

The future and what to do about it

Mark Stevenson

@optimistontour

1772

1855

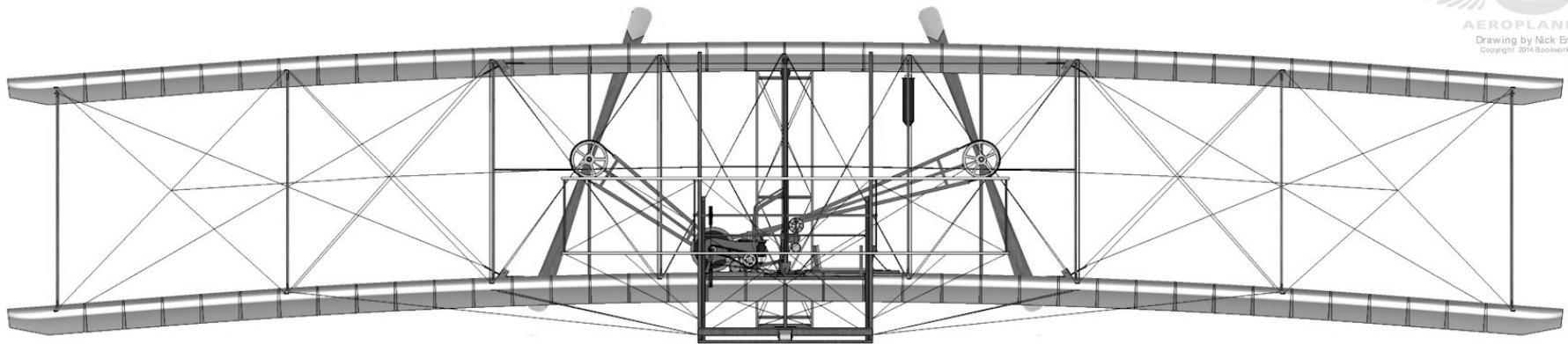


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“Man will not fly for 50 years”

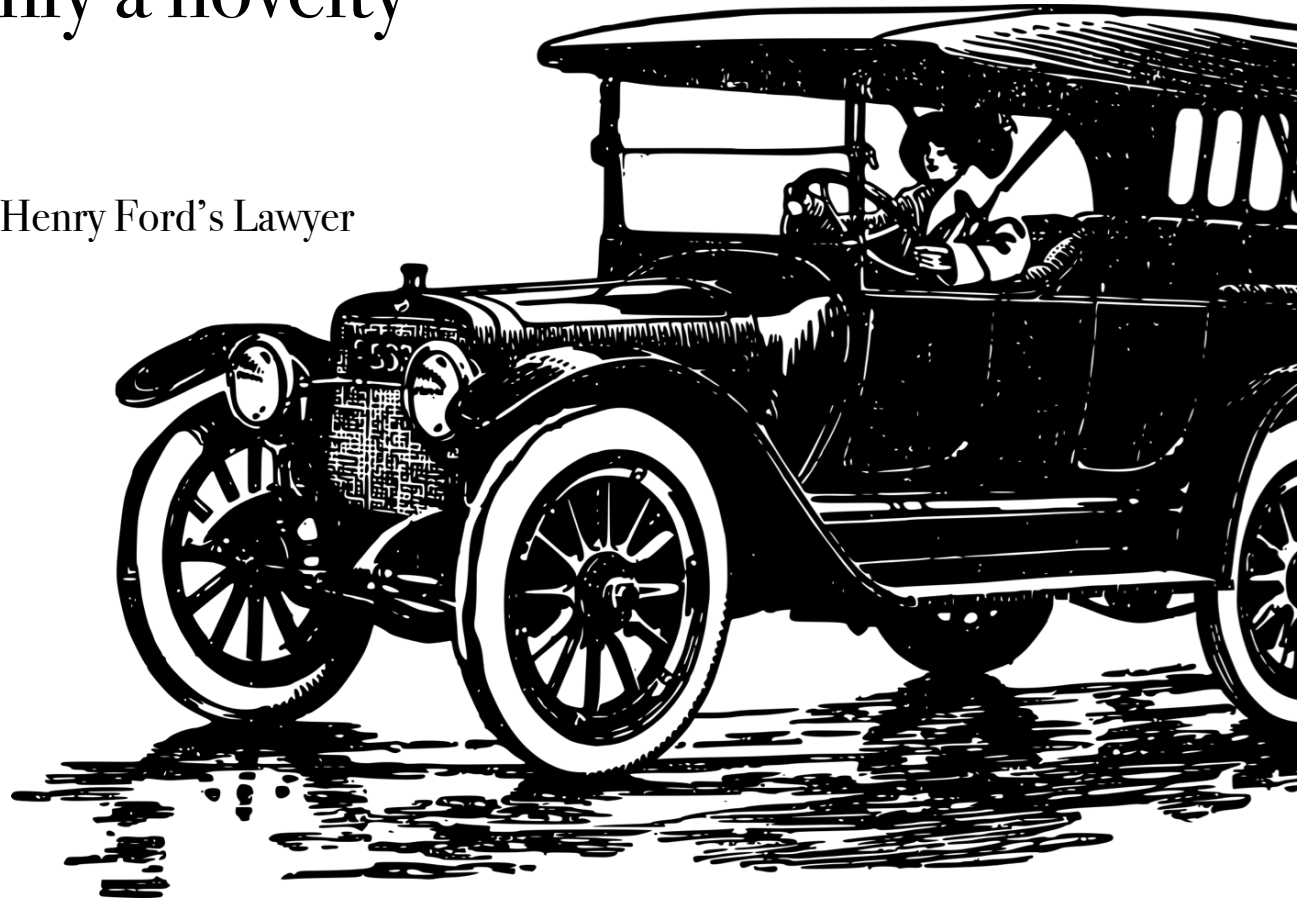
Wilbur Wright 1901



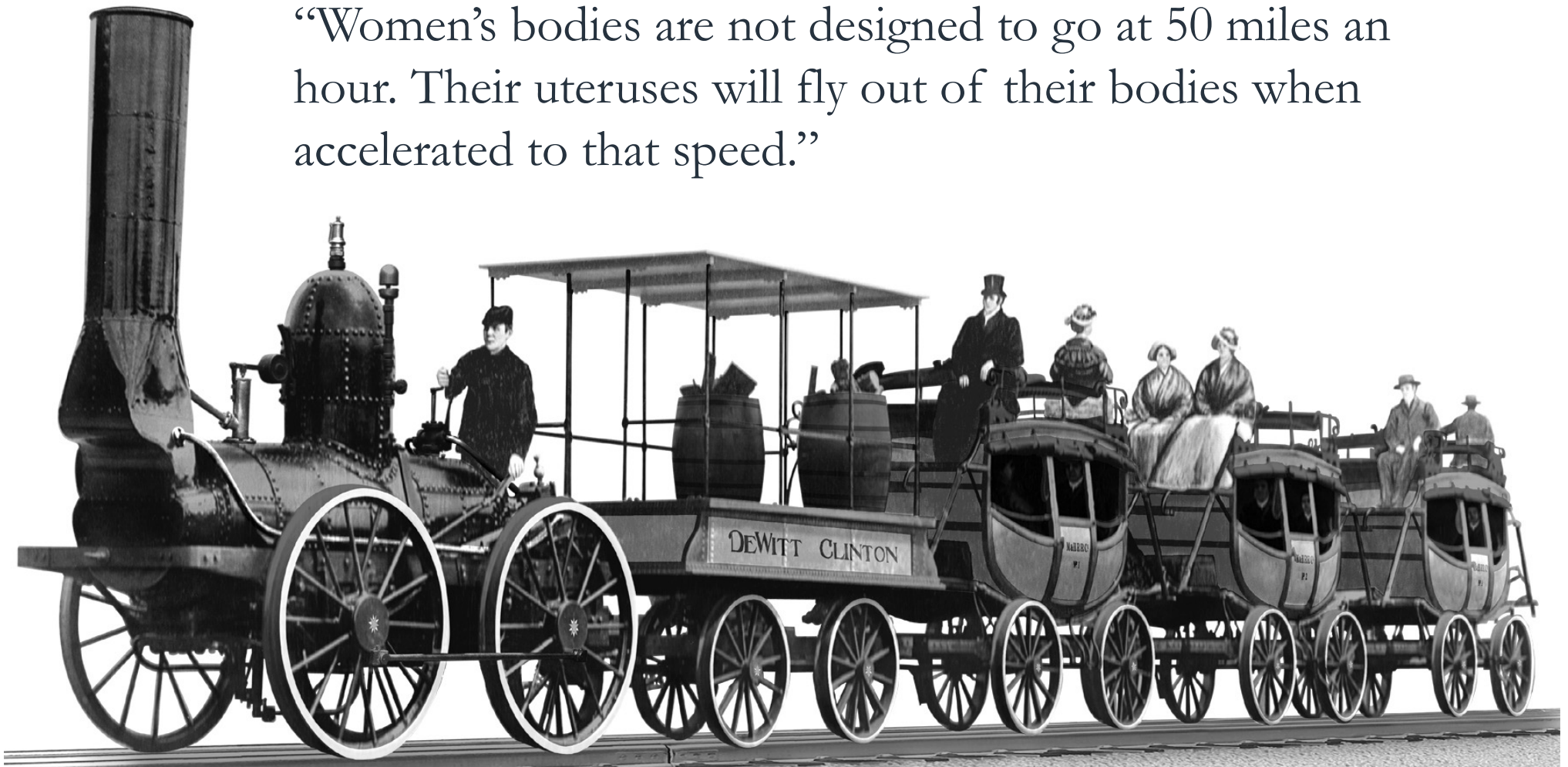
WRIGHT
BROTHERS
AEROPLANE Co.™
Drawing by Nick Engler
Copyright 2014 Bookworks, Inc.

The horse is here to stay but
the automobile is only a novelty
– a fad”

President of Michigan Bank 1927 - to Henry Ford's Lawyer



“Women’s bodies are not designed to go at 50 miles an hour. Their uteruses will fly out of their bodies when accelerated to that speed.”







**“WHO THE HELL
WANTS TO HEAR
ACTORS *TALK*?”**

HARRY WARNER (WARNER BROS) 1927





"There is no
reason
anyone
would want a
computer in
their home"

Ken Olson, president Digital
Equipment Corp 1977

Prediction

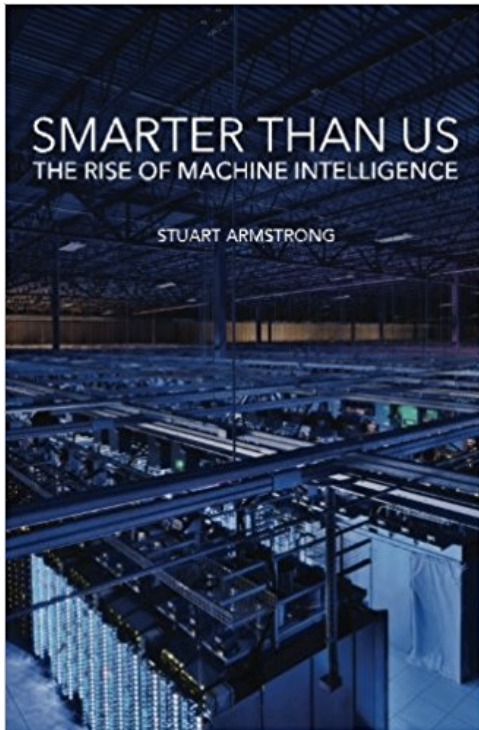
Gartner
FORRESTER
McKinsey&Company



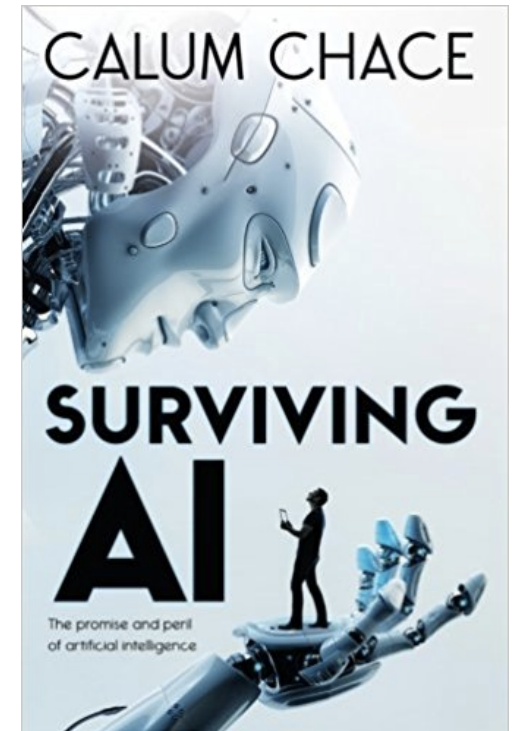
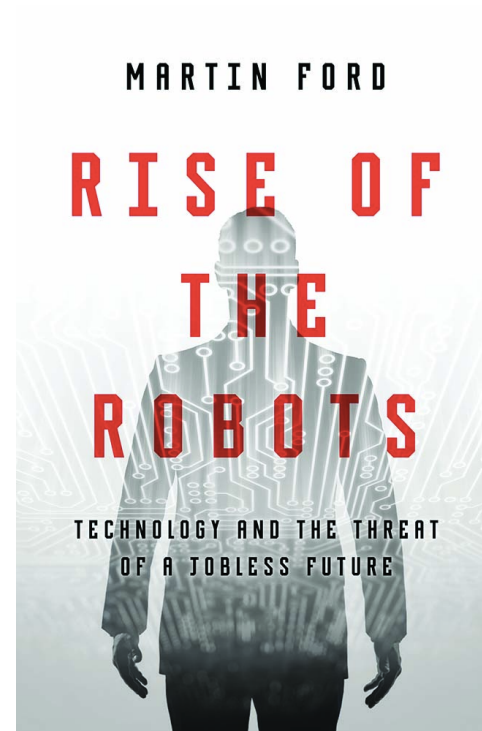
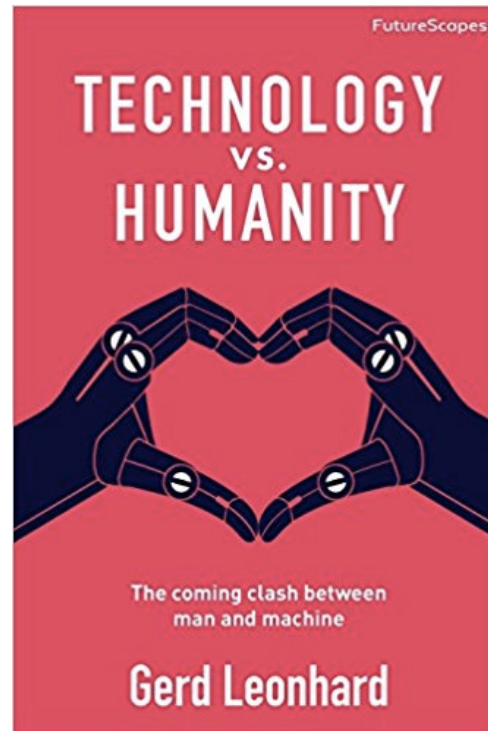
Reality

2002: 16% growth per year
2004: 14% growth per year
2006: 12% growth
2008: 10% growth

By 2004: 100% growth
By 2006: 100% growth
By end of year: 100% growth
By end of year: 100% growth



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MARCH OF THE MACHINE MAKES IDLE HUMAN HANDS

By EVANS CLARK.

A FEW days ago the General Motors Corporation reported the largest peace-time earnings ever made by a single concern in the history of America. Three days later Governor Smith made public a report from the New York Industrial Commissioner which called public attention to serious unemployment throughout the State: not since the depression of 1921, it was disclosed, have conditions been as bad.

The people of the United States—in the shadow of a Presidential election—are presented with a social

Prevalence of Unemployment With Greatly Increased
Points to the Influence of Labor-Saving Machinery



have gone far to make construction a machine industry instead of a collection of hand trades. One gasoline crane takes the place of ten or twelve laborers. The hod-carrier has disappeared before the invasion of the material hoist. In concrete construction building materials are mixed, the dough, in a machine and literally poured into place without the touch of a human hand. The Ohio Bureau record these results: with 10 per cent. fewer men employed, contractors put up 11 per cent. more feet of finished buildings last year than in 1923.

Coal Mined by Machines.

News › Business › Business News

Automation: A third of London jobs to be taken by robots within 20 years, says report

Brexit could accelerate the adoption of new technologies to replace human labour, according to report

Ben Chapman | @b_c_chapman | 16 hours ago | 0 comments

DOES
MEN
THE LONG RUN?

Technology called threat to 5 mln. jobs
Imminent 'Robot Age' Awakens Concern
Computers: Worker Menace?

PM acts to counter
'chips' that kill jobs

Workers See 'Robot Revolution'
Depriving Them of Jobs



THE FUTURE OF EMPLOYMENT: HOW SUSCEPTIBLE ARE JOBS TO COMPUTERISATION?*

Carl Benedikt Frey[†] and Michael A. Osborne[‡]

September 17, 2013

Abstract

We examine how susceptible jobs are to computerisation. To assess this, we begin by implementing a novel methodology to estimate the probability of computerisation for 702 detailed occupations, using a Gaussian process classifier. Based on these estimates, we examine expected impacts of future computerisation on US labour market outcomes, with the primary objective of analysing the number of jobs at risk and the relationship between an occupation's probability of computerisation, wages and educational attainment. According to our estimates, about 47 percent of total US employment is at risk. We further provide evidence that wages and educational attainment exhibit a strong negative relationship with an occupation's probability of computerisation.

Keywords: Occupational Choice, Technological Change, Wage Inequality, Employment, Skill Demand
JEL Classification: E24, J24, J31, J62, Q33.

*We thank the Oxford University Engineering Sciences Department and the Oxford Martin Programme on the Impacts of Future Technology for hosting the "Machines and Employment" Workshop. We are indebted to Stuart Armstrong, Nick Bostrom, Eric Chinellato, Mark Cusumano, Daniel Dewey, David Does, Alex Flint, Claudia Goldin, John Muellbauer, Vincent Mueller, Paul Newman, Seán Ó hÉigeartaigh, Anders Sandberg, Murray Shanahan, and Keith Woolcock for their excellent suggestions.

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MARTIN
SCHOOL



UNIVERSITY OF
OXFORD

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1	0.99	Telemarketers	25	0.98	Milling and Planing Machine Setters, Operators, and Tenders, Metal and F
2	0.99	Title Examiners, Abstractors, and Searchers	26	0.98	Credit Analysts
3	0.99	Sewers, Hand	27	0.98	Parts Salespersons
4	0.99	Mathematical Technicians	28	0.98	Claims Adjusters, Examiners, and Investigators
5	0.99	Insurance Underwriters	29	0.98	Driver/Sales Workers
6	0.99	Watch Repairers	30	0.98	Radio Operators
7	0.99	Cargo and Freight Agents	31	0.98	Legal Secretaries
8	0.99	Tax Preparers	32	0.98	Bookkeeping, Accounting, and Auditing Clerks
9	0.99	Photographic Process Workers and Processing Machine Operators	33	0.98	Inspectors, Testers, Sorters, Samplers, and Weighers
10	0.99	New Accounts Clerks	34	0.98	Models
11	0.99	Library Technicians	35	0.97	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop
12	0.99	Data Entry Keyers	36	0.97	Credit Authorizers, Checkers, and Clerks
13	0.98	Timing Device Assemblers and Adjusters	37	0.97	Payroll and Timekeeping Clerks
14	0.98	Insurance Claims and Policy Processing Clerks	38	0.97	Agricultural and Food Science Technicians
15	0.98	Brokerage Clerks	39	0.97	Telephone Operators
16	0.98	Order Clerks	40	0.97	Real Estate Brokers
17	0.98	Loan Officers	41	0.97	File Clerks
18	0.98	Insurance Appraisers, Auto Damage	42	0.97	Counter and Rental Clerks
19	0.98	Umpires, Referees, and Other Sports Officials	43	0.97	Prepress Technicians and Workers
20	0.98	Tellers	44	0.97	Motion Picture Projectionists
21	0.98	Etchers and Engravers	45	0.97	Camera and Photographic Equipment Repairers
22	0.98	Packaging and Filling Machine Operators and Tenders	46	0.97	Cashiers
23	0.98	Procurement Clerks	47	0.97	Ophthalmic Laboratory Technicians
24	0.98	Shipping, Receiving, and Traffic Clerks	48	0.97	Log Graders and Scalers

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Option 1:

Mass unemployment and civil unrest



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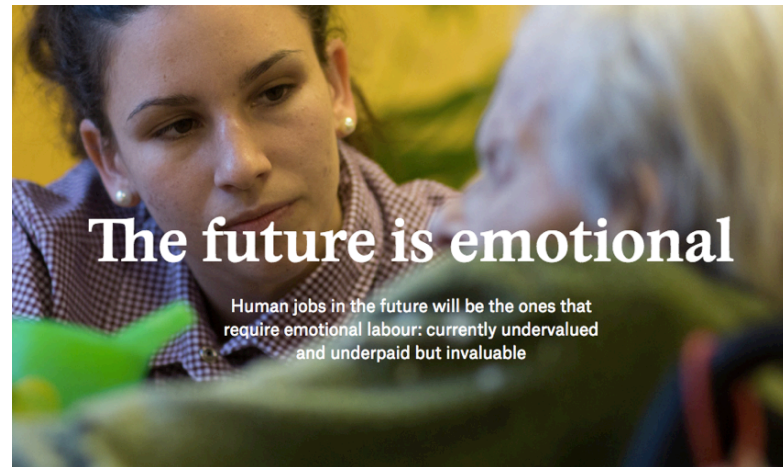
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Option 2:

From Muscle to
Meaning

Forbes

The Future of Work: Death of the Single Skill Set In The Age Of Automation



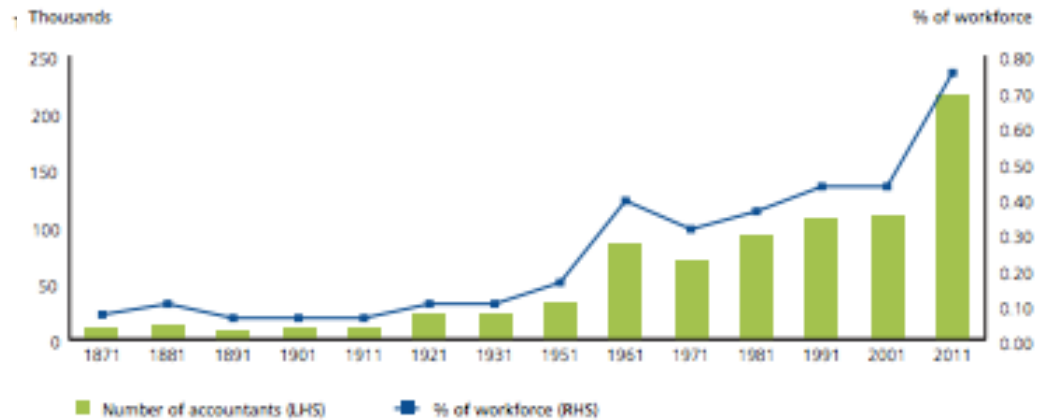
Option 2: From Muscle to Meaning

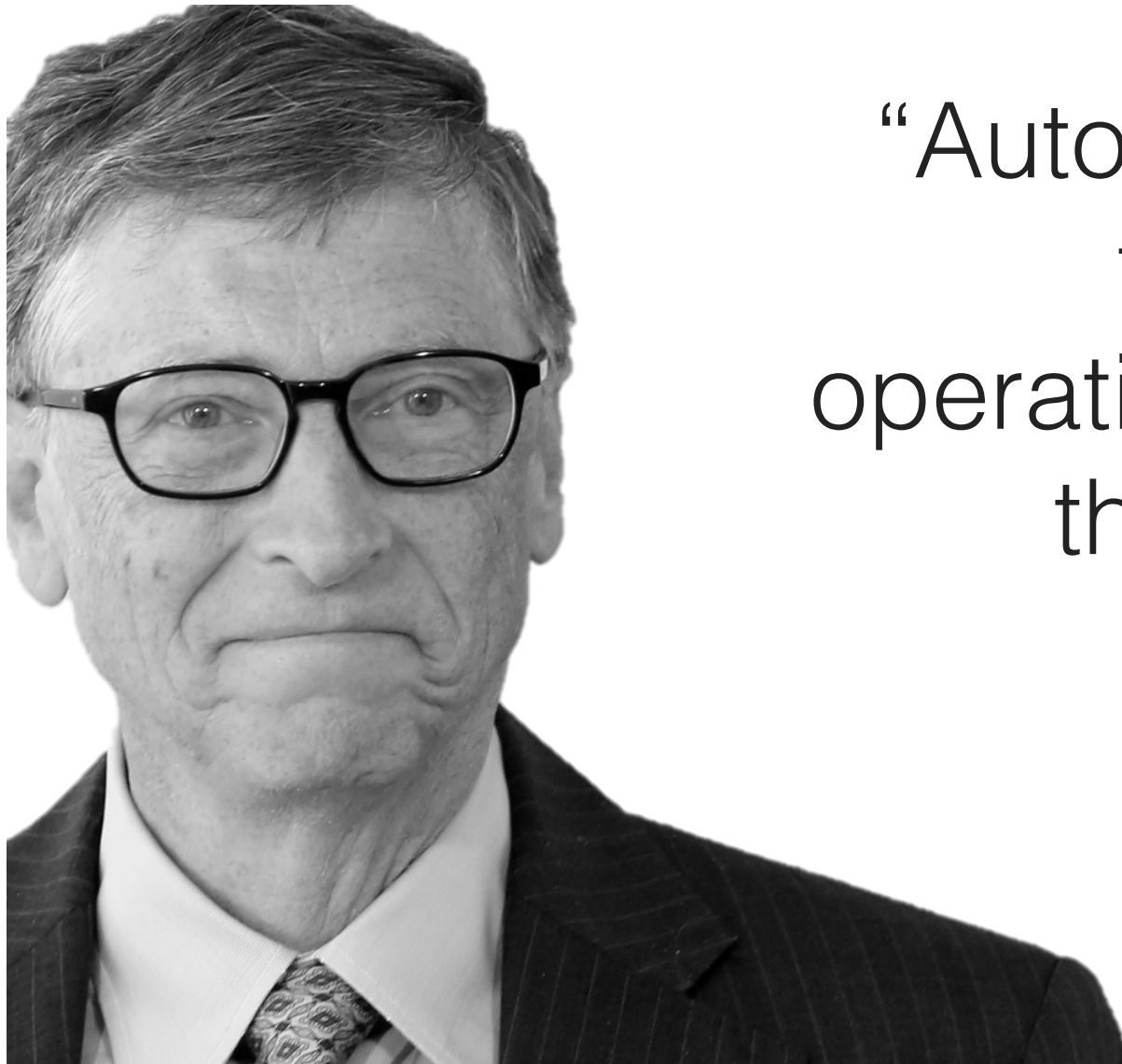
Chart 1. Agricultural labourers



Source: England and Wales Census records, authors' calculations

Chart 4. Accountants





“Automation applied
to an inefficient
operation will magnify
the inefficiency.”

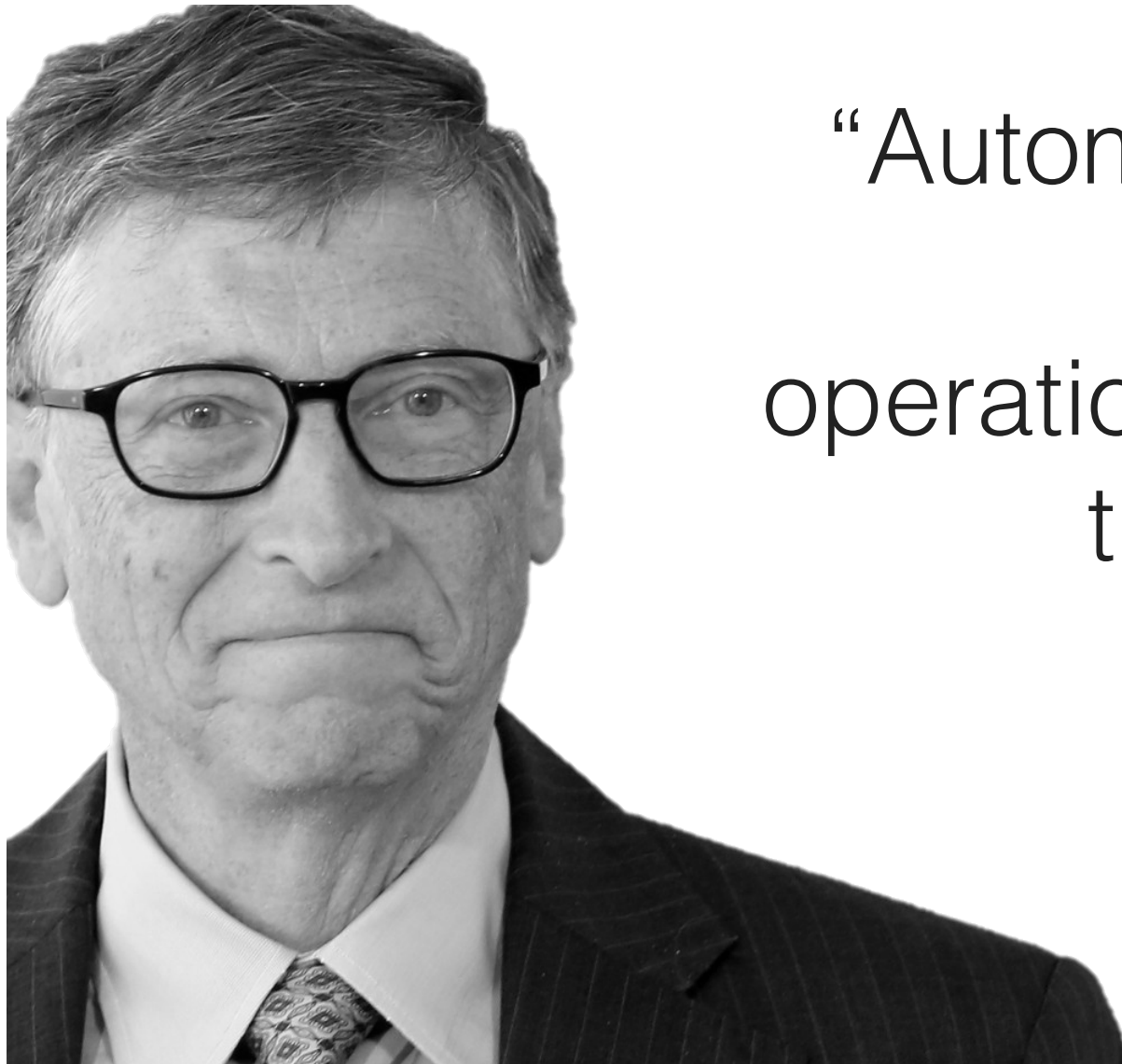


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Artificial stupidity





“Automation applied
to an efficient
operation will magnify
the efficiency.”

Technology \neq Answer

Technology is a Question

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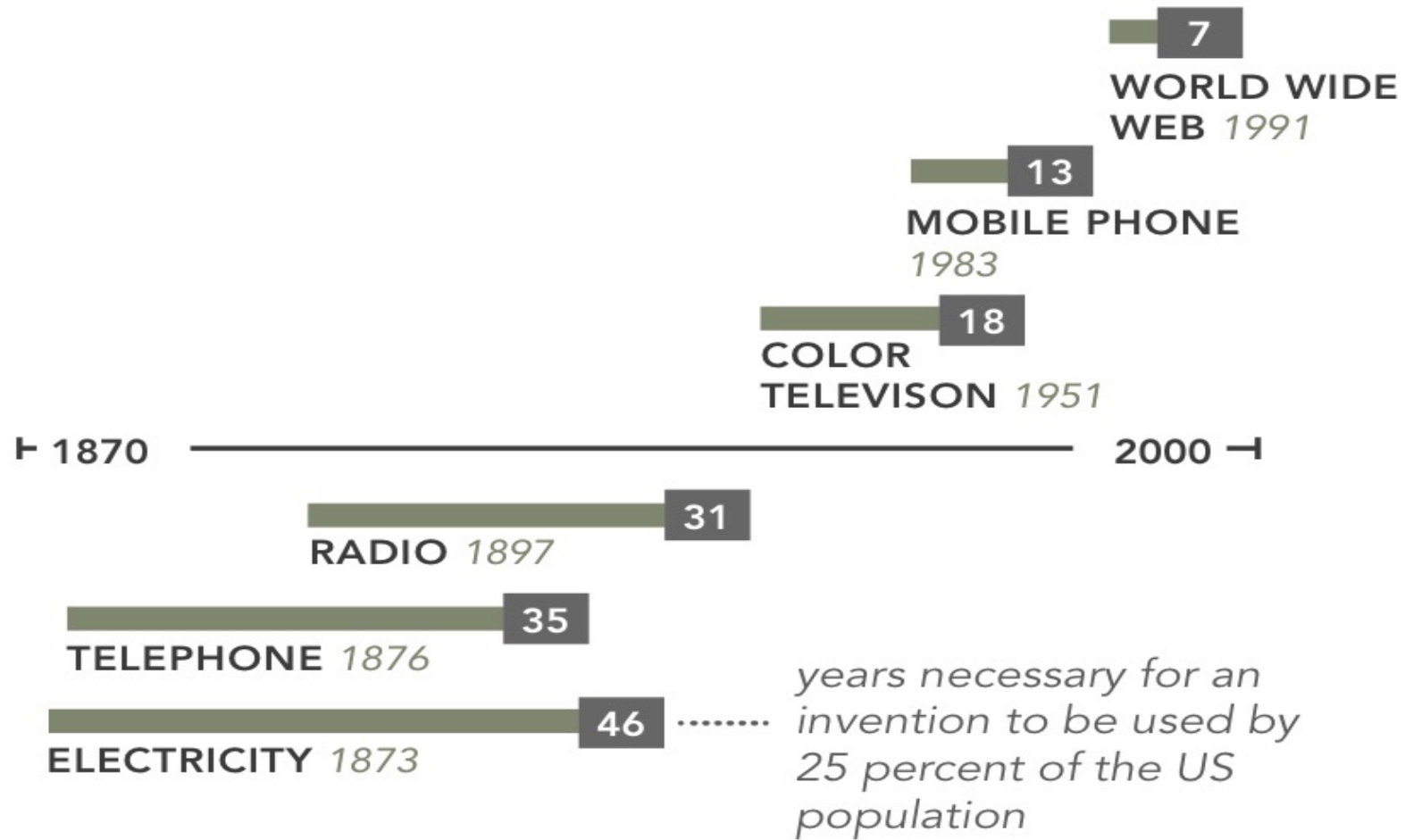


$0 - 45$

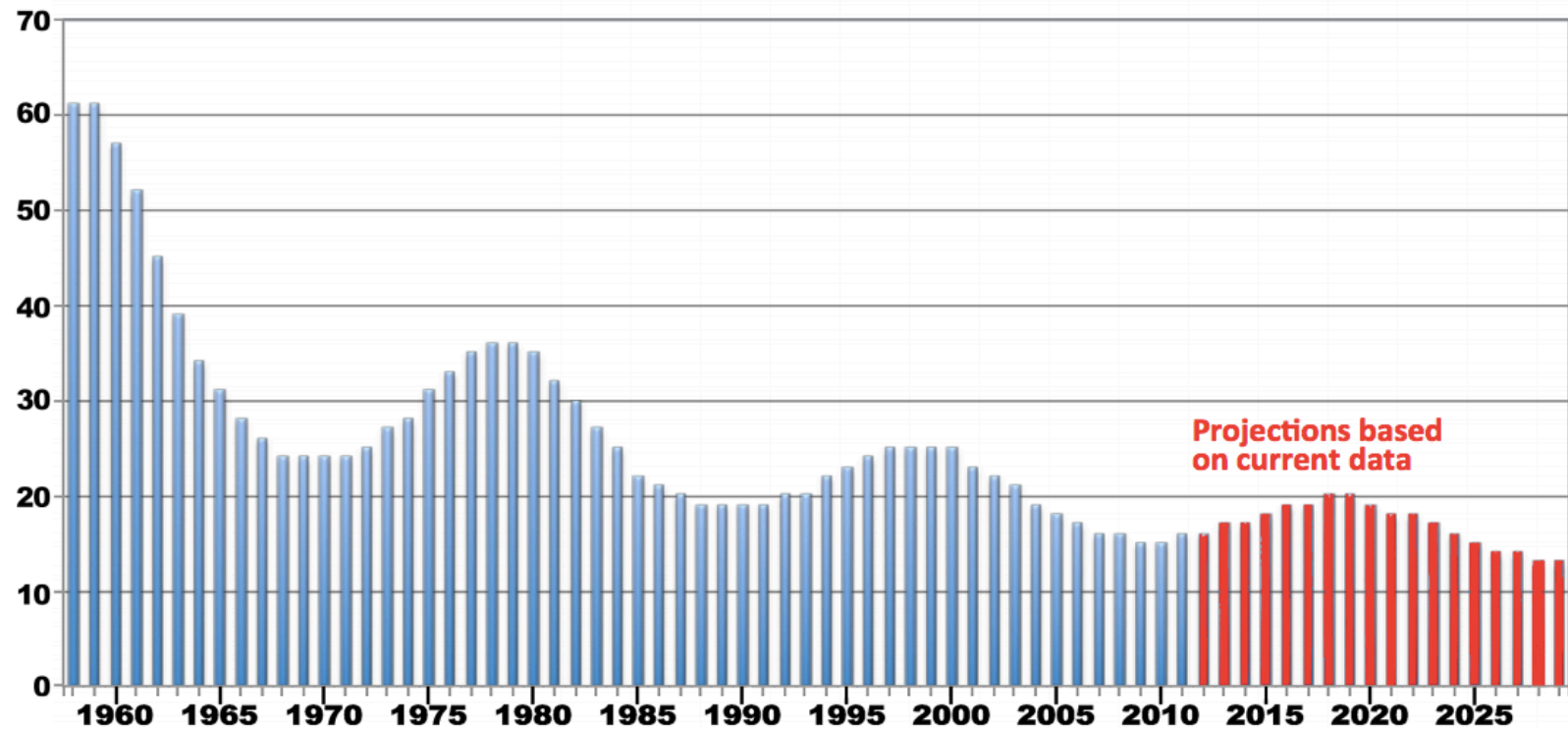


> 45





Average company lifespan on S&P 500 Index (in years)



Year (each data point represents a rolling 7-year average of average lifespan)

DATA: INNOSIGHT/Richard N. Foster/Standard & Poor's



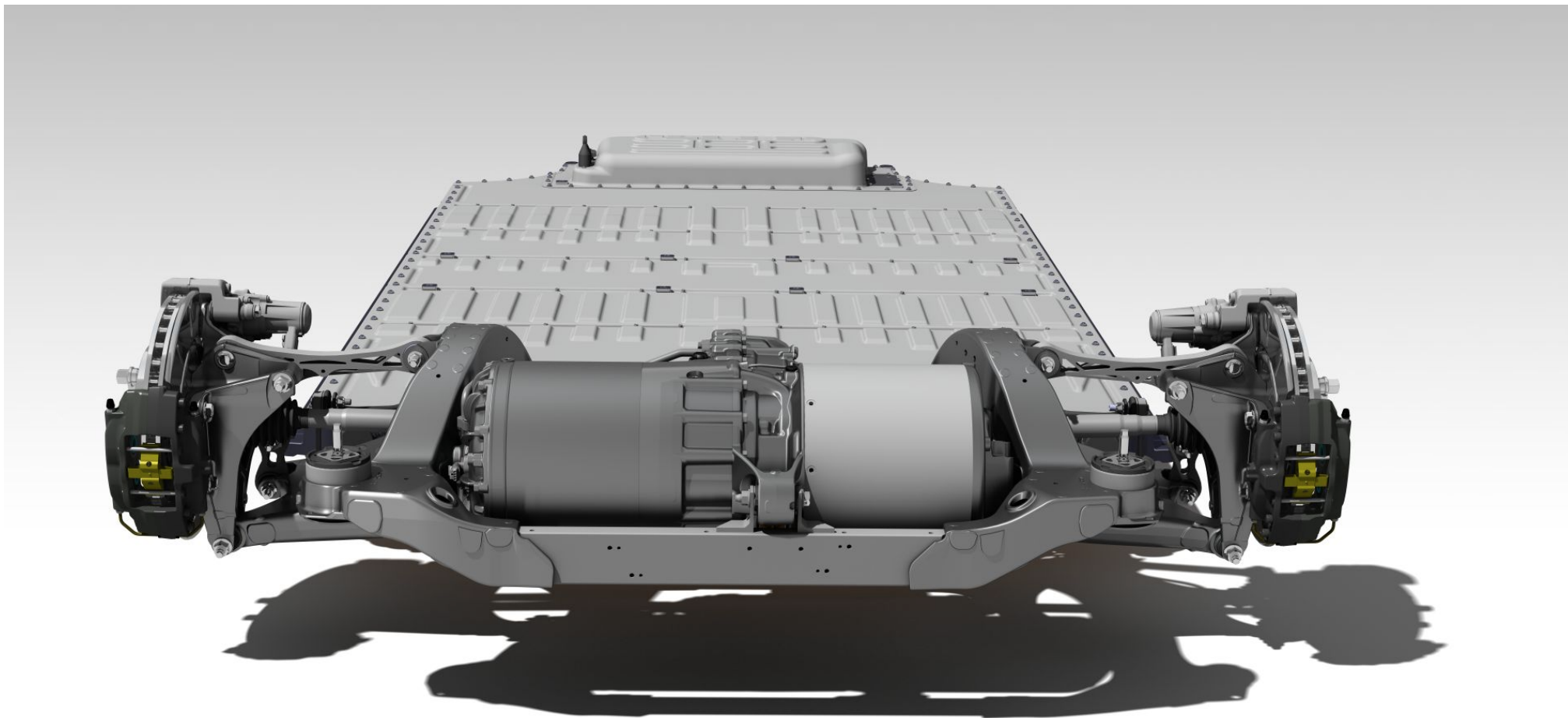
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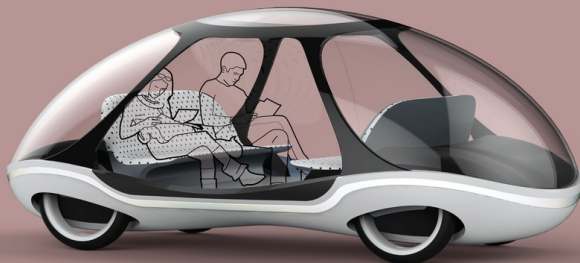
RethinkX

Disruption, Implications and Choices

Rethinking Transportation 2020-2030

*The Disruption of Transportation and the Collapse
of the Internal-Combustion Vehicle and Oil Industries*

DRIVERLESS ELECTRIC CAR



- + Convenient, safe, personal transport
- + Reduces need for car ownership
- + Facilitates easy app-based ride sharing

By 2030 Transport as a Service (TaaS):

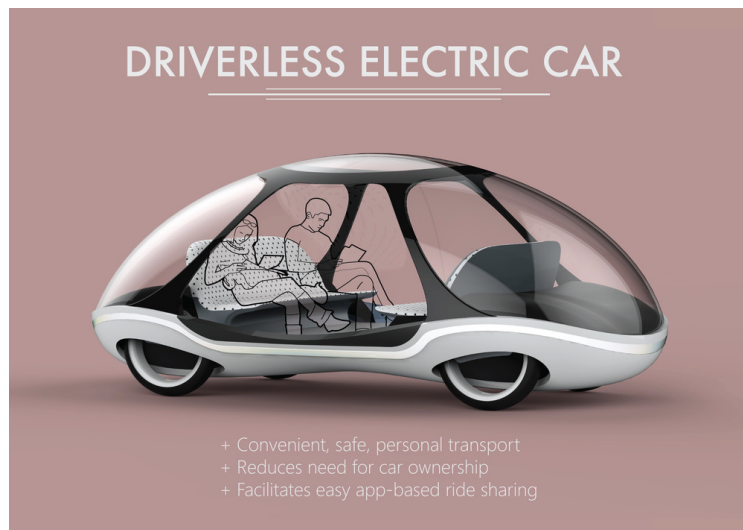
will be 4x cheaper per mile than buying a new car

The average American family saving

\$5,600 per year

in transportation costs
(=10% wage increase)





By 2030 Transport as a Service (TaaS):

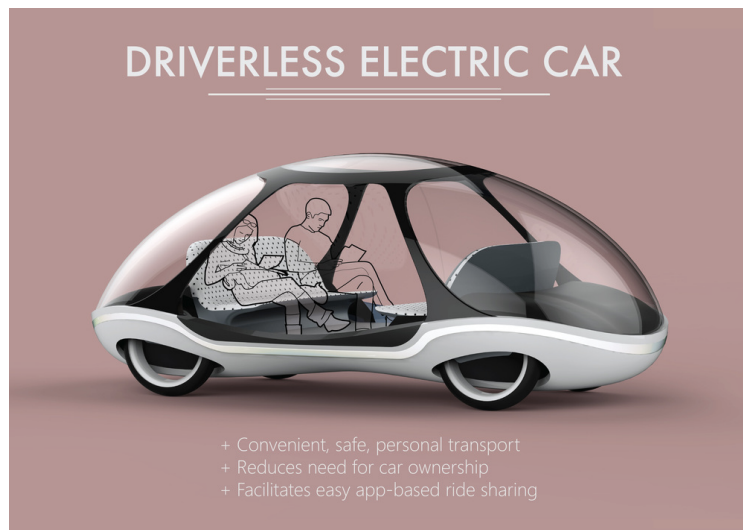
Keeping an additional

\$1 trillion per year

in Americans pockets

(potentially generating the largest infusion of consumer spending in history).





By 2030 Transport as a Service (TaaS):

70%

fewer passenger cars and trucks will be manufactured each year.

Total disruption of the car value chain,
car dealers, maintenance, insurance companies suffering almost complete
destruction.



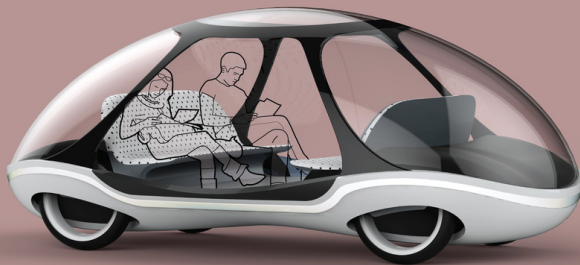
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≡ FORTUNE | Autos



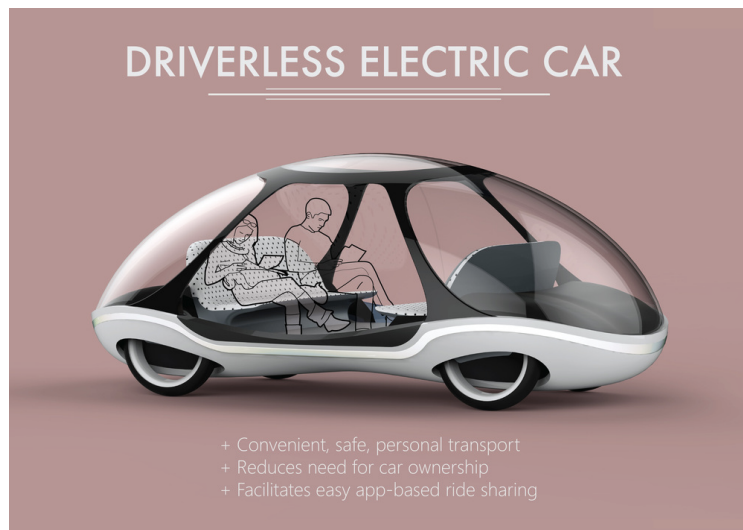
Volvo unveiled the IntelliSafe Auto Pilot interface in October 2015, which will allow drivers to switch in and out of autonomous mode. Courtesy of Volvo Car Group

AUTONOMOUS VEHICLES

Volvo CEO: We will accept all liability when our cars are in autonomous mode

Kirsten Korosec
Oct 07, 2015





By 2030 Transport as a Service (TaaS):

Oil demand will **drop** by

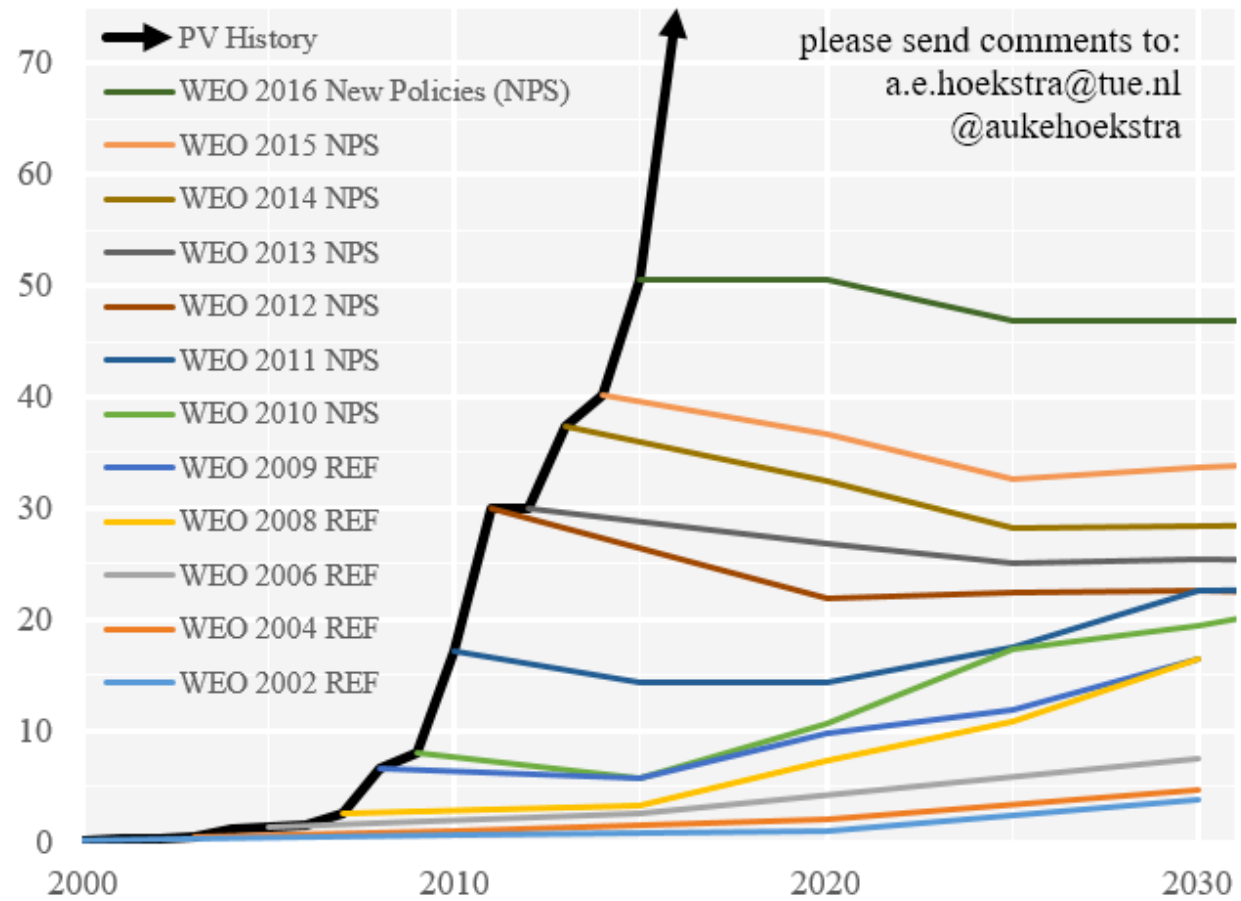
30 million barrels a day.

Shale oil, Keystone XL and Dakota Access become stranded assets



Annual PV additions: historic data vs IEA WEO predictions

In GW of added capacity per year - source International Energy Agency - World Energy Outlook



IEA raises its five-year renewable growth forecast as 2015 marks record year

(Paris) — 25 October 2016



Renewables will be the fastest-growing source of electricity but growth still concentrated in wind and solar PV, and government support remains critical

The International Energy Agency said today that it was significantly increasing its five-year growth forecast for renewables thanks to strong policy support in key countries and sharp cost reductions. Renewables have surpassed coal last year to become the largest source of installed power capacity in the world.

The latest edition of the IEA's *Medium-Term Renewable Market Report* now sees renewables growing 13% more between 2015 and 2021 than it did in last year's forecast, due mostly to stronger policy backing in the United States, China, India and Mexico. Over the forecast period, costs are expected to drop by a quarter in solar PV and 15 percent for onshore wind.

Last year marked a turning point for renewables. Led by wind and solar, renewables represented more than half the new power capacity around the world, reaching a record 153 Gigawatt (GW), 15% more than the previous year. Most of these gains were driven by record-level wind additions of 66 GW and solar PV additions of 49 GW.

About half a million solar panels were installed *every day* around the world last year. In China, which accounted for about half the wind additions and 40% of all renewable capacity increases, two wind turbines were installed *every hour* in 2015.



Half a million
solar panels
installed
every day

Dubai: solar at 2.3c per kwh

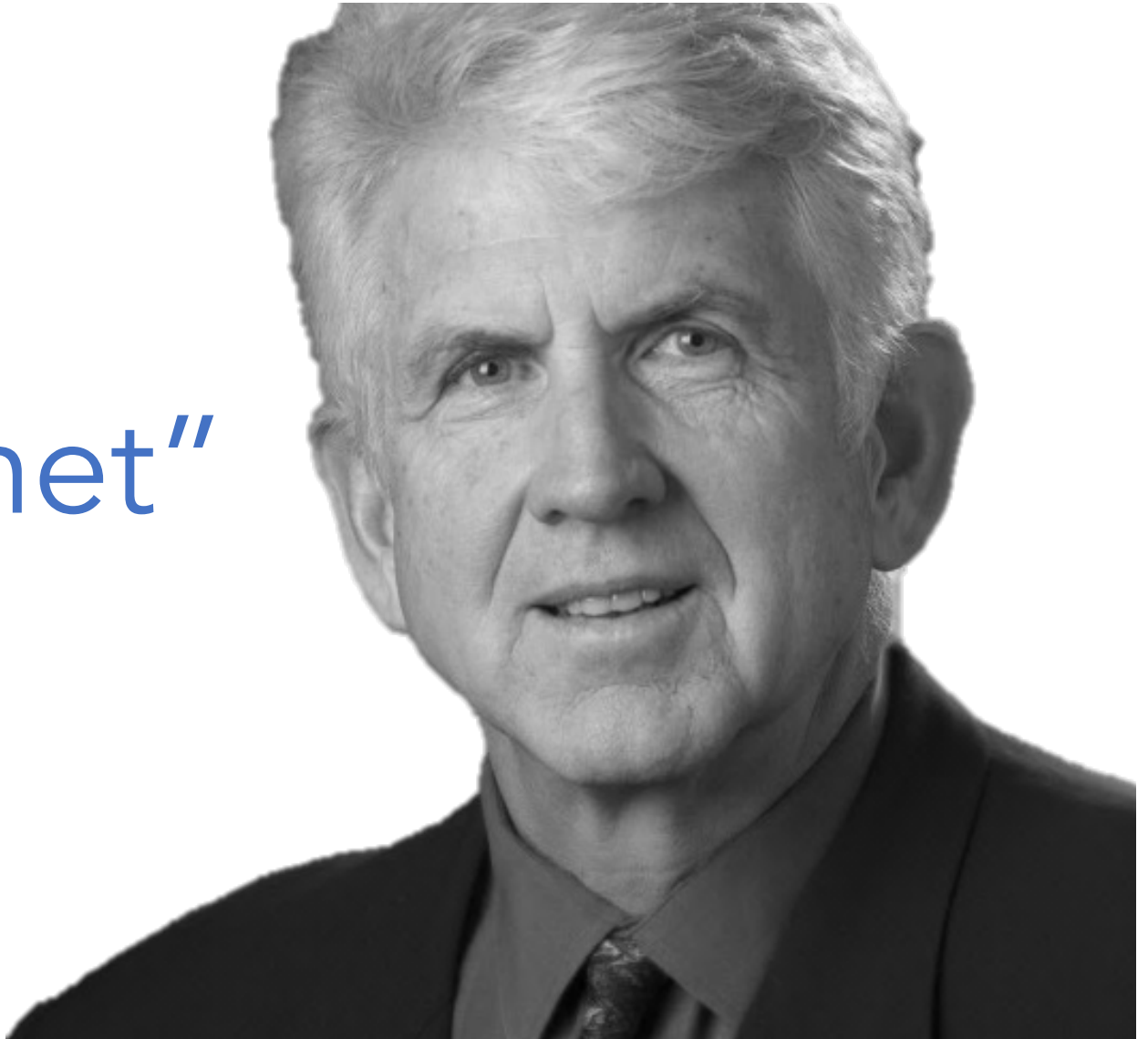
(Typical UK gas tariff: 6.5c per kwh)



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“The Enernet”



Als beste getest door de Consumentenbond!

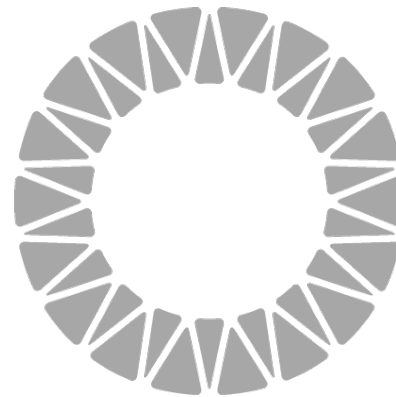
vandebron

Bereken nu je tarief



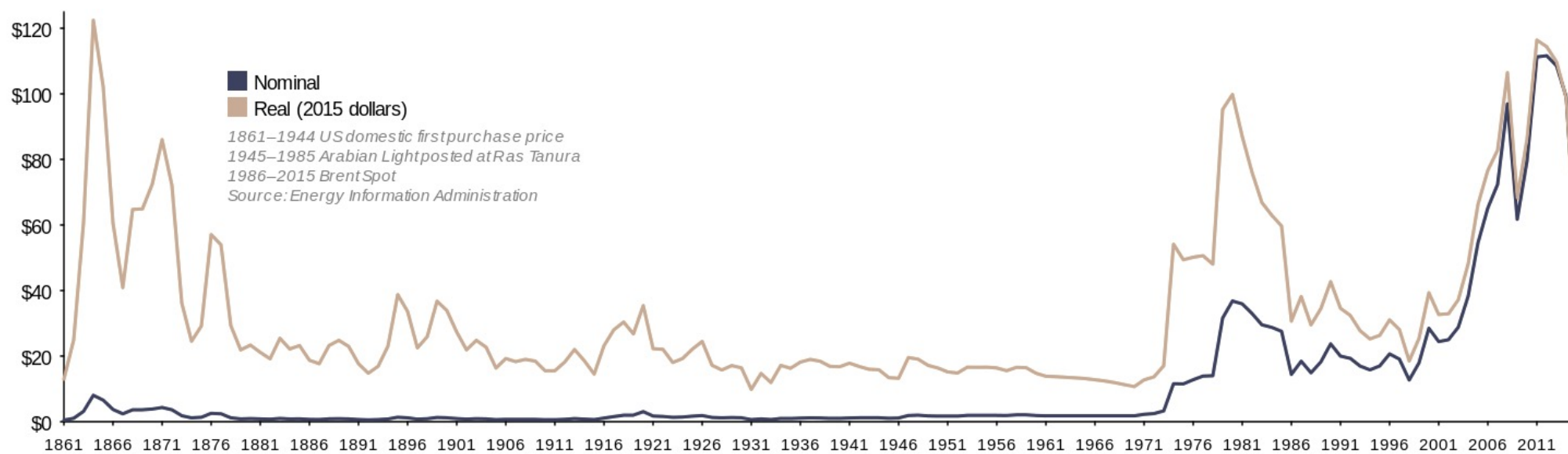


Open Utility



**Good
Energy**





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Audi conjures fuel out of thin air (and water)

AUTOPIA / 28 APRIL 15 / by KATIE COLLINS

f t @ in g+ 87 shares
2 comments



Audi has started production of a synthetic, carbon-neutral diesel fuel made from water, CO₂ and hydrogen.

The fuel was developed at a research facility in Dresden after a commissioning phase of just four months. Audi partnered with plant operator Sunfire to produce the fuel, which uses green power and requires only two raw materials -- water and carbon dioxide. The CO₂ is currently supplied by a biogas facility, but a portion of it is also captured from ambient air.

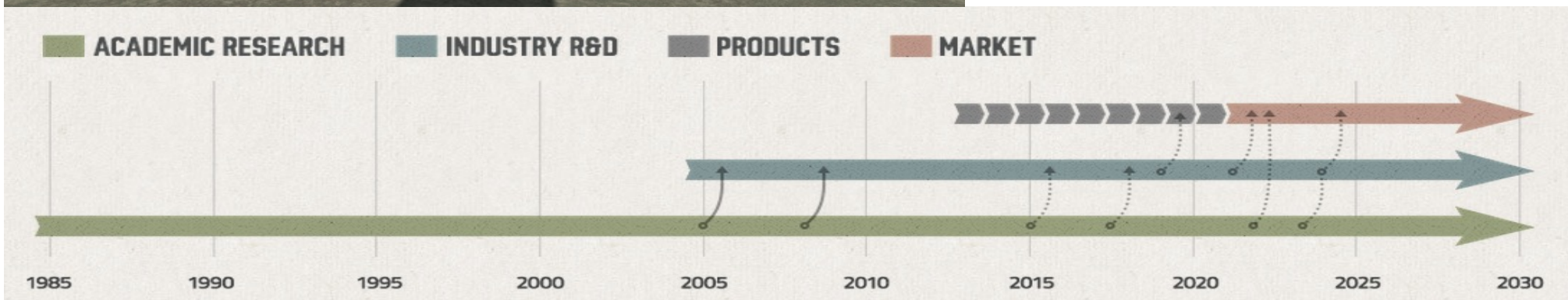
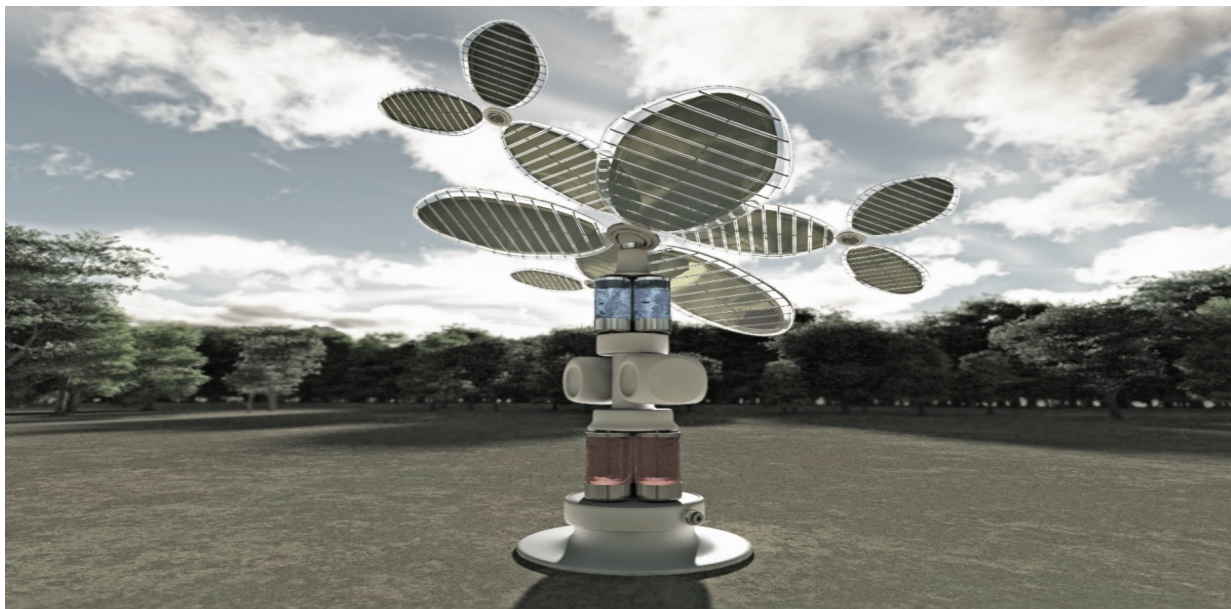
The fuel is produced in various stages, starting with heating up the water to form steam, which is then broken down into hydrogen and oxygen. The hydrogen then reacts with the CO₂ in synthesis reactors under high pressure and at high temperatures. The product is a liquid known as blue crude, which like fossil crude oil can be refined to yield e-diesel. Tests conducted by Audi have shown that it is suitable for



Audi



EARTH
CHALLENGE

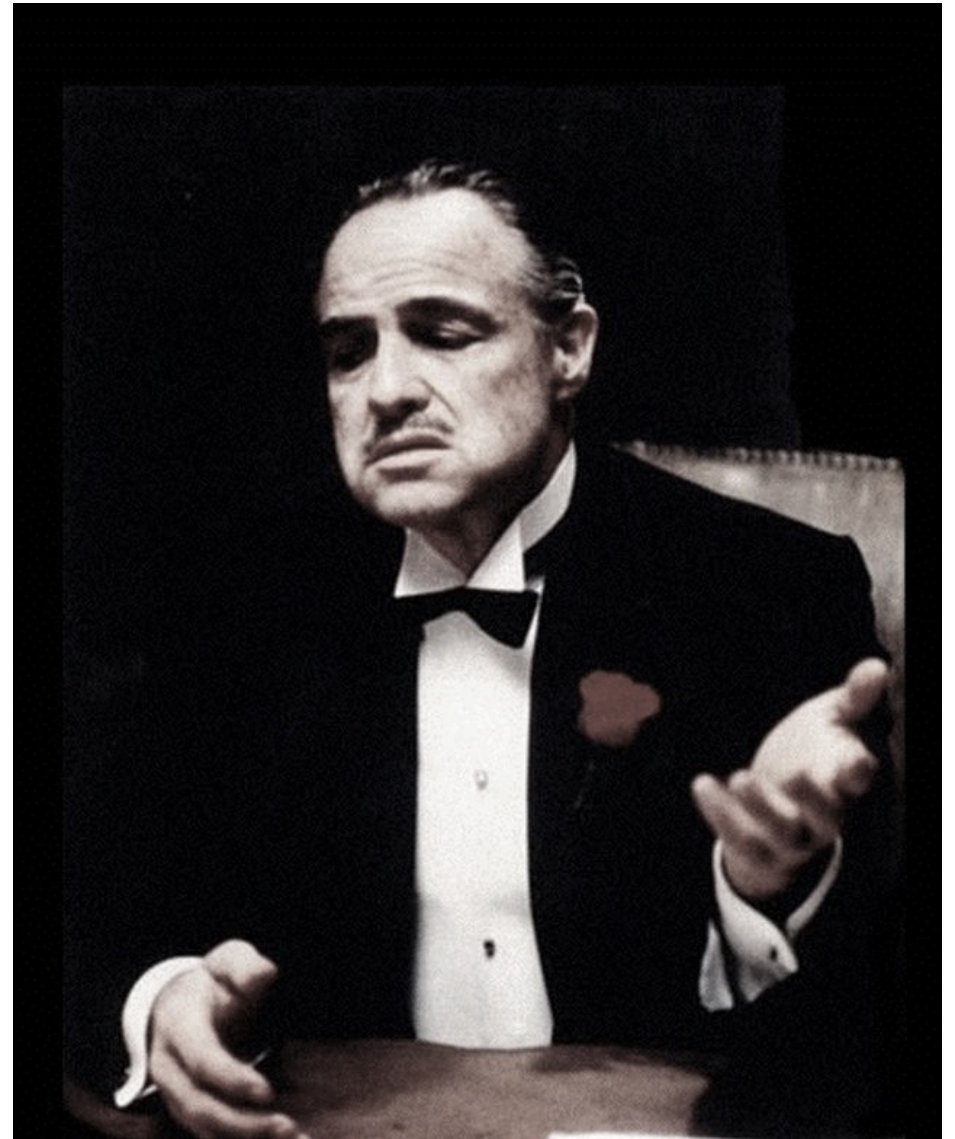




“Within 20 years, we will be an economy or state that doesn’t depend mainly on oil.”

- Deputy Crown Prince
Mohammed bin Salman

“Maybe it’s not all
about family?”





"The stone age did not end for the lack of stone."

- Sheikh Ahmed Zaki Yamani



9%



24%

18%



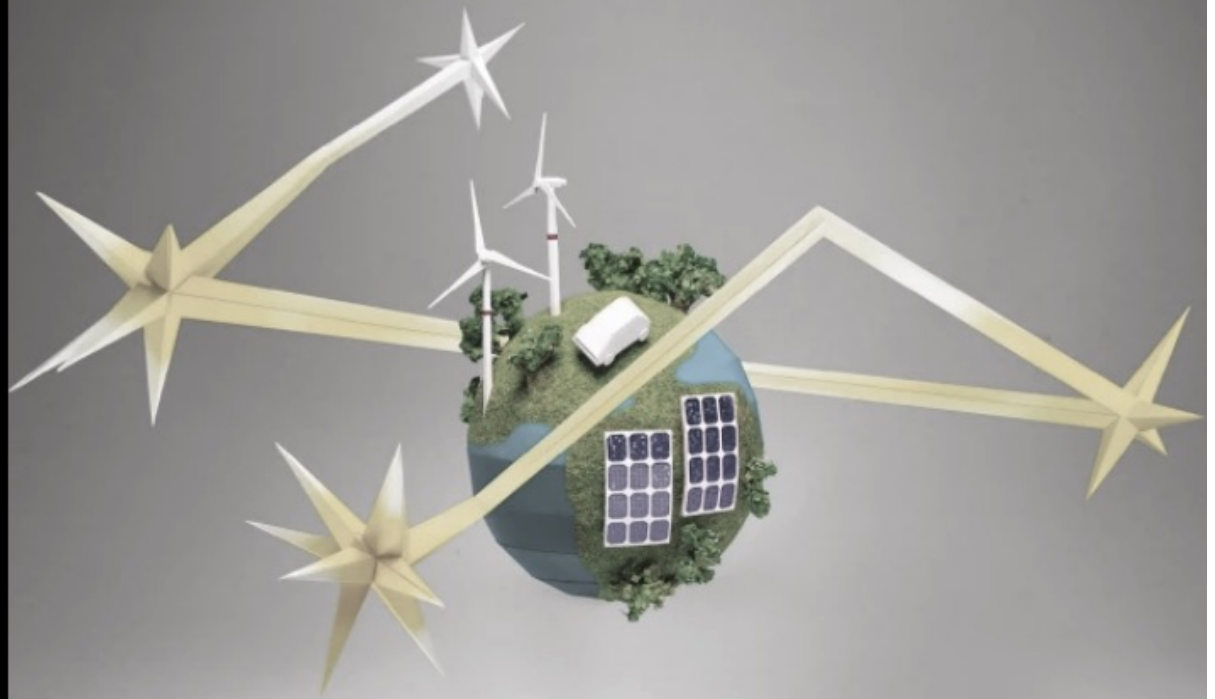


The Big Read **Renewable Energy**

+ Add to myFT

The Big Green Bang: how renewable energy became unstoppable

The shift to cleaner power is disrupting entire industries.
Will the 21st century be the last one for fossil fuels?



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CHINA

China Wants to Power the World

25 APRIL 3, 2016 6:00 PM EDT

By [Adam Minter](#)

China's State Grid Corporation, the world's biggest power company, is on an impressive buying binge. As Bloomberg News [reports](#), the company is "actively in bidding" for power assets in Australia, hoping to add them to a portfolio of Italian, Brazilian, and Filipino companies. The goal isn't simply to invest, however. State Grid's Chairman Liu Zhenya has a plan that he believes will stall global warming, put millions of people to work and bring about world peace by 2050.

China swoops in on Italy's power grids and luxury brands

China State Grid quietly builds Mediterranean power network

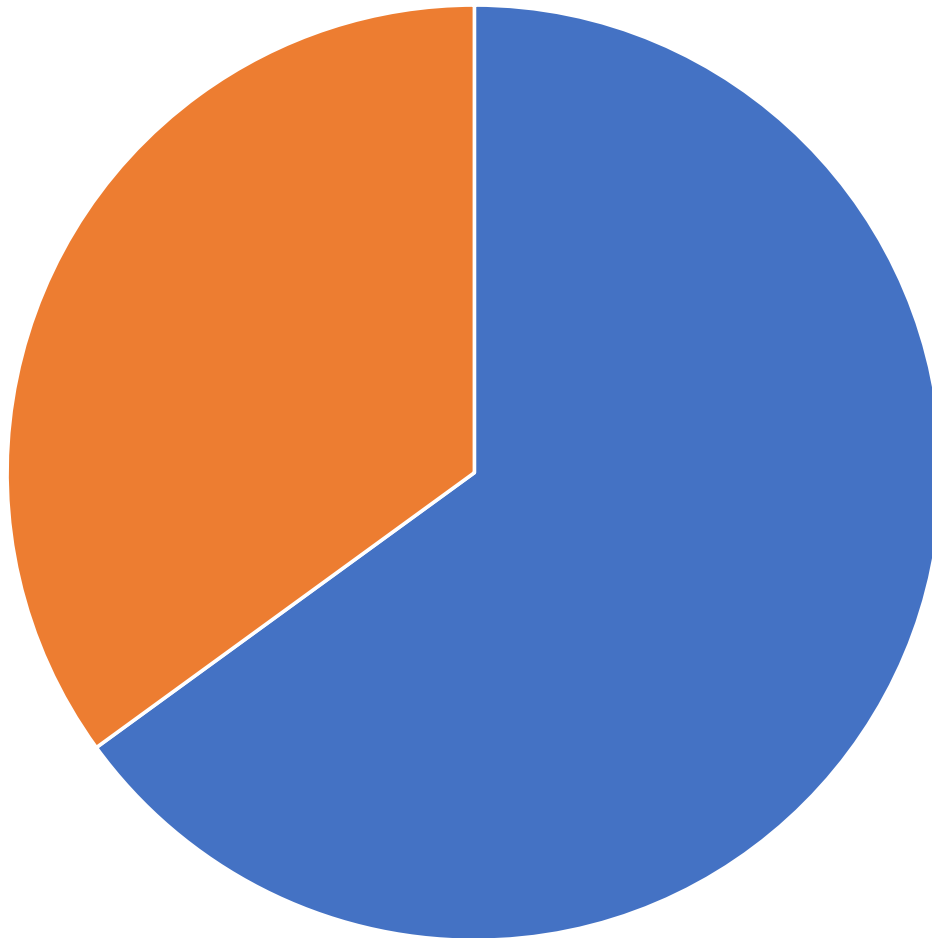
China Builds an Empire of Electricity With Australia as Target

Why China Is Dominating the Solar Industry

Between 2008 and 2013, China's solar-electric panel industry dropped world prices by 80 percent

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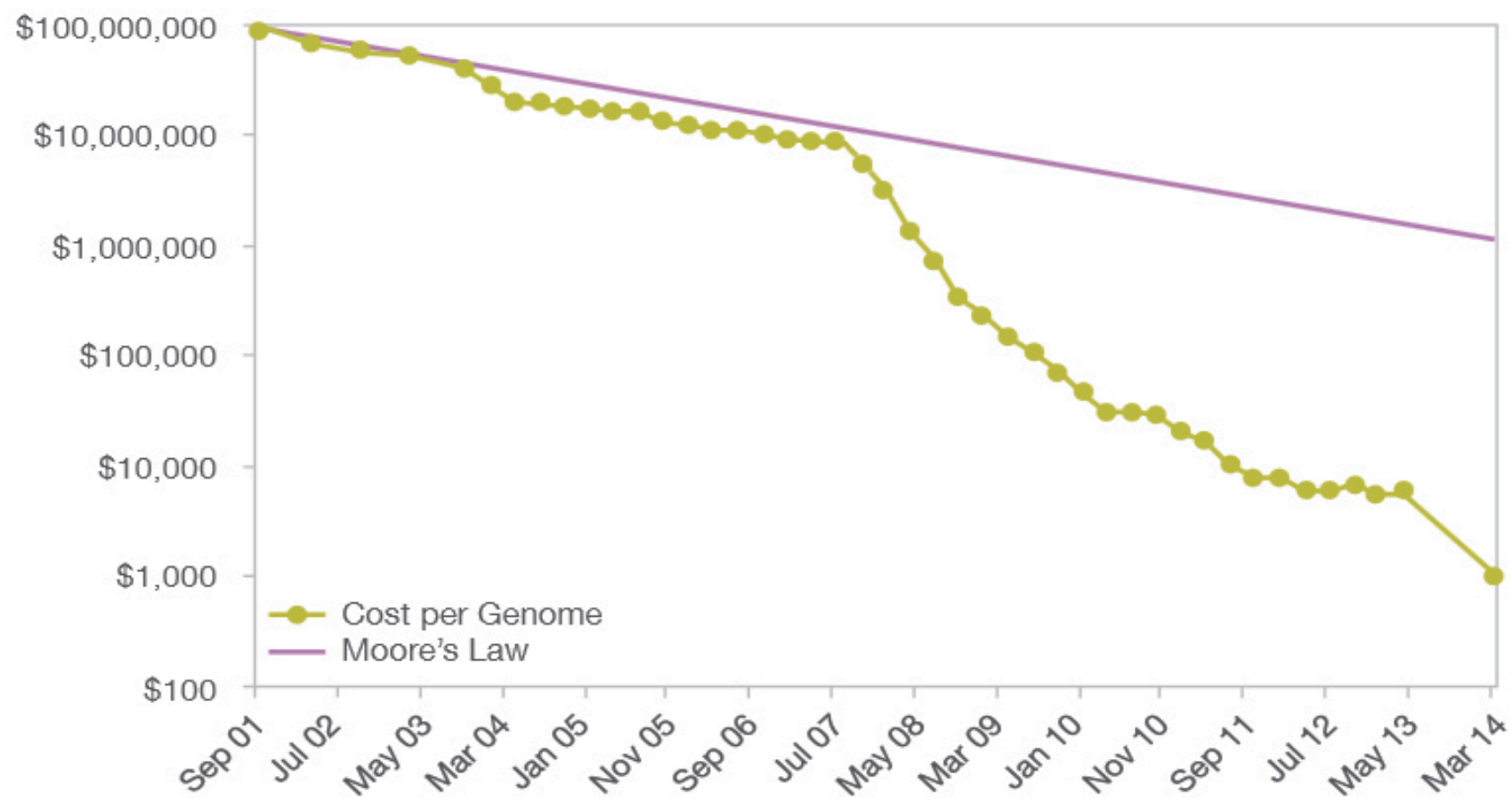
Russia's exports

-  Hydrocarbons
-  Everything else

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Solar Employs More People In U.S. Electricity Generation Than Oil, Coal And Gas Combined





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Telomere extension turns back aging clock in cultured human cells, study finds

Researchers delivered a modified RNA that encodes a telomere-extending protein to cultured human cells. Cell proliferation capacity was dramatically increased, yielding large numbers of cells for study.

JAN 22
2015

A new procedure can quickly and efficiently increase the length of human telomeres, the protective caps on the ends of chromosomes that are linked to aging and disease, according to scientists at the Stanford University School of Medicine.

Treated cells behave as if they are much younger than untreated cells, multiplying with abandon in the laboratory dish rather than stagnating or dying.

The procedure, which involves the use of a modified type of RNA, will improve the ability of researchers to generate large numbers of cells for study or drug development, the scientists say. Skin cells with telomeres lengthened by the procedure were able to divide up to 40 more times than untreated cells. The research may point to new ways to treat diseases caused by shortened telomeres.

Telomeres are the protective caps on the ends of the strands of DNA called chromosomes, which house our genomes. In young humans, telomeres are about 8,000-10,000 nucleotides long. They shorten with



Helen Blau

Harvard geneticist says reversing aging is plausible

By Gary Robbins | 12:27 p.m. March 3, 2016



Geneticist George Church AP

Renowned Harvard geneticist George Church said at a science conference in La Jolla on Thursday that reversing aging in humans is plausible based on research that's been done on small animals.

"Reversal is something that has been demonstrated in a number of different animals in a number of different ways," said Church, a keynote speaker at the Future of Genomic Medicine conference. "I think that's going to translate into larger animals and humans. We won't know until we try. But we're trying 65 different genes in different combinations to see if we can reproduce the aging reversal that we've seen in small animals."



TOP STORIES

- Stepfather arrested in Jahi Turner's 2002 disappearance
- Corporate water users who saved the most — or least
- State asks UCSD to find ways to detect stoned drivers
- 'Beautiful' border wall? Murals aren't what Trump envisions
- Fentanyl disguised as other drugs alarms authorities



Should 'Blade Jumper' Markus Rehm be allowed in the Olympics?

By Elizabeth Hudson
BBC Sport

🕒 17 February 2016 | Athletics | 💬 57

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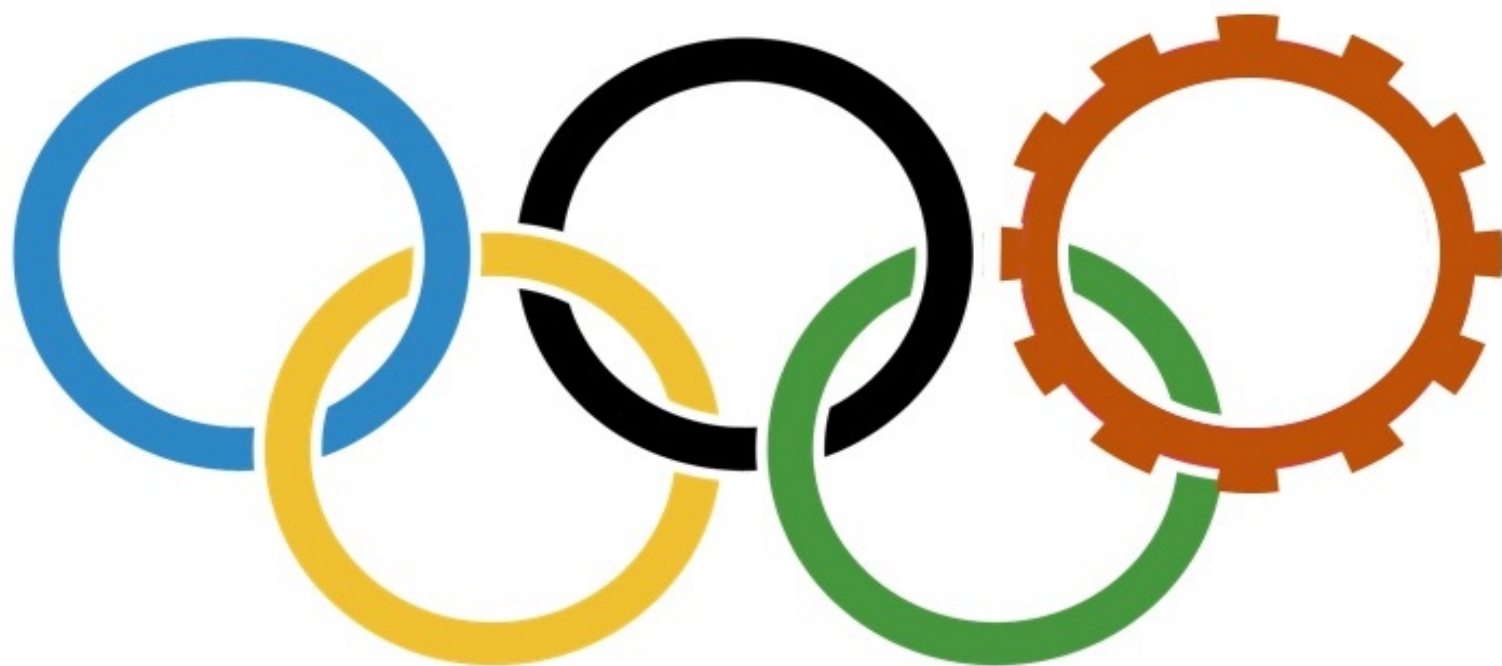
'Blade Jumper' Rehm wants Olympic glory

BBC SPORT

Paralympic long jump champion Markus Rehm has a dream of competing at both the Rio Olympics and Paralympics later this year.

But the German single-leg amputee is running out of time to prove that his carbon fibre running blade does not give him an unfair advantage over his Olympic rivals.



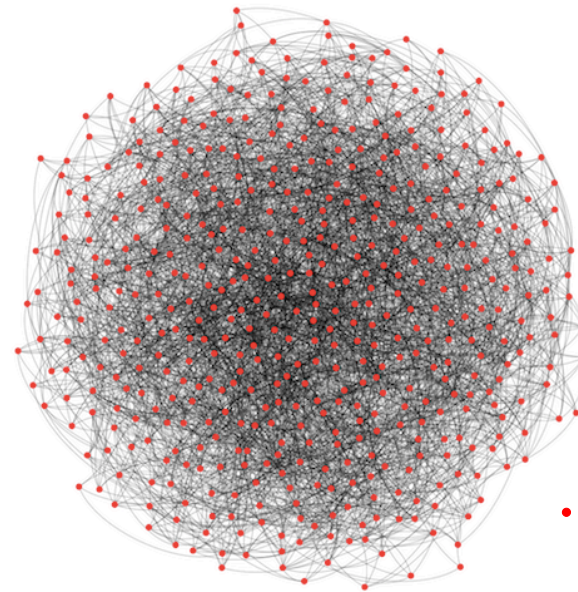




BLOCKCHAIN



BLOCKCHAIN



• = ledger

Financial transactions • Smart contracts • Votes • Regulation • Tax



Trusted Third Parties



Trusted Third Parties

Proof





Engineered from Recycled Glass
Bottle Waste



Typical 3 Bed House Printed
Out To Flat Pack



Typical 3 Bed House Walls, Floor
Pad and Roof Erected On Site

TufecoTM

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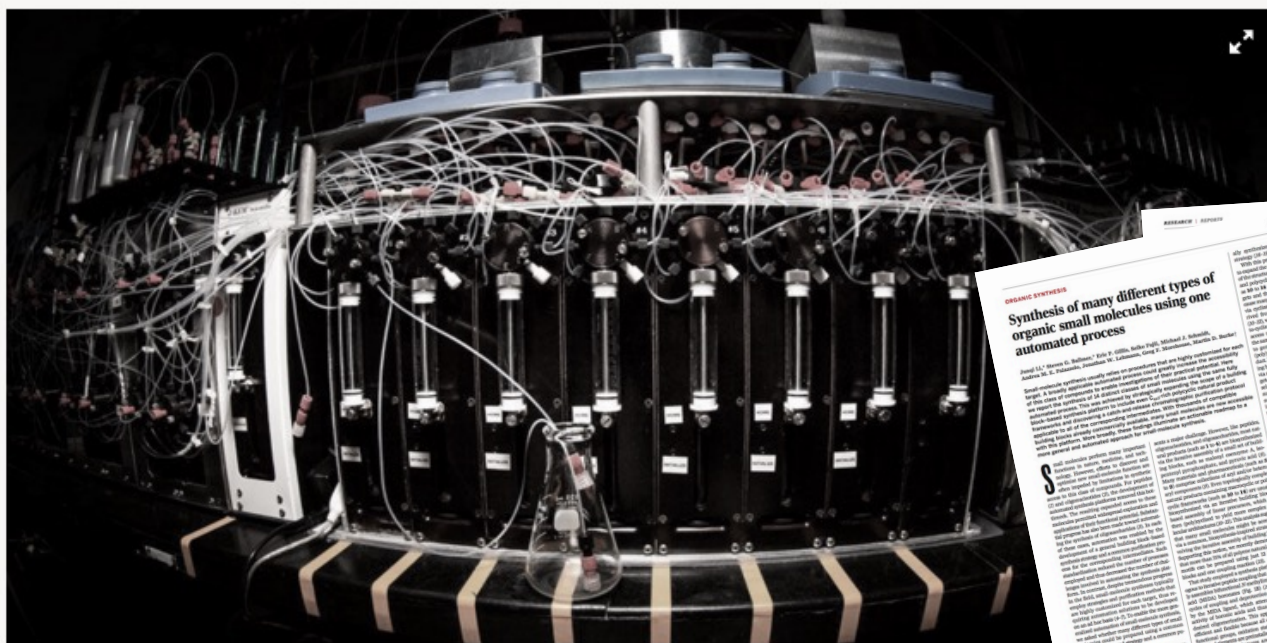
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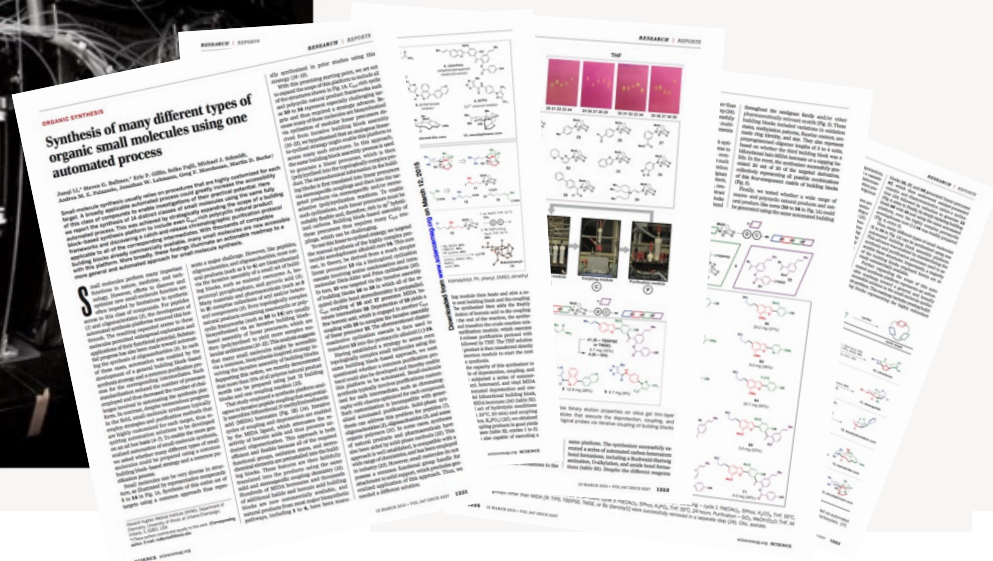
This Chemistry 3D Printer Can Synthesize Molecules From Scratch

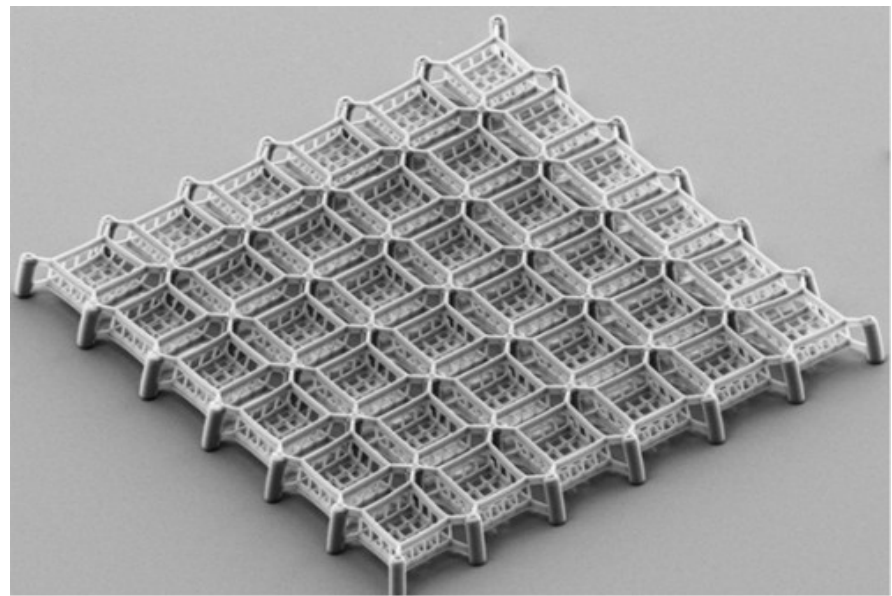
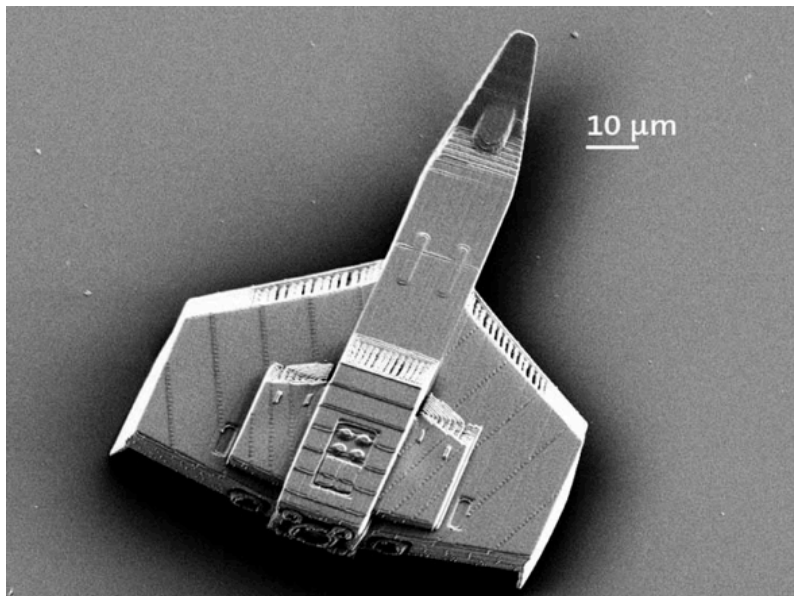
Need an obscure medicinal compound found only in a jungle plant? Just print it

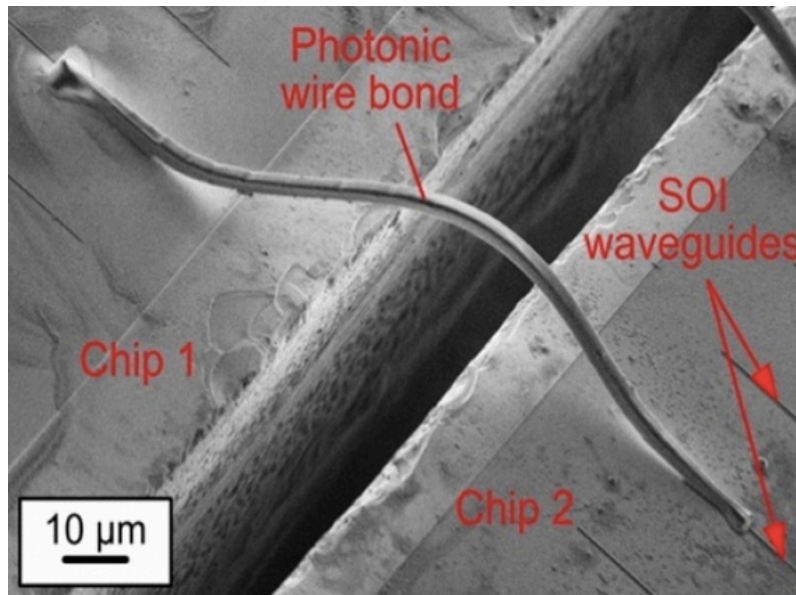
Burke Laboratories



BurkeScience







- 3D Photonics
- 3D Scaffolds and biometrics
- 3D Microfluidics
- 3D Mechanical microstructures
- 2.5D Micro-optics
- Nano-casts





TECHNOLOGY

3-D Printed Drugs Are Here

The FDA just approved the first pill produced by the technique, but historians say the manufacturing process probably won't threaten big drug companies.



ROBINSON MEYER | AUG 19, 2015

Over the past decade, 3-D printers have been hailed as changing everything from [fashion](#) to [firearms](#). Now, they're coming to the pharmaceutical business—or, at least, they seem to be.

Earlier this month, the U.S. Food and Drug Administration approved the first 3-D-printed pill: *Spritam levetiracetam*, a drug which can reduce seizures among epileptics. Manufactured by the American pharmaceutical company Aprecia, it's produced not by a [tableting machine](#), but by a special process where the drug's active and inactive ingredients are laid down layer-by-layer.

Spritam levetiracetam



APRECIA[®]
PHARMACEUTICALS





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Translation

ALL BETS ARE OFF

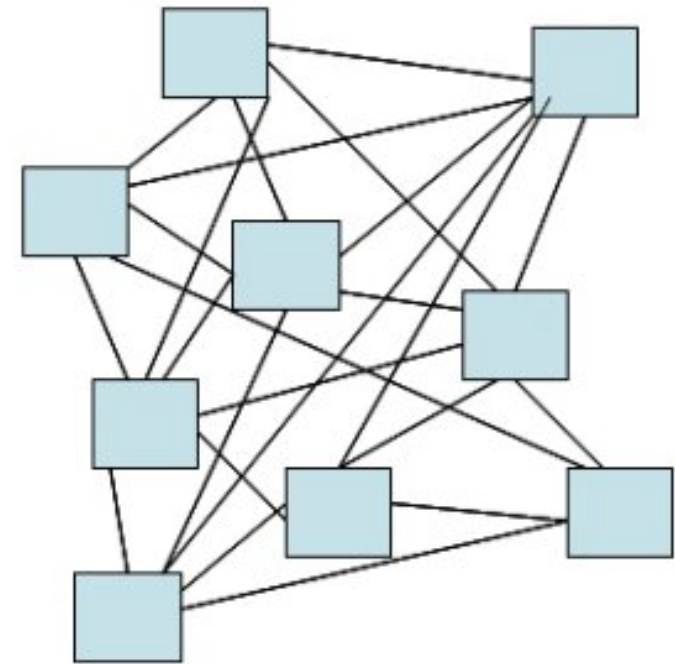
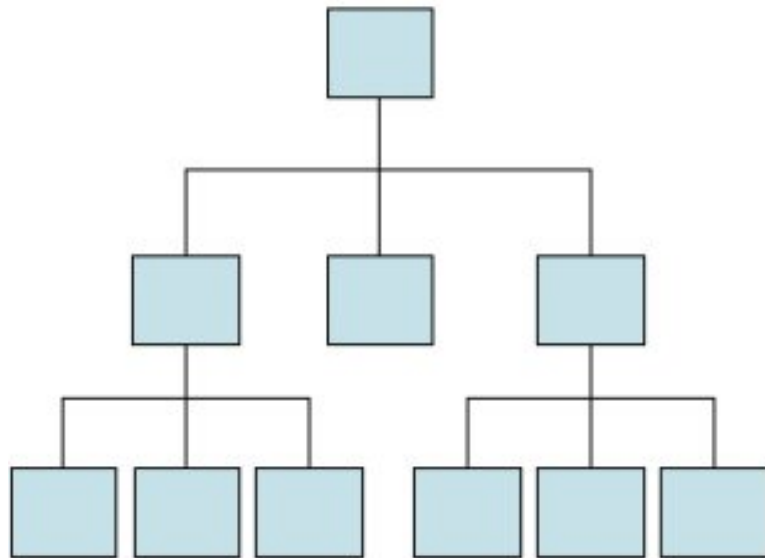
Past performance is not
an indicator of future
outcomes

“Increasingly, there are only two kinds of companies: brave and dead.”

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From economies of scale....



...to economies of distribution

“There will be whole nations that end up on the scrap heap because they don’t understand this stuff”



“Nearly every social
and technical and
business infrastructure
we have can’t survive”



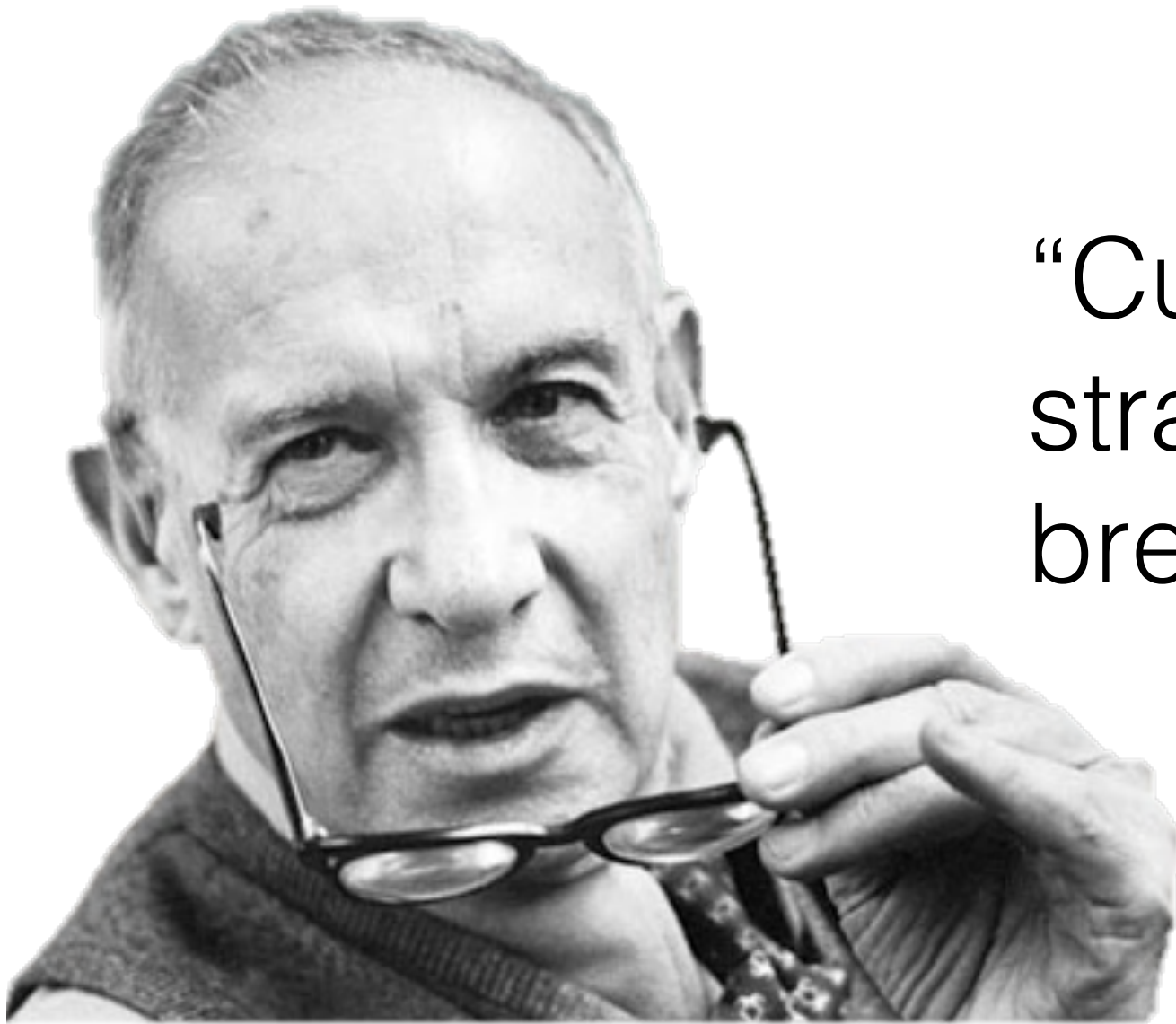
Half of the your clients
won't be in business
in 10 years

Half of the your investments
won't exist
in 10 years

Half of you
won't be in business
in 10 years

Write out 100 times...

We want innovation, no honestly we do....
We want innovation, no honestly we do....
We want innovation, no honestly we do....
We want innovation, no honestly we do....
We want innovation, no honestly we do....
We want innovation, no honestly we do....
We want innovation, no honestly we do....
We want innovation, no honestly we do....
We want innovation, no honestly we do....
We want innovation, no honestly we do....



“Culture eats
strategy for
breakfast”

Epic Fail: How Blockbuster Could Have Owned Netflix

Marc Graser
Senior Editor
@marcgraser



NOVEMBER 12, 2013 | 12:28PM PT

JUSTIN SULLIVAN/GETTY IMAGES

Blockbuster chiefs lacked the vision to see how the industry was shifting under the video rental chain's feet

It will go down as one of the biggest missed opportunities in the boardroom: Blockbuster deciding not to buy Netflix.

Blockbuster's CEO once passed up a chance to buy Netflix for only \$50 million



Celena Chong

Jul. 17, 2015, 8:26 PM 4,718

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People Born Between 1953 & 1979 With N...
(Comparisons.org)
Here's What A Funeral Should Really Cost...
(Experts In Money)

Gamers around the world have been...
(Grepolis - Online Free Game)
Expert Reveals: 5 Honest Dating Sites Tha...
(DatingAdvice)

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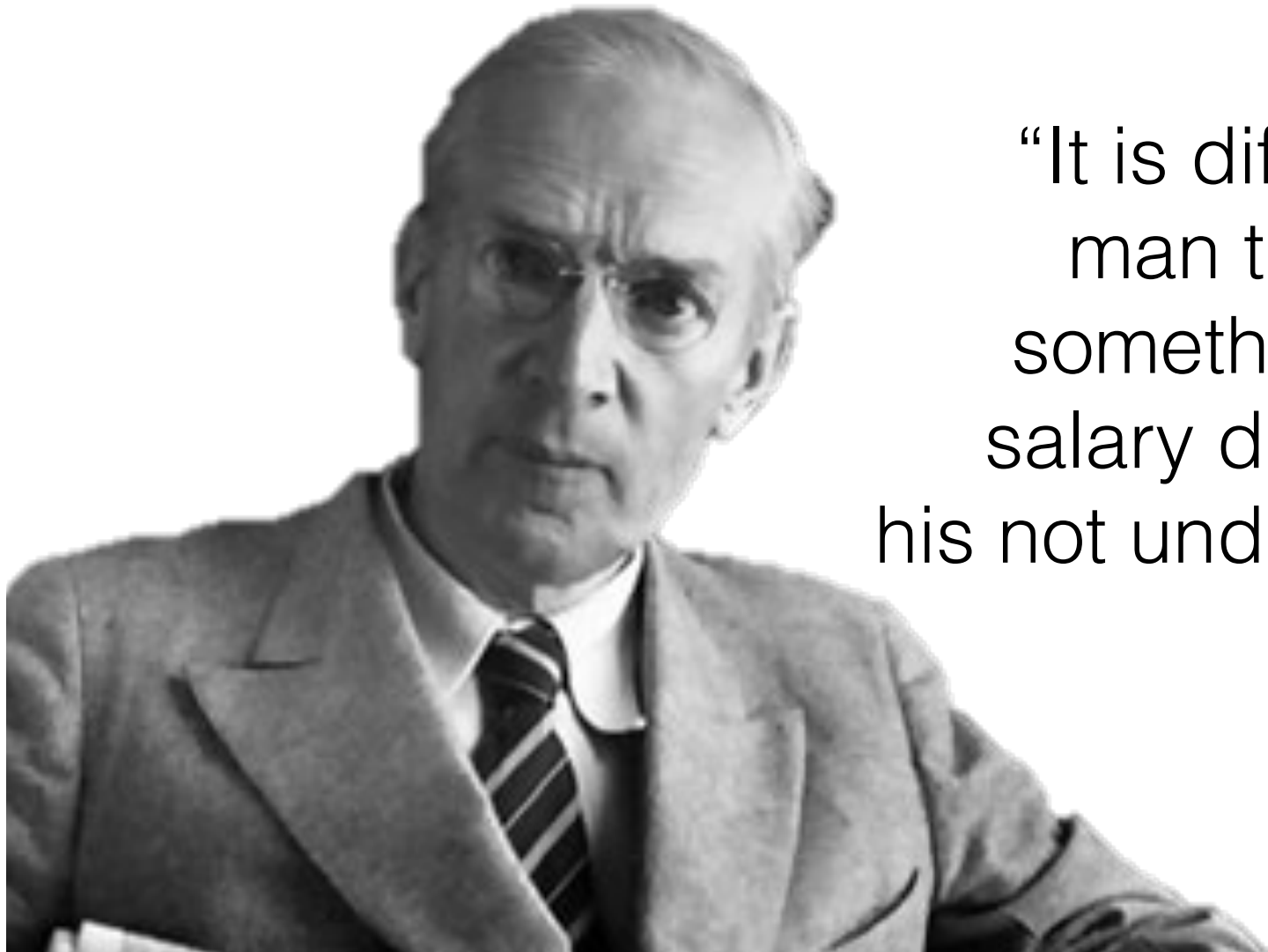
Former Blockbuster workers all over the world must cringe every time they hear the words "online streaming" and "on-demand."

That's because back in 2000, Reed Hastings approached former Blockbuster CEO John Antioco and asked for \$50 million to give away the company he founded — Netflix.

Antioco, thinking that it was a "very small niche business," ended



Former Blockbuster CEO John Antioco Bloomberg



“It is difficult to get a man to understand something, when his salary depends upon his not understanding it”

Technology

digital

ICL

WANG

Entertainment



WOOLWORTHS

Everyone else



ZURICH



PayPalTM

amazon



Instagram

ebayTM

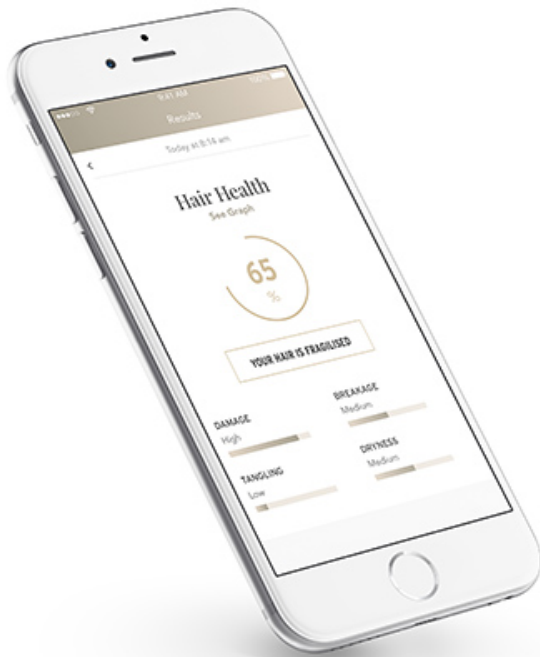


Spotify[®]

skypeTM

Innovation is the culture
of asking the right
questions

KERASTASE HAIR COACH



DISCOVER

Powered by  Withings



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iPhone X

Say hello to the future.



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iPhone X

Overview

iOS

Tech Specs

Models and Pricing



Animoji

The TrueDepth camera analyses more than 50 different muscle movements to mirror your expressions in 12 Animoji. Reveal your inner panda, pig or robot.

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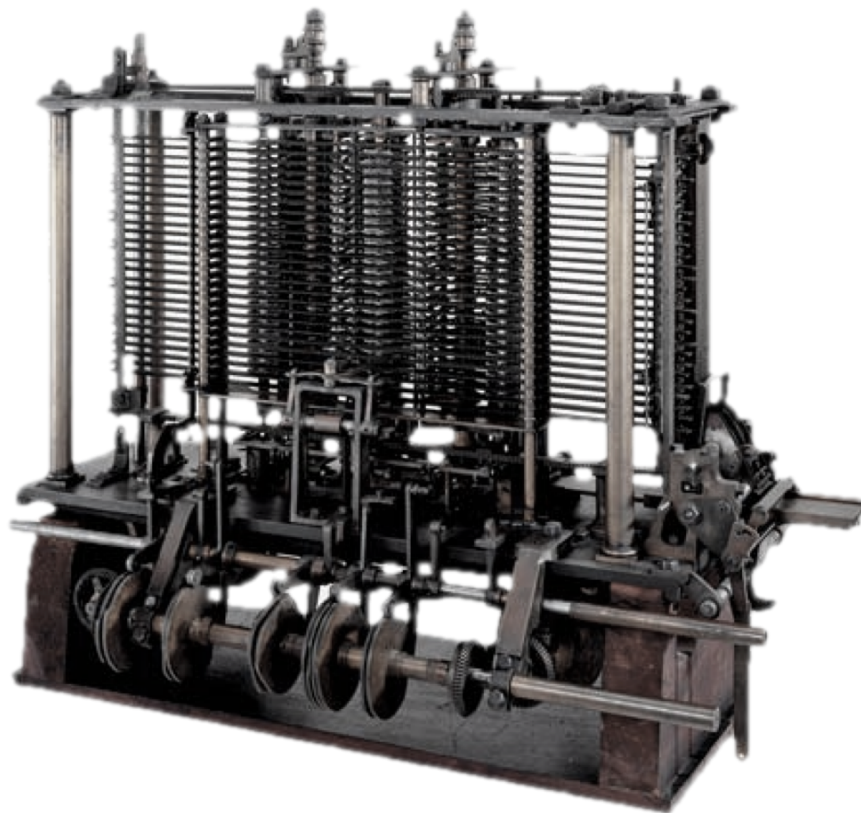


Everything is
broken



Democracy

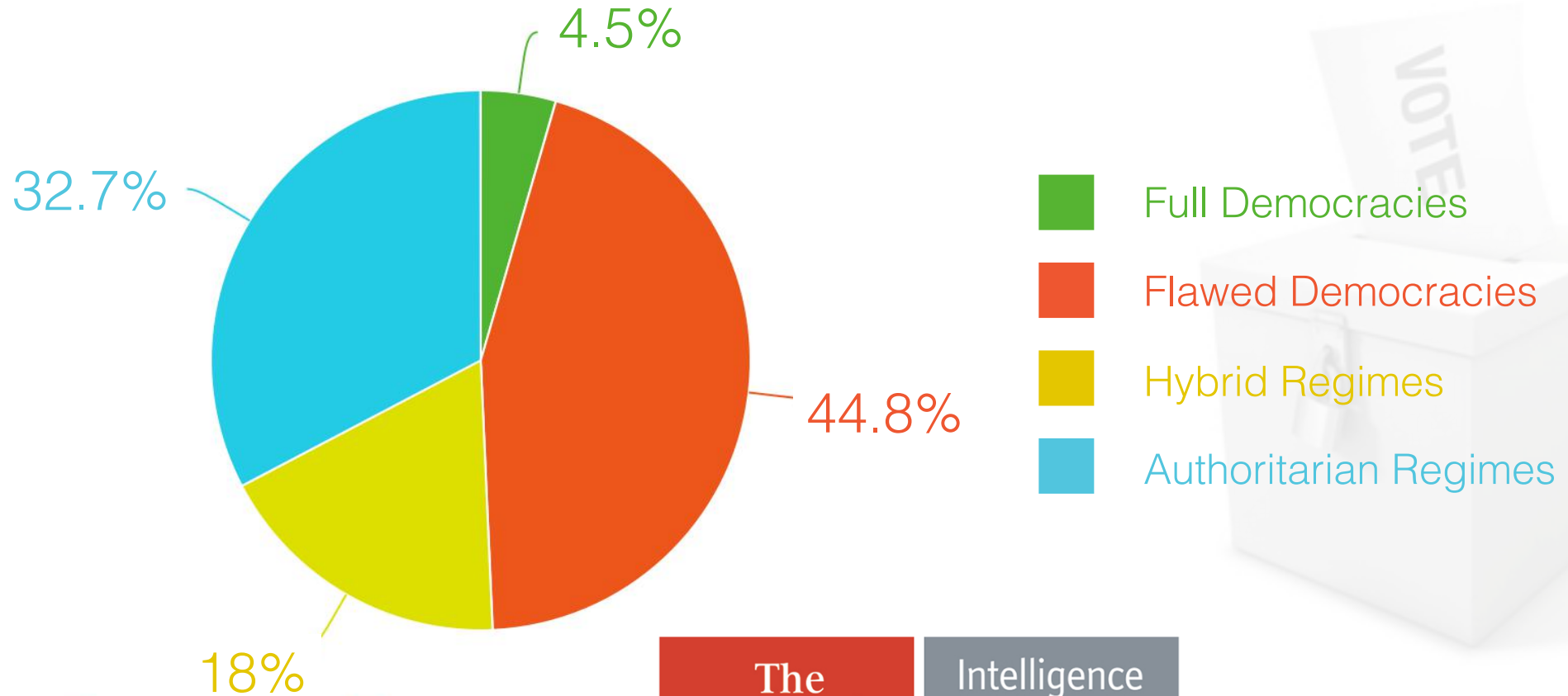




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% world population living under different types of regime



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**The
Economist**

Intelligence
Unit

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**TRANSPARENCY
INTERNATIONAL**

6 billion of us
(79%) live in a
country “with a
serious corruption
problem”.



A total collapse in trust in the institutions that shape society.

Attitudes to institutions no longer defined by left and right, but around those who have “faith in the system” (the well off) and those who don’t (the rest of us)

Democracy (as practised)
is **very bad**
at democratising things

It is not democracy



Media

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A FREE PRESS?

Echo chamber of sexist, racist, homophobic, phone-hacking protectors of the establishment status quo



15,818,965



11,372,076



5,691,767



3,309,100

Accountants



1,243,074



1,198,526



2,102,236



6,395,622

Echo chamber of establishment lefty nerds and catastrophists

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Trust in media plunges
to all time lows



Wealth

3 degrees
Saves lives daily
Salary: £30,000





Ex CEO, HBOS
“Colossal failure”

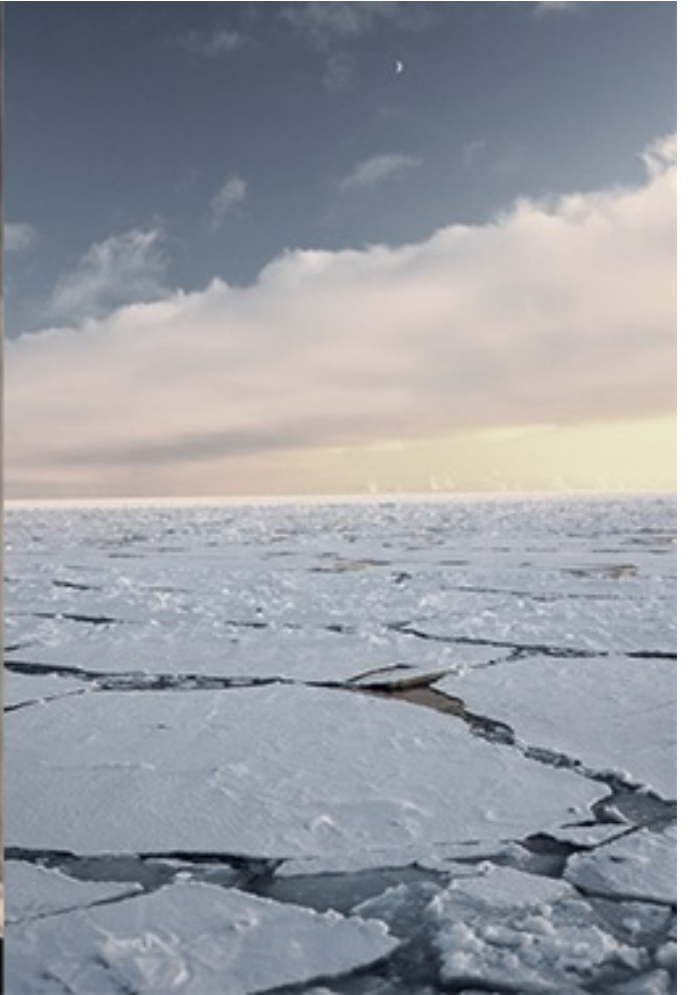
Salary: £2,000,000



1% own 50%



Environment



Stockholm Resilience Centre
Sustainability Science for Biosphere Stewardship



“The environment is
starting to send back
invoices”







NATURAL CAPITAL AT RISK:
THE TOP 100 EXTERNALITIES OF BUSINESS

APRIL 2013





NATURAL CAPITAL AT RISK:
THE TOP 100 EXTERNALITIES OF BUSINESS

APRIL 2013

\$7.3 trillion/ year

(or 13% of global
economic output)

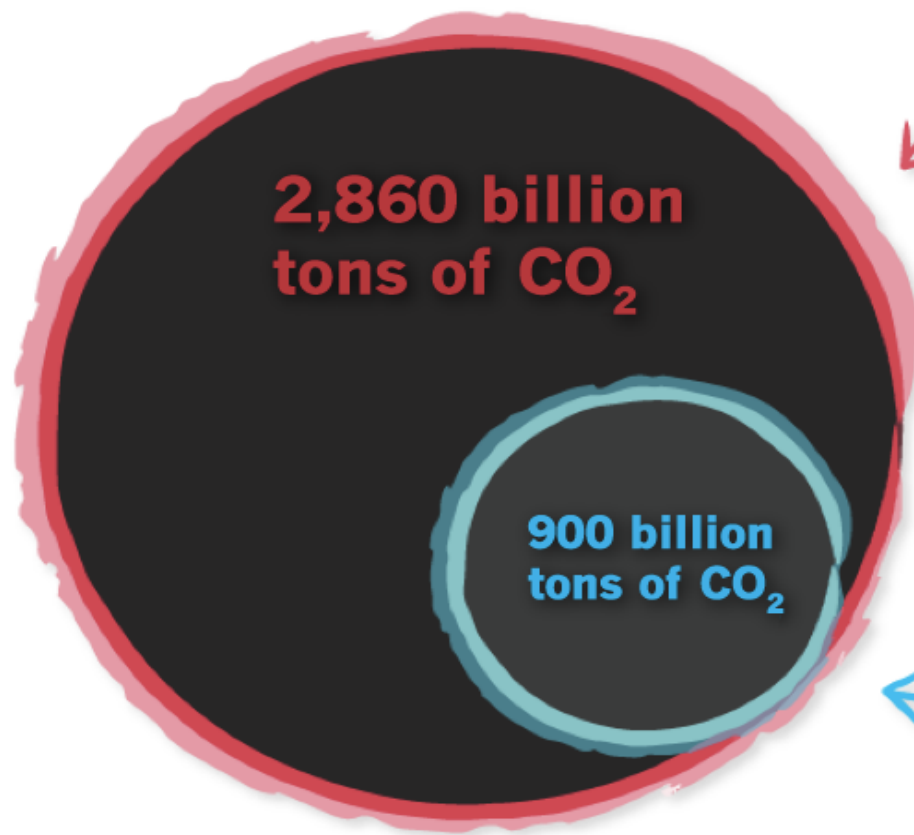


NATURAL CAPITAL AT RISK:

THE TOP 100 EXTERNALITIES OF BUSINESS

APRIL 2013

$\frac{1}{3}$ profits would be lost if firms had to pay for use/ loss and damage

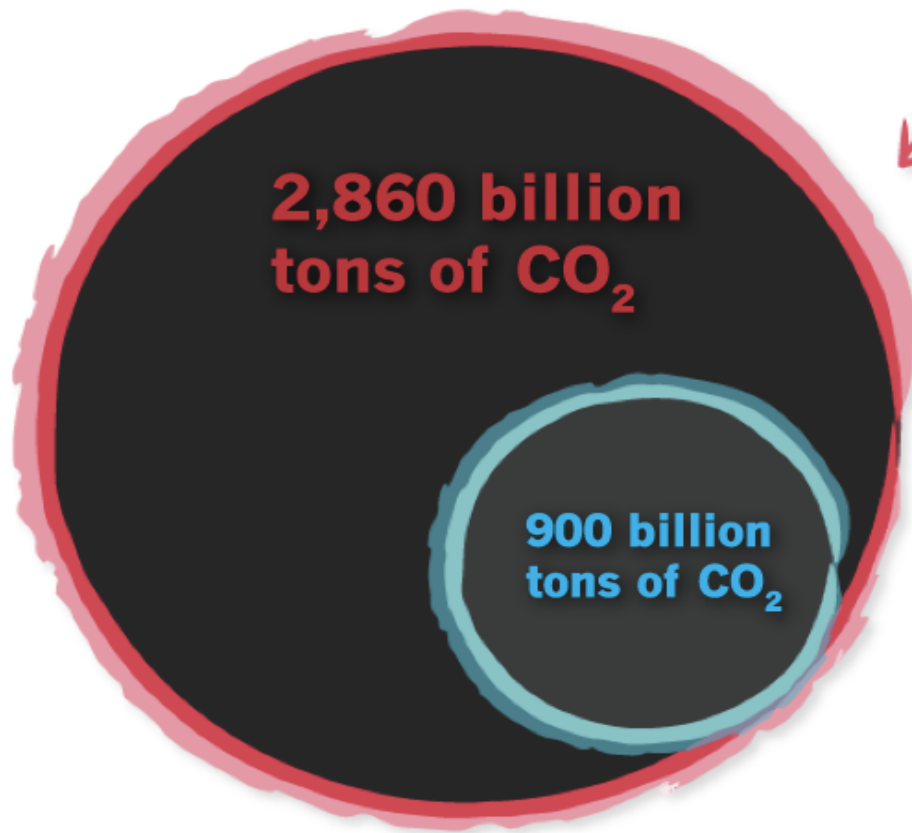


CARBON BUBBLE

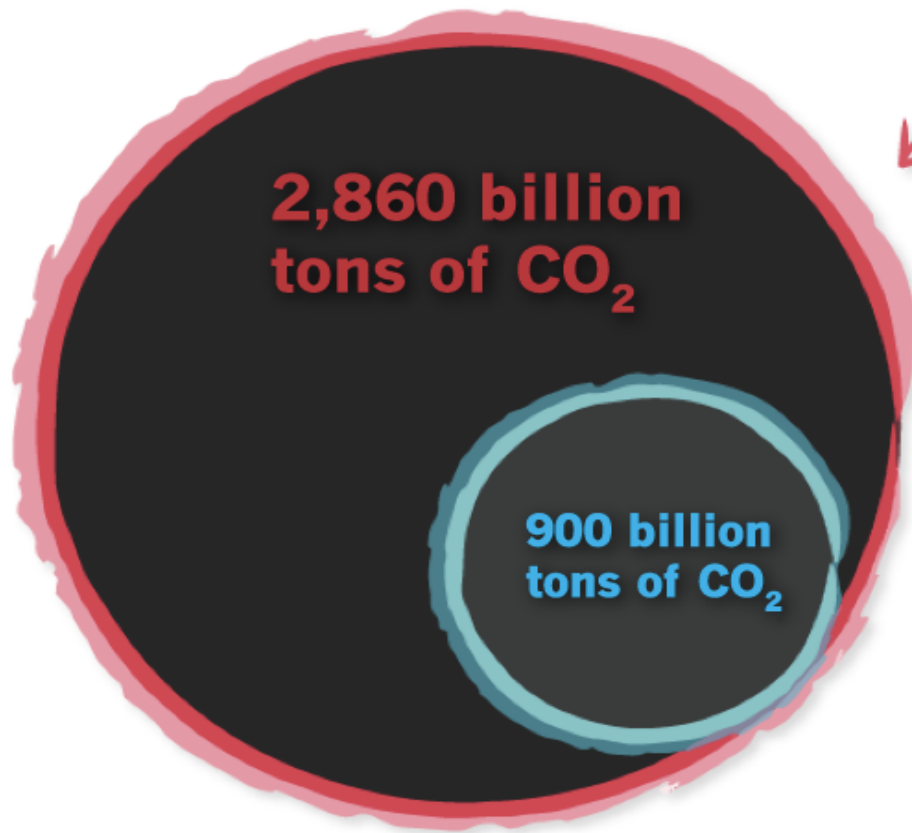
Emissions from burning all known reserves of coal, oil and natural gas.

Remaining carbon budget

This is how much CO₂ can be emitted until 2050 and still give a reasonable chance of staying below 2 degrees Celsius of global warming.



Currently valued at
\$22 trillion

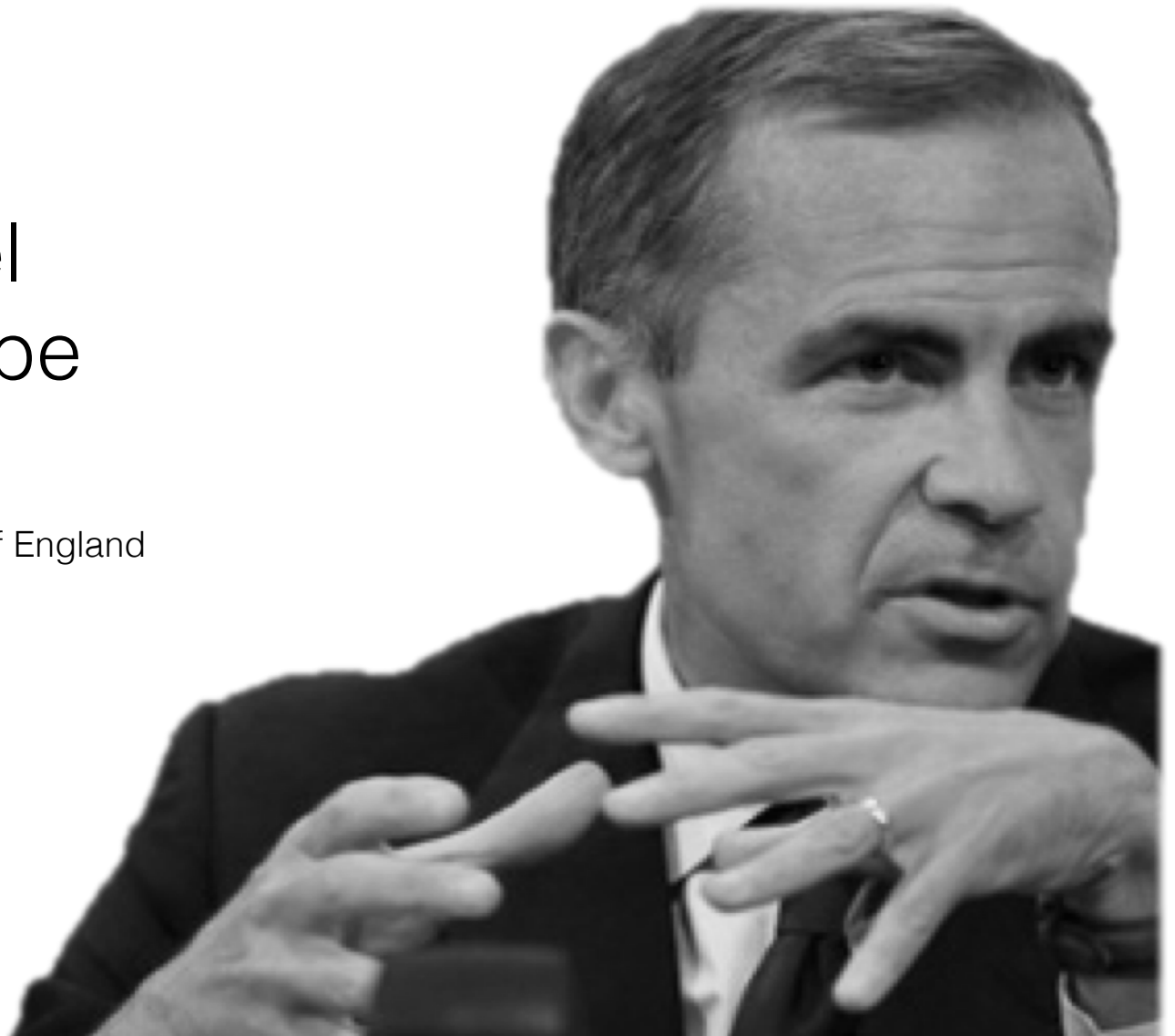


Currently valued at
\$22 trillion

Actually worth: 0

“Most fossil fuel
reserves can’t be
burned”

— Mark Carney Governor, Bank of England



Schroders

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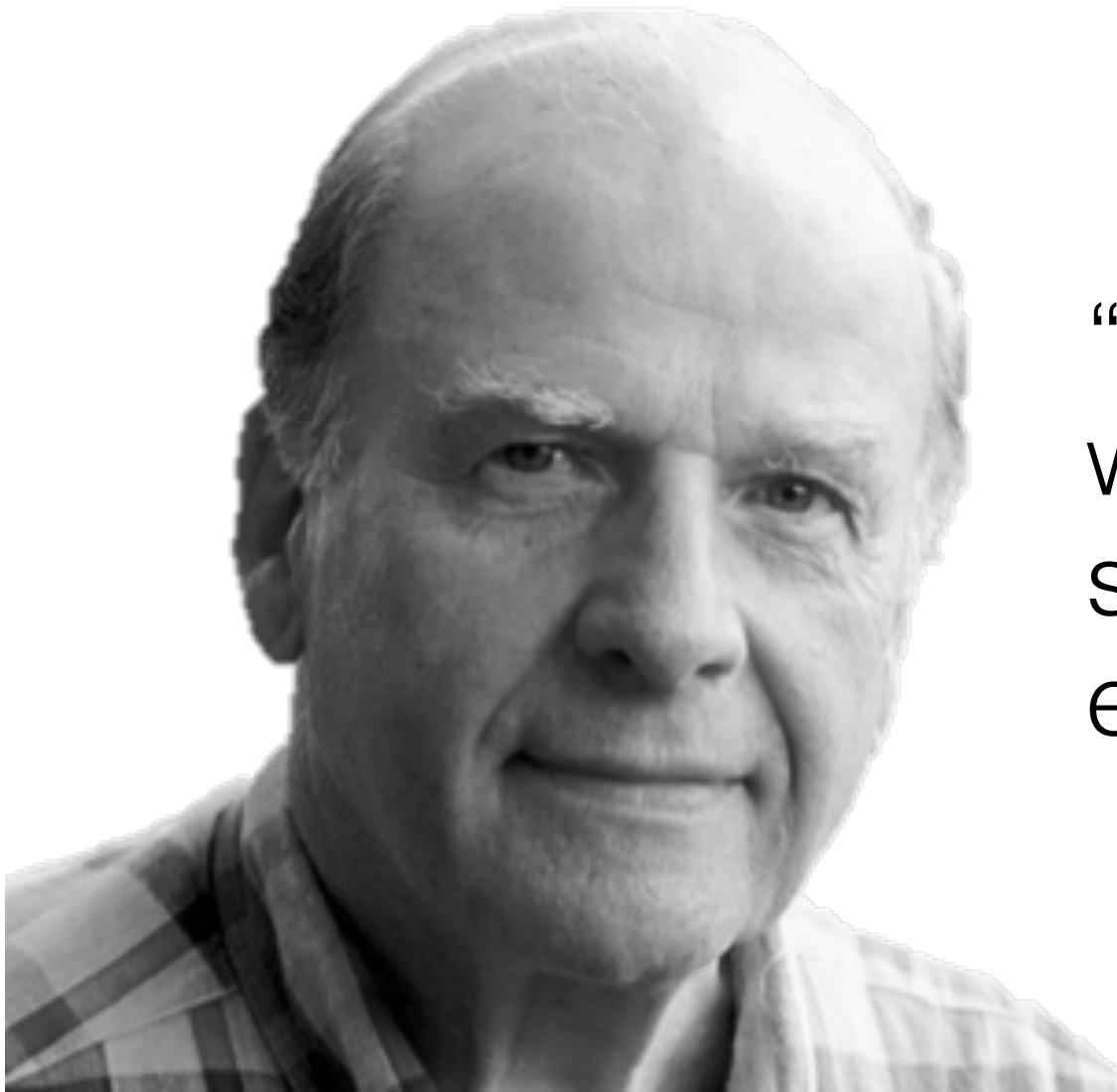
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“The economy is a wholly owned subsidiary of the environment ”

Translation

Any investment that doesn't consider the environment isn't an investment. It is a cost on the future.

...also know as: stealing from your
children

“If your advice prioritises the wealth of your client over the livability of the world in which they can spend it you are a **very, very bad** advisor.”



Work



“13% of employees across 142 countries worldwide are engaged in their jobs.

Actively disengaged workers outnumber engaged employees at a rate of nearly 2-1”



“Yes, the planet got destroyed. But for a beautiful moment in time we created a lot of value for shareholders”



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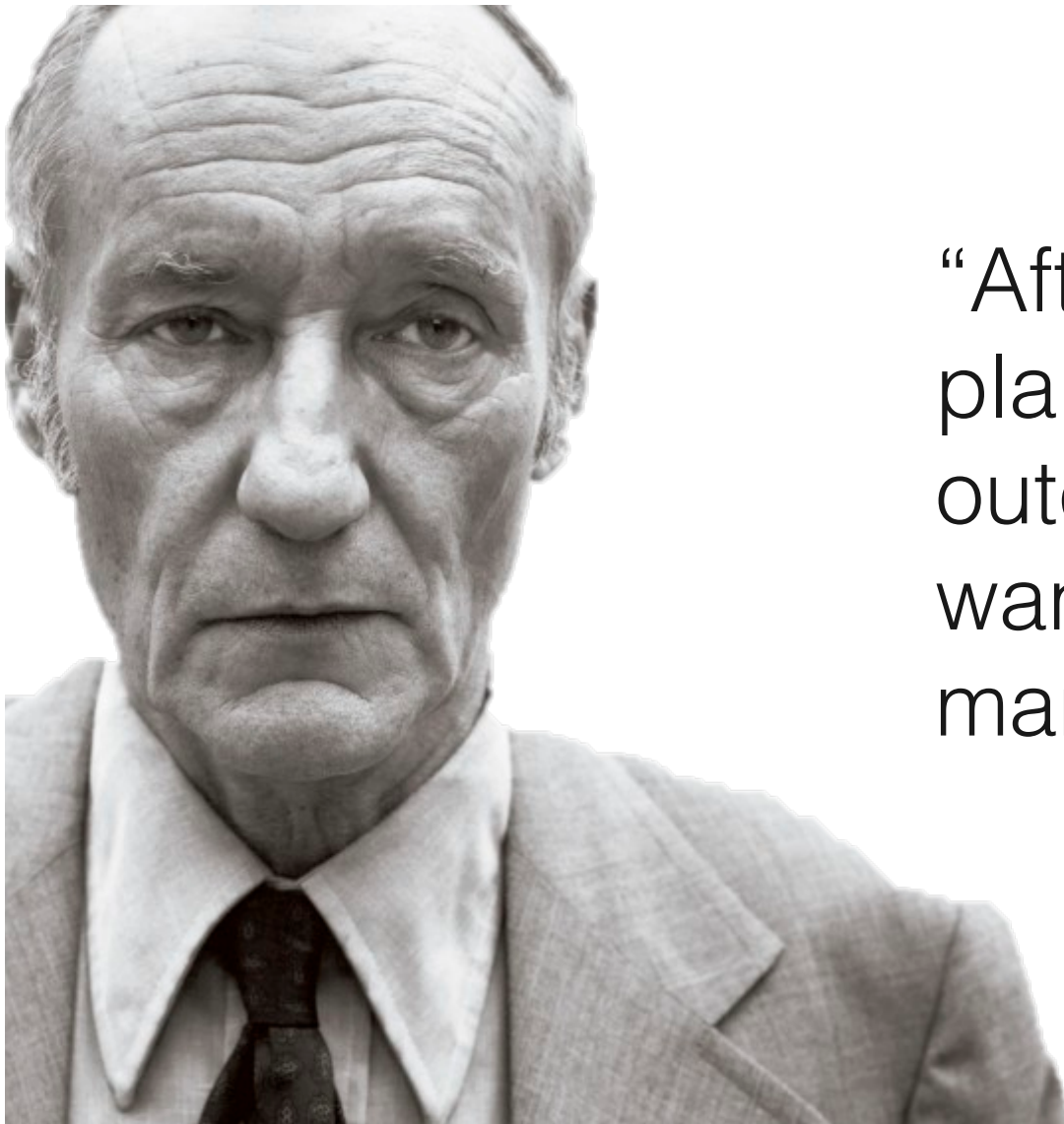


Education

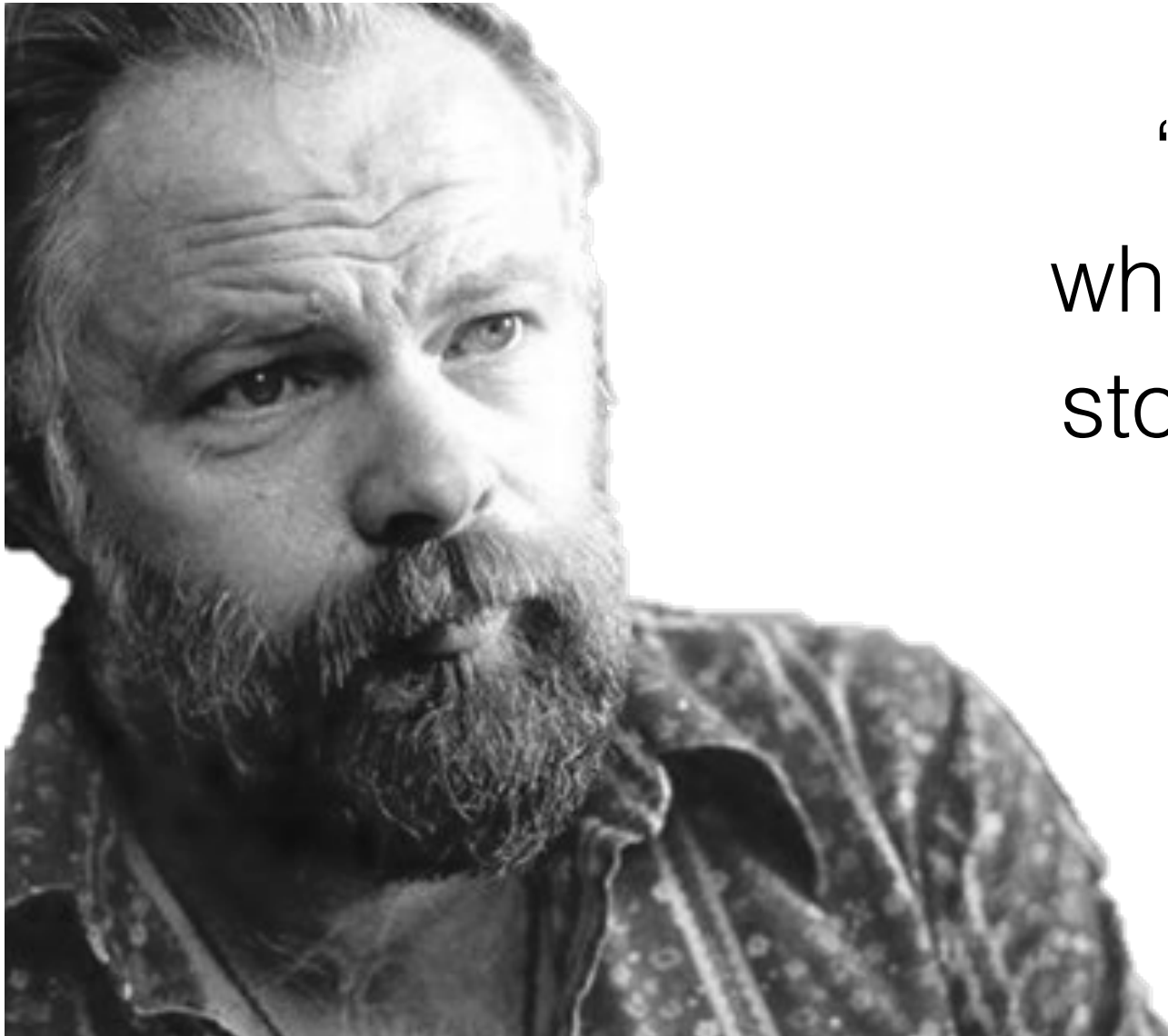


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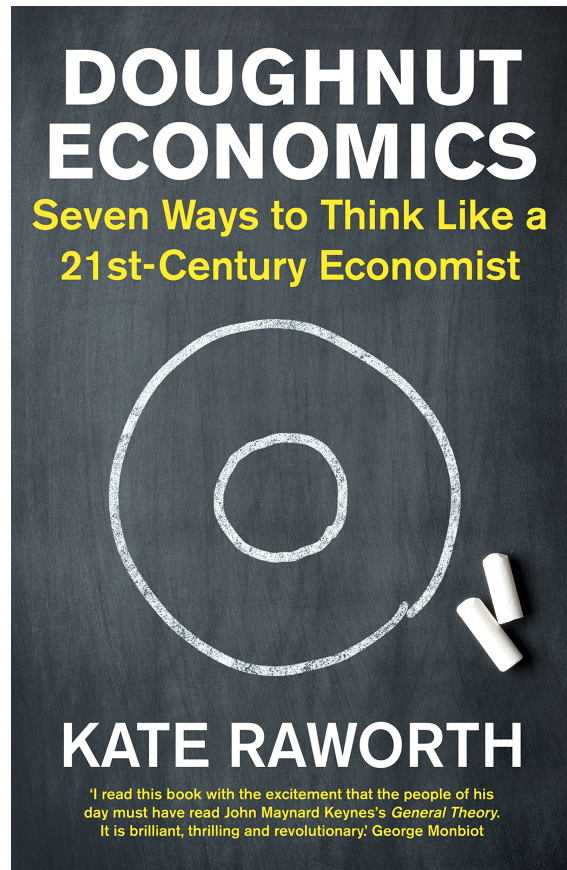
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“After one look at this planet any visitor from outer space would say 'I want to see the manager'.”

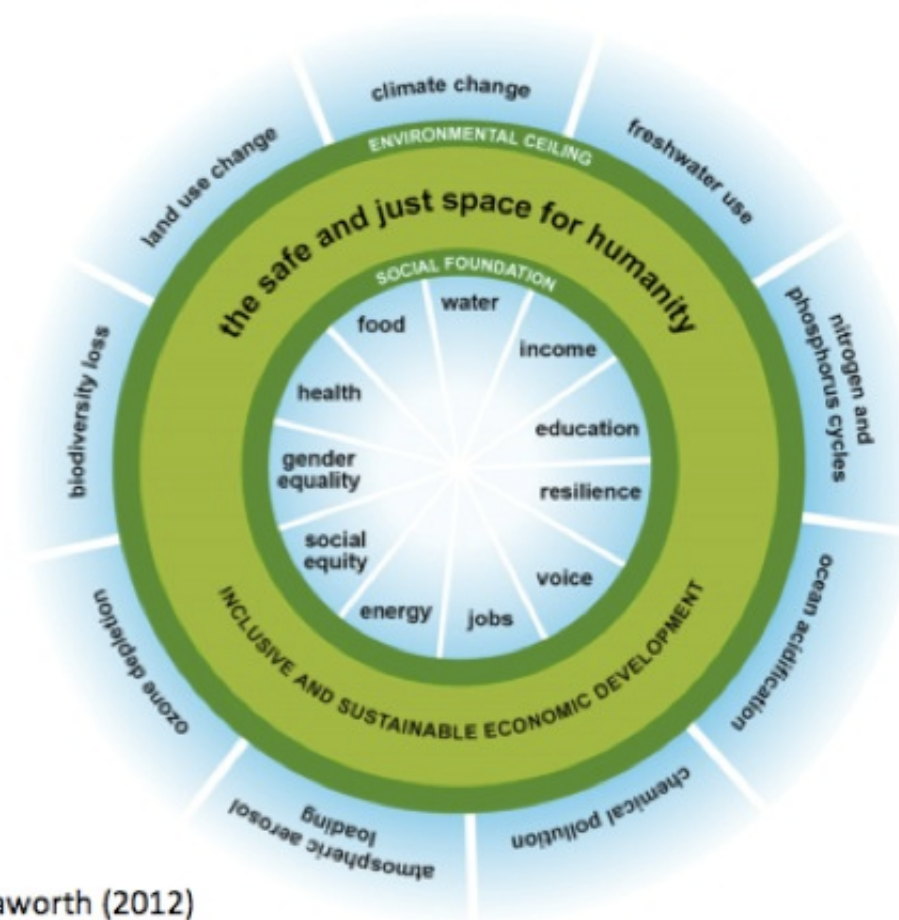


“Reality is that
which, when you
stop believing in
it, doesn’t go
away.”



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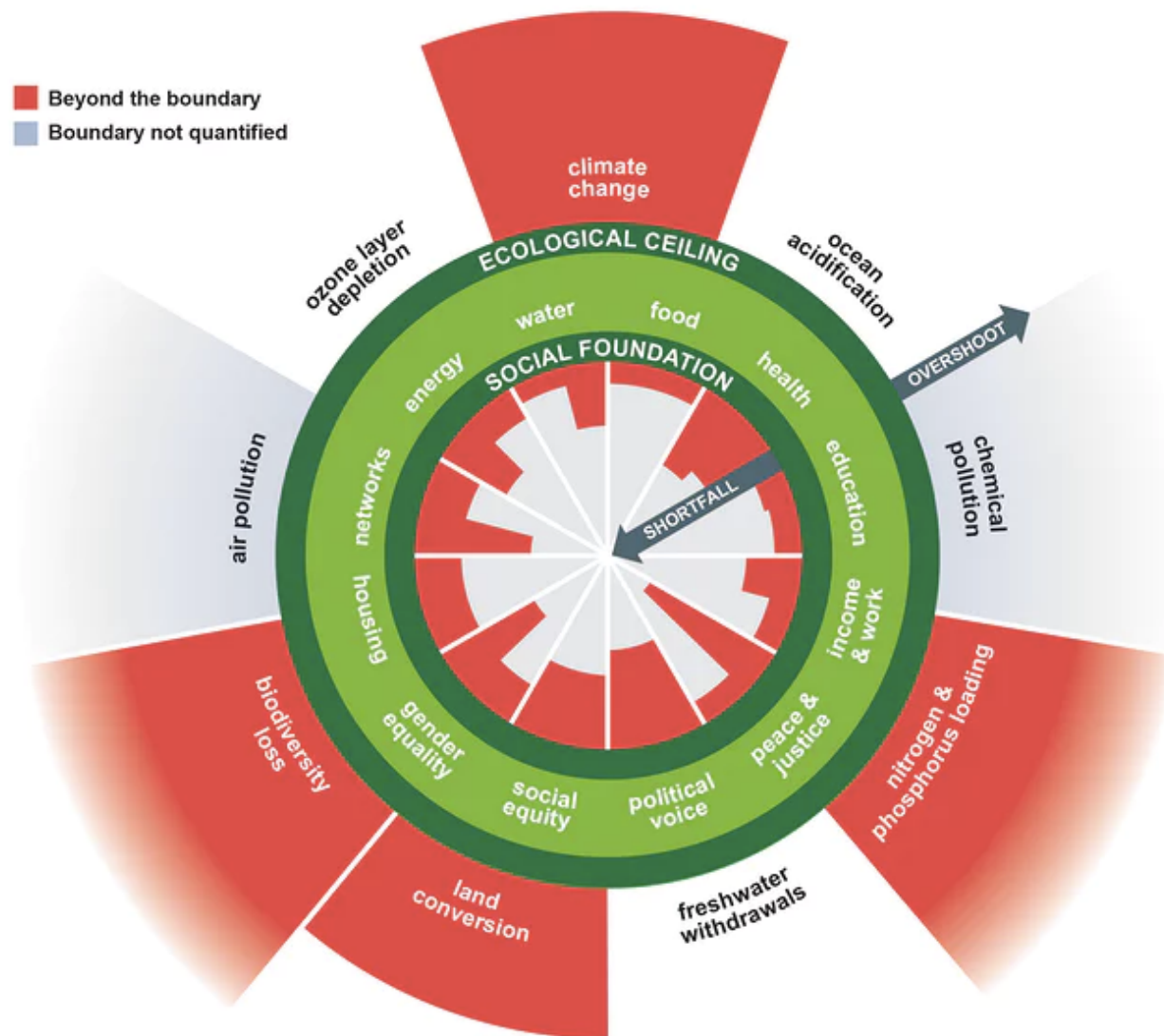




Raworth (2012)

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Translation?

Invest in companies that
understand the reality and are
doing something about it



High Sustainability companies significantly outperform their counterparts over the long-term, both in terms of stock market as well as accounting performance.





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BLACKROCK

To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society.

Companies that aim to maximise good
citizenship over short-term profits will
prosper

Taking the future
seriously will cost some
people their jobs

Not taking the future
seriously will cost
everyone their jobs

The image is a vertical split-screen comparison. The left half, labeled 'Brave', shows a vibrant, futuristic cityscape with sleek, metallic skyscrapers and a modern, elevated transit system. The right half, labeled 'Dead', shows the same city in a state of complete ruin, with buildings reduced to rubble and smoke rising from the ground. The sun is visible on the right side, creating a dramatic silhouette effect.

Brave

Dead

@optimistontour

“If you want to subvert
the status quo you
need to have more fun
than they are and let
them know while you’re
doing it”





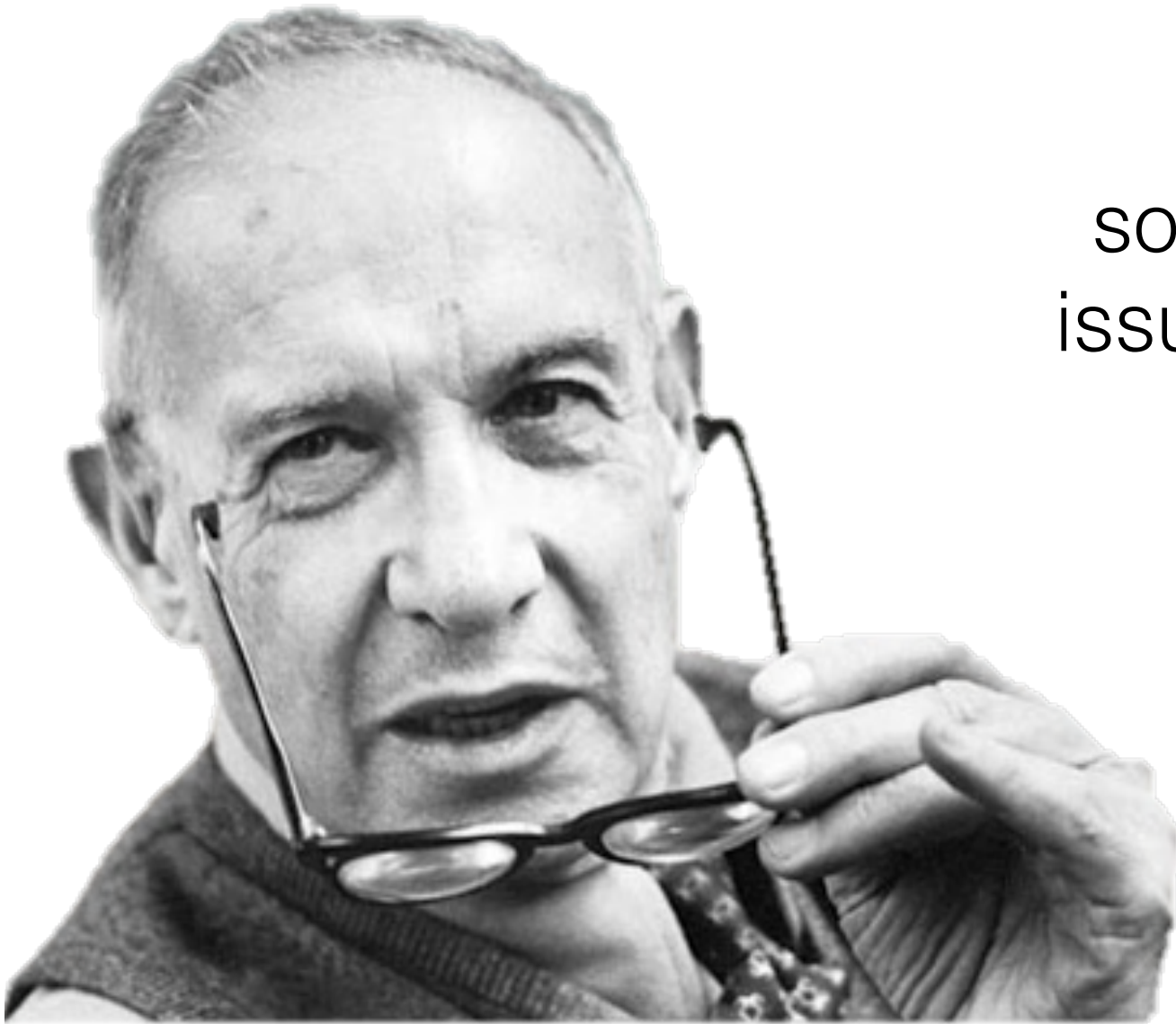
“A great wind is blowing and that gives you either imagination or a headache.”

NOT
ALL
SUPERHEROES
WEAR
CAPES



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“Every single
social and global
issue of our day is
a business
opportunity in
disguise.”



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Atlas of the Future

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