

Hållbar Framtid

- vår tids ledarskapsfråga

Ekon. Dr Göran Carstedt

Uthållig Kommun

Göteborg April 28, 2011



Ledarskap

Meningsfullt

Lärorikt

Värt människors fulla engagemang

Ledarskap

Lösa vår tids utmaningar

Skapa tillsammans

Utifrån perspektiv

”I think there are good reasons for suggesting that the modern age has ended.

Today, many things indicate that we are going through a transitional period, when it seems that something is on the way out and something else is painfully being born.

It is as if something were crumbling, decaying and exhausting itself – while something else, still indistinct, were arising from the rubble.”

Vaclav Havel, Philadelphia 1994

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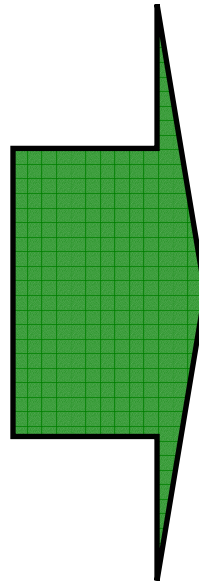


Old Logic

Things

New Logic

Ideas, knowledge



GC 1997

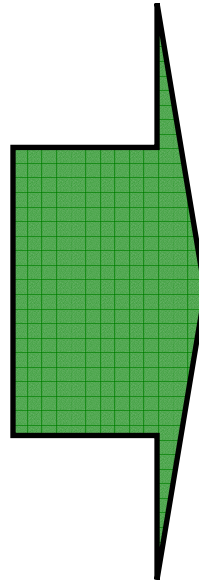
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Old Logic

Things

Newtonian
Org. as machine
Hierarchies
Structure
Boss
Action
Teaching
Capital growth
Info technology
Market share
Conquer Nature



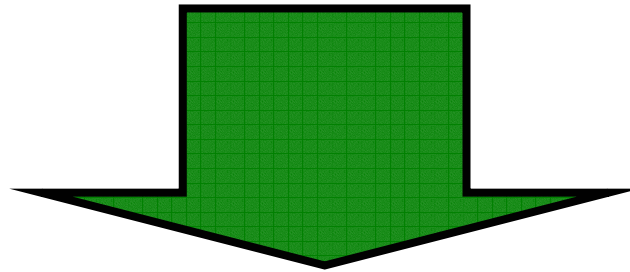
New Logic

Ideas, knowledge

Quantum
Org. as communities
Networks
Process
Facilitator
Interaction
Learning
People growth
Interaction technology
Mind share
Harmony with Nature

Att se Världen med Nya Ögon

Från ett liv som mestadels
organiserats åt oss



En värld där vi alla måste
skapa vår egen framtid

Framtiden...

... inte förutbestämd

skall skapas...

Hur skall vi Organisera oss?

Co-create

Att skapa tillsammans

Vem skulle saknas oss
om vi inte fanns?

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

(Nietzsche)

Vad är bra för vårt företag?

eller

Vad är vårt företag bra för?

Ett varumärke

Ett löfte

GC 1992

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“Only while sleeping one makes no mistakes.

The fear of making mistakes is the root of bureaucracy and the enemy of evolution.”

(Ingvar Kamprad, 1976)

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Lärande Organisationer

”Där man ständigt lär sig att lära
och hur man utvecklar saker
tillsammans.”

**Vi har mer att lära
från våra kunder än
från att kopiera våra
konkurrenter**

Dagens ledarskapsutmaningar ?

En hållbar framtid

Organisatorisk förändringskraft

The Economist

OCTOBER 25TH-31ST 2003

www.economist.com

The Franco-German relationship

PAGE 31

Iran's last chance

PAGE 12

Russia's western borders

PAGES 21-23

A SURVEY OF CORPORATE LEADERSHIP

AFTER PAGE 56

The end of the Oil Age



UK £5.00	USA \$12.00	Canada \$12.00	Japan ¥1,200	South Africa R12.00	India ₹12.00	China ¥12.00	Australia \$12.00
France €5.00	Germany €5.00	Italy €5.00	Spain €5.00	Sweden €5.00	Norway €5.00	Denmark €5.00	Poland €5.00
Portugal €5.00	Greece €5.00	Switzerland €5.00	Belgium €5.00	Finland €5.00	Sweden €5.00	Denmark €5.00	Poland €5.00
Spain €5.00	Italy €5.00	France €5.00	Germany €5.00	Japan ¥1,200	USA \$12.00	Canada \$12.00	UK £5.00



Inside Andy Grove's
Latest Crusade

Toyota's
Secret Weapon

INVESTING
7 MUTUAL FUNDS
THAT BUY, HOLD—AND WIN

FORTUNE

DISPLAY UNTIL AUGUST 30, 2004

SPECIAL REPORT

HOW TO KICK THE OIL HABIT

America's addiction to foreign
oil has never seemed more
dangerous. It won't
be easy to quit.
Here's a four-part
plan that gives us
a big headstart.



www.fortune.com (AOL Keyword: Fortune)

WATCH "D-DAY: MEN & MACHINES," THIS MONTH ON NATIONAL GEOGRAPHIC CHANNEL

NATIONALGEOGRAPHIC.COM/MAGAZINE

JUNE 2004

NATIONAL GEOGRAPHIC

THE END OF
CHEAP

Oil

The Shiites of Iraq 2
Under Monterey Bay 36
Cliff-Hanging Tombs 56
Sprawl on the Mall? 60
At Home With Flickers 72
ZipUSA: Pawtucket, RI 110
BONUS Tear-out Map of Washington, D.C.

The Economist

AUGUST 27TH-SEPTEMBER 2ND 2005

Poland's Solidarity, 25 years on

PAGE 25

A shameful silence on Uzbekistan

PAGE 14

Iraq, the war and the constitution

PAGES 22-24

Brother Roger, Taizé's melodic monk

OBITUARY, PAGE 70

The oiloholics



Albania	1,600	Czech Rep.	KC130	France	€6.90	Ireland	€6.90	Israel	₪25.00	Japan	¥1,000	Malaysia	RM2.00	Saudi Arabia	SAR2.00	Sweden	SEK42
Austria	€6.90	Cyprus	€2.85	Germany	€6.90	Italy	€6.90	Lebanon	₪25.00	Norway	NOK42	Slovakia	SKK360	Switzerland	Sfr4.00	Taiwan	NT\$100
Bahrain	Dinar2.00	Denmark	DKK43	Greece	€2.70	India	₹4.00	Luxembourg	€4.00	Poland	PLN7.50	Slovenia	€1.00	Turkey	TL4,300,000	Ukraine	₴1.00
Belgium	€6.90	Estonia	€1.00	Hungary	Forint200	Korea	₩4,400	Mexico	₱2.00	Portugal	€4.00	Romania	Lei2.00	Singapore	S\$2.00	Syria	£1.00
Bulgaria	BGN7.00	Finland	€6.90	Iceland	ISK400	Kuwait	Dinar2.00	Netherlands	€4.00	Oman	₹4.00	Qatar	QAR2.00	UAE	Dirhams30		

APRIL 13, 2004

www.time.com AOL Keyword: TIME

SPECIAL REPORT GLOBAL WARMING

TIME

BE
WORRIED.
BE **VERY**
WORRIED.

Climate change isn't some vague future problem—it's already damaging the planet at an alarming pace. Here's how it affects you, your kids and their kids as well.

EARTH AT THE **TIPPING POINT**

HOW **CHINA & INDIA** CAN HELP
SAVE THE WORLD—OR DESTROY IT

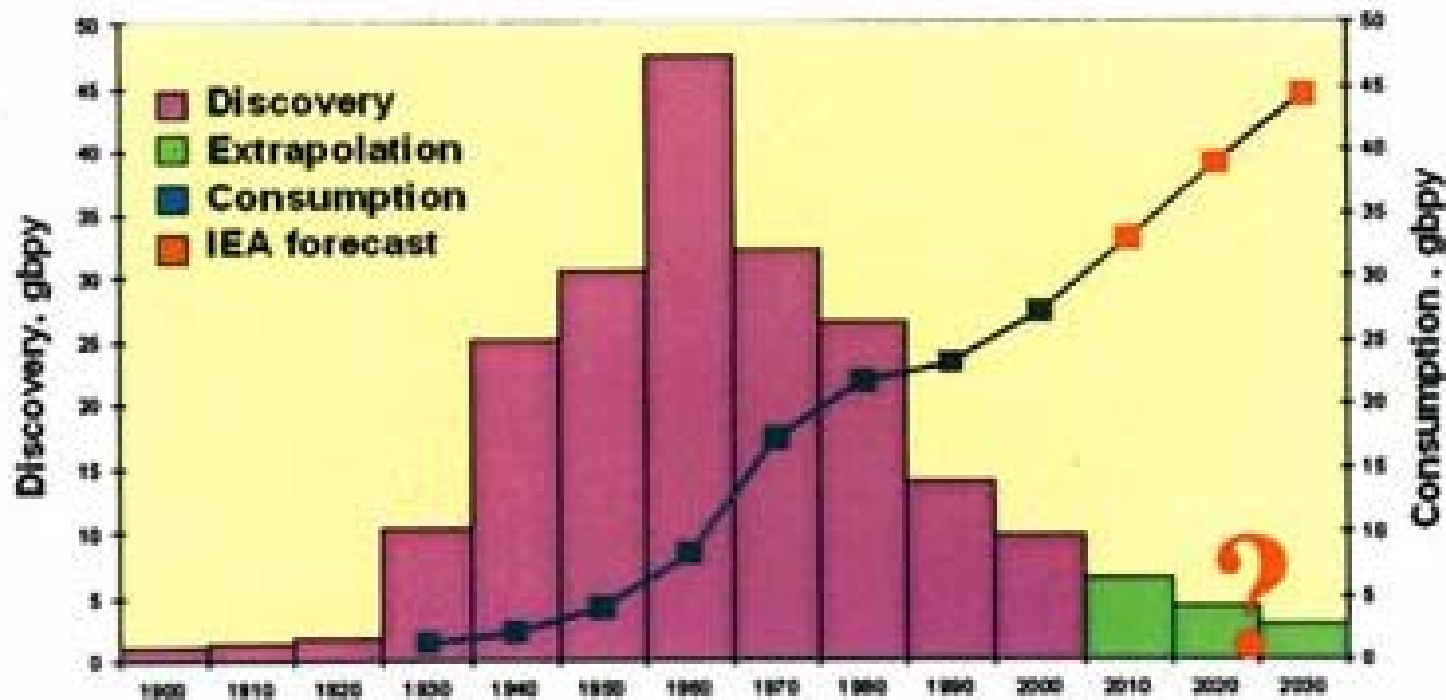
THE CLIMATE **CRUSADERS**



Varför ?

Oil Usage! vs Discoveries?

Comparison between discovery and consumption



"If oil demand remains flat to 2030,

- 45mb/day need to be built to offset oilfield decline
- roughly four times the current capacity of Saudi Arabia."

- Nobuo Tanaka, CEO IEA 2008

Department of Energy

Peak Oil

"The risk to our economies and our civilization are enormous, and people don't want to hear that."

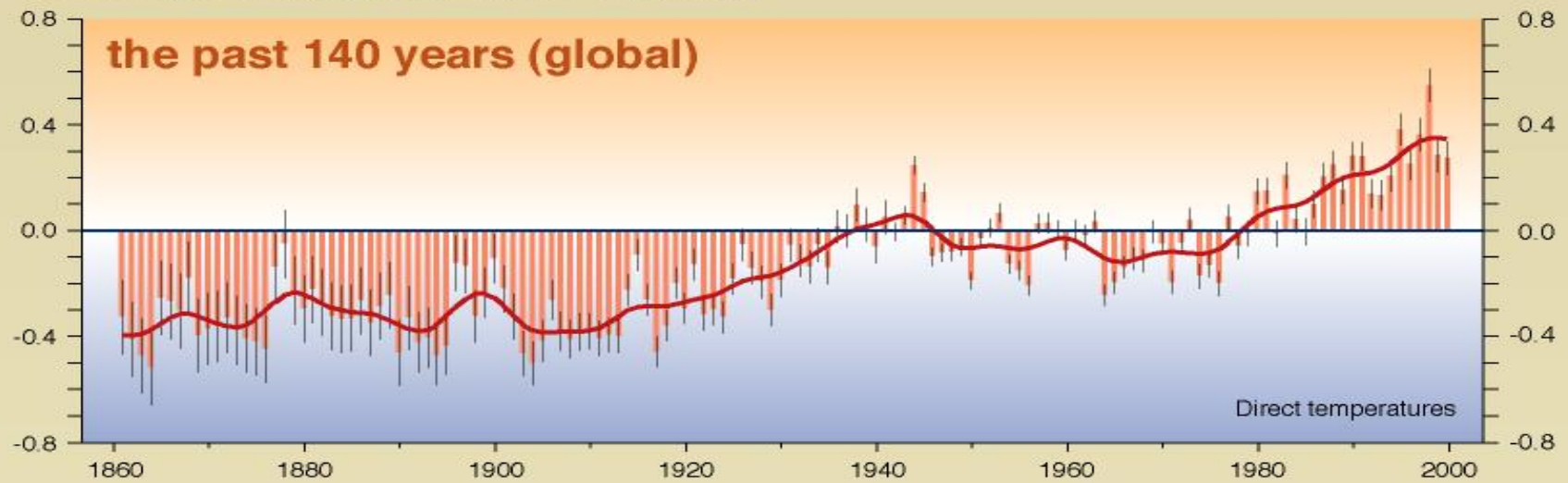
- Robert Hirsch, 2005

SUPERTRAMP

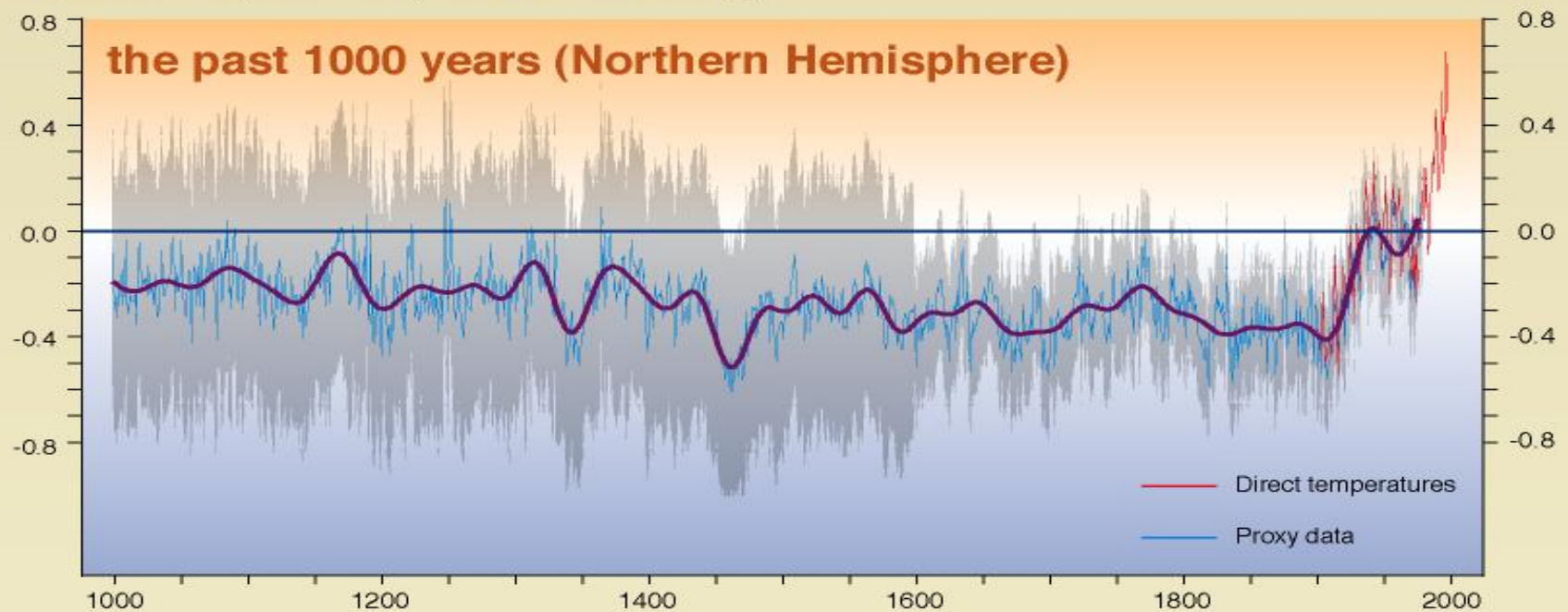


Variations of the Earth's surface temperature for...

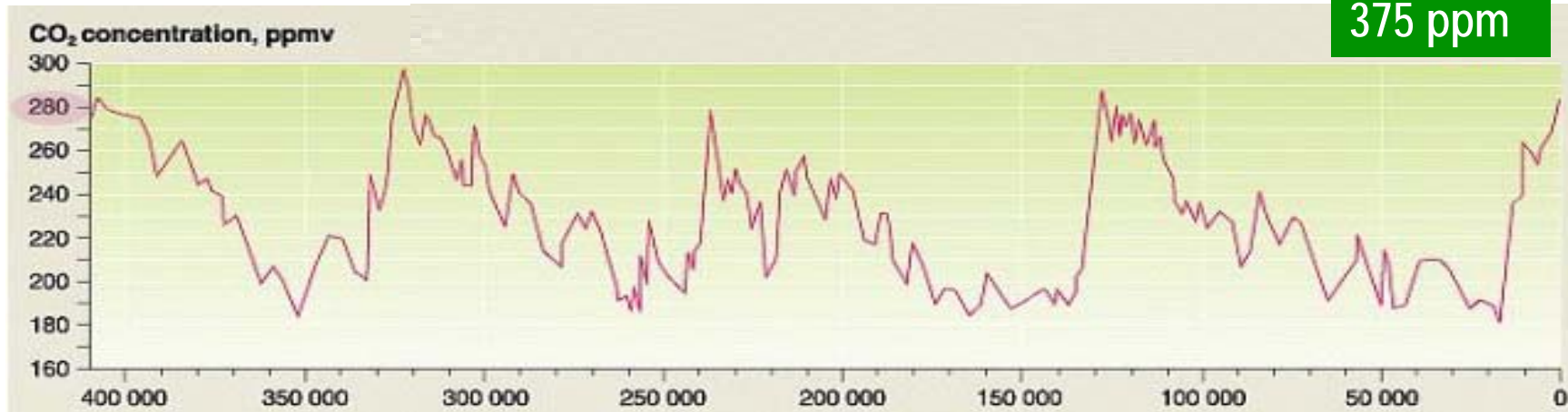
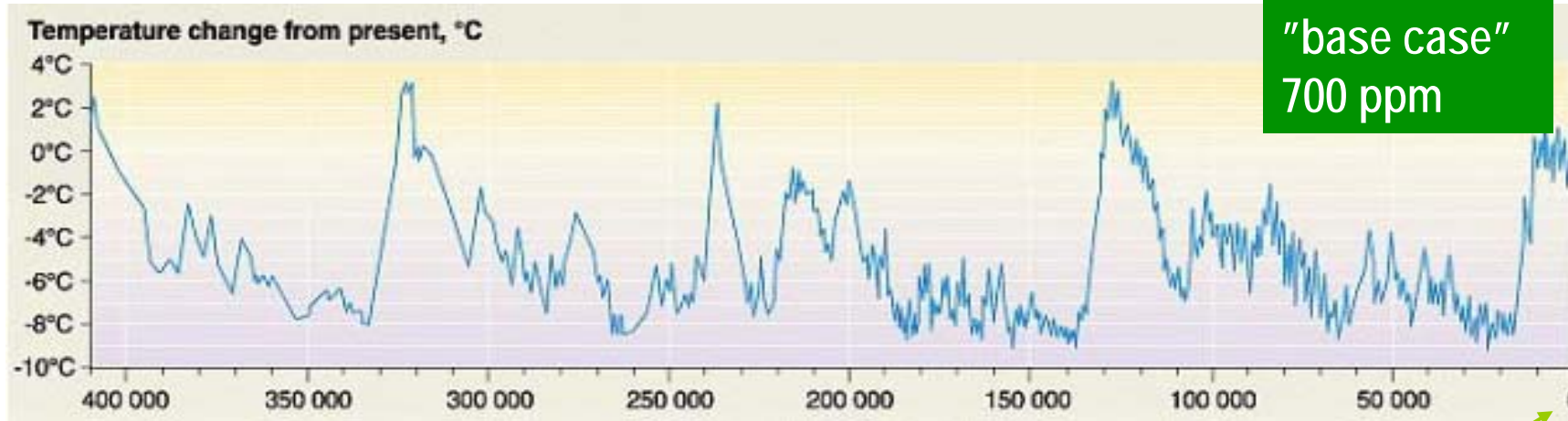
Departures in temperature in °C (from the 1961-1990 average)



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

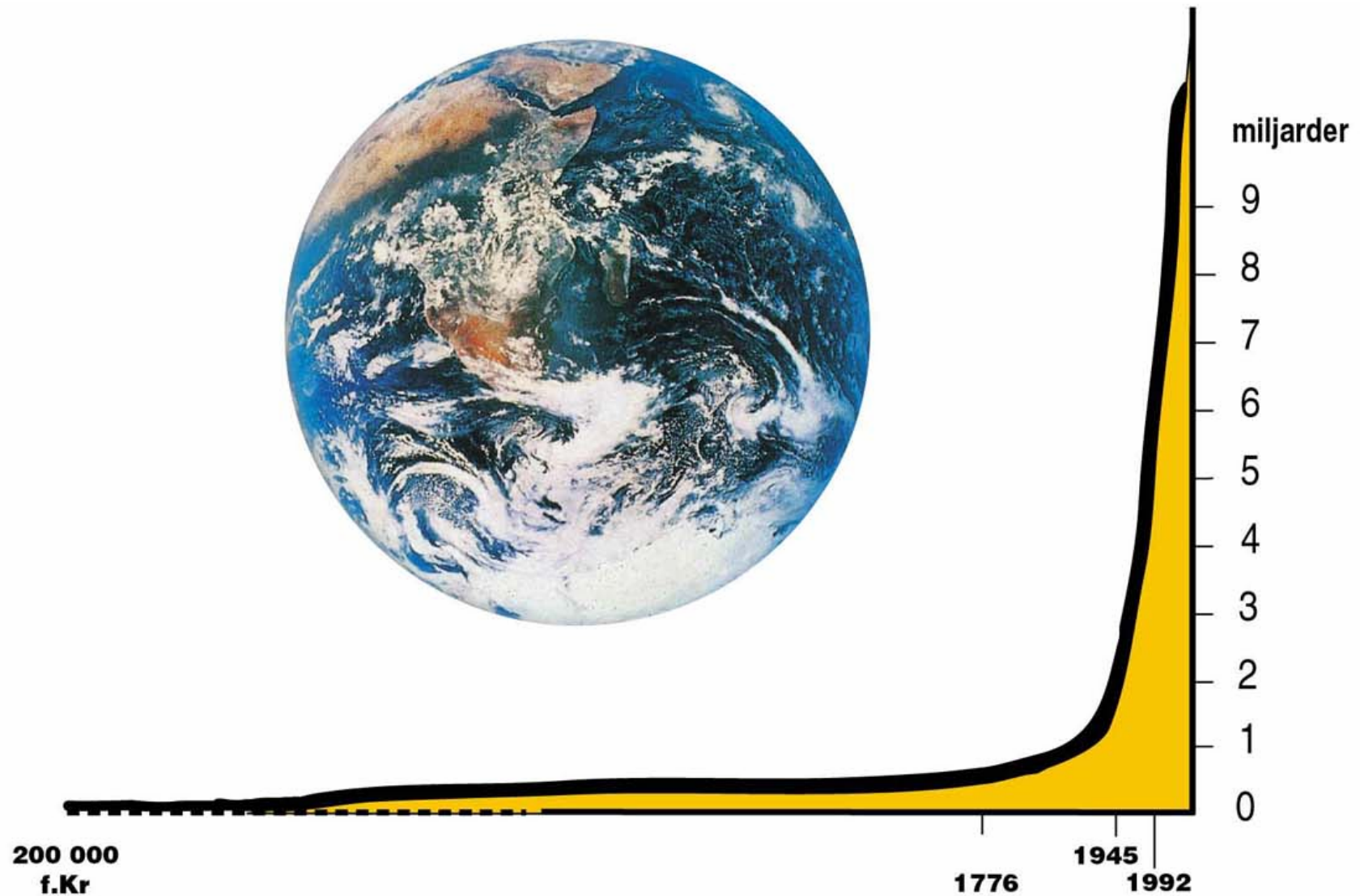


Past 400 000 years from "the Vostok Ice Core"



Varför ?

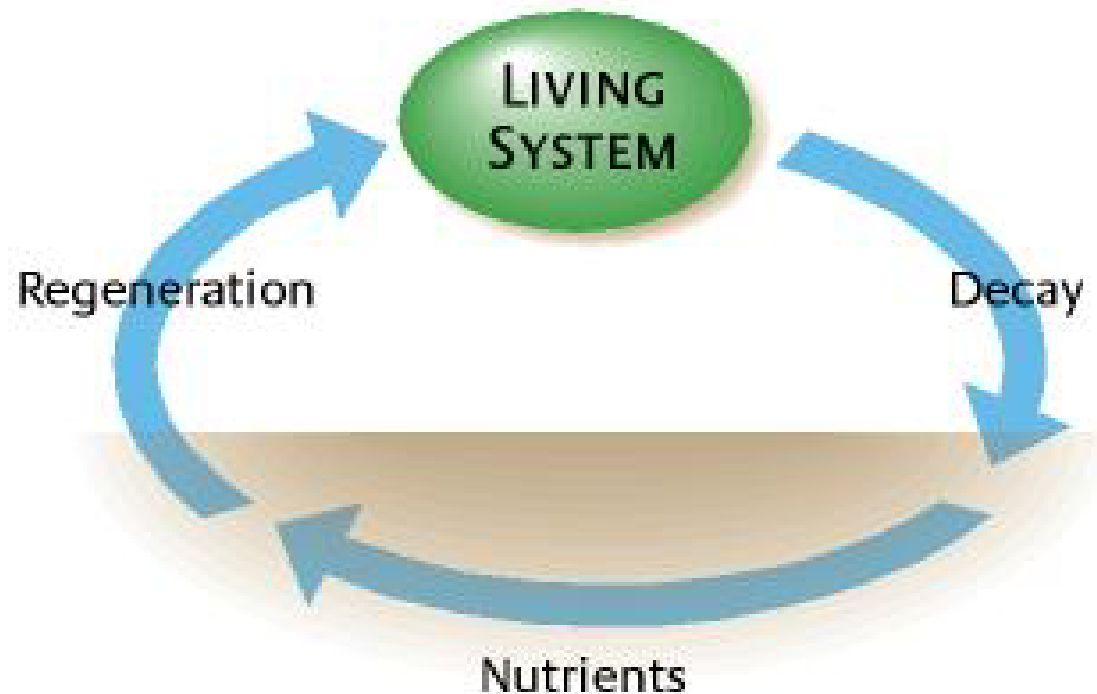
Planet earth and population



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

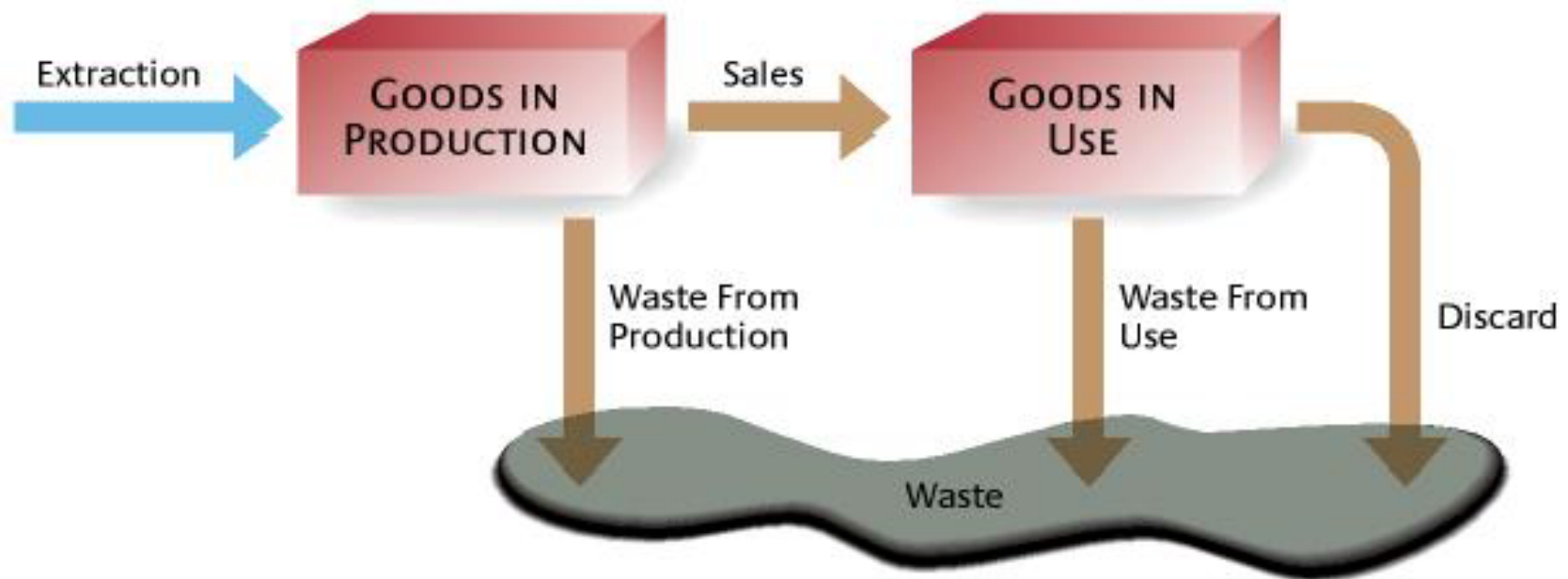
- Albert Einstein

Living systems follow cycles



Source: Peter Senge & Göran Carstedt, MIT Sloan Management Review, 2001

Industrial-age systems do not



Source: Peter Senge & Göran Carstedt, MIT Sloan Management Review, 2001

Det Nya Tänkandet handlar om

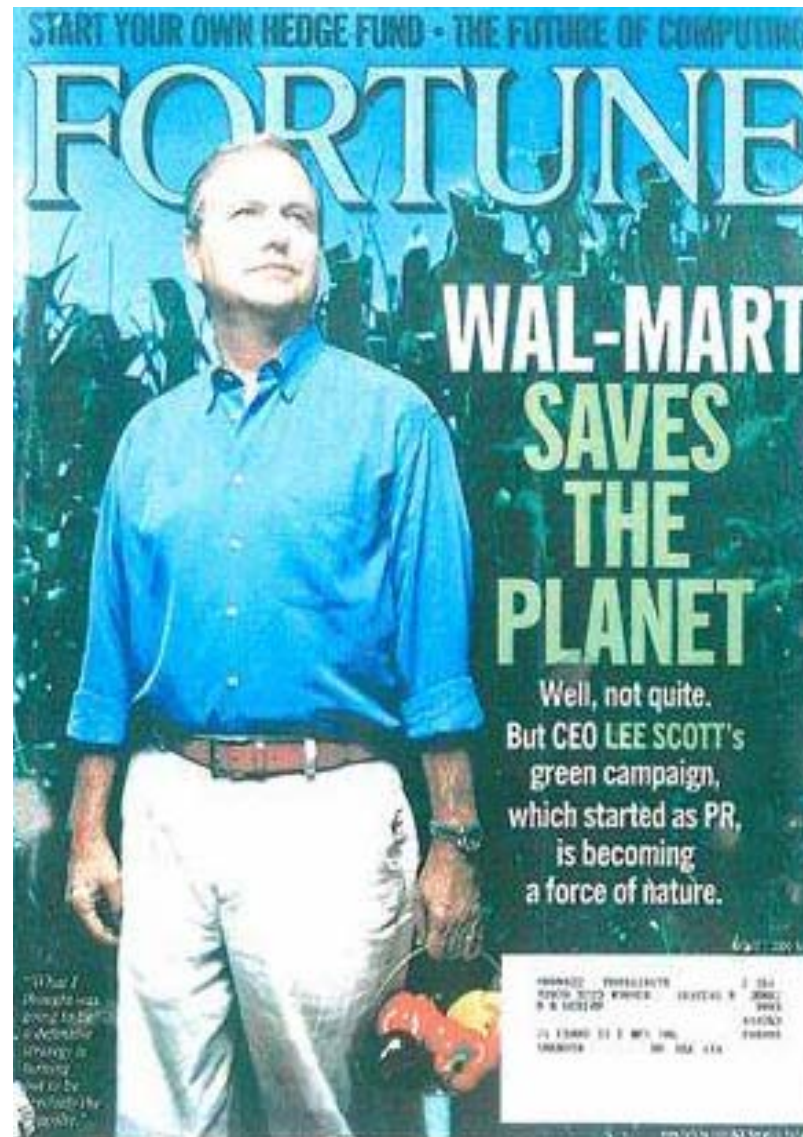
- Skapa önskvärda framtider
- Backcasting från hållbara principer
- Gränsöverskridande samarbeten
- Ändra spelets regler
- Se och mäta
 - Helheter inte Delar
 - Viktigt inte Mätbart
 - Långsiktigt inte Kortsiktiga resultat

Hur mäter vi utveckling?

- Robert Kennedy- “BNP mäter allt- utom det som gör livet värt att leva” (1968).
- Nicholas Sarkozy- “Lyckoindex” (2009)

Från ord till handling

Några exempel



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

These goals are both ambitious and aspirational

“And I am not sure how to achieve them, at least not yet.

This obviously will take some time, but we do know the way.”

Lee Scott, Wal-Mart

We will not be measured by our aspirations...

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

Lee Scott, Wal-Mart

Wal-Mart

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

GC 2007



CLINTON
CLIMATE
INITIATIVE

GC 2007

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Clinton Climate Initiative (CCI)

”practical and measurable
steps to reduce greenhouse
gas emissions”

Concentrated Solar Power



Greener Planet



Cities

2%

of landmass

50%

of total population

60-70%

of energy consumption & CO₂

Clinton Climate Initiative - C40

Retrofitting buildings

Idrottsanläggningar 25-35%

Ishallar, badhus och idrottshallar förbrukar 1 Twh per år

- Lika mycket som Umeå ca. 112 000 invånare

Investeringar på SEK 50 miljoner

- Omedelbart minska 15% energianvändning
= SEK 100 mln per år i 10 år
- Driftider för ventilation & belysning, anpassning av
luftflöden, kylmaskiner

(Energimyndigheten)

Clinton Climate Initiative - C40

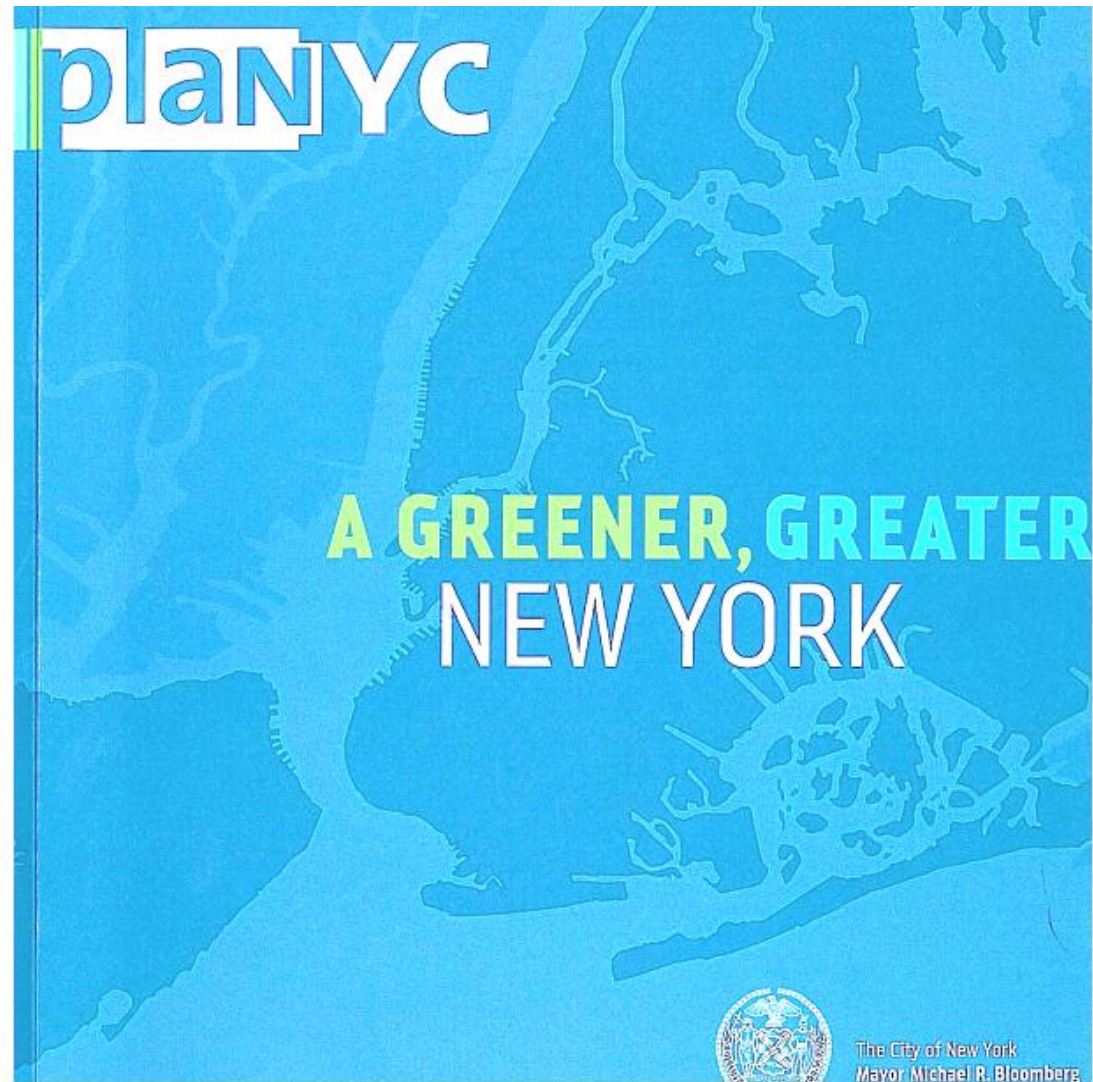
Retrofitting buildings

Waste to Energy

Transportation

Seaports/Airports

Climate positive urban development

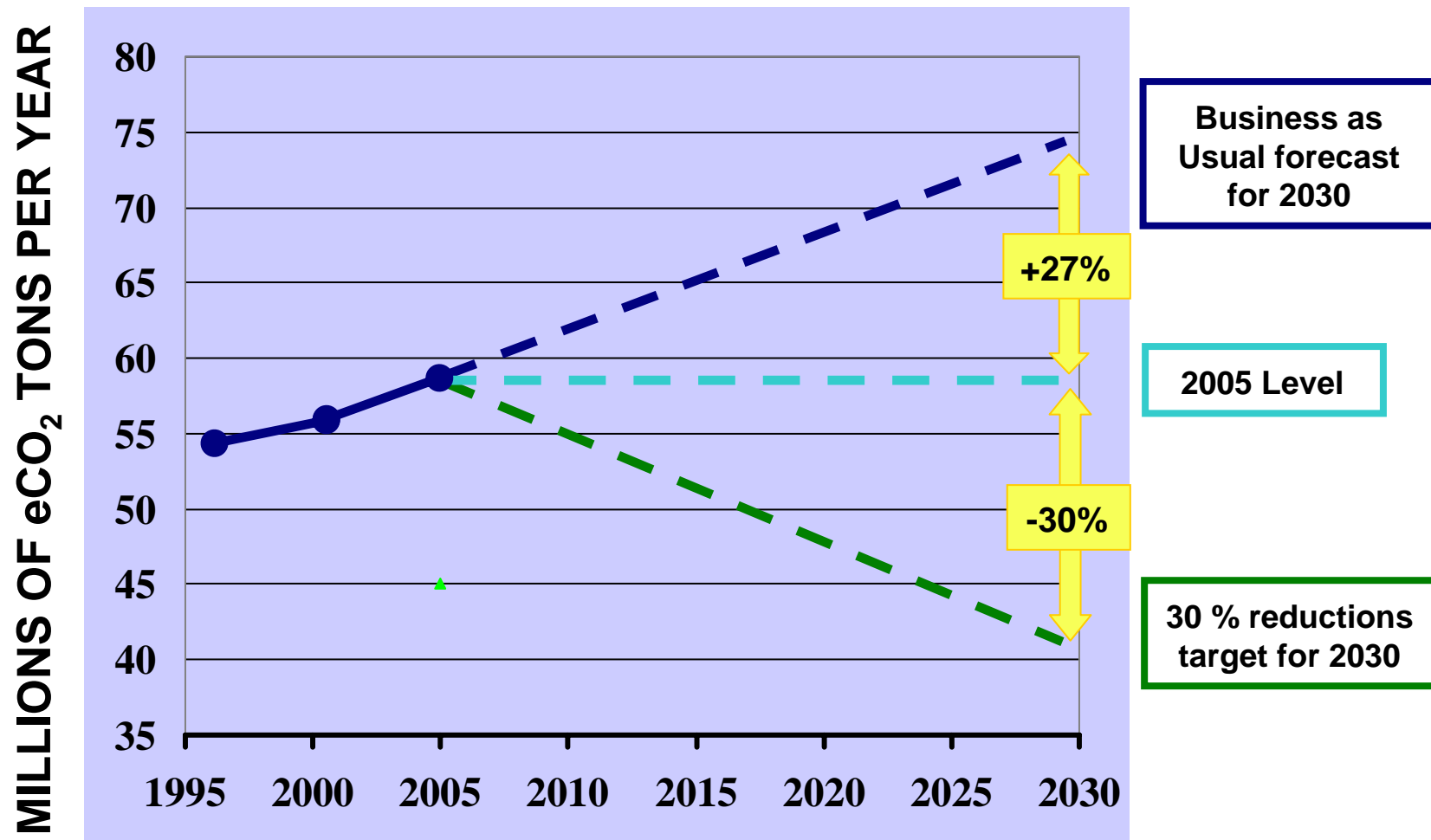


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New York City's Greenhouse Gas Emissions Citywide emissions



Source: PLANYC – A GREENER, GREATER NEW YORK

GC 2007

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Västerås

återvinning av matavfall

65 %

(Sverige 21 %, Mål 35 %)

91 %

av invånarna sorterar sina sopor

Västerås

återvinning av matavfall

65 % *(Sverige 21 %, Mål 35 %)*

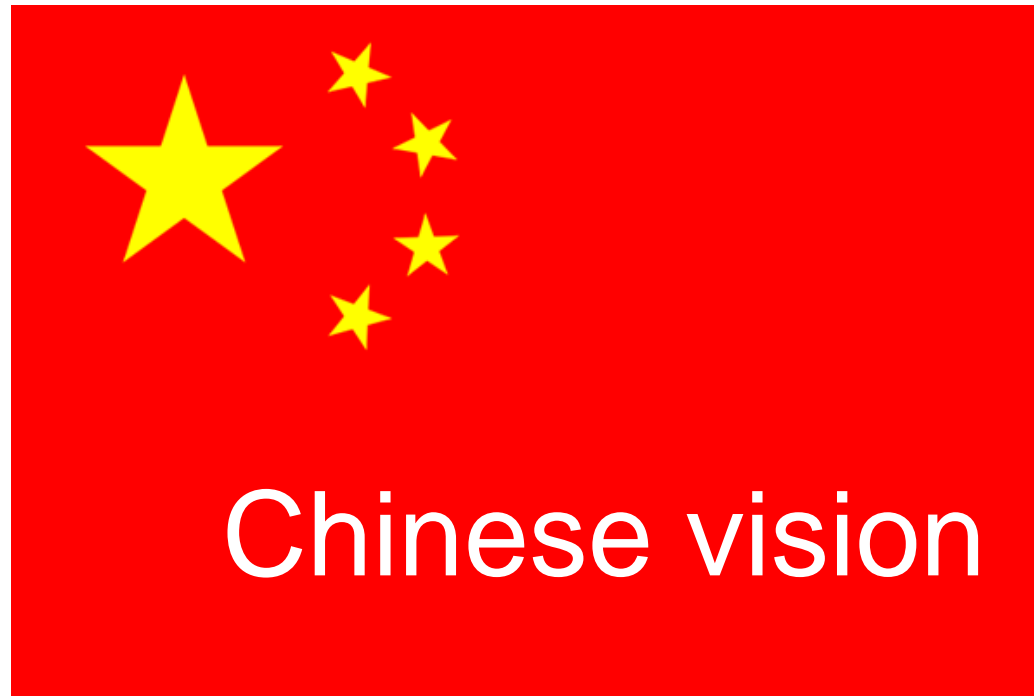
91 % *av invånarna sorterar sina sopor*

Dubbel taxa, om ej sorterar

Alla bussar (40), alla sopbilar (13) drivs med biogasen

Information och dörrknackning

Välinformerade - Förstår Varför



A circular economy,
in social harmony

2007



“We hear a lot of thunder
- we see no rain”

“We are not waiting- we act”

- President NDRC, April 2008



China 2009

Added 37 Gw
of Renewable power capacity.

More than any other country

- UNEP August 2010

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China 2010

Added more
wind power capacity (17 GW)

than Nuclear added worldwide



China

Next 5 year plan (12th)

Government funding will reach 3,1 trillion yuan.



"Identify the strategic direction and trust that future generations will be wiser.

The leaders themselves will only be in power for a decade at the most; it is neither feasible nor necessary for them to reach the goals they set.

Completion will take several generations. All that is needed now is the commitment."

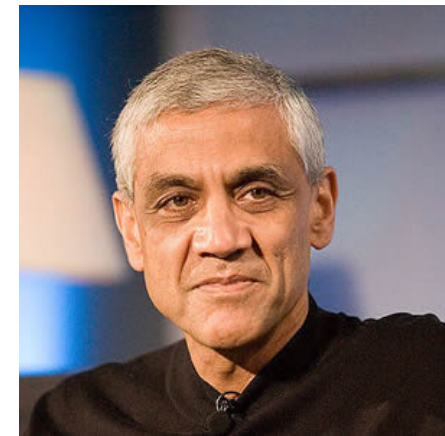
-Deng Xiaoping, 1987



USA

Green Tech - Clean Tech - Green Rush

- Silicon Valley, Boston,
 - Universities, Laboratories, VC, entrepreneurs
- Koshla ventures
 - Vinod Khosla – founder Sun Microsystems
 - 60 green start-ups
 - New fund Oct. 09 – 1,1 bln USD
- California VC
 - 60% US Green Tech investment



Pro science, pro technology, pro business, pro risk

GC 2009

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Green and Clean Technology

A battle for potentially millions of jobs and trillions of dollars in export revenues



A venture capital-driven market approach relying on gov. subsidies



A top-down system of state capitalism

GC 2009

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Vi behöver...

Nya produkter

Nya processer

Nya affärsmodeller

Nya samarbetsformer

Nytt sätt att tänka

Sustainability today

more than an **Ethical** imperative

a decisive **Business** imperative

Länder, Regioner, Städer, Företag...

som inte vill se utmaningen

- hamnar på efterkälken.



-  The Marshall Plan
-  The NASA's all time budget
-  The Moonshot
-  The Korean War
-  The Louisiana Purchase
-  The Vietnam War
-  The New Deal
-  The Savings and Loan Crisis
-  The Gulf War



2008 Bailout



Dilemma

"I was struck by the countries that won't meet their Kyoto targets... They aren't lazy, they aren't stupid and they are not corrupt.

They're well-meaning, hard-working people who are, like all political leaders, facing all kinds of competing pressures in an economy that is not organized for tomorrow's energy- it's organized for yesterday's."

- Bill Clinton, The Guardian, Aug 2008

Hur skapar vi Förändringskraft ?

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 ?

Optimist or Pessimist?

Industriella Revolutionen

- transformerade vårt samhälle

- Ingen master plan
- Ingen start/slutpunkt
- Inte ledd av någon
- Inte initierat av någon politisk eller annan organisation

Industriella Revolutionen

- Produkten av en miljon "small beginnings"
- En process av ständiga förbättringar
- En flodvåg av mänsklig kreativitet

Förändrade synsätt

- bland de många människorna

A sustainable future-

Has to be seen as
something **Desirable.**

“I have a Dream”

- Martin Luther King

“I have a nightmare!”

Optimism is an expectation,
based on the evidence at hand, that
there are reasonable likelihood of a
positive outcome.

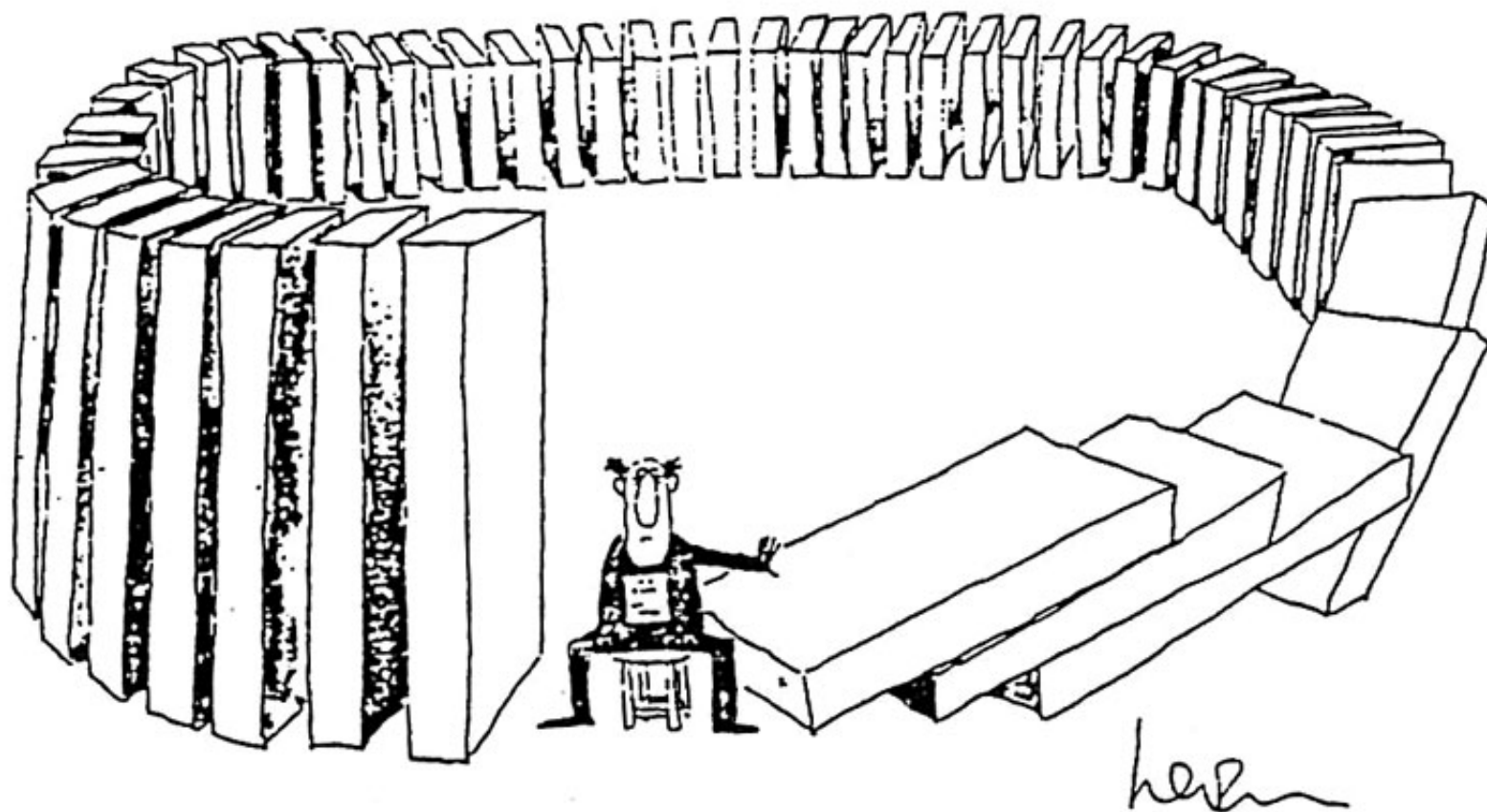
Hope, is the certainty that
something make sense,
regardless of how it might turn
out.

V Havel– letter to wife from prison

GC 09

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

En Meningsfull Uppgift

En av mänsklighetens
starkaste drivkrafter

TACK!



Free to use. Free to share. You must attribute the work to the author.



Sustainability Challenges

- Energy and Climate change
- Food and Water
- Waste and Toxicity
- Biodiversity
- Poverty and Social justice

We can not afford any enemies
on this.

Time is our enemy, our past
habits are our enemy.

- President Clinton, Aug 2006

More power capacity added in
Europe + USA
from renewable sources 2008 & 2009

Than from coal, gas, nuclear together

Worldwide – will pass 2010-11

- UNEP August 2010

What if...

...learning is less about
absorbing information and more
about becoming part of a
meaningful community ?

Large Scale Social Transformation

If one company or municipality can make its environment smoke free, why can't another?

The crazy idea no longer seems so crazy

Levels of Commitment

Defensive- It is not our fault

Compliant- We'll do only what we have to

Managerial- It's the business

Strategic- It gives us a competitive edge

Civil- We need to make sure that
everybody does it

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

Tällberg 1986

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En Meningsfull Uppgift

Vi skall möjliggöra att ...

Kunder ...

Medarbetare ...

Samhället

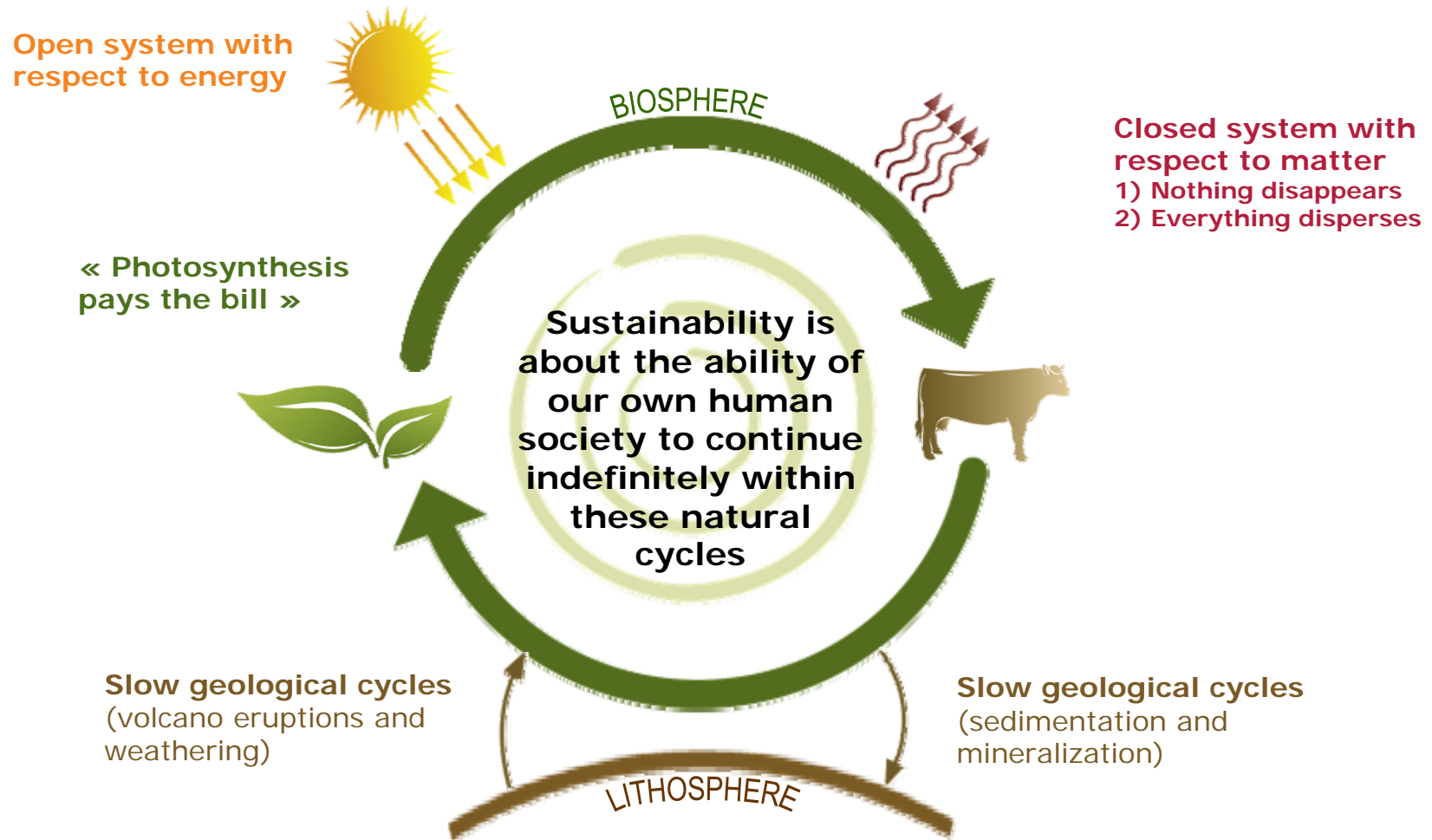
Aktieägarna

Backcasting



1. Begin with the end in mind

Cycles of nature



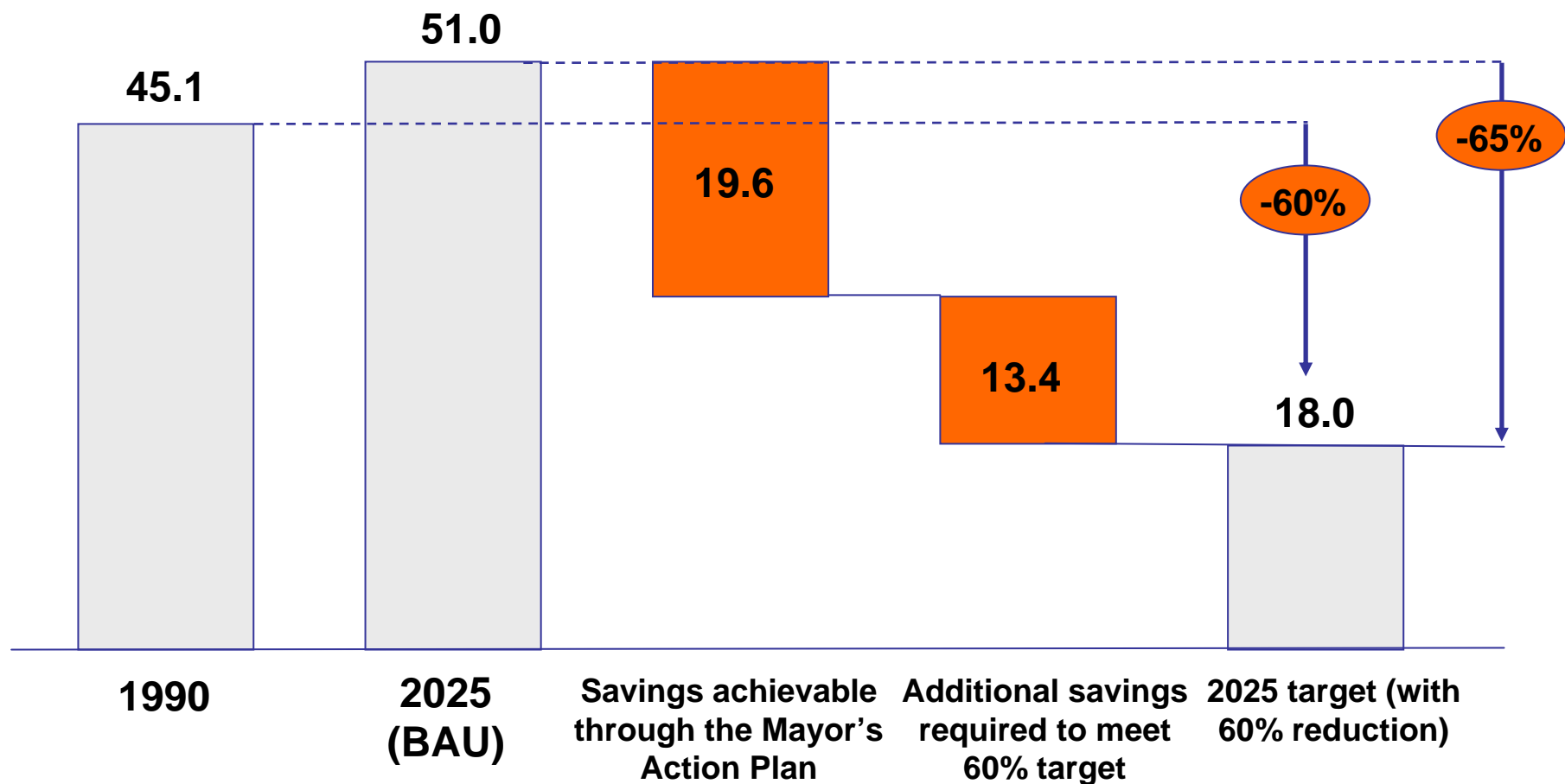
YOUR M&S

TESCO

Walmart
Save money. Live better.

CO₂ avtryck
för varje produkt

London's 2025 CO₂ reduction target (excluding aviation) Million tons of CO₂



Sverige- energismart byggande

1%

Andel lågenergibyggnader. Norge, Danmark 10 %

100 %

*Noll energihus (NNE) 2020 enl. EU och Sverige direktiv
Renoveringar – mot nollenergistandard*

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1%

Andel lågenergibyggnader. Norge, Danmark 10 %

100 %

*Noll energihus (NNE) 2020 enl. EU och Sverige direktiv
Renoveringar – mot nollenergistandard*

Gamla sanningar måste omprövas

Alla aktörer tänka nytt

Fler demonstrationsprojekt

Skatter, forskning, utbildning



China

Low Carbon Energy 2020- 20%

Hydro	300 Gw	+150 Gw
Wind	160 Gw	2009: 25 2010: 42
Photo Voltaic	20 Gw	
Biomass	30 Gw	
Solar Heating	No. 1 in the World	
Nuclear	70-80 Gw	2008: 9

Heavy subsidies & Carbon Tax ?

GC 2009

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USA

Green Tech - Clean Tech - Green Rush

Advanced biofuels
- cellulose, microalgae

Smart grids

Solar energy
– wind, CSP, current

Ecological material

Electrical vehicles

Deep geothermal,
Etc...

GC 2009

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UK- Climate Change Act (Dec 2008)

First government to legally commit to reduce
GHG by 80% by 2050

(Endorsed by the opposition)

Three five-year carbon budgets with
statutory targets and audits

(separate committee)

"What were you thinking? Didn't you hear the IPCC four times unanimously warning the world to act?

Didn't you see the glaciers melting? Didn't you see the deserts growing, and the droughts deepening, and the crops drying up?

Didn't you pay attention to what was going on?

Didn't you care? What were you thinking?"

Al Gore, speech to UN Climate Change
Conference, Bali 2007

What if...

you can only earn people's trust
by being trustworthy?