

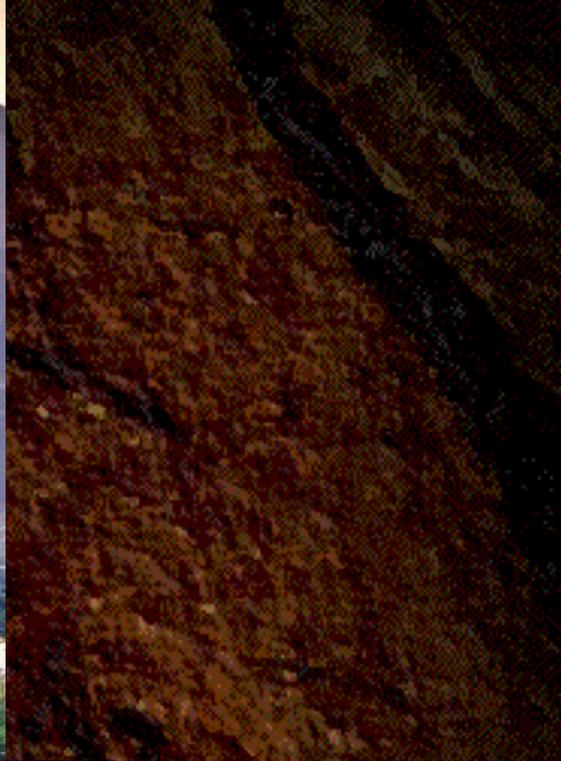
NATURAL CAPITALISM SOLUTIONS



TRIUMPH OF THE GREEN GIANTS

A presentation by L. Hunter Lovins
@ NCS 2016







We are called to be architects of the future,
not its victims.

Buckminster Fuller

Welcome to the Anthropocene

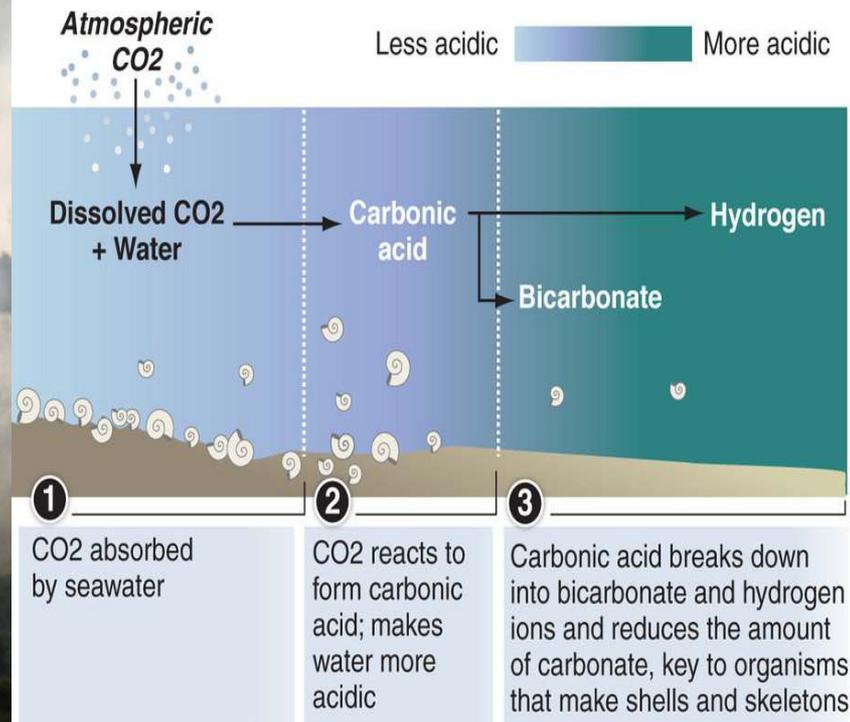


We are the first generation to to have dominion over the earth and likely the last to be able to save it

Global Biodiversity Outlook Three -

Oceans turning acidic

Higher carbon dioxide (CO₂) emissions from human activity are acidifying the oceans and could harm everything from plankton to whales.



How acidity affects marine life

- Depletes oceans of compound that clams, coral, plankton, other creatures need to build shells, skeletons
- Fish, other organisms can develop metabolic, immune, reproductive problems
- Kills off food for animals at higher end of food chain

NASA funded the HANDY Study:

Is Industrial Civilization Headed for Irreversible Collapse

The study found:

“Cases of severe civilisational disruption due to "precipitous collapse - often lasting centuries - have been quite common.”

Population, Climate, Water, Agriculture and Energy were the key interrelated factors that explain civilisational decline, and may help determine risk of collapse today

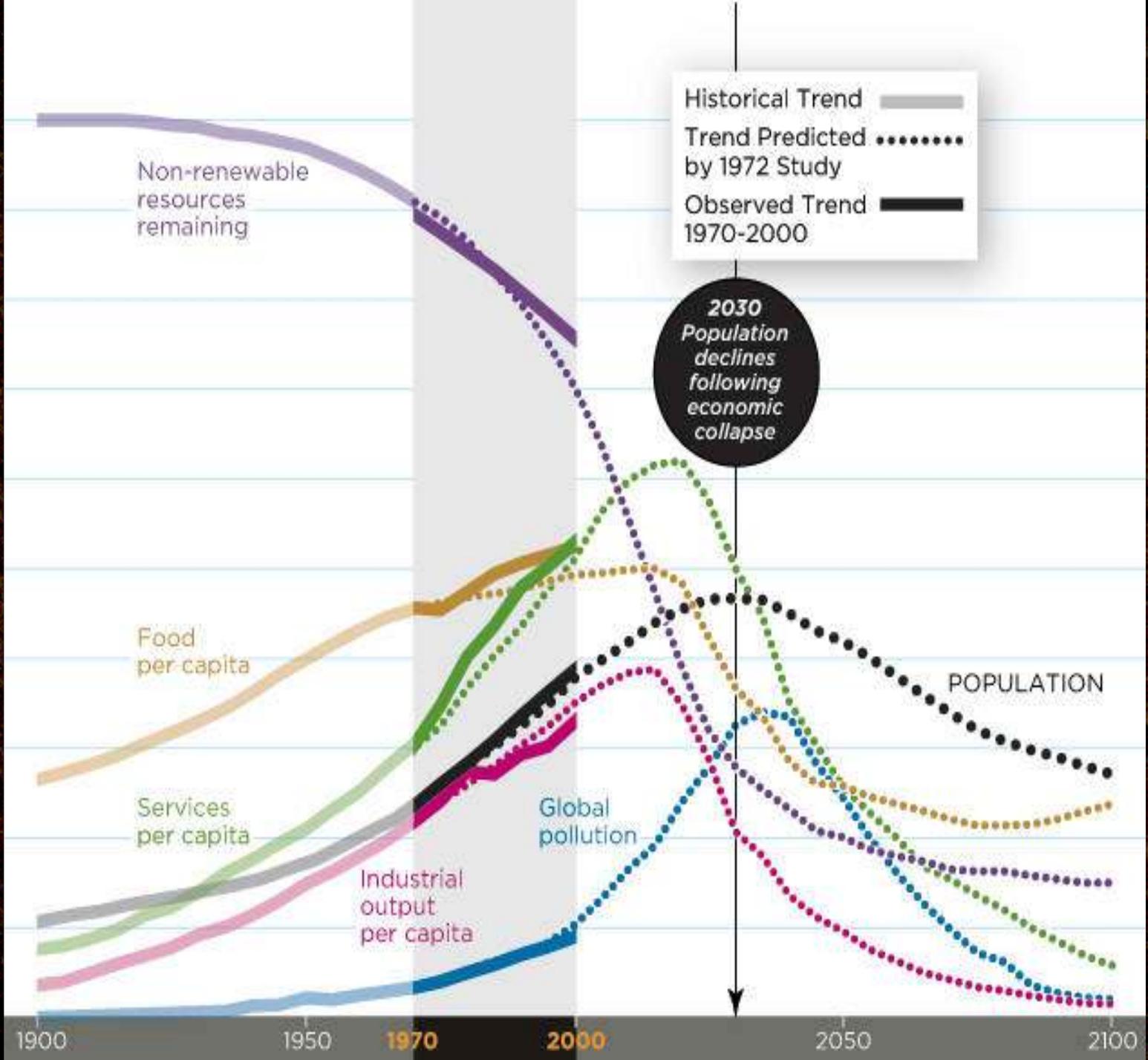
The study sought to understand long-term behavior not make a short term prediction, but its warning is stark.

Two crucial social features drove collapse:

“...the **stretching of resources** due to the strain placed on the ecological carrying capacity”; and

“...the **economic stratification** of society into Elites [rich] and Masses (or "Commoners") [poor]”

These social phenomena have played “a central role in the character or in the process of the collapse,” in all such cases over “the last five thousand years.”



Research Paper Series

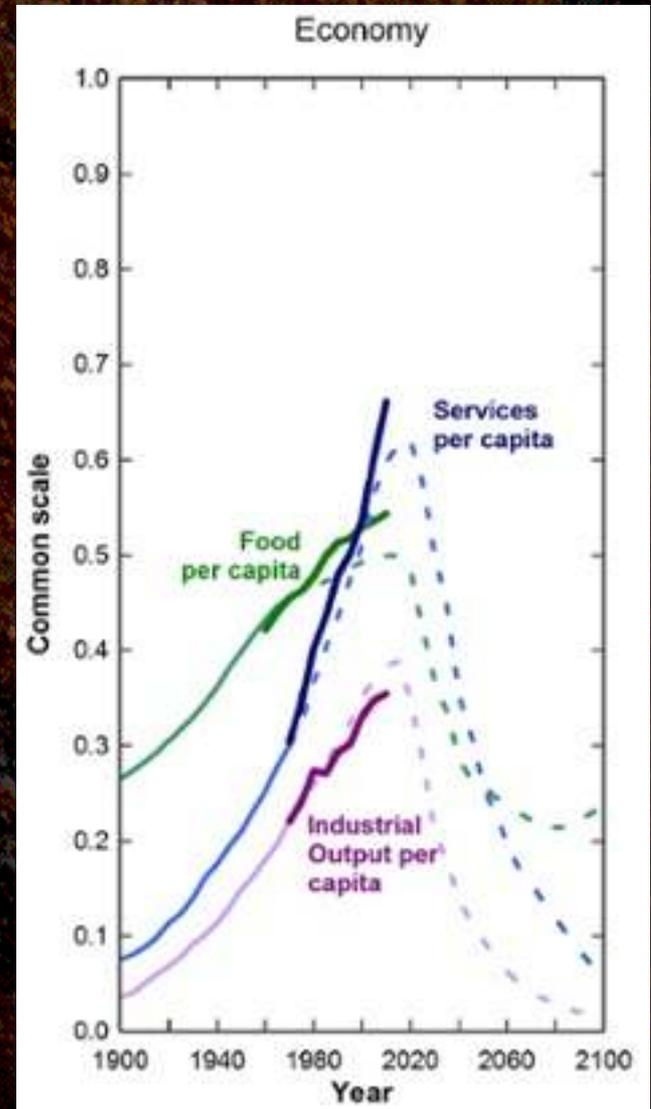
IS GLOBAL COLLAPSE IMMINENT?

GRAHAM TURNER



MELBOURNE SUSTAINABLE
SOCIETY INSTITUTE

Replicated & verified Limits graphs



Current Situation

We have exceeded the carrying capacity of the planet:

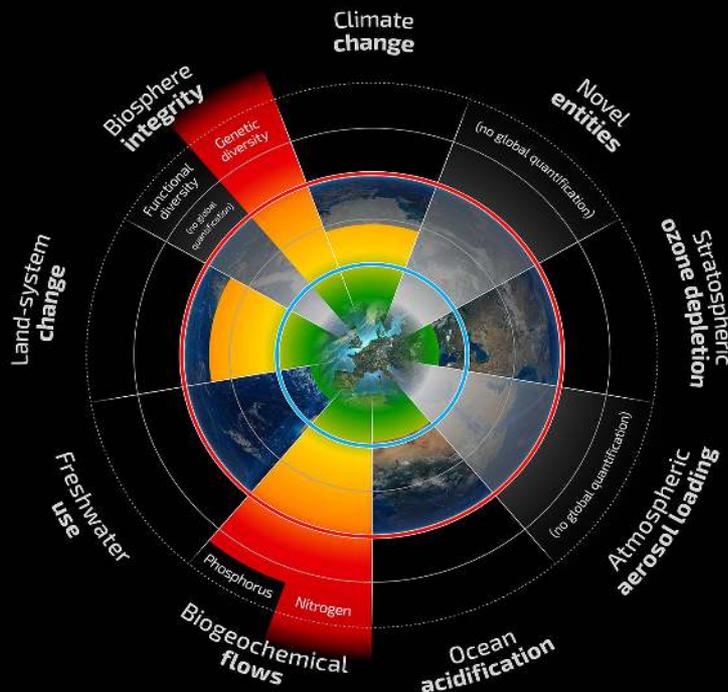
Fish stocks are depleted.

In 100 years of industrial agriculture we have lost 50 - 70% of the organic material in the soil that took 10,000 years of post glacial building to accumulate.

Ground water tables are falling meters a year, much more rapidly than they can be regenerated.

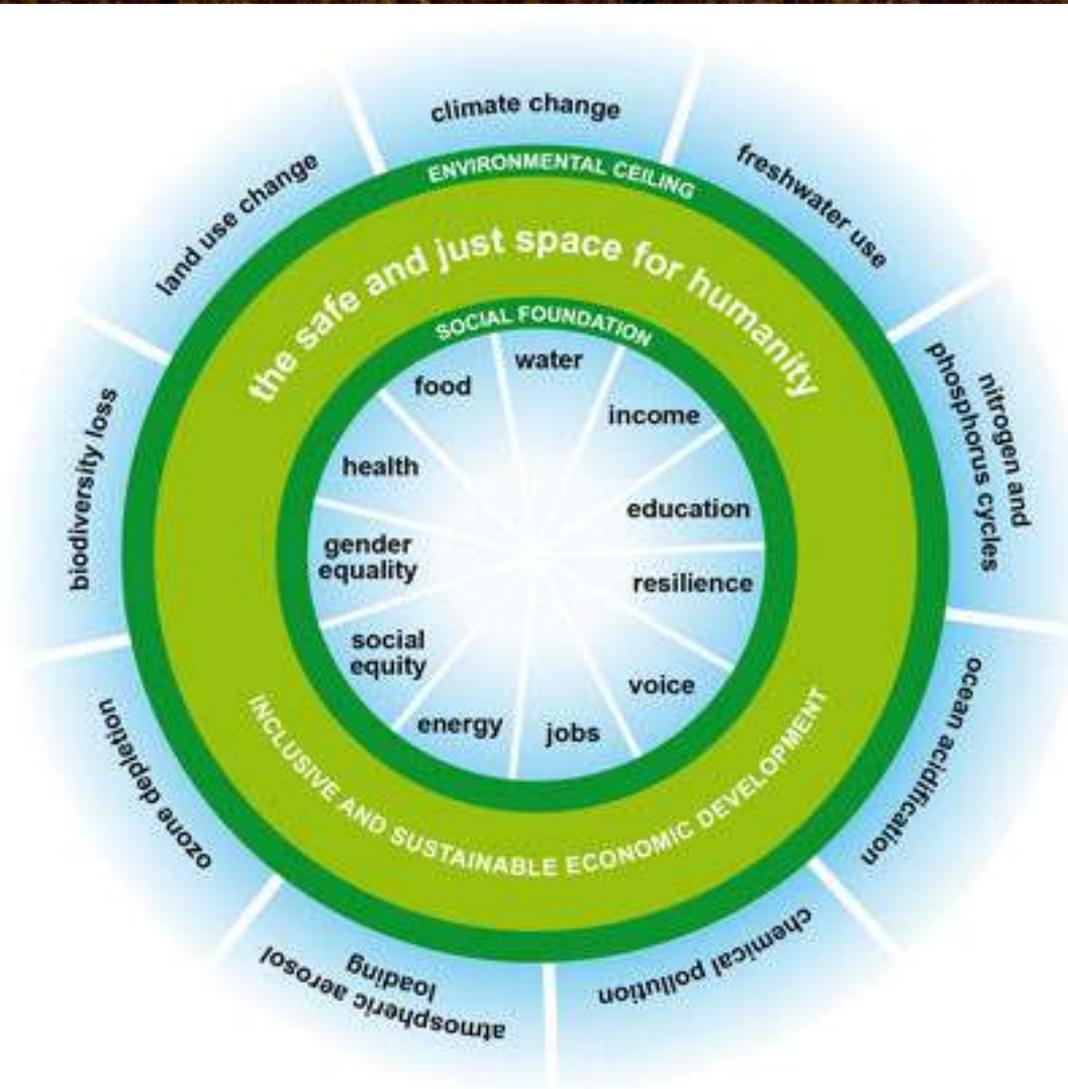
Planetary Boundaries

A safe operating space for humanity

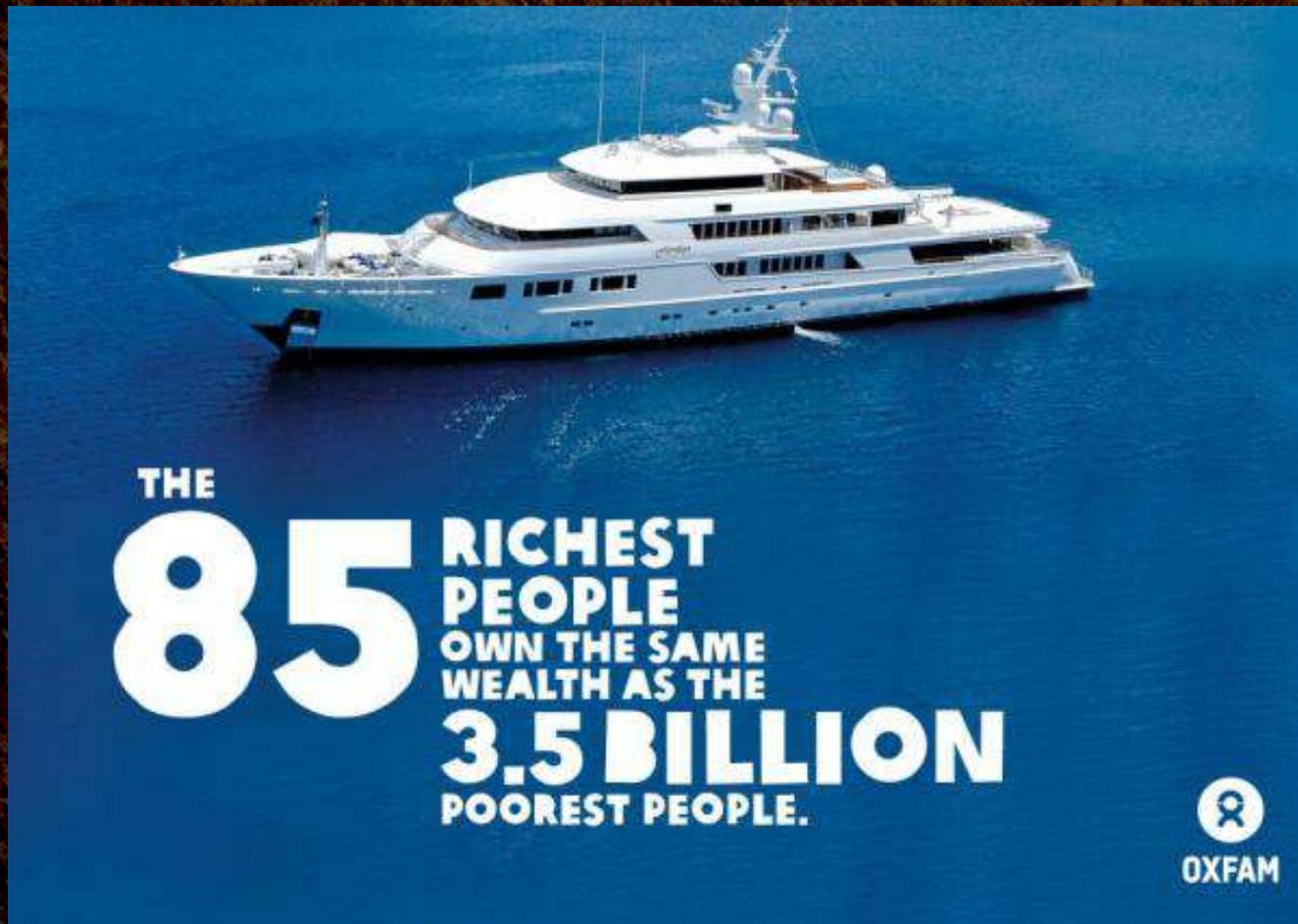


- Beyond zone of uncertainty (high risk)
- In zone of uncertainty (increasing risk)
- Below boundary (safe)
- Boundary not yet quantified

We are failing to meet basic human minimums



And we have huge inequality



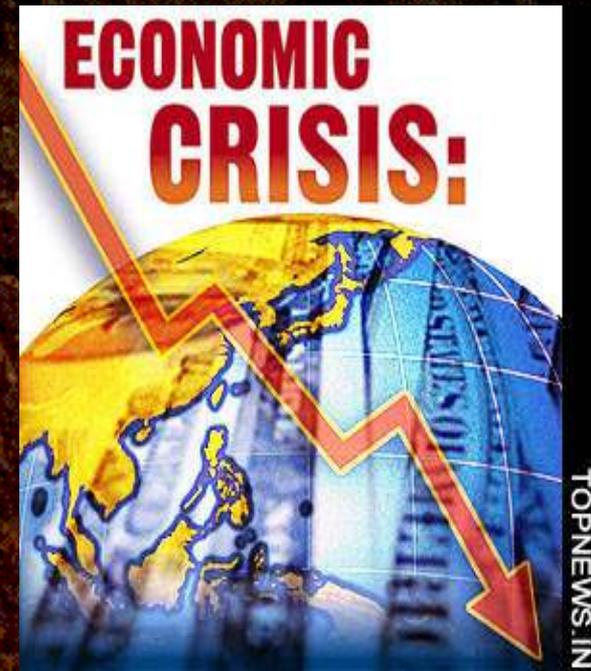
Almost half of the world's wealth now owned by just one percent of the population

The study concluded :

Under conditions "closely reflecting the reality of the world today... we find that collapse is difficult to avoid."

But it observed:

"Collapse can be avoided and population can reach equilibrium if the per capita rate of depletion of nature is reduced to a sustainable level, and if resources are distributed in a reasonably equitable fashion."





“Climate change has become the human rights challenge of our time, responsible for many of the challenges that the impoverished face, including loss of life, lack of fresh water, the spread of disease and rising food prices.”

“

In the face of the emergencies of human-induced climate change, social exclusion, & extreme poverty, we join together to declare that:

Human-induced climate change is a

scientific reality,

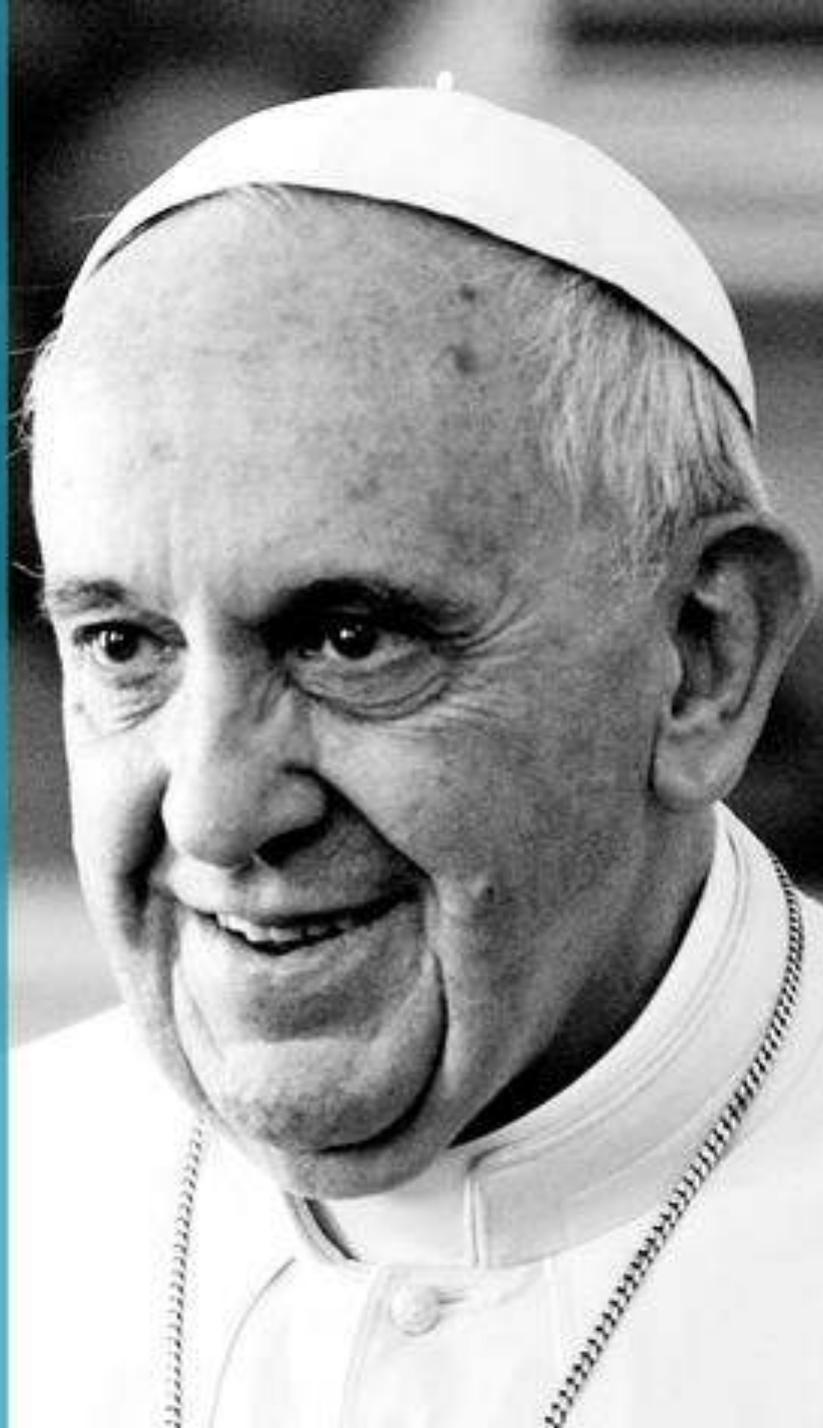
and its decisive mitigation is a

moral and religious

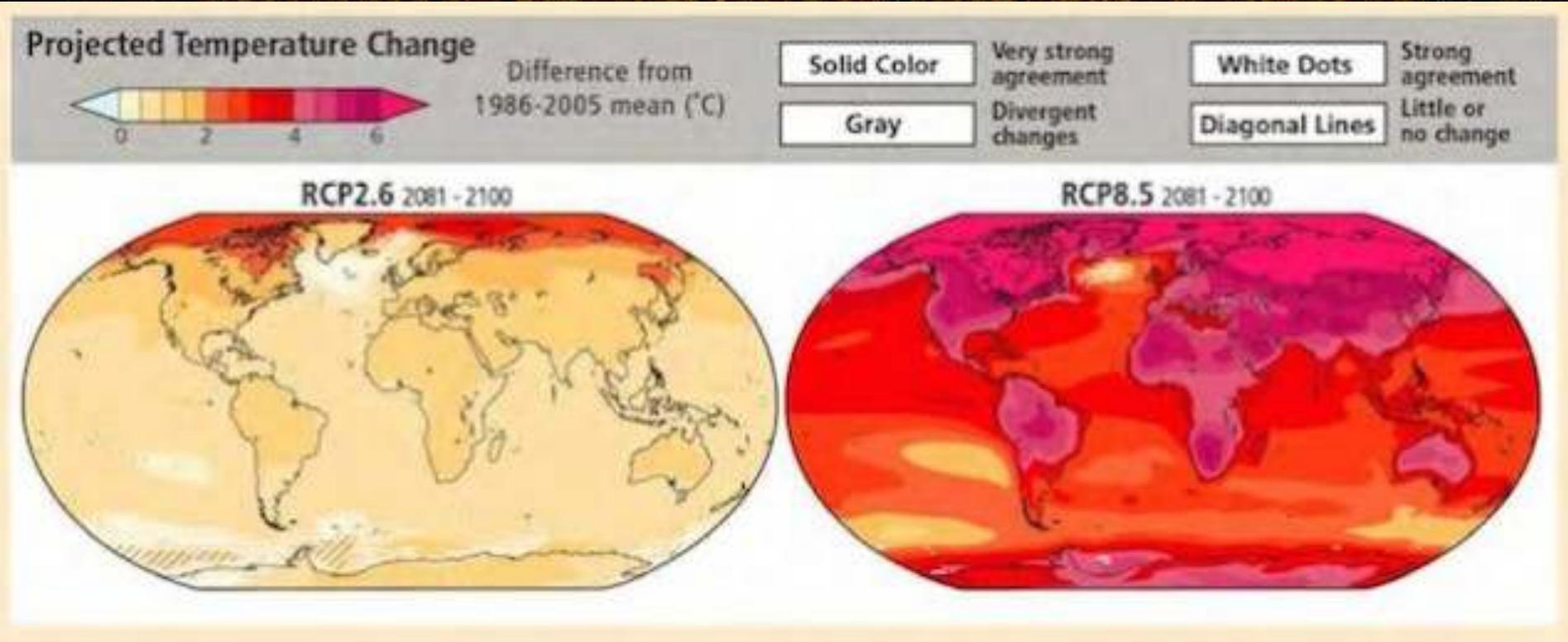
imperative for humanity.

”

Pontifical Academies of Sciences and Social Sciences



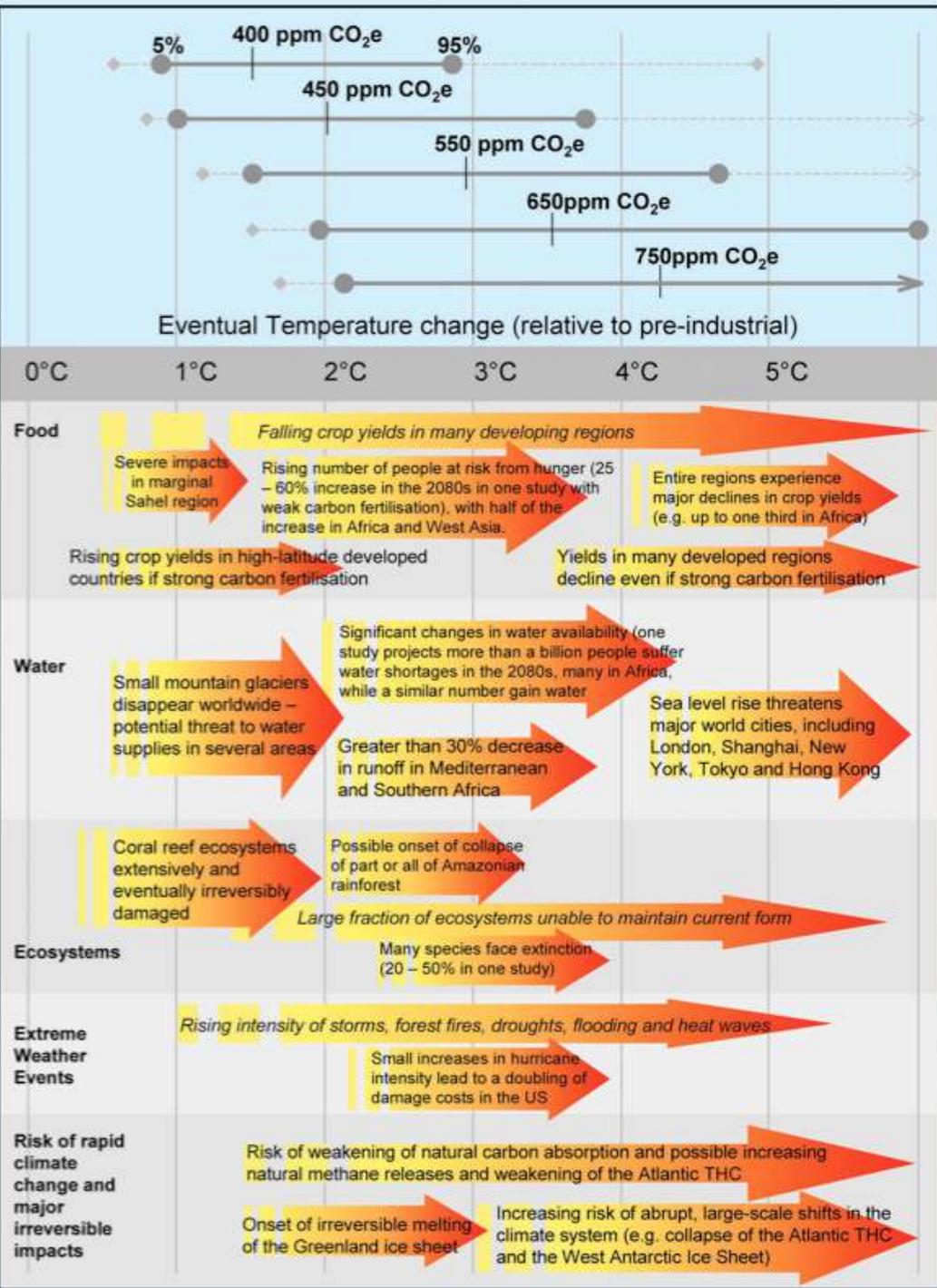
Vision of hell on earth



Early aggressive climate action (left) minimizes future warming. Continued inaction (right) results in catastrophic levels of warming, 6° C over much of the world

Climate change hurts the poorest first





How do we account for the net present value of what climate chaos will do to the planet?



Unsustainability Drove the Financial Collapse

Unsustainable business practices contributed to the economic collapse, which will not be resolvable until these more fundamental issues are addressed

“People seem blind to the fact that the causes of the economic collapse are exactly the same as those behind today's ecological crisis – and behind accelerating climate change in particular.”

- Jonathan Porritt, Forum for the Future
quoting Sir John Beddington



2007/ 2008 Great Recession:

\$50 trillion dollars gone

80 million jobs evaporated

WHO KILLED
BEAR STEARNS?

“We don’t fully understand what is happening to advanced economies”



WORLD NEWS

Bankers say they are flying blind

IMF mood

Experts do not fully understand what is happening in advanced economies, writes Chris Giles

Growing concern at the International Monetary Fund over the long-term side-effects of interest rates close to zero came as some of the leading figures in central banking conceded they were flying blind when steering their economies.

Lorenzo Bini Smaghi, the former member of the European Central Bank’s executive board, captured the mood at the IMF’s spring meeting, saying: “We don’t fully understand what is happening in advanced economies.”

In this environment of uncertainty about the way economies work and how to

Bank of England, added that “there is the risk of appearing to promise too much or allowing too much to be expected of us”.

It is troubling for monetary policy experts that their crisis-fighting tools – rates stuck at zero, money printing operations to bring down longer-term interest rates and encourage private sector spending, and efforts to calm financial market fears – might have nasty side-effects.

The central bankers were clear that they had got it wrong before the crisis, allowing themselves to be lulled, by stable inflation, into thinking they had eliminated financial vulnerabilities. Speaking to the IMF’s conference on rethinking global macro-economies, Janet Yellen, vice-chairman of the Federal Reserve, said: “In the years before the crisis, financial stability became a ‘junior partner’ in the monetary policy process, in contrast with its traditional ‘senior role’.” The

same mistake in their efforts to secure a recovery. Might they be storing up financial distortions which will bite in the future?

The IMF was clear in its global financial stability report that it did not want to see an end to the extraordinarily loose monetary policy being implemented across rich countries. José Viñals, its head of financial stability, said central banks’ efforts were “absolutely necessary”.

But the fund urged countries to use the breathing space offered to repair financial systems and also to address the unintended consequences.

It cited three new risks that were all potentially associated with easy money. In the US it sees lax underwriting standards on corporate borrowing at a level normally associated with a late stage in a boom-bust credit cycle. It also

sees easy money policies spilling over to emerging economies, particularly in the form of foreign currency borrowing by emerging market corporates, leaving these companies vulnerable to foreign currency risks and emerging markets sensitive to hot money international capital flows. Third, it worries that the exit from monetary easing could lead to a spike in market interest rates that could destabilise credit markets and the US economy.

“Put simply, we are in uncharted territory,” said Mr Viñals.

Central bankers are divided on the relevance of such concerns. While Mr Bini Smaghi said central bankers had become cornered into ever more exotic monetary experimentation, Ms Yellen sought to reassure her audience that the Fed was getting the balance right. “I don’t see pervasive evidence of rapid credit growth, a marked build-up in leverage, or significant

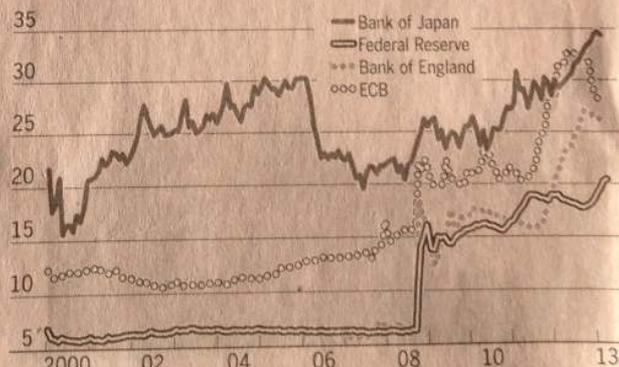
But there are signs that some parties are reaching for yield, and the Federal Reserve continues to carefully monitor this situation,” she said.

The problem outlined by Sir Mervyn was that the uncertainty is so pervasive that no one can be sure that the expansionary monetary policy is appropriate in a world where nations are learning they are poorer than they expected, but are not sure by how much. How can we be sure “we really are [not] running the risk of reigniting the problems that led to the financial crisis in the first place?” Mr Bear asked the IMF panel.

His question underpinned the fear that the abilities economies have been damaged that expansionary policy is likely to go on too long as central banks and governments seek to recover lost ground. Central bankers were not worried that monetary policy already gone too far, they were nervous the

Central bank balance sheets

Assets (as a % of GDP)



Markets & Investing



**Stephen
Roach**

INSIGHT

How zombie US consumers menace the world economy

The global economy is being hobbled by a new generation of zombies, the economic walking dead. The US consumer is in the

Over consumption in the North

Product	Expenditure	Economic goal	Investment needed to achieve goal
Makeup	\$ 18 billion	Reproductive health care	\$ 12 billion
Pet food- EU and US	\$ 17 billion	Elimination of hunger and malnutrition	\$ 19 billion
Perfumes	\$15 b	Universal literacy	\$ 5 b
Bottled water	\$ 35 b	Clean drinking water for all	\$ 10 b
Ice cream in EU	\$ 11 b	Immunizing every child	\$ 1.3 b

- 2002 : 41 million passenger vehicles produced (5 x more than in 1950)
- Global passenger car fleet = 531 million vehicles, growing by 11 million vehicles annually

Normal is getting dressed in clothes that you buy for work and driving through traffic in a car that you are still paying for - in order to get to the job you need to pay for the clothes and the car, and the house you leave vacant all day so you can afford to live in it.

~ Ellen Goodman

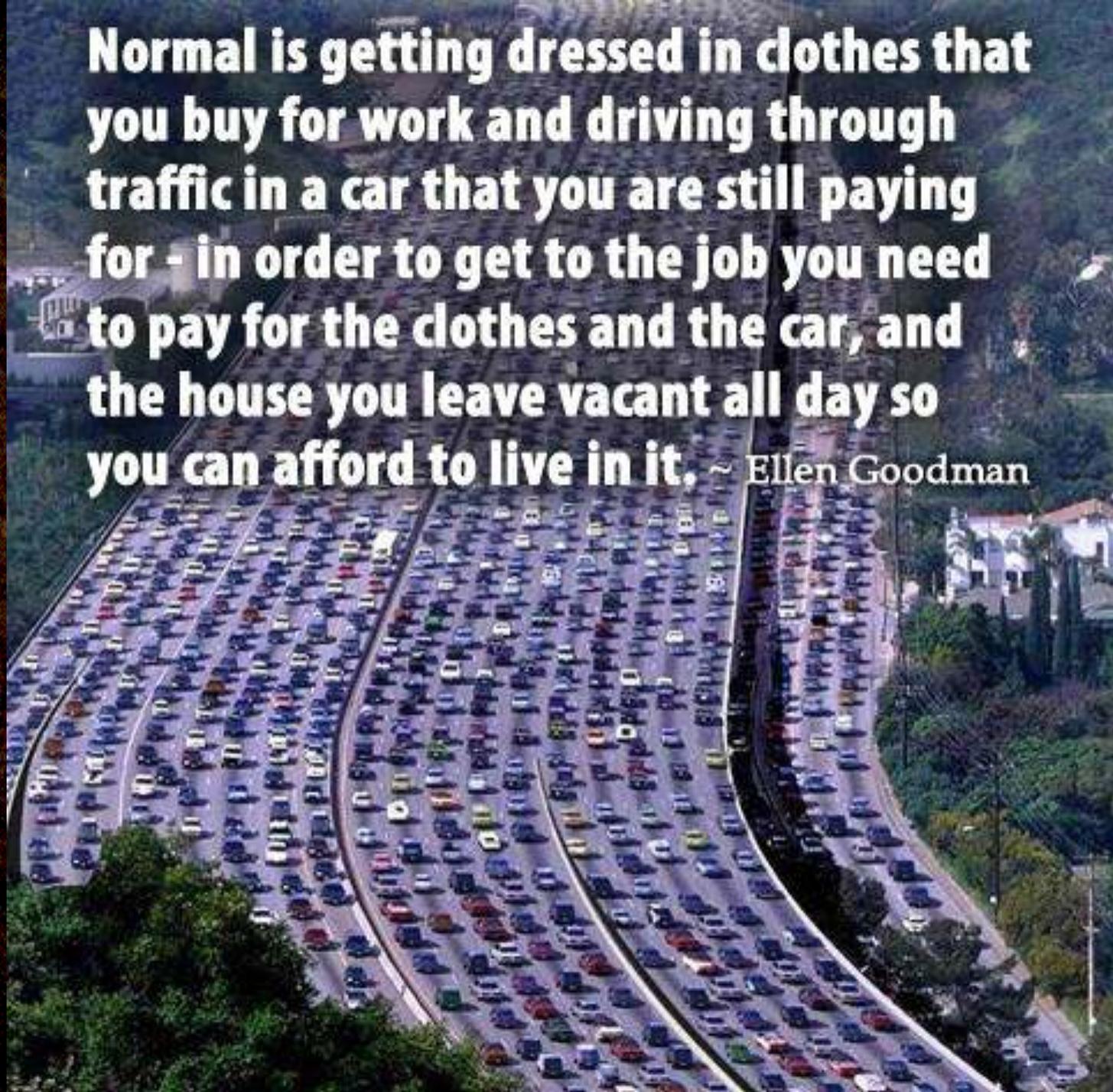


Figure 1 Income and happiness in the USA

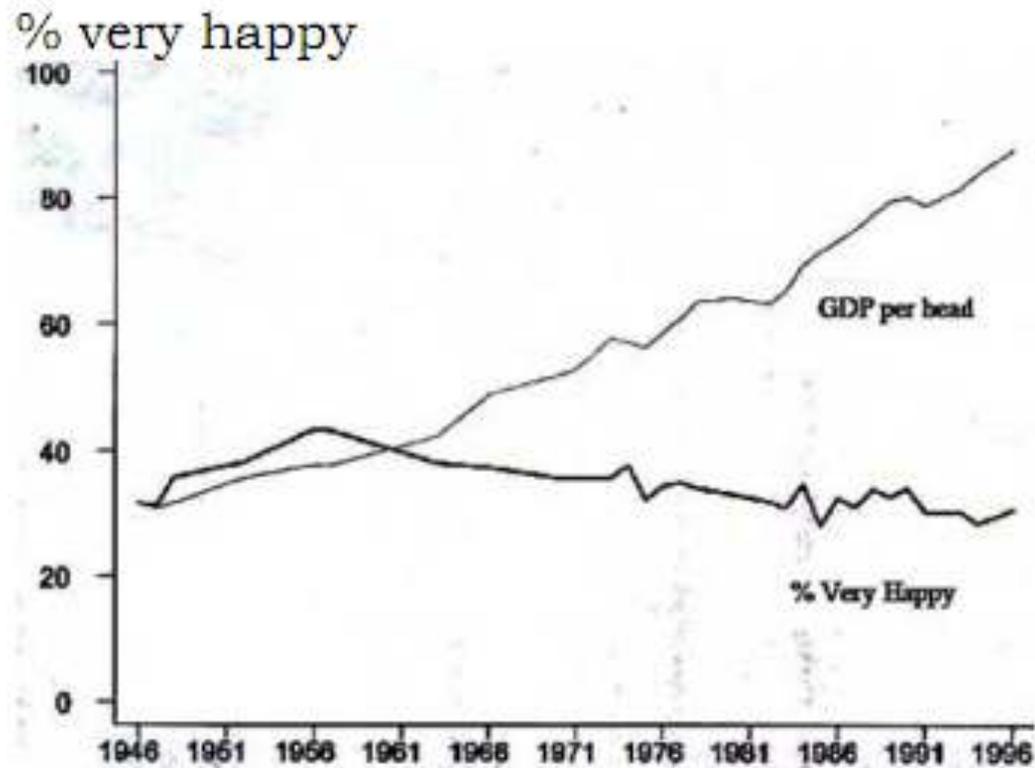


Figure taken from Layard (2005)

GDP = Gross Domestic Product, which is the total value of the annual amount of goods and services produced within a country, regardless of whether they are produced by its citizens.



B. Smaller

“What would you suggest to fill the dark, empty spaces in my soul?”

Is it possible to get out of this mess?



Poverty is not an accident.
Like slavery and apartheid,
it is man-made and
can be removed by
the actions of
human beings.

- Nelson Mandela



Mount Pelerin Society



"Columbus did not seek a new route to the Indies in response to a majority directive."

Milton Friedman



Thomas Berry says:

“We are in trouble just now because we do not have a good story....

The old story - the account of how the world came to be and how we fit into it...sustained us for a long period of time. It shaped our emotional attitudes, provided us with a life purpose, energized action. It consecrated suffering, integrated knowledge, guided education....

We need a (new) story that will educate man, heal him, guide him”

A photograph of a sunset over the ocean. The sun is a bright yellow-orange orb on the horizon, casting a shimmering path of light across the water. The sky transitions from a deep blue at the top to a soft orange near the horizon. The ocean is dark blue with white-capped waves breaking on a sandy beach in the foreground. A semi-transparent dark grey circle is overlaid on the left side of the image, containing white text.

**“The key to the future
of the world is finding
the optimistic stories
and letting them be
known.”**

- Pete Seeger, 1919-2014.

True freedom and success depend on creating a world where we all prosper and flourish.

Institutions serve humanity best when they recognize our individual dignity and enhance our interconnectedness.

To thrive, businesses and society must pivot toward a new purpose: shared well-being on a healthy planet.

Desired Outcome

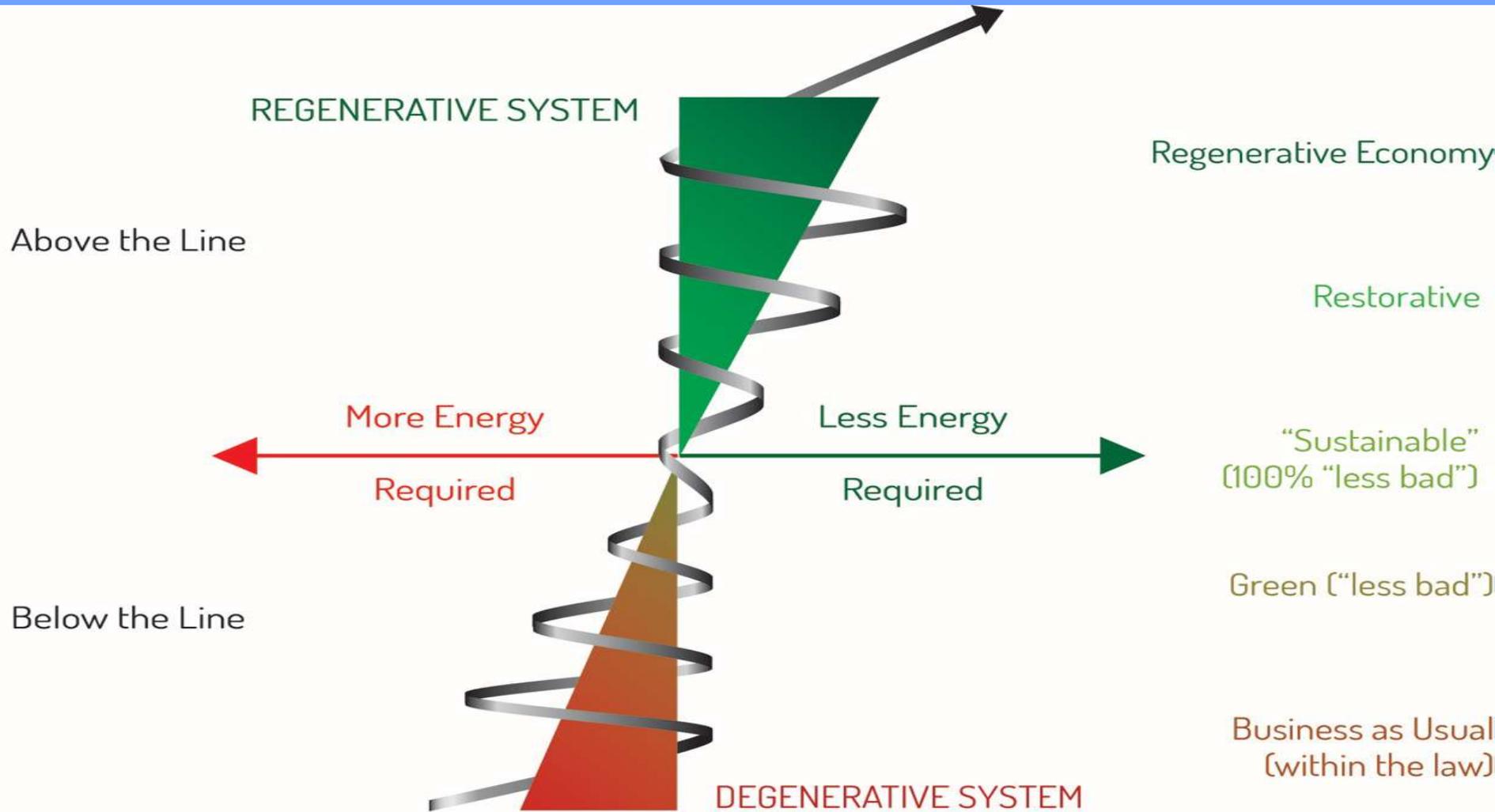
Finance

Economy

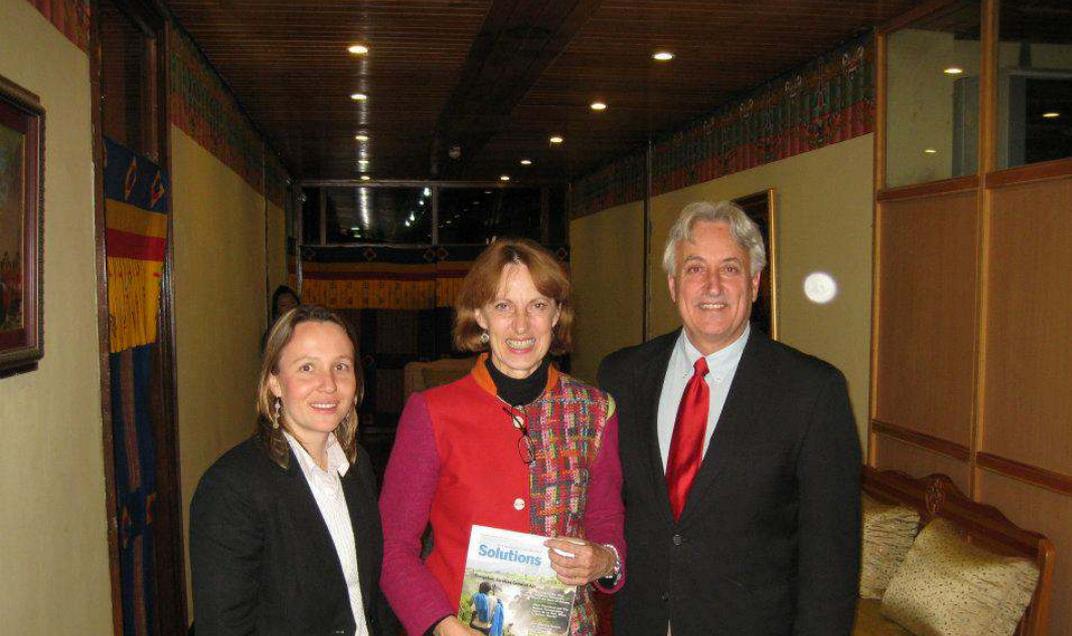


Natural systems are sustainable

because they are **Regenerative**



Derived from Bill Reed, Regenesi Group





FASTCOMPANY

CREATIVE BRAINTRUST

FASTCOMPANY

DESIGN

EXIST

CREATE

LABS



FEATURES

EMAILS

ISSUES

Creating A "Regenerative Economy" To Transform Global Finance Into A Force For Good

What if the economy protected people and the planet?

Co.EXIST

John Fullerton and Hunter Lovins

8 elements of regenerative capitalism

- in right relationship
- holistic wealth
- innovative and adaptable
- empowered participation
- edge effect abundance
- robust circulation
- seeks balance
- honors community and place

Green Latin America Awards

Central & South American Sustainable Business

Opportunities – 1,054 projects



Solve the climate crisis –

Empower entrepreneurs

Doing this creates jobs and ends poverty

Mobilize the money

Deliver full employment

All the rest will follow

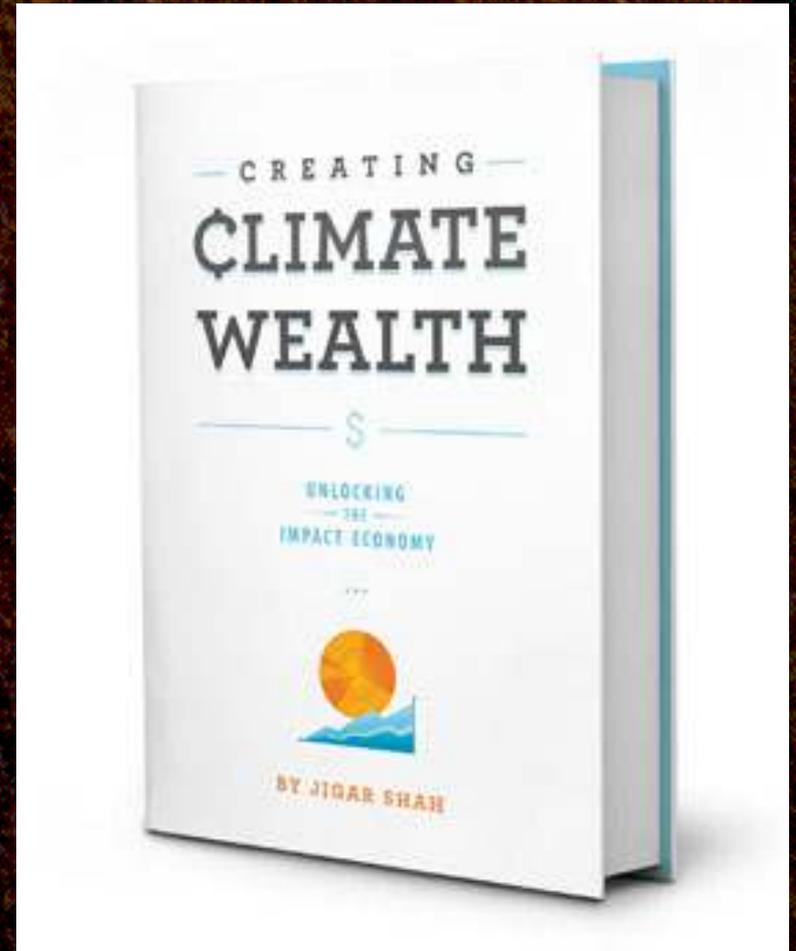
We have all the technologies we need to solve **all** the challenges facing humanity

“There are no technological or economic barriers to converting the entire world to clean, renewable energy sources. It is a question of whether we have the societal and political will.”

– Mark Jacobson
Director, Atmosphere/Energy Program
Stanford University

Jigar's Climate Wealth Law

~50% of the greenhouse gas emissions will **always** be profitable to eliminate, due to continuous technology innovation — held up only by lack of effective business model and financial innovation.



Ohio State University

Turning off computers at night, saved the University over \$250,000 a year.

This money is used for academic programs across the campus





NEW REPORT: ENERGY EFFICIENCY: HOW TO CREATE CLIMATE WEALTH THROUGH EFFICIENT BUILDINGS

"TODAY WE ARE ON THE BRINK OF A SIGNIFICANT ACCELERATION IN ADOPTION OF ENERGY EFFICIENCY SOLUTIONS DUE TO MAJOR TECHNOLOGICAL AND FINANCIAL INNOVATIONS."

José María Figueres, President, Carbon War Room

VALLE DE LAS PALMAS

Ciudad Sustentable



Economic Realities:

Saving energy strengthens the entire economy

Table 9: Economic Impacts per Average Megawatt Savings

Economic Impact Measure	Impact per aMW Saved
Output	\$2,230,572
Wages	\$684,536
Business Income	\$125,882
Jobs	22

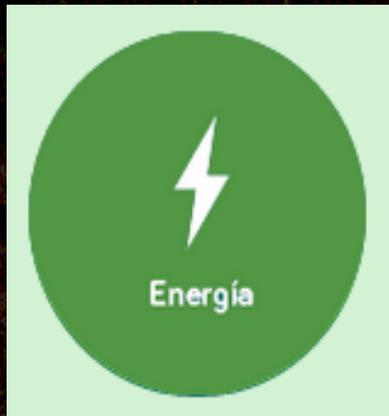
Source: Calculated by ECONorthwest using 2002 Energy Trust spending and energy savings impacts.

Mexican auction last week for 1,720 MW won
by solar and wind at $\sim 4.2/\text{kWh}$



World now more than 200 GW solar





Green Energy Investments- Latin America

Latin American is hungry for clean tech

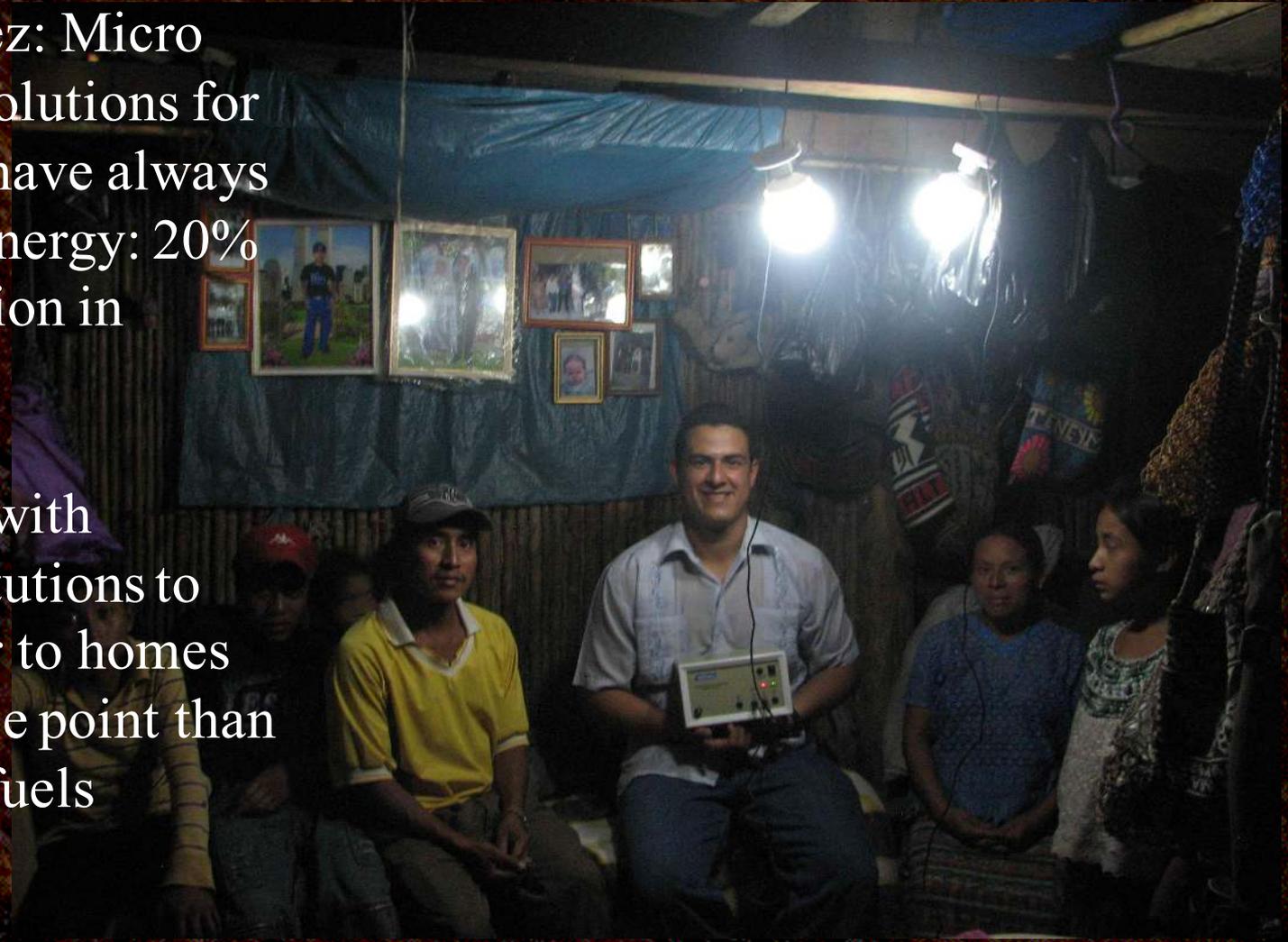
\$16.8 billion invested in green energy in Latin America in 2013 (6% of global total)

This trend is accelerating

Quetsol

Juan Rodriguez: Micro scale energy solutions for families who have always lacked basic energy: 20% of the population in Guatemala.

Has alliances with financial institutions to provide power to homes at a lower price point than conventional fuels



Unreasonable Institute Mexico



unreasonable
mexico

con el
apoyo de



Fomento Social
Banamex

¡Habemus Generación Irrazonable 2016!

14 emprendedores con el potencial de cambiar la realidad de millones de Mexicanos

¡Conócelos!

Ayúdalos a cambiar la historia



¡Dales
alas!

#Tianguis
Irrazonable2016

Entra antes del 11 de mayo
www.unreasonablemexico.org/tianguis



SUSTENATOR - Argentina

Rodrigo Herrera Vegas and Daniel Nofal provide pragmatic and sustainable solutions such as solar panels, wind generators, solar installations or thermal-tanks.

Their blog, followed by over a million people, offers eco-friendly solutions, an ecological online store, a platform where sustainability experts can be hired and runs a foundation promoting ecological awareness.

Unilever, Walmart, Apple. Google, Ikea....



Committed to be 100% renewably powered



ENERGY DARWINISM

The Evolution of the Energy Industry

“This is the era of renewables”

“Alarming fall in cost of solar”

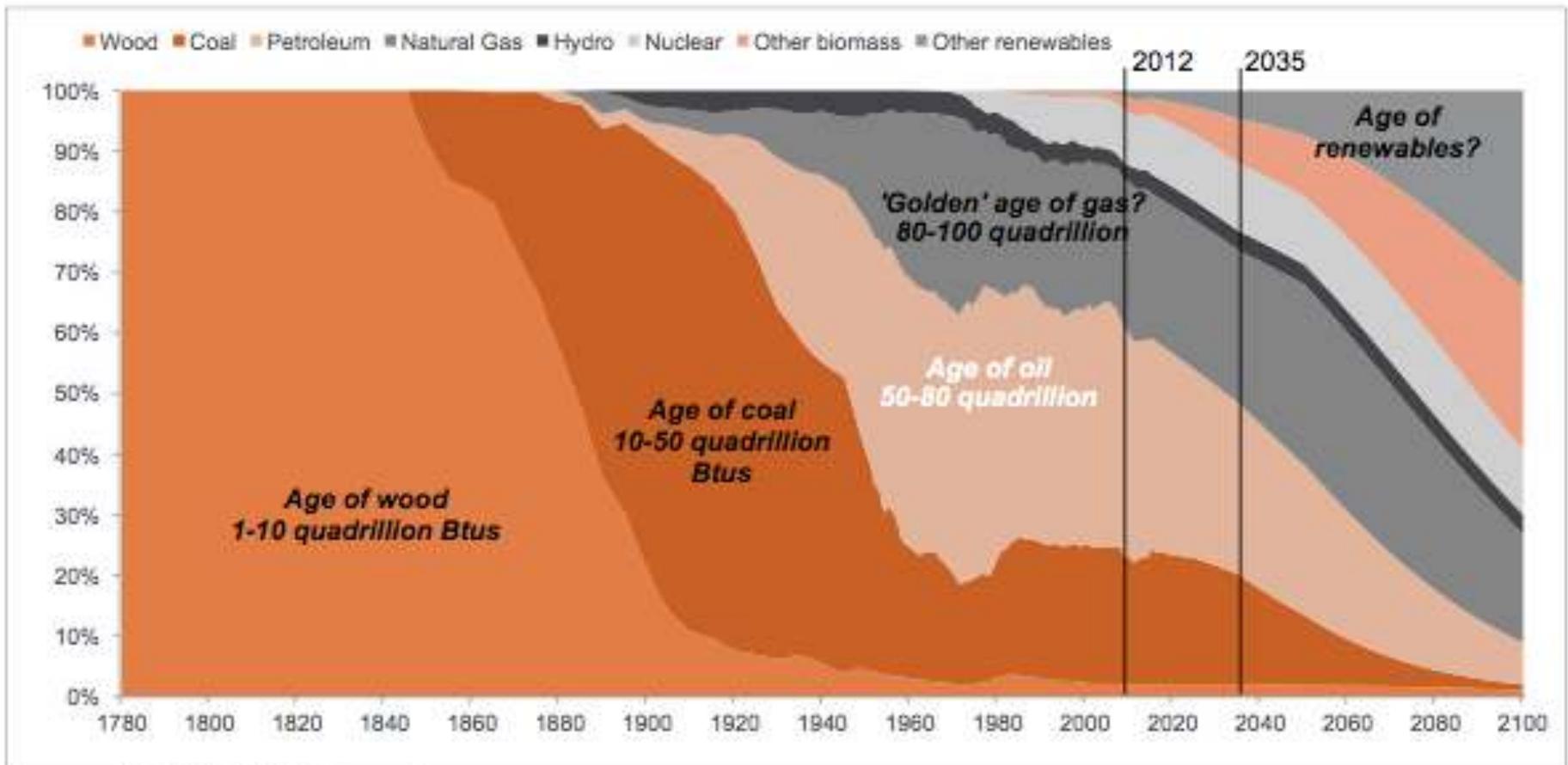
10-year unsubsidized forward price of gas: 11¢/ kWh

10-year unsubsidized forward price of solar: 10¢/ kWh

It's over: solar wins

“History of the energy industry tells us that change is never gradual. New technologies are embraced at the expense of incumbents.”

Figure 4. The ages of energy: History suggests a process of substitution



Source: IEA, EIA, Citi Research

Agora Energiewende:

Solar electricity is already the low-cost energy in many regions, and will be everywhere soon.

Large-scale PV in Germany fell from 40 cents /kWh in 2005 to 9 cents /kWh in 2014.

Financing the Future of Energy

The opportunity for the Gulf's financial services sector

A report for the National Bank of Abu Dhabi by the University of Cambridge and PwC

March 2015



With no dramatic technological breakthroughs cost reduction will continue, with costs of 4-6 c/kWh expected by 2025, and 2-4 c/kWh by 2050.

Change happening fast. In just 1 year, CA went from utility-scale solar supplying 1.9% of its electricity to 5% in 2014.

“Most scenarios underestimate the role of solar power in future energy systems.”



Produced for



e-on

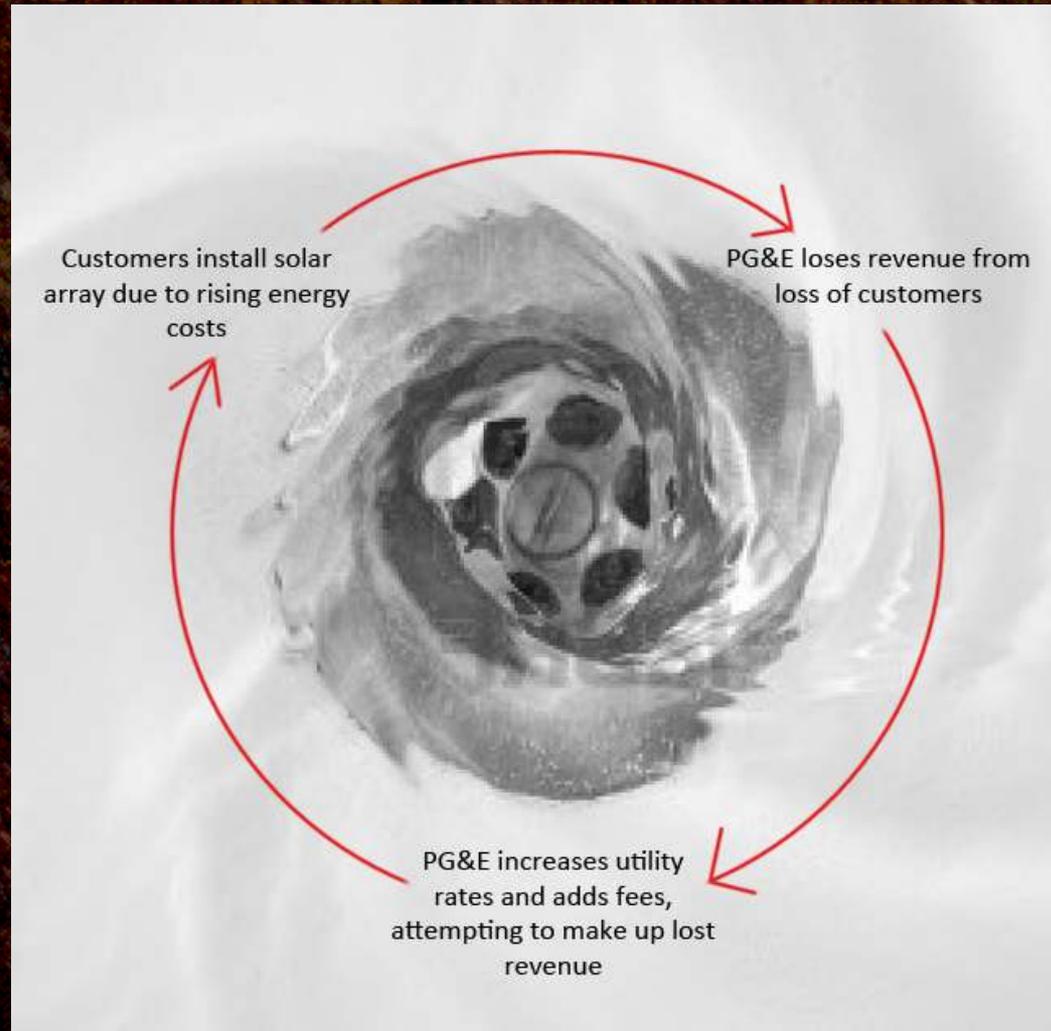


RWE



THE DEATH SPIRAL

Top 20
European
utilities have
lost \$600
billion in value
over the past 5
years



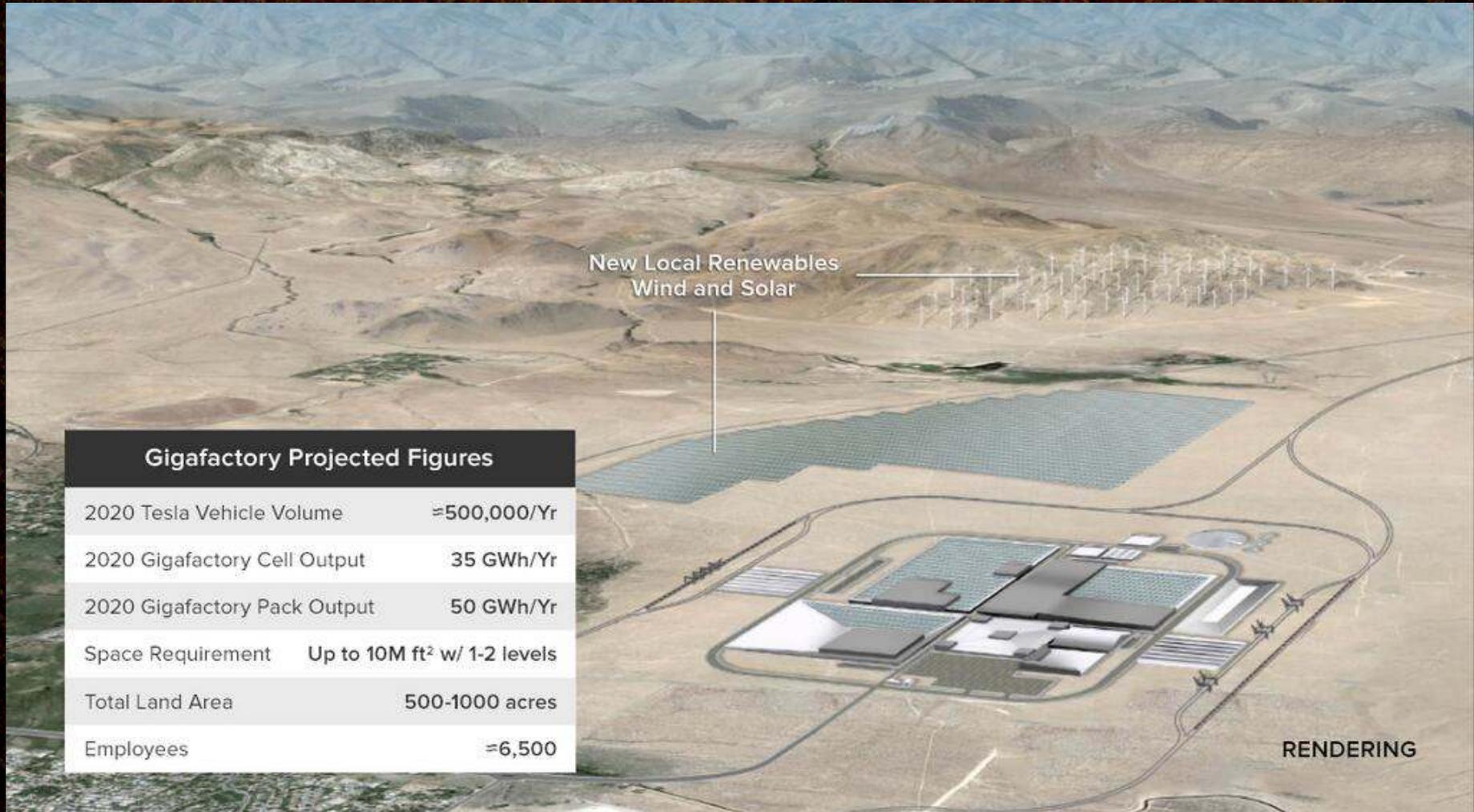
How the world has changed



Tesla is valued at more than half of GM – despite producing 300 times fewer cars



It's a battery company



New Local Renewables
Wind and Solar

Gigafactory Projected Figures

2020 Tesla Vehicle Volume	≈500,000/Yr
2020 Gigafactory Cell Output	35 GWh/Yr
2020 Gigafactory Pack Output	50 GWh/Yr
Space Requirement	Up to 10M ft ² w/ 1-2 levels
Total Land Area	500-1000 acres
Employees	≈6,500

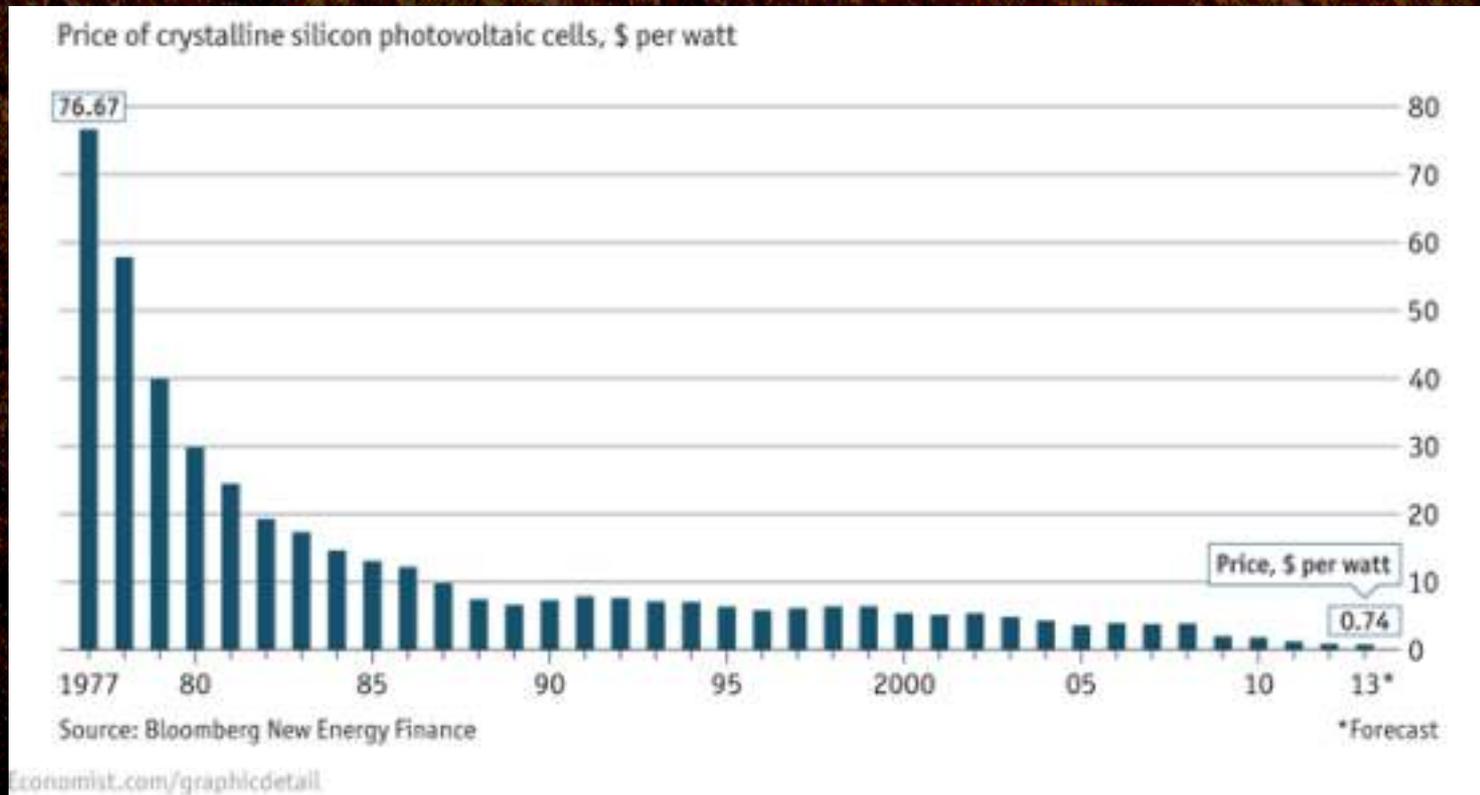
RENDERING



Or better: walk or bike

Swanson's law

Prices of solar drop 20% for every doubling
Only 8 more doublings to produce 100% of energy from solar



Chile and India are collaborating on solar



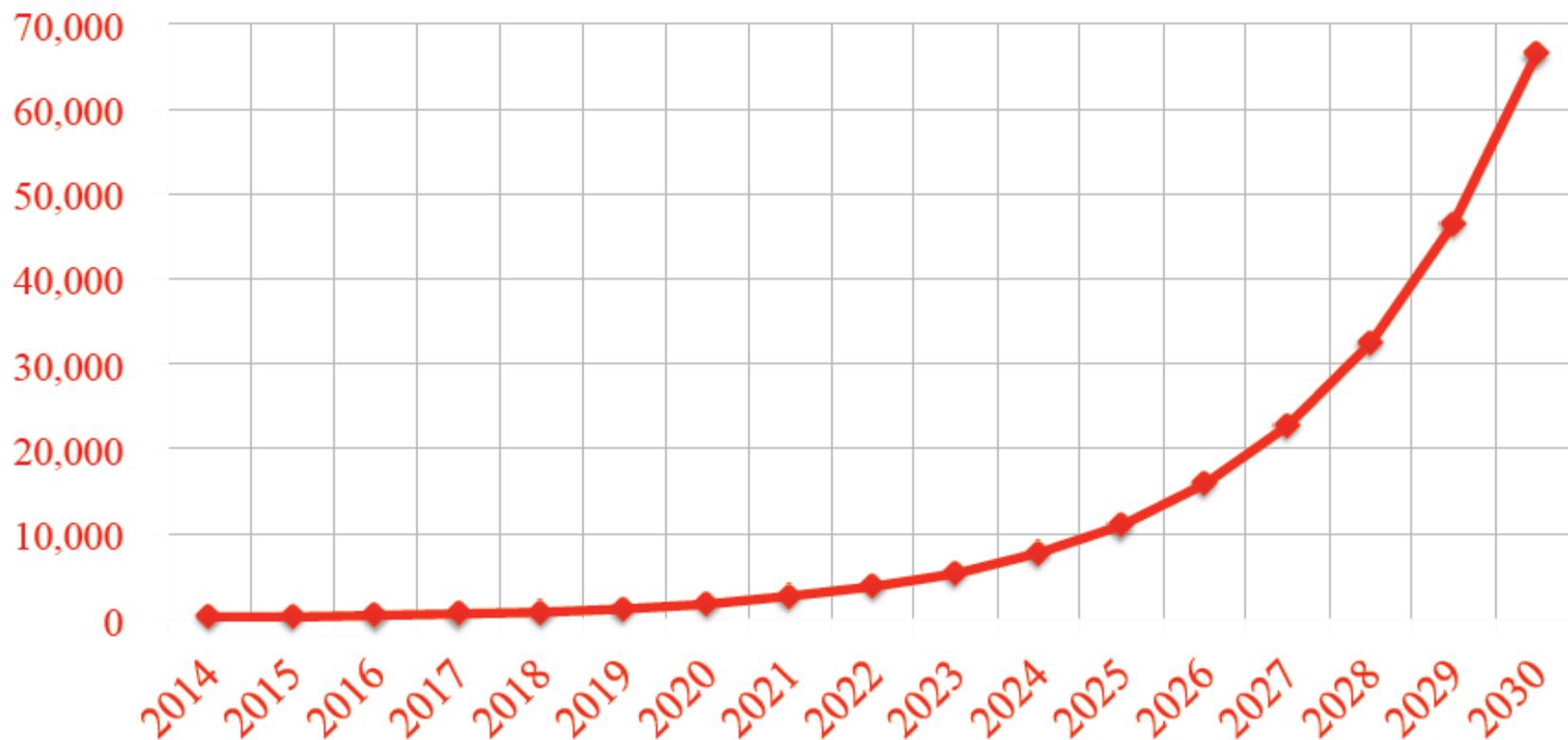
Chile has
committed to
20%
renewable by
2025

India just committed to 40% renewables: 350
GW wind and solar; 35% less carbon intensity,
all by 2030!

CA will go 50% renewable by 2030

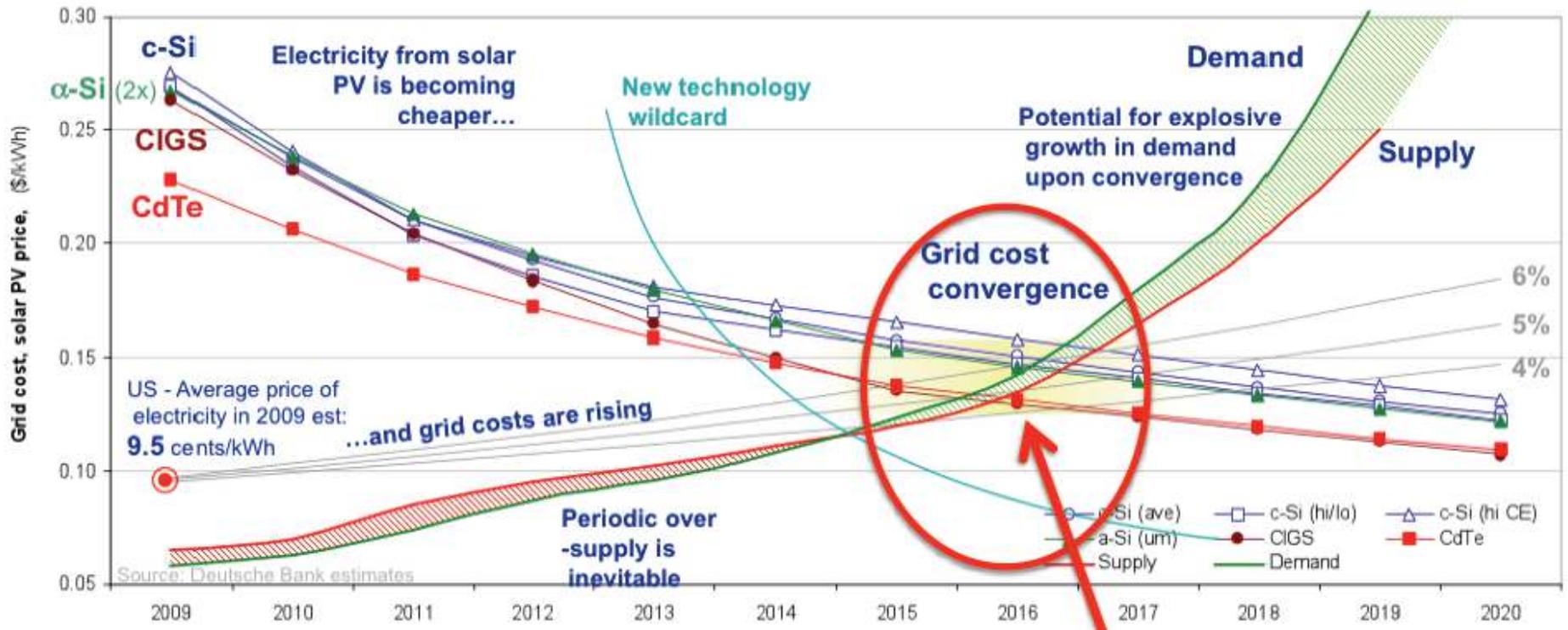
Energy = 100% Solar by 2030 ?

Solar Installed Base (GW)



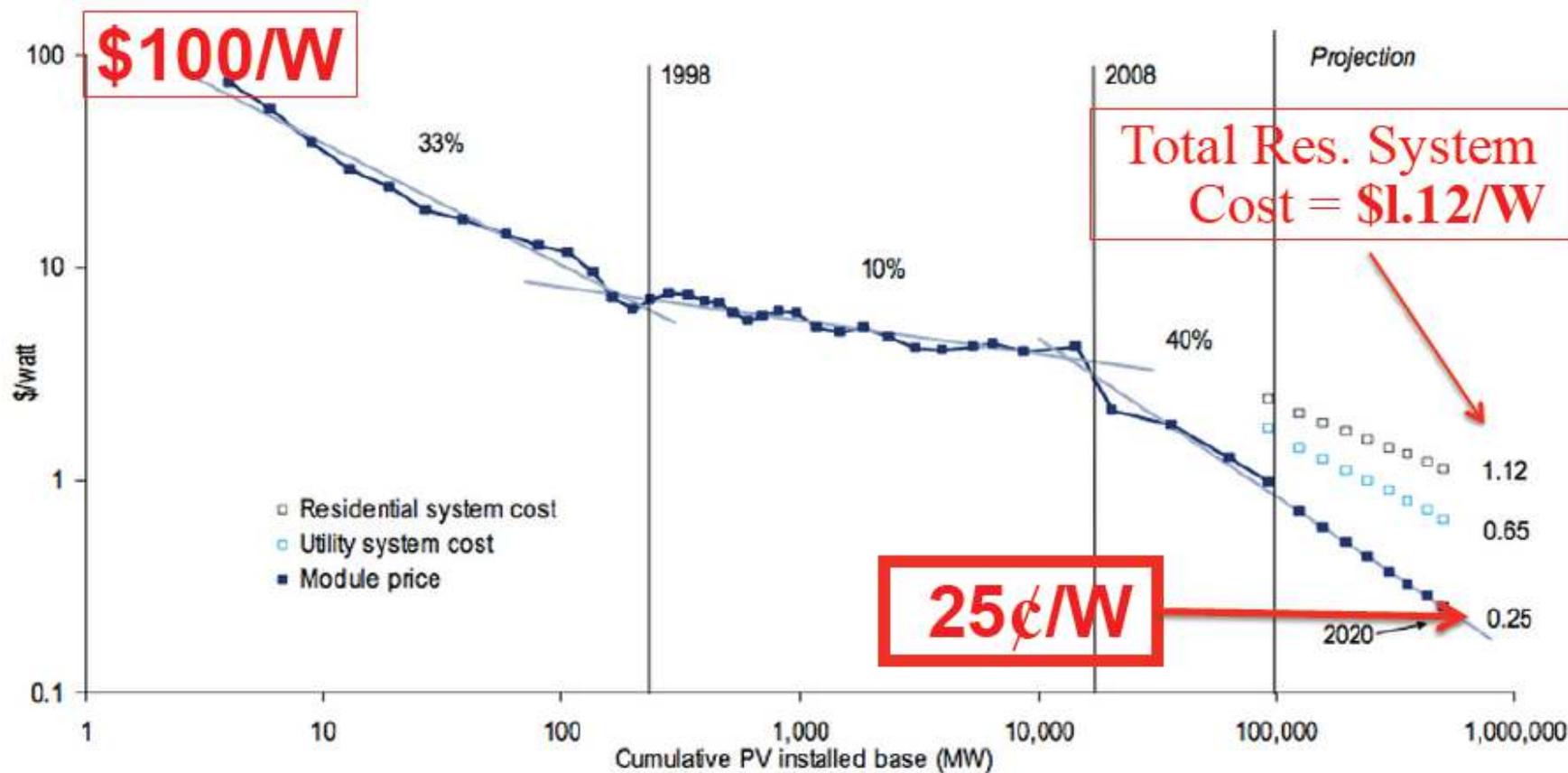
- **If Solar PV continues to grow at ~42% CAGR**
- **100% of all energy (not just electricity) in the world would be solar by 2030**

Grid Parity in 80% Global Markets by 2017



- Solar already below grid parity in hundreds of markets globally.
- *Deutsche Bank*: **Solar Below Grid Parity in**
 - ALL 50 states in the USA by 2016 and
 - **Up to 80% of Global markets by 2017**

Solar PV costs to drop another 50%+ by 2020



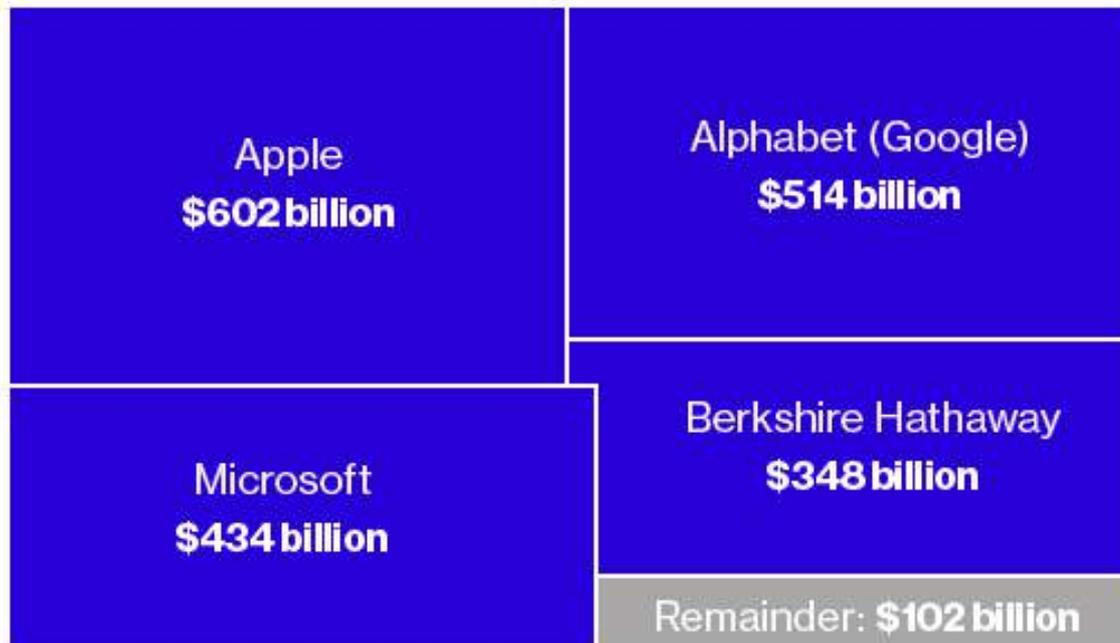
- Solar PV costs down **400X** from 1970-2020
- Citi: installed cost of Residential solar ~\$1.12/W by 2020
 - Installed cost is already <\$1.4/W in Australia. (2)

Saudis announce \$2 trillion mega-fund to finance transition out of oil – plan to be world's largest solar exporter

Buying Power

With \$2 trillion in assets, the megafund could buy the four largest public companies in the U.S. – with a bit left over.

Market capitalization



A recent paper in Nature showed that to keep warming below 2 degrees C, emissions reduction is necessary, but that ways must be found to capture carbon and return it to the soil



“A mere 2 percent increase in the carbon content of the planet’s soils could offset 100 percent of all greenhouse gas emissions going into the atmosphere.”

—DR. RATTAN LAL, OHIO STATE SOIL SCIENTIST

nutiva®



ALLAN**SAVORY**



Date Creek, Arizona



Just downstream - same day, different management



Sonoran Desert, Mexico



Next door - same day, different management



Kachana Station, Kimberly, WA - Nov 1992



Same spot, different management - Nov 1998



Near Victoria Falls in Zimbabwe



Next door - same day, different management

Wyoming – both taken same day



- Left-side upstream, managed holistically (260% inc in livestock over 10 years)
- Right-side is downstream land managed ‘conventionally’

Sierra Gorda

Martha (Pati) Ruiz Corzo



**Grupo Ecológico
Sierra Gorda™**



TOP STORIES IN LIFE & CULTURE

1 of 12



The Power of the Doodle: Improve Your F...

2 of 12



Tech Timeout for Grown-Ups

3 of 12



One Notch Better Than Organic?



A Platform for Moving Bodies

LIFE & STYLE

Grass-Fed Milk Is Taking Off With Health-Conscious Shoppers

At Almost \$6 a Half-Gallon at Whole Foods and Other Stores, Milk From Cows That Don't Eat Grain Is Considered Healthier Than Organic



By SARAH NASSAUER [CONNECT](#)

Updated July 29, 2014 8:58 p.m. ET

For some shoppers, organic isn't enough. They want grass-fed milk.

The pricey milk isn't only organic. It comes from cows fed mostly grass, and never corn and soy.



MASSACHUSETTS GENERAL HOSPITAL

CANCER CENTER

Everyday Amazing

2013 UNCTAD report

Modern industrial agriculture has not ended hunger and is particularly vulnerable to climate change

Small-holder peasant farmers could easily feed the populations of developing countries with existing labor-intensive, environmentally friendly agricultural technologies—were it not for corruption, extreme inequality, and misguided attempts to impose inappropriate “modern” crops and techniques.





795 million people are severely hungry or malnourished, according to the UN. Yet for every 2 tonnes of food being consumed, another ton is wasted in the supply chain in production, retail or manufacturing. Each year 1.3 billion tonnes of food (1/3rd of all that is produced, is wasted while. Even in poor countries up to 16% is thrown away.

20% of dairy and meat, 35% of seafood, 30% of cereals and 45% of fruits and vegetables are wasted.

Cutting that waste by just 25% would deliver enough food to feed everyone in the world.



Using Waste to Transform Communities

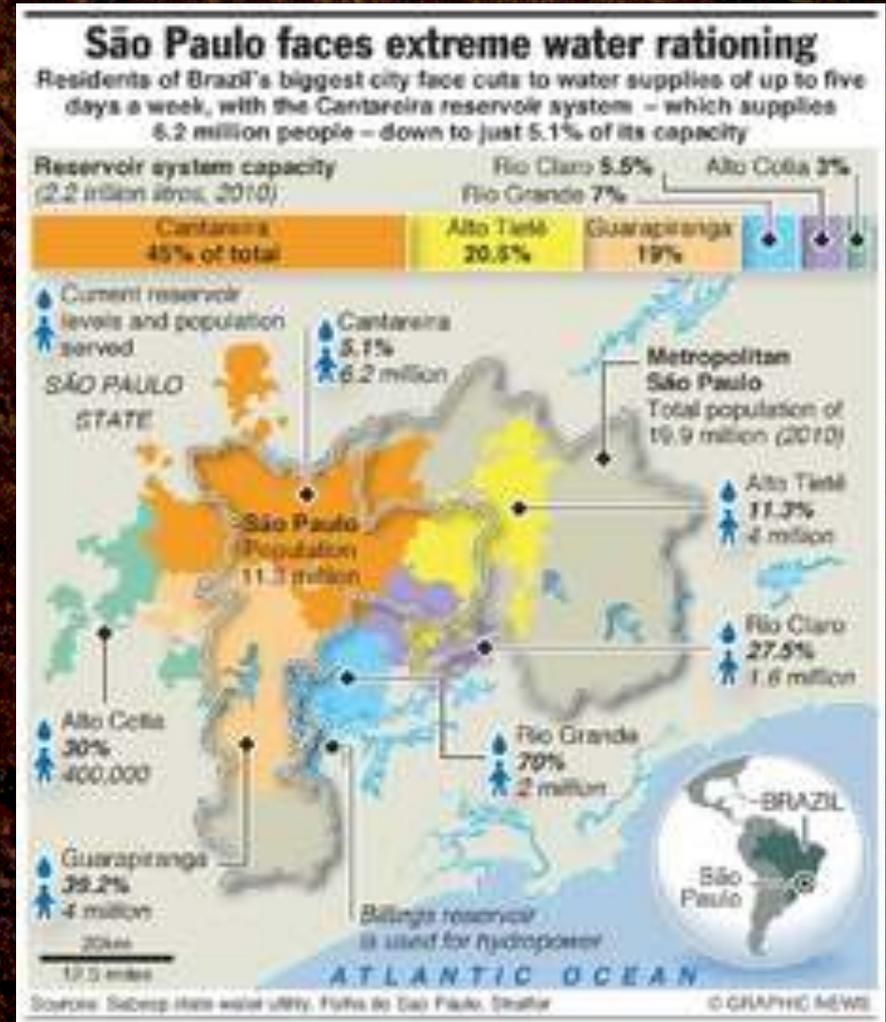
El Salvador's Glenda Alfaro's compost tumblers turn organic waste into mulch and compost tea to enhance soil microbiology.

- Has enabled the community to grow more vegetables and fruits,
- start a community market, and cut waste
- by 40%



Many parts of the world are short of water:
2/3rds of humanity lives in water-short regions.

Sao Paulo is only one of dozens of areas in South America experiencing drought and water shortages



WATER: THE OIL OF THE 21ST CENTURY

Worldwide H₂O usage doubling every 21 years

A high-speed photograph of a single water droplet falling into a pool of water. The droplet is captured mid-fall, just above the surface, creating a series of concentric ripples that spread outwards. The water is a deep blue color, and the lighting highlights the droplet's spherical shape and the ripples' texture.

Since 1900, a 6X increase in H₂O use

Rising standards of living

Unsustainable levels of irrigated agriculture

Mexico is no stranger to drought



RECORD-BREAKING DROUGHT

Areas on four continents are suffering their worst droughts in decades.





BioFiltro is designed for the treatment of household sewage & liquid industrial waste.

Technology uses 80% less energy, requires no chemicals, and is 1/3 the cost of competing solutions.



The Memsys technology provides solutions for

- desalination
- waster water treatment
- air conditioning
- and other thermodynamic processes

It uses low grade heat from solar or power generation that is otherwise discharged (waste heat)

It is modular, cost effective, energy efficient and robust

It provides products of excellent quality, e.g. distilled water and pure, cool air

It provides effective energy storage solutions on air conditioning applications

Thermal separation is the oldest form of desalination: The sun shining on the oceans evaporates water, which condenses in clouds and rains down as distilled water. The memsys frame takes over the same functionalities with hydrophobic membranes (evaporation) and foils (condensation) combined in a stacked module.

Water Piping

- Heating
- Cooling
- Injection
- Brine Disposal

Steam Ducting

Collection of Product

Membranes or Foils

- Steam Separation
- Energy Recycling
- Mass transfer
- Energy transfer

Degassing

membranes
or foils

Integrated "micro chip" for the water world

Sustainable Coffee Production- Miramar, Costa Rica



Montes de Oro Cooperative's “Integrated Open Canopy”

- Preserves forest cover
- Provides habitat for migratory birds
- Produces higher yield
- Creates carbon credits



Tourism:

\$7 trillion industry worldwide

9.5% of global GDP

1 in 11 jobs in the world

Tourism in Mexico is 9.4% of GDP, and will soon be Mexico's third biggest industry, generating ~\$13 billion a year

In contrast oil rents are ~7% of GDP and falling

Ecotourism

- The fastest growing form of tourism - the largest industry in the world - In Ecuador, tourism increased 14% 2014 and added 60,000 new jobs since 2008
- Eco-tourists spend more per trip and per day than average tourists - up to twice as much
- 85% of tourists more likely to support travel companies that preserve the environment
- Energy efficiency and renewables can make all forms of tourism more profitable, and better for community

Eco-tourism Case Stories



Maho Bay, St. Johns
Mocking Bird Hill, Jamaica
Rio Muchacho, Ecuador
Tiamo Resort, Bahamas



A greener economy already employs almost 3 million - more than fossil fuel

It could create between 15 million to 60 million jobs worldwide over the next two decades

At least half of the global workforce will be affected in some way by 2030



CORPORATION
2020

TRANSFORMING BUSINESS
FOR TOMORROW'S WORLD



PAVAN SUKHDEV

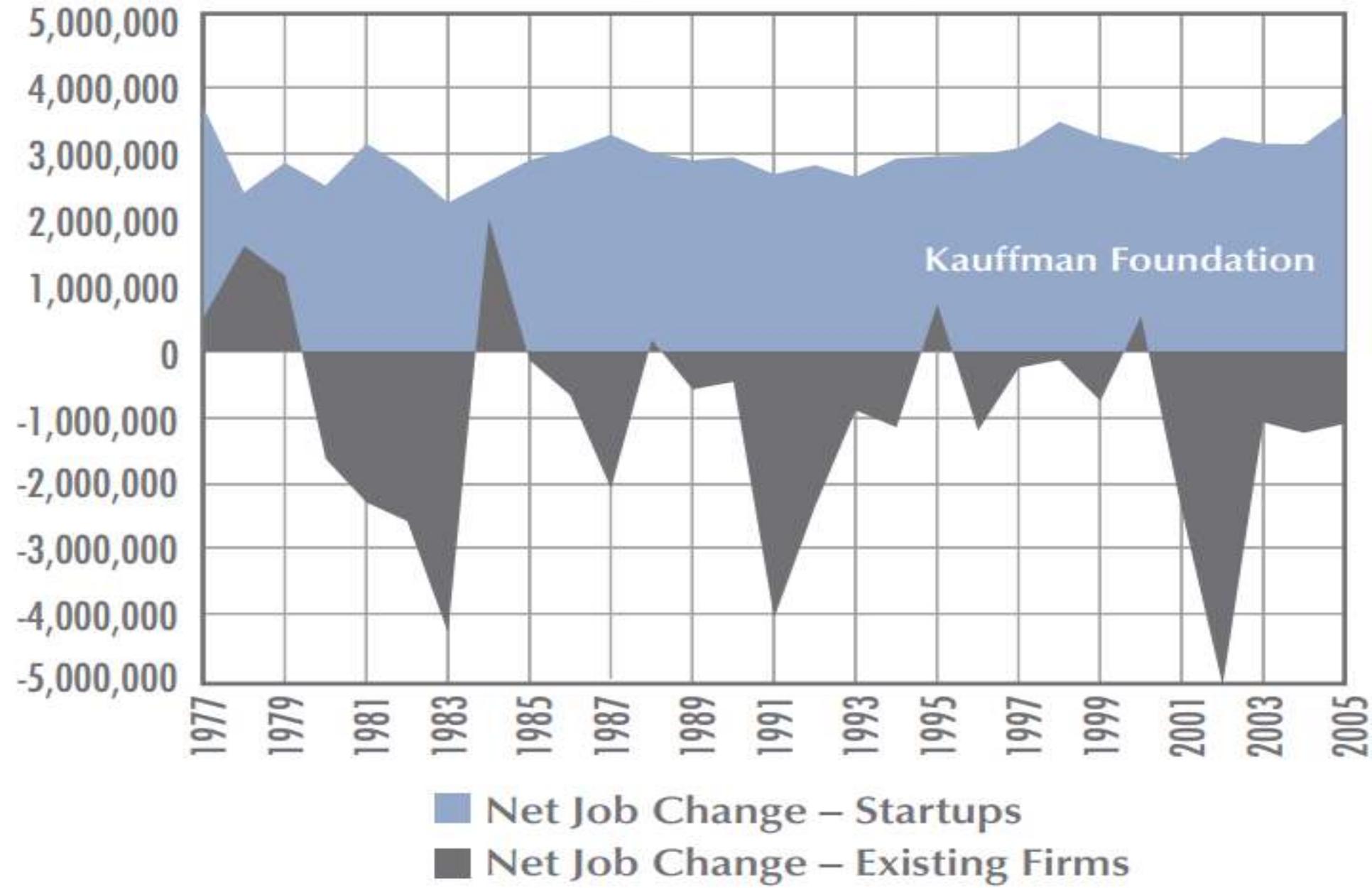
Young Professionals

96% of workers aged 18-35 want to work for a responsible and green-minded company.

-Johnson Controls Global Workplace Innovation



Startups Create Most New Net Jobs in the United States





Sustainability is happening



Harvard Business Review

“Sustainability **isn't the burden on bottom lines** that many executives believe it to be. It can lower your costs and increase your revenues. That's why **sustainability should be a touchstone for all innovation.**

In the future, **only companies that make sustainability a goal will achieve competitive advantage.** That means rethinking business models as well as products, technologies and processes.”

Why Sustainability is Now the Key Driver of Innovation

Sustainability pays

Companies in the Dow Jones sustainability Index outperform the general market

Goldman Sachs report July 2007: Companies that are leaders in environmental, social and governance (ESG) policies **outperform competitors in stock performance—by an average of 25%**.

72% of the companies on the DJSI outperformed industry peers

2014 CDP report:

S&P 500 companies that build sustainability into their core strategies outperform those that fail to show leadership.

Corporations that are actively managing and planning for climate change secure an 18% higher return on investment (ROI) than companies that aren't
67% higher than companies who refuse to disclose their emissions.

Who is
responsible?



Dr. Sylvia Earle:

“What we do in the next ten years is more important than what humanity does in the next 10,000 years”



A finer future is possible

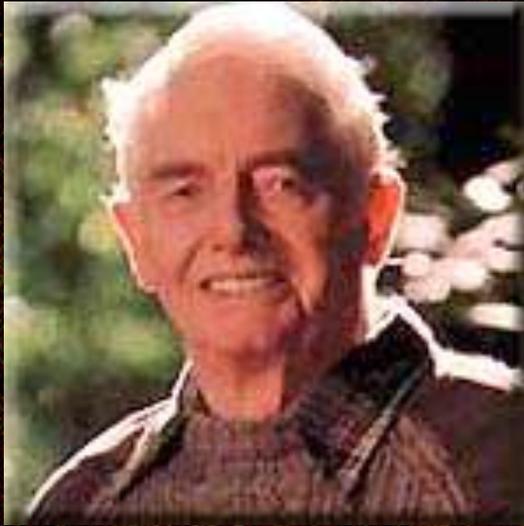
A world that works for 100% of humanity will arise from ensuring the dignity of all

We have all the technologies we need to solve all of the problems facing us: As William Gibson said: The future is already here, it's just not widely distributed.

There is enormous wealth to be made transforming how we deliver energy, grow our food, finance our industries....

A successful transition requires an inspiring vision of a future of greater wellbeing, deep engagement with nature and each other. This will overcome resistance to change because people want to belong to it

We CAN redefine and reform an economy that seeks only to maximize shareholder value to an economy in service to life



David Brower:

What do we want the earth to be like fifty years from now? Let's do a little dreaming.

Aim high! Navigators have aimed at the stars for centuries. They haven't hit one yet, but because they aimed high they found their way



Natural Capitalism Solutions

Visit: www.natcapsolutions.org



Each person must see himself as though the entire world were held in balance and any deed he may do could tip the scales

Maimonides

Introduce yourselves to each other

Appoint a scribe

Appoint a group leader

What does “Sustainability mean to you?”

Write it down

Discuss

Frame an agreement for your table

?



What do you want most in your life?

Second, third, fourth...?

Write these down

Discuss

Frame an agreement for your table

?

What are the principles of the existing economy?

Write them down

Do these deliver what it is that you agreed you really want?

?

What would be the principles of an economy
in service to life?

Write them down

Would these deliver what it is that you really
want?

?

What has to happen to create an economy in
service to life?

Write them down

?

What are you going to do to create a better world?

Write it down

Send yourself an e-mail of your commitment to humanity

?