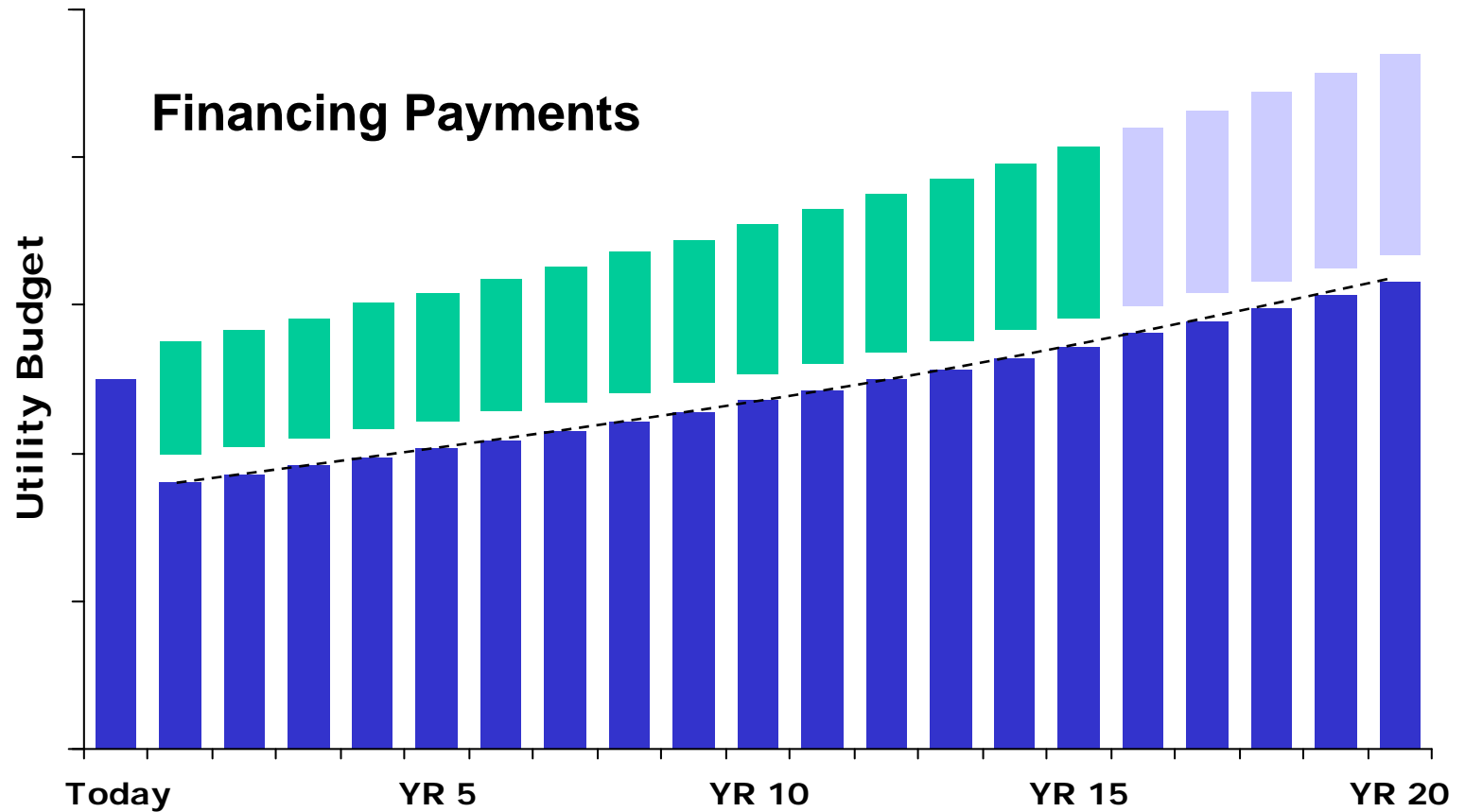
# EPC: Overview

## Energy Performance Contracting

- Proven contracting model
  - Project development costs minimized
  - Streamlines procurement process
  - Transparency and integrity assured
  - High confidence of implementation
- Owners control process
  - Owners specify investment criteria
  - Open-book & guaranteed maximum pricing reduce risk
  - Gain sharing reduces project costs, maximizes outcomes
- Self-financing
  - Utilize energy savings to make debt service payments on project financing
  - Performance assured for life of agreement
  - includes gain sharing and savings guarantee

# EPC: Cash Flow

*Funding Potential...*





# Everyone wins

- **City Mayors and administrations can deliver on promises**
  - Reduce GHG Emissions
  - Reduce Operating Expense
  - Upgrade/Renew Aging Infrastructure
  - Improve Comfort and Facility Performance
  - Reduce Capital Budget
  - Revive Communities / Inject money in local businesses
  - Part of a World Class Initiative, great way to demonstrate social responsibility, and harvest positive public relations
- **Building owners (including City) SAVE money and energy**
  - ESPC market grows – Banks, ESCOs, Product suppliers increase business
- **Lower GHG emissions**
- **More jobs**

# London

- 1st city in world to agree deal using EEBRP
- London selected 2 ESCOs – Dalkia and Honeywell
- 42 municipal buildings to be retrofitted
  - Including police stations, fire stations, transport buildings
- Traditional construction contract but aims for 25% energy reduction
- Expected to save city £1million per year
- City recruiting private building owners to join them

Increasing energy efficiency, is the

- Largest
- Least expensive
- Most quickly deployable
- Least visible
- Least understood
- Most neglected way

To meet future energy demand

Amory Lovins

What if we don't have an  
environmental problem, school,  
health care, or a business  
problem...

...but an institutional problem?

What if...

our organizations are not capable  
to deal with the complexities we  
are now meeting?

What if organizations don't act like machines, but more like living communities?

What if...

change is less about  
reorganizing, restructuring and  
reengineering and more about  
reconceiving?

What if people don't mind  
change, but they do mind  
being changed?

What if people are not led by managers, but by good ideas ?

# The 1st Industrial Revolution

- transformed our society

There were:

- no master plan
- no headquarter
- no starting/end point

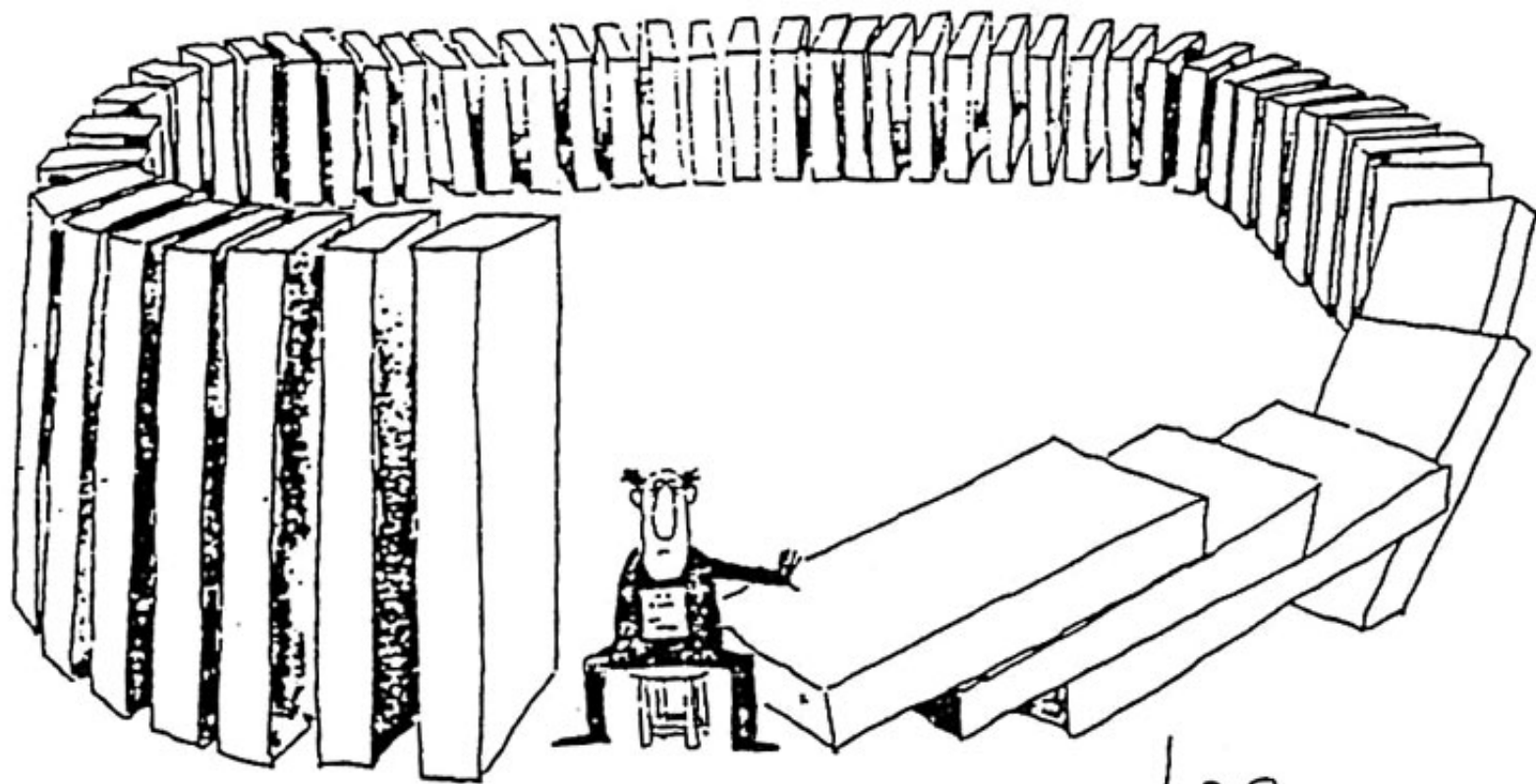
# 1st Industrial Revolution

A product of

Millions of small beginnings

A process of making things better

Outpouring of human creativity



Levin

*Drawing by Levin; © 1976 The New Yorker Magazine, Inc.*