

Warum und wie die
Zukunft **besser** ist
als wir denken!

HARBOURCLUB

THE GOOD FUTURE

Gerd Leonhard
Futurist & Humanist



@gleonhard



gerdtube.com



futuristgerd.com



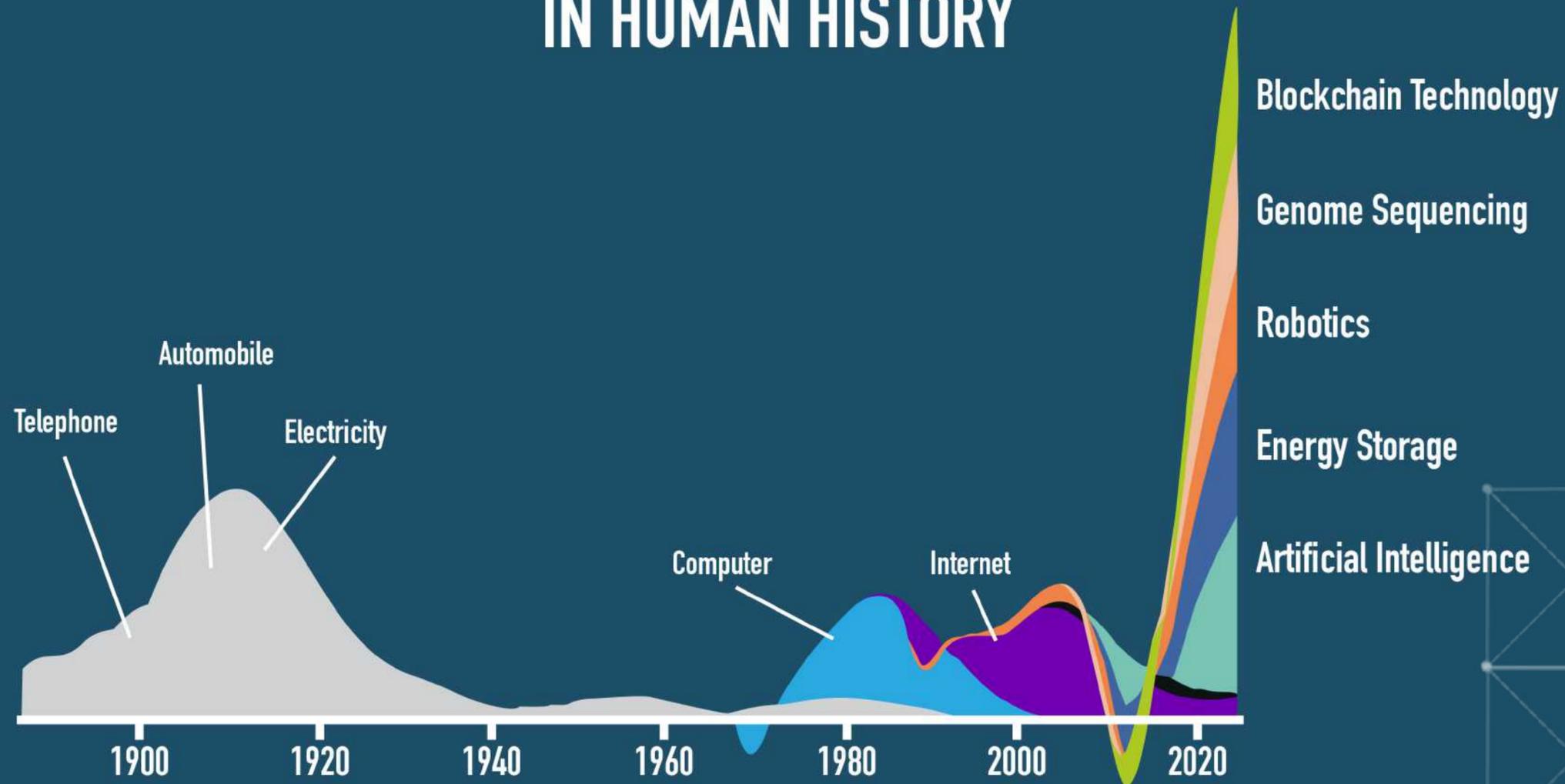
thegoodfuturefilm.com

THE GOOD FUTURE

THE GOOD FUTURE



THE LARGEST TECHNOLOGICAL TRANSFORMATION IN HUMAN HISTORY



Source: ARK Investment Management

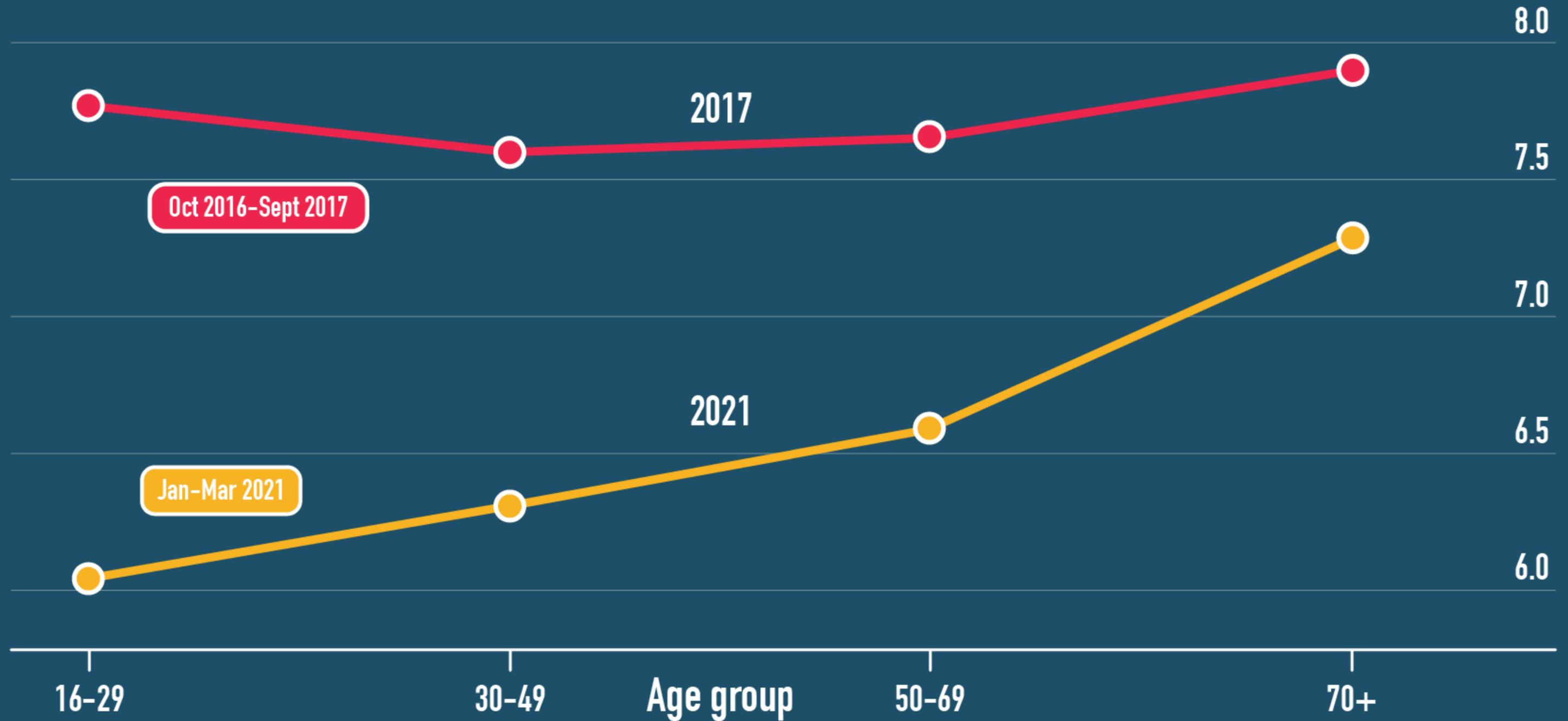
THE FUTURE IS BETTER
THAN YOU THINK



WHEN YOU'RE HAPPY AND YOU KNOW IT

"HOW SATISFIED ARE YOU WITH YOUR LIFE NOWADAYS?"

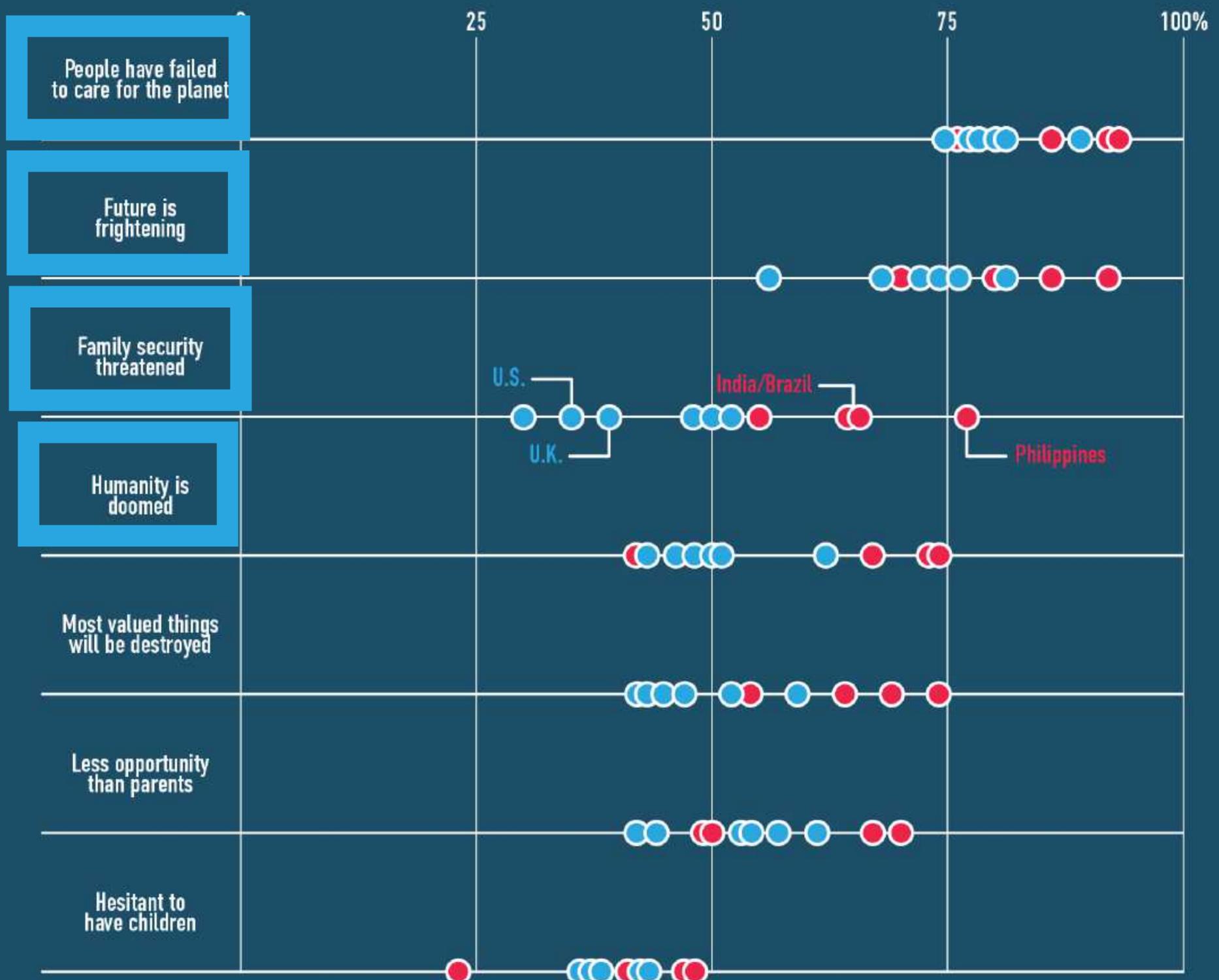
Britain, 10=completely satisfied



THE CLIMATE-CHANGE ANXIETIES FELT BY PEOPLE AGE 16-25

SHARE OF RESPONDENTS WHO ANSWERED IN THE AFFIRMATIVE

● Global north countries ● Global south countries



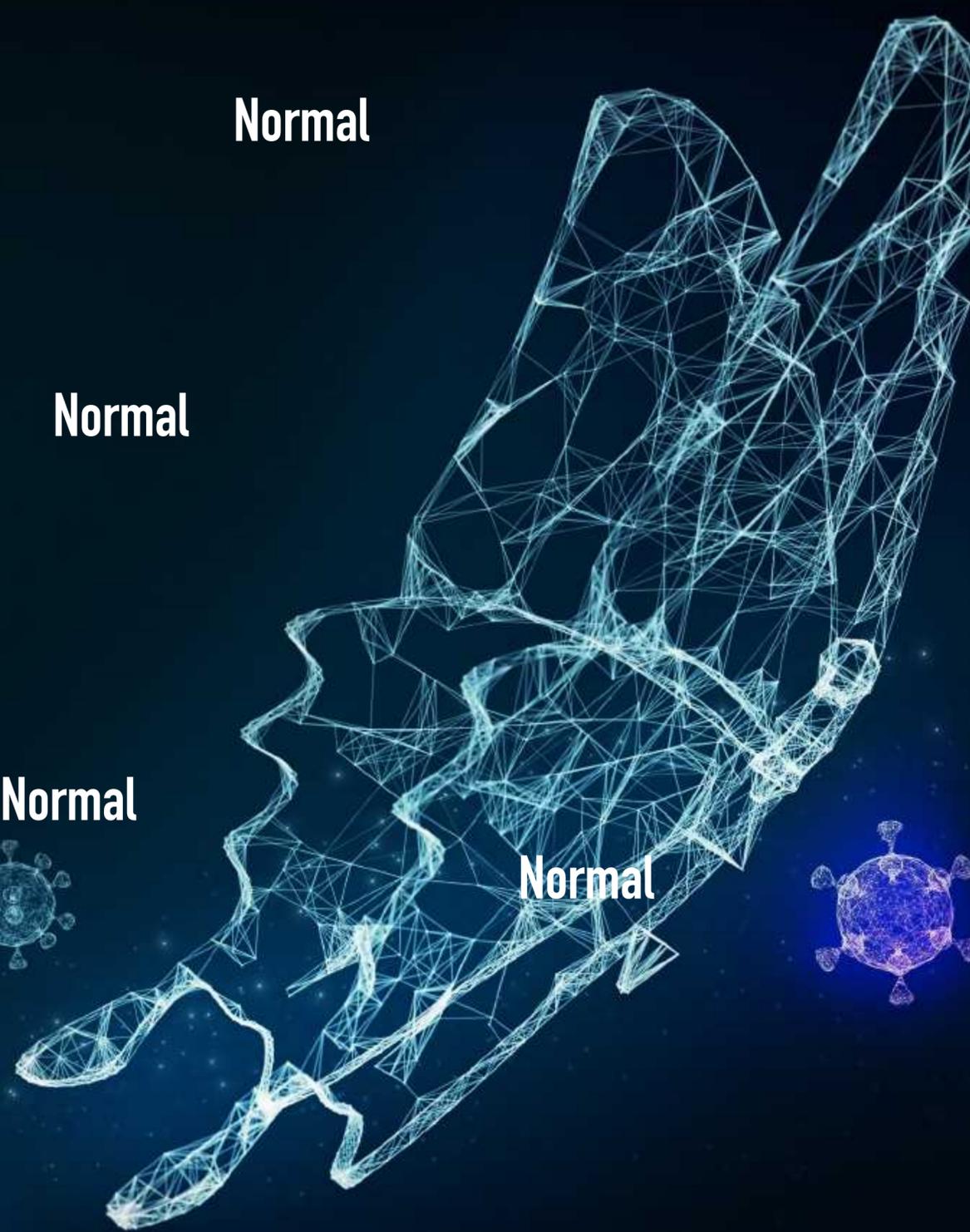
Source: Lancet Planetary Health



KRISE ~~NORMAL~~ KATALYSATOR



Normal



NEW ECONOMIC
LOGIC

CLIMATE
CHANGE

COVID-19





30 LINEAR steps will take you
30 meters from the starting point

30 EXPONENTIAL steps will take you
26 trips around the world!





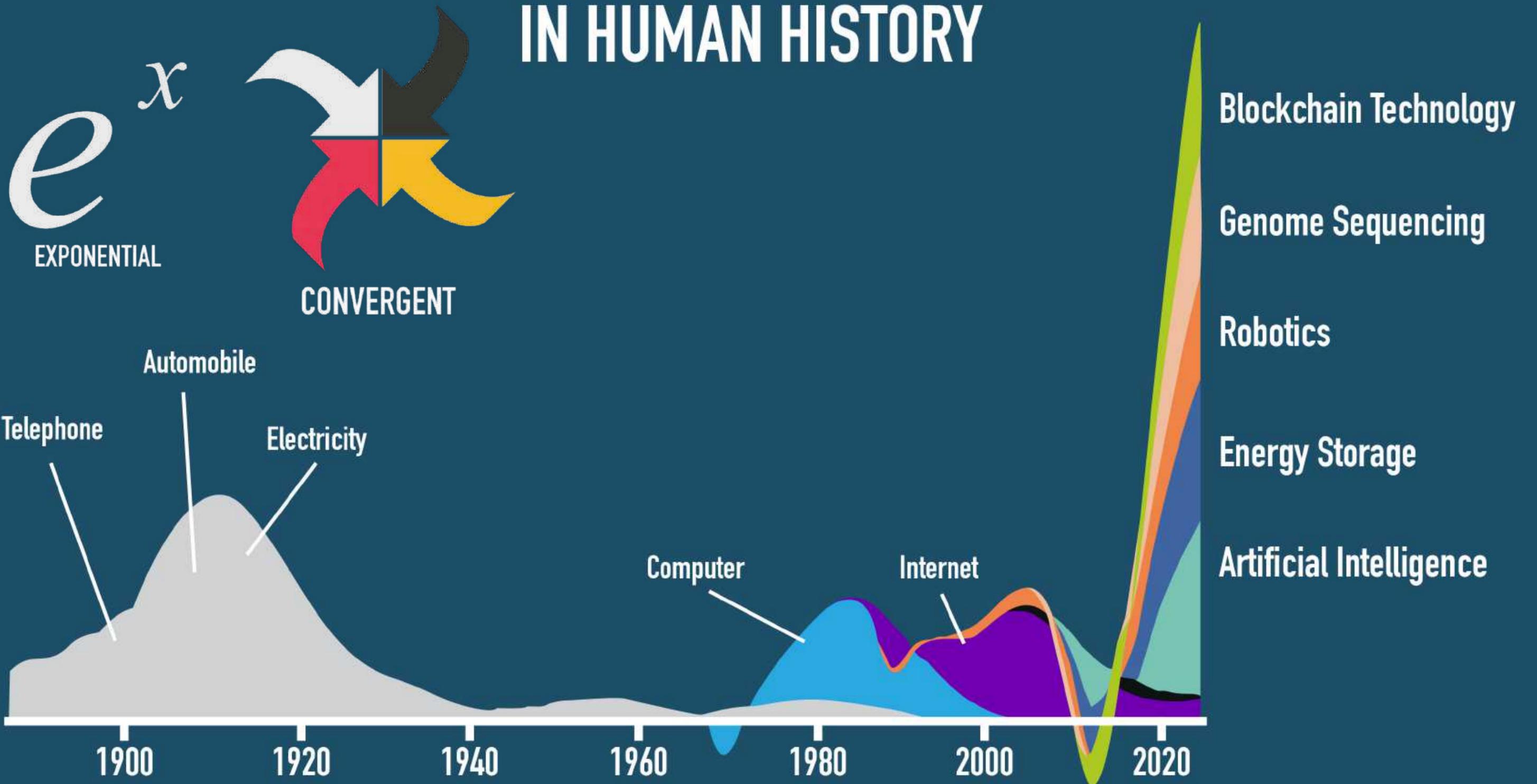
Amazon Astro via Youtube

SCIENCE FACT



where users can hold meetings
as **avatars** of themselves

THE LARGEST TECHNOLOGICAL TRANSFORMATION IN HUMAN HISTORY



EXPONENTIAL COST REDUCTION TREND

e^x
EXPONENTIAL



- Solar PV
- Data Storage
- LED
- Genome Editing
- Computing Performance
- Genome Sequencing
- Batteries

THEN

- \$5.27/watt
- \$16.5/GB
- \$68/bulb
- \$1.183/kWh
- \$1,000/Design
- \$1,503/gflop
- \$95m/genome



NOW

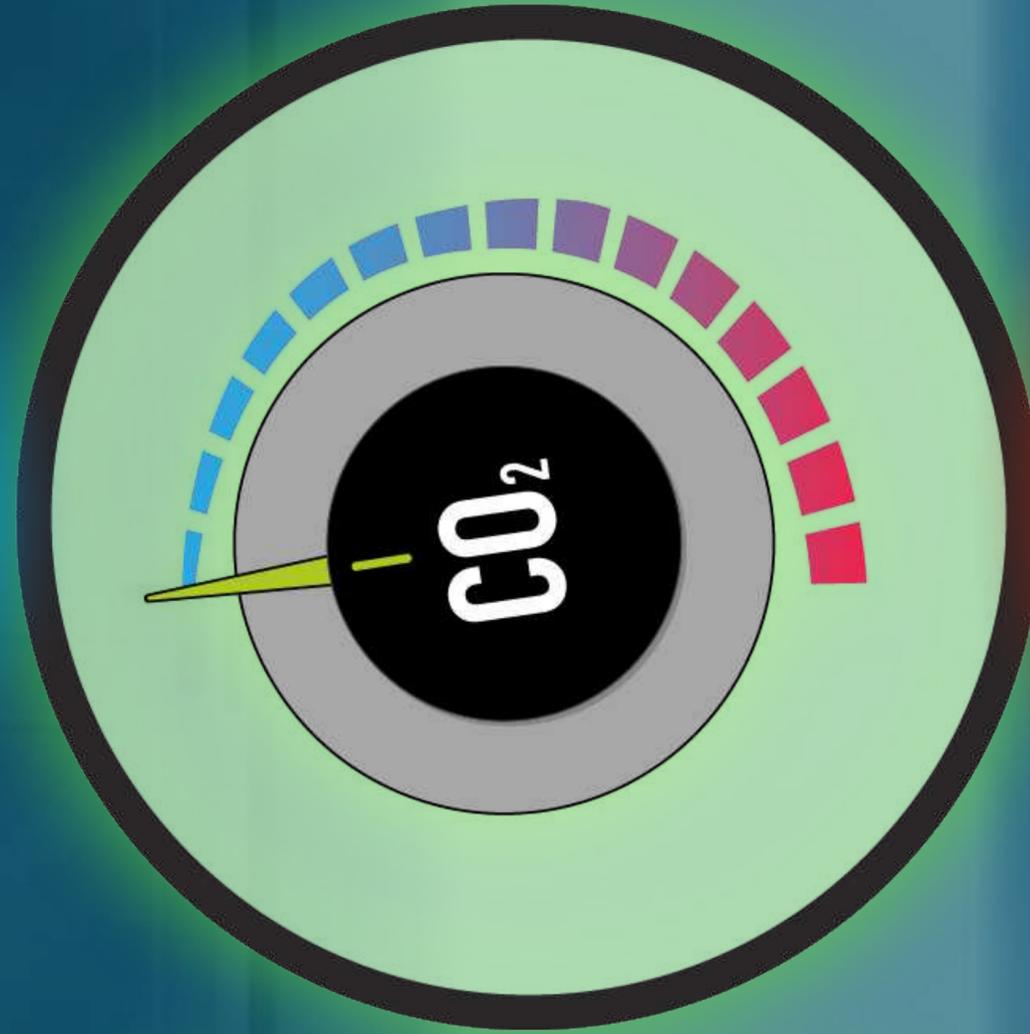
- \$65/Design
- \$137/kWh
- \$2/bulb
- \$0.23/watt
- \$700/genome
- \$0.03/gflop
- \$0.023/GB

Source: Balance Point Ventures

3 Tickets zur 'Guten Zukunft'



DIGITIZATION



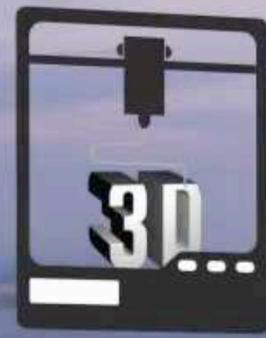
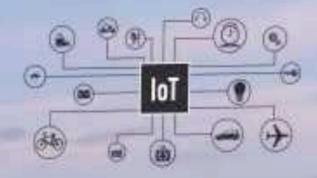
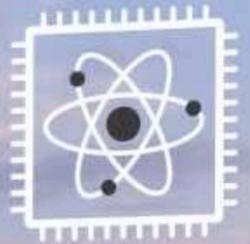
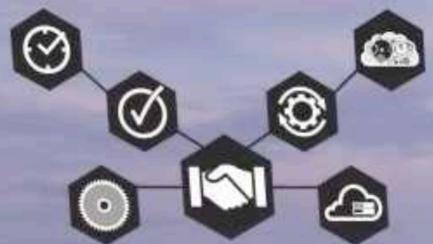
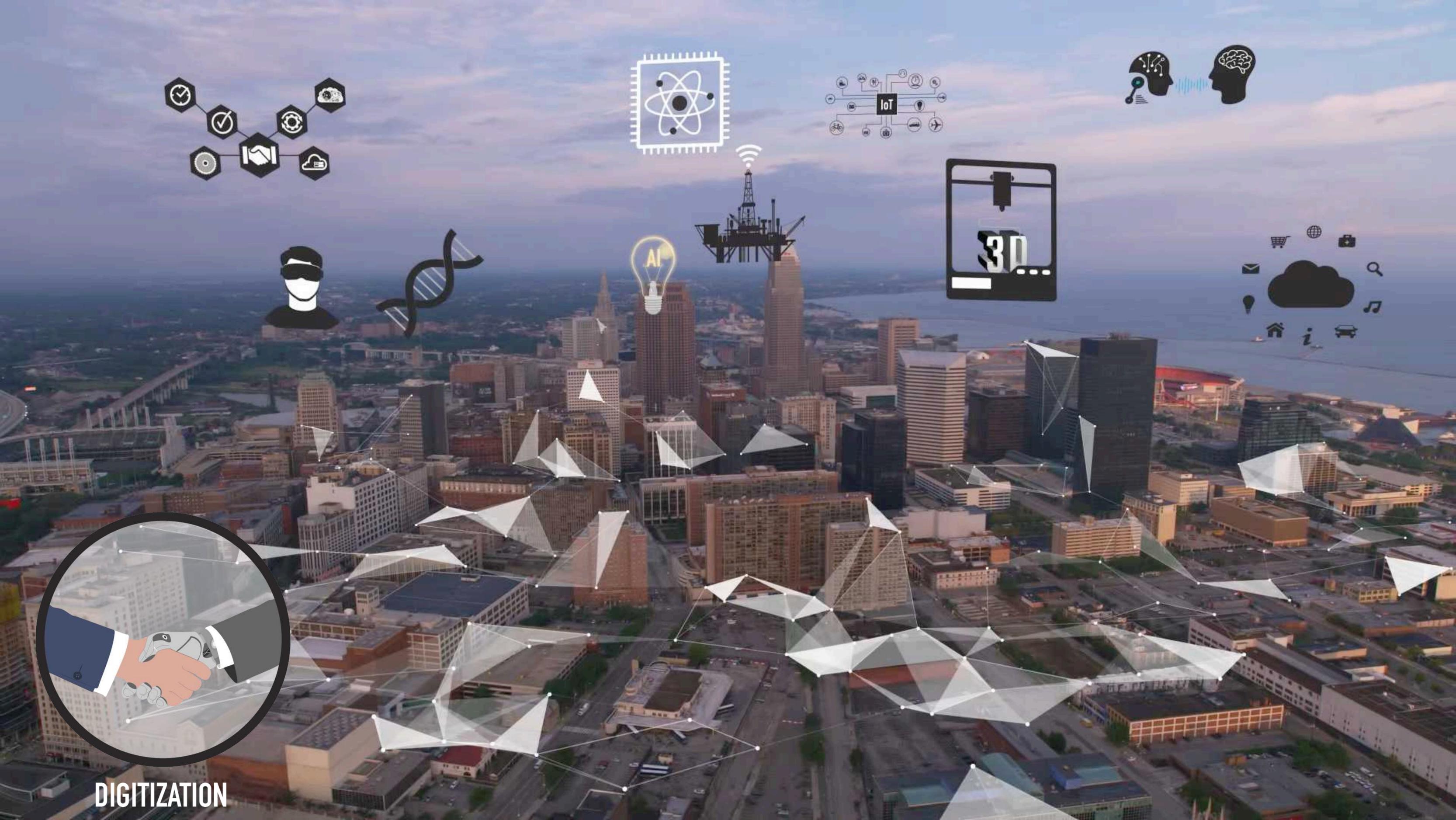
DECARBONIZATION



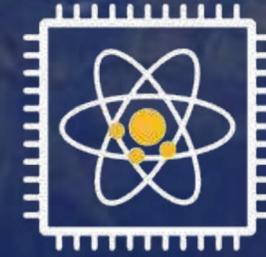
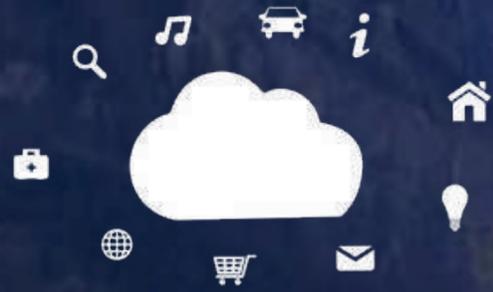
REFORMATION



Digitisation



DIGITIZATION

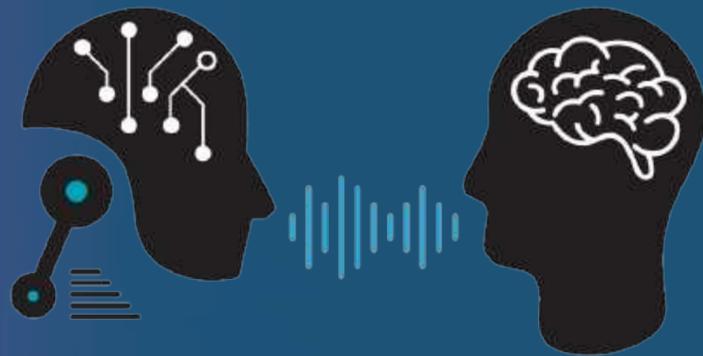




Artificial Intelligence is the
NEW ELECTRICITY

Data (+Cloud + IoT): the **NEW OIL**

*but also the new PLUTONIUM



Voice Control is the new
INTERFACE

Virtual Reality (AR, MR) is the new
SENSES

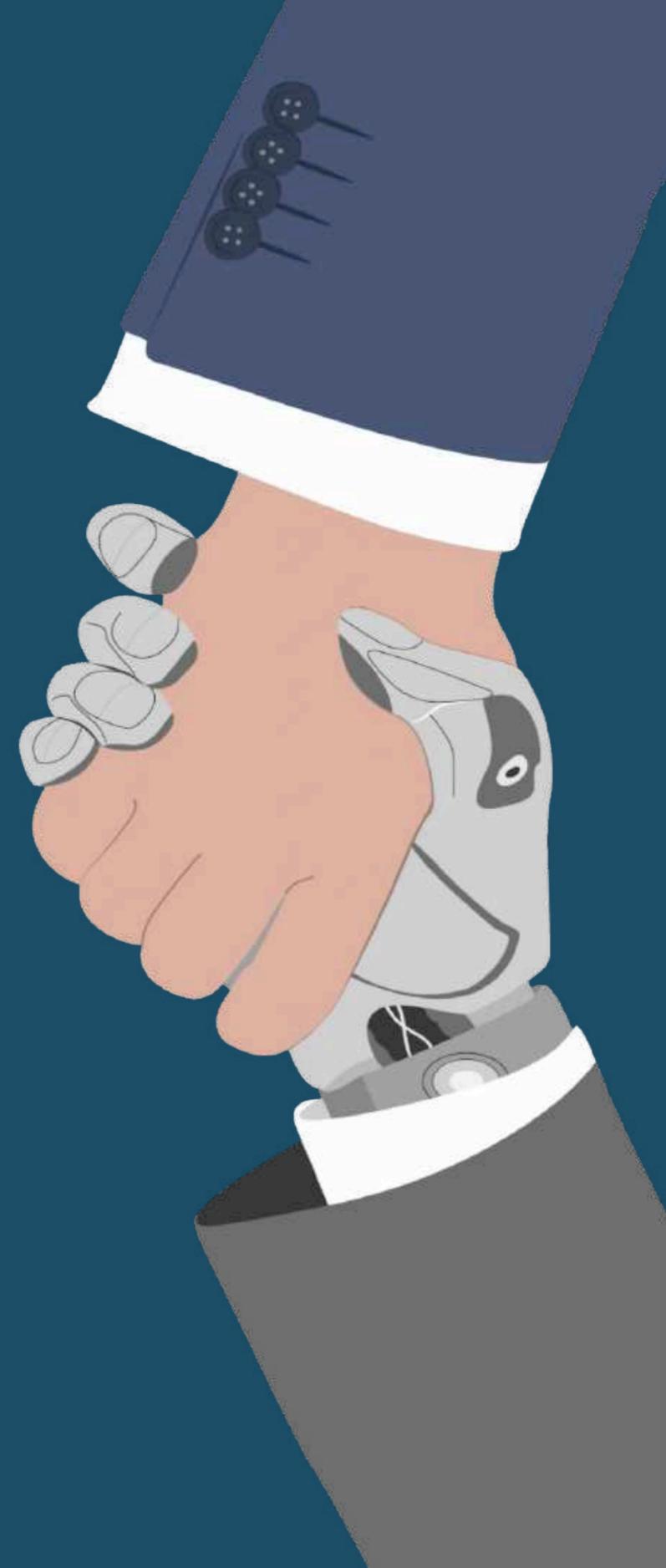
Blockchain is the new

PAY / Transact

Digital Transformation

Societal Transformation

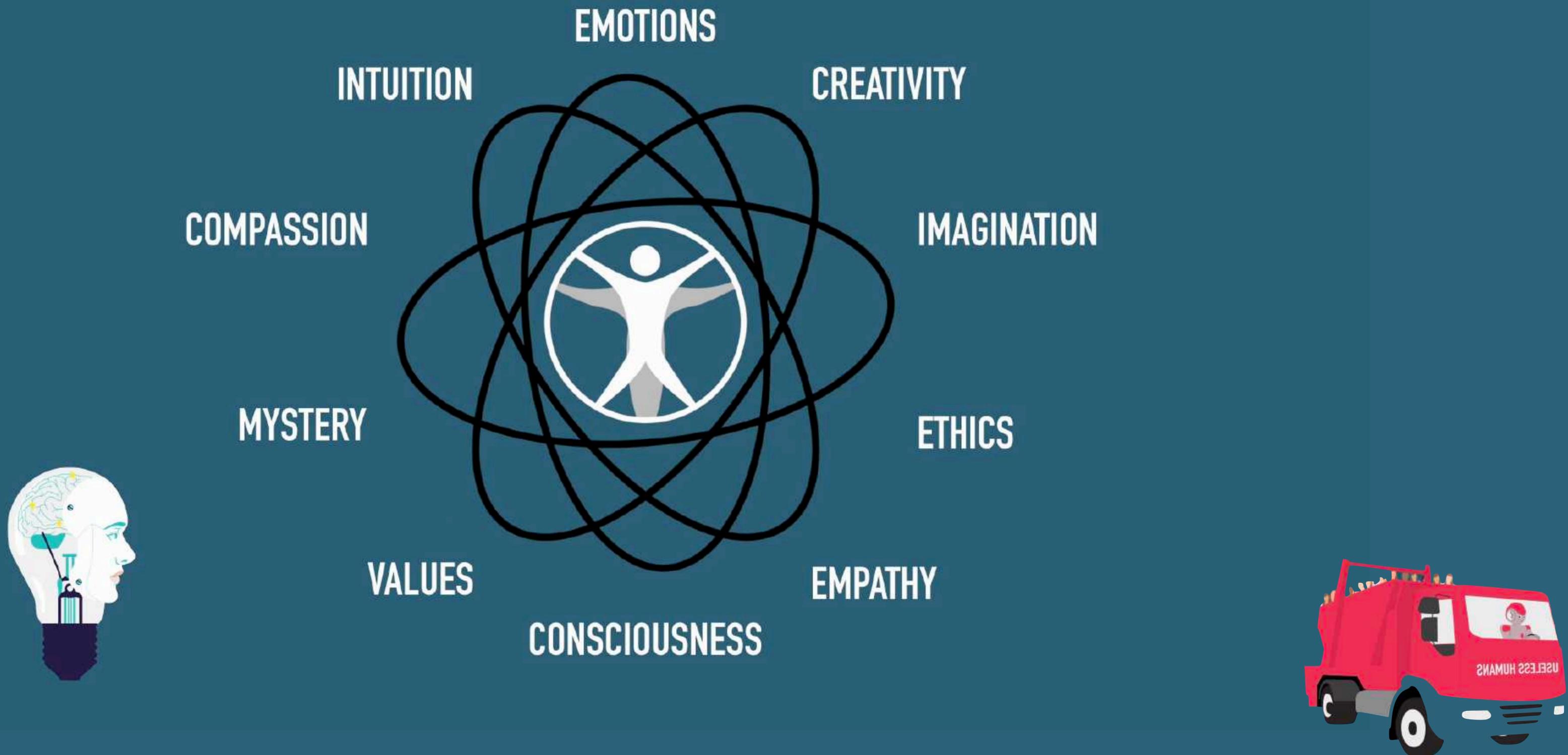
**HUMAN
TRANSFORMATION**



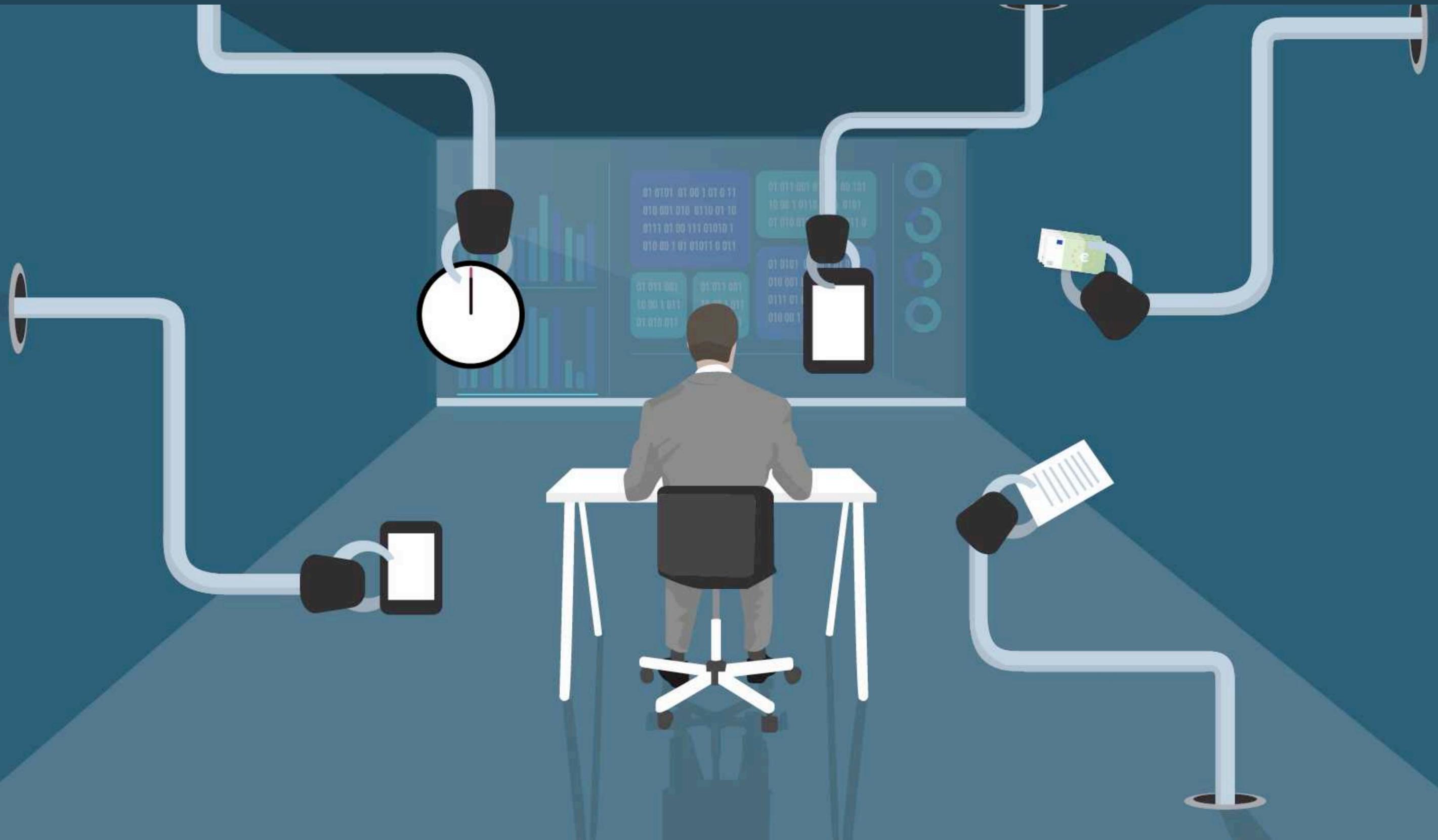
Anything that can be digitized or automated, will be...



But anything that **cannot** be digitized or automated will become much more valuable



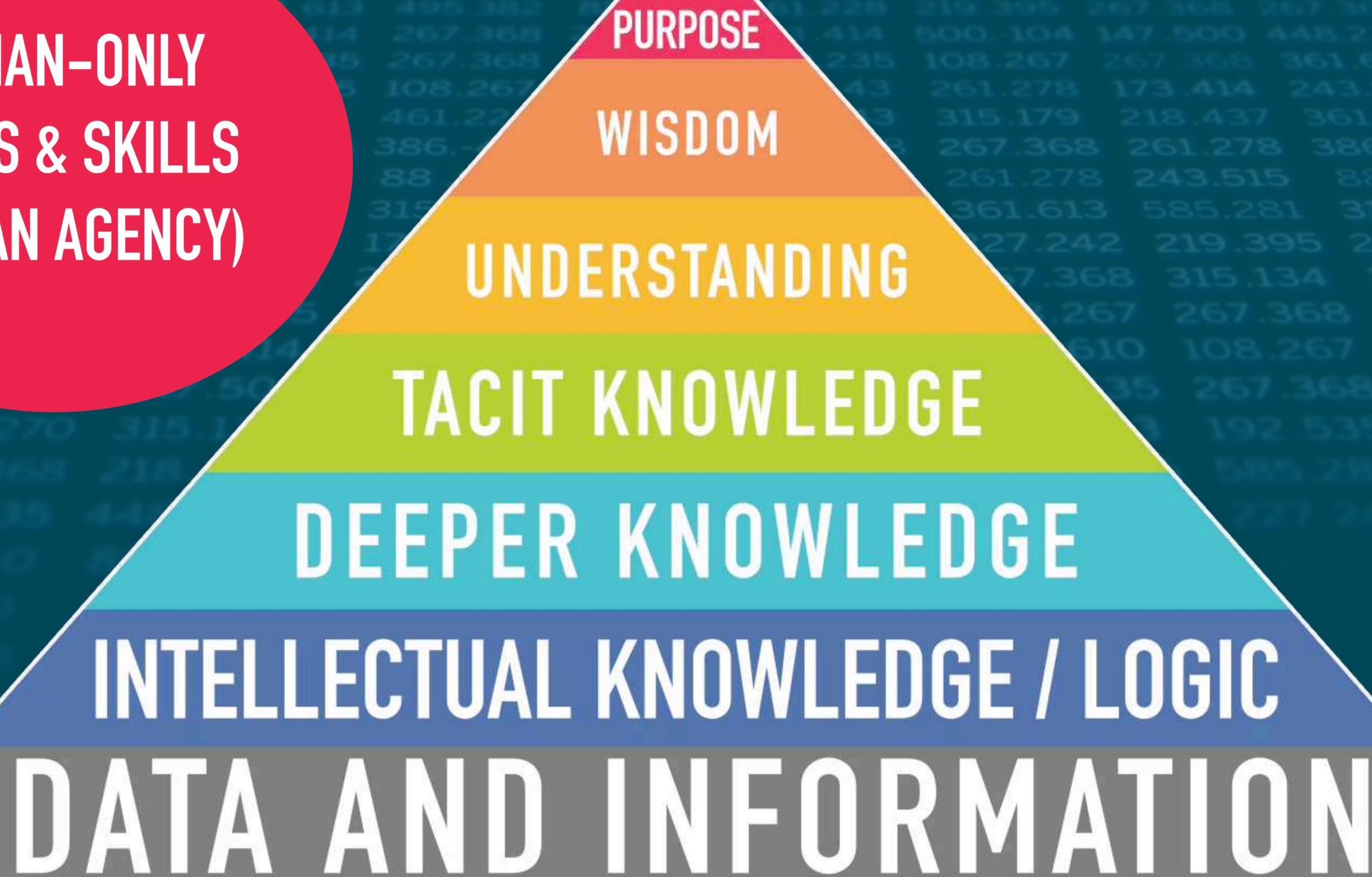
Wenn Sie wie ein Roboter arbeiten, wird ein Roboter Sie ersetzen



THE FUTURE OF WORK PYRAMID

**HUMAN-ONLY
TRAITS & SKILLS
(HUMAN AGENCY)**

"Machine Turf"

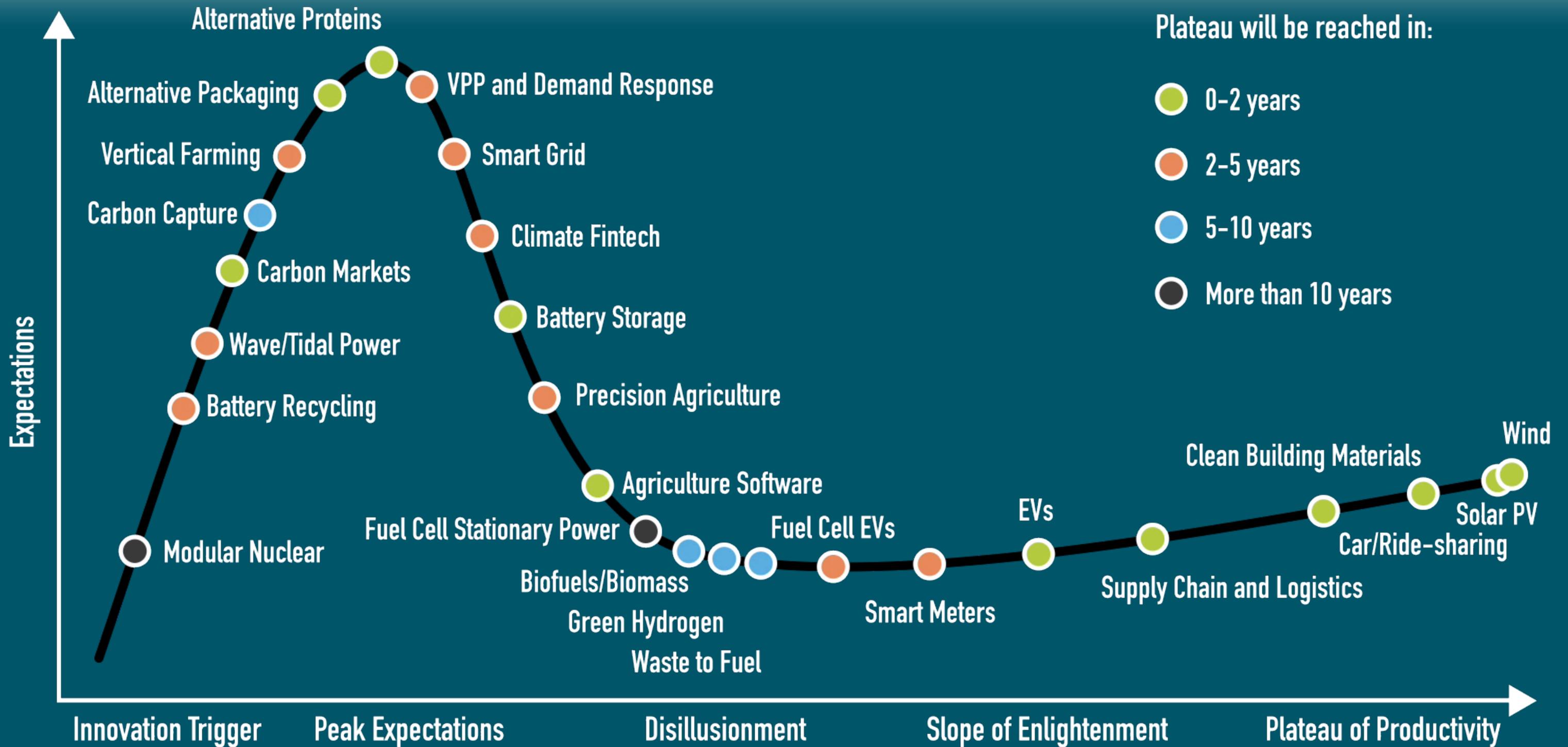




Dekarbonisierung

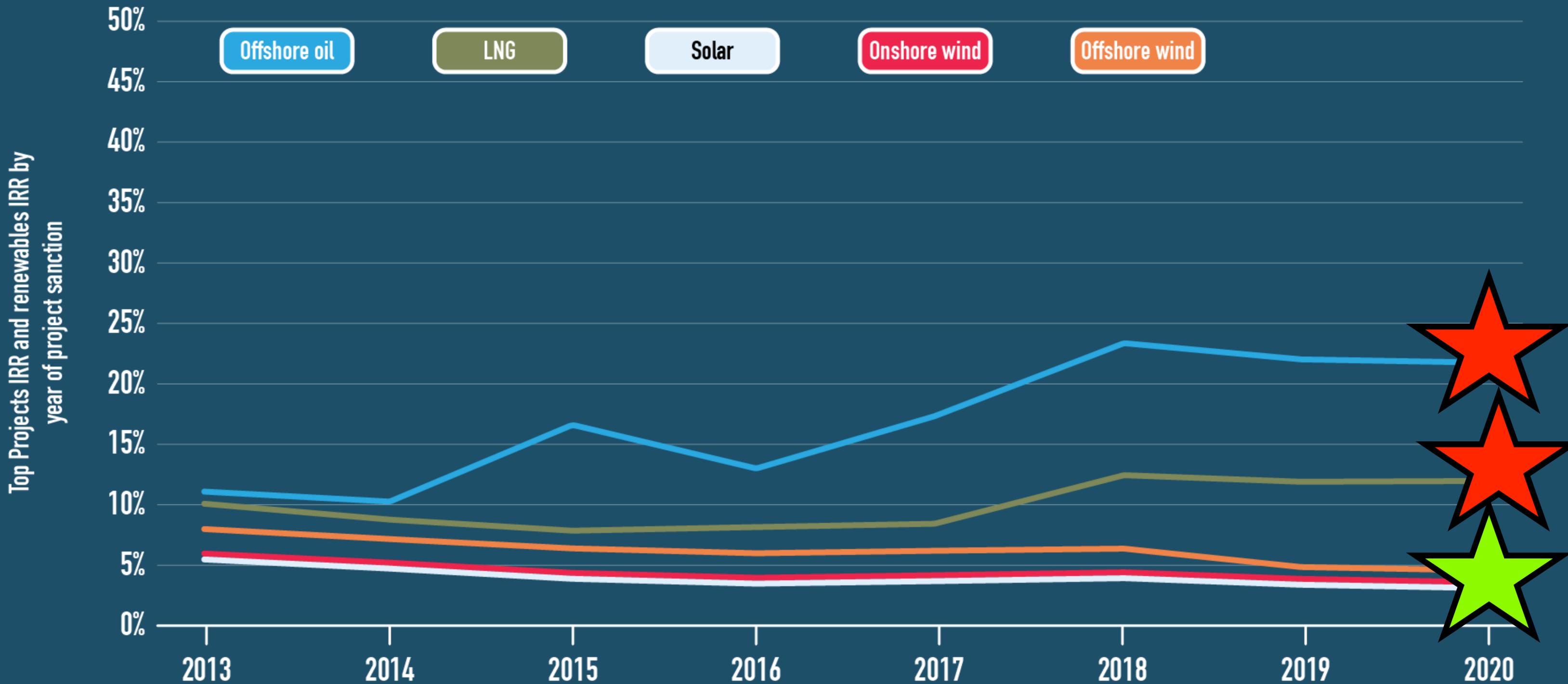
(Big Green)

SUSTAINABLE (GRÜN) IST DAS NEUE DIGITAL!



Source: Exponentialview.co

BIFURCATION OF COSTS FOR HYDROCARBON VS RENEWABLES



'Sustainable Everything' ist keine Ideologie mehr – Es ist unser **Business Plan!**



Wins

-  Document has breakthrough agreement on fossil fuels
-  Agreement says emissions have to fall 45% by 2030
-  Negotiations reach deal on global carbon trading
-  Need to tackle methane mentioned for first time
-  China and the U.S. strike a rare climate deal

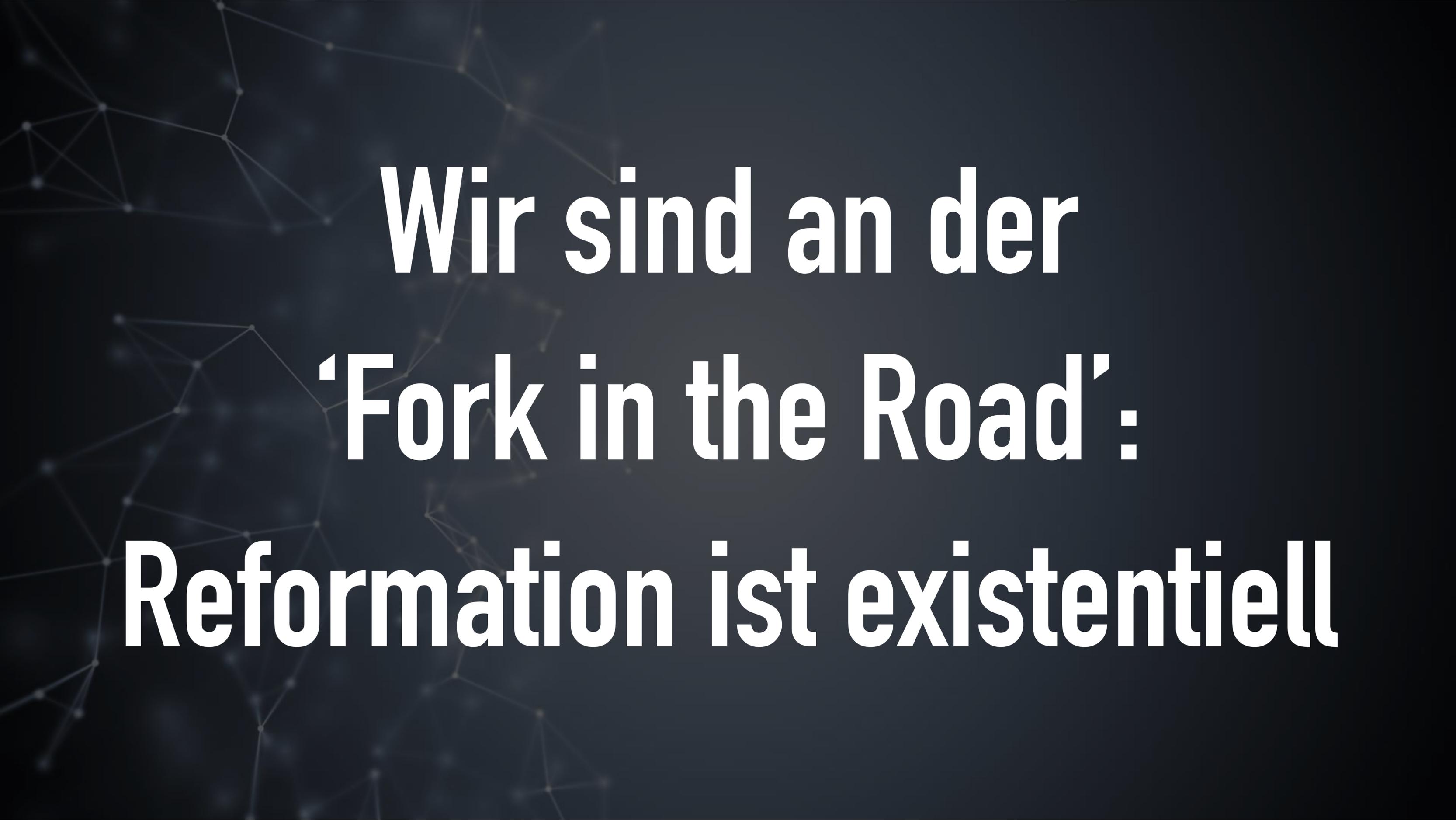
Losses

-  Rich countries don't make clear pledges for finance
-  Experts warn carbon trading deal has weaknesses
-  Most vulnerable countries don't get funds to cope
-  Current national pledges put world on track for 2.4C
-  Language on reducing coal use watered down



2030

1 2 4 8 16 32 64 128 256 512

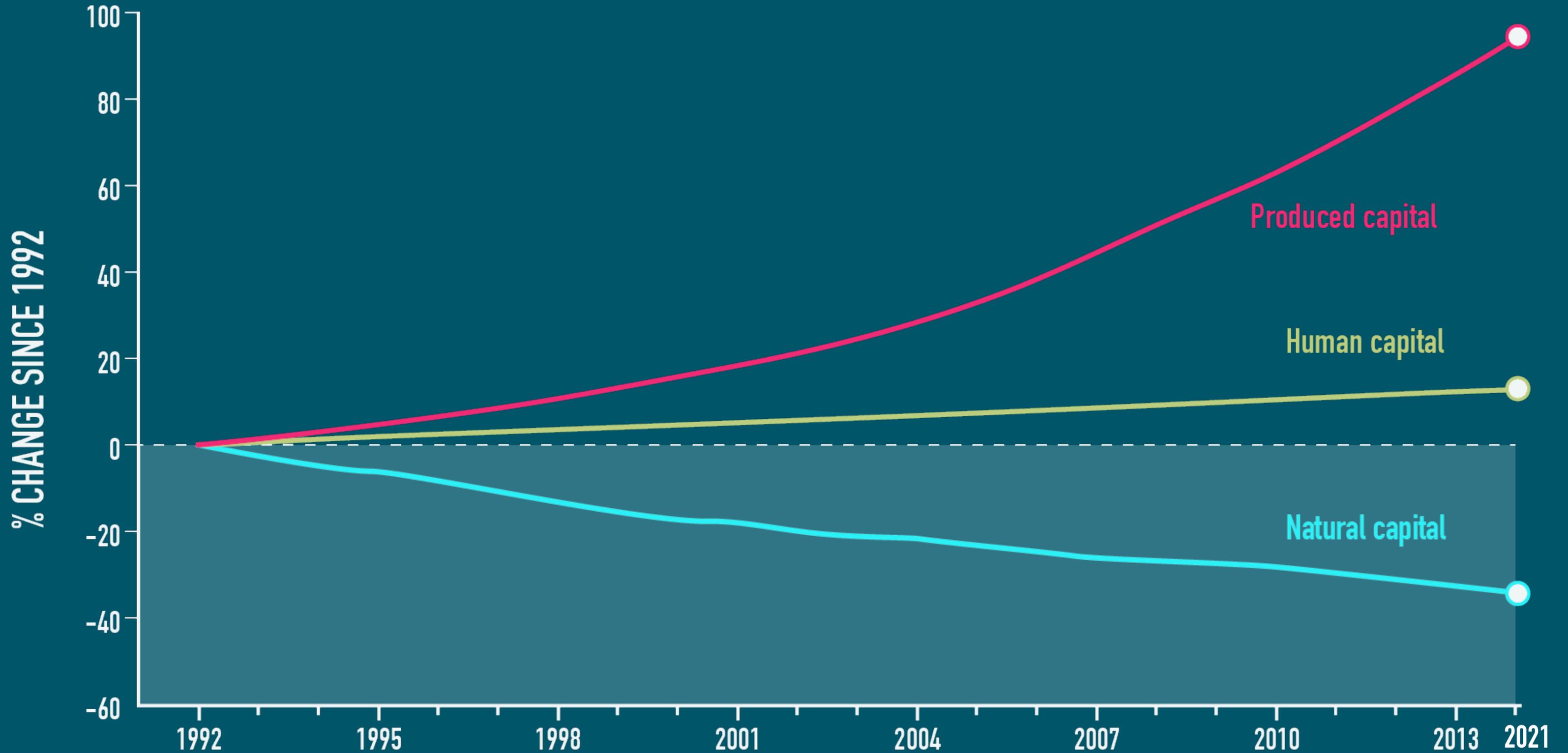


**Wir sind an der
'Fork in the Road':
Reformation ist existentiell**

'FORK IN THE ROAD' (Buckminster Fuller)



GLOBAL CAPITAL STOCKS PER CAPITA



**BUSINESS AS USUAL
IS DEAD
OR DYING**

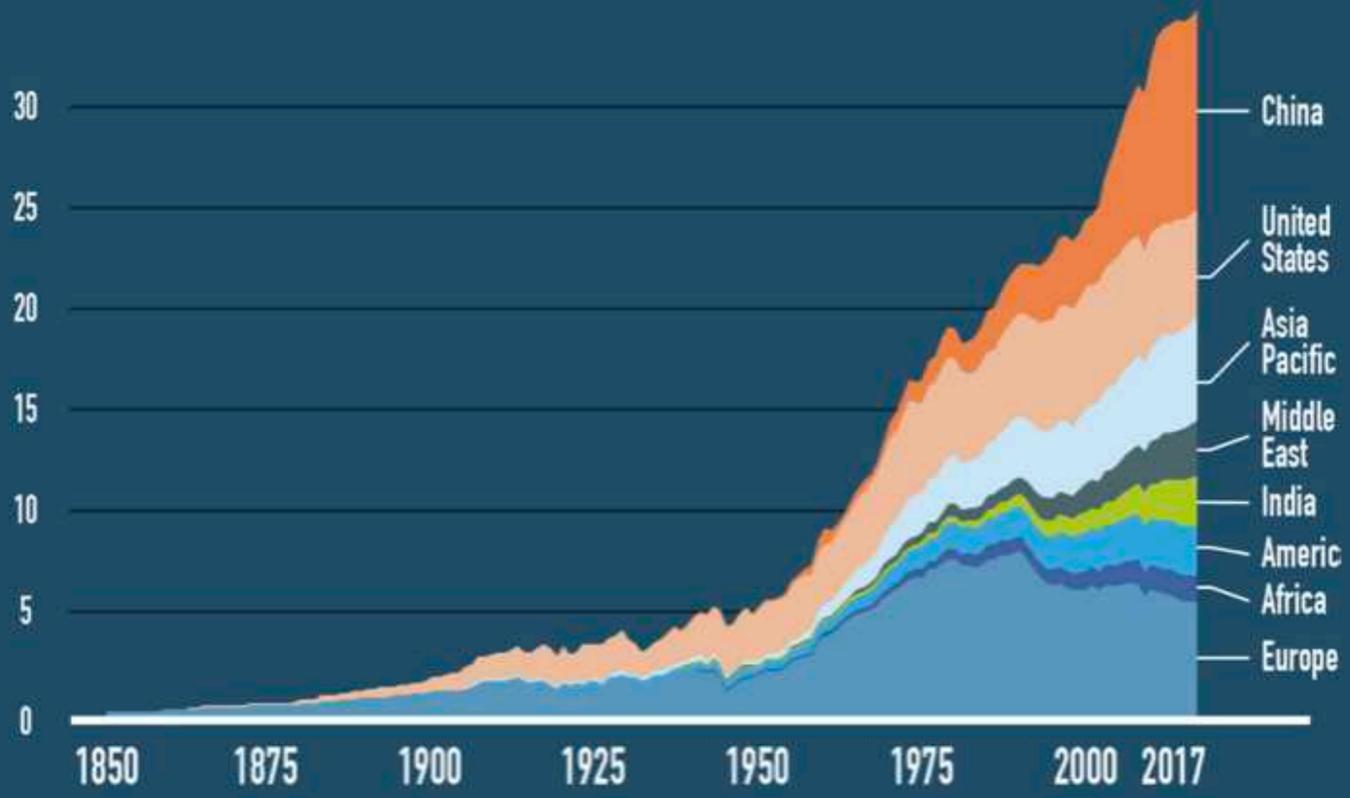
Produced capital

Human capital

Natural capital

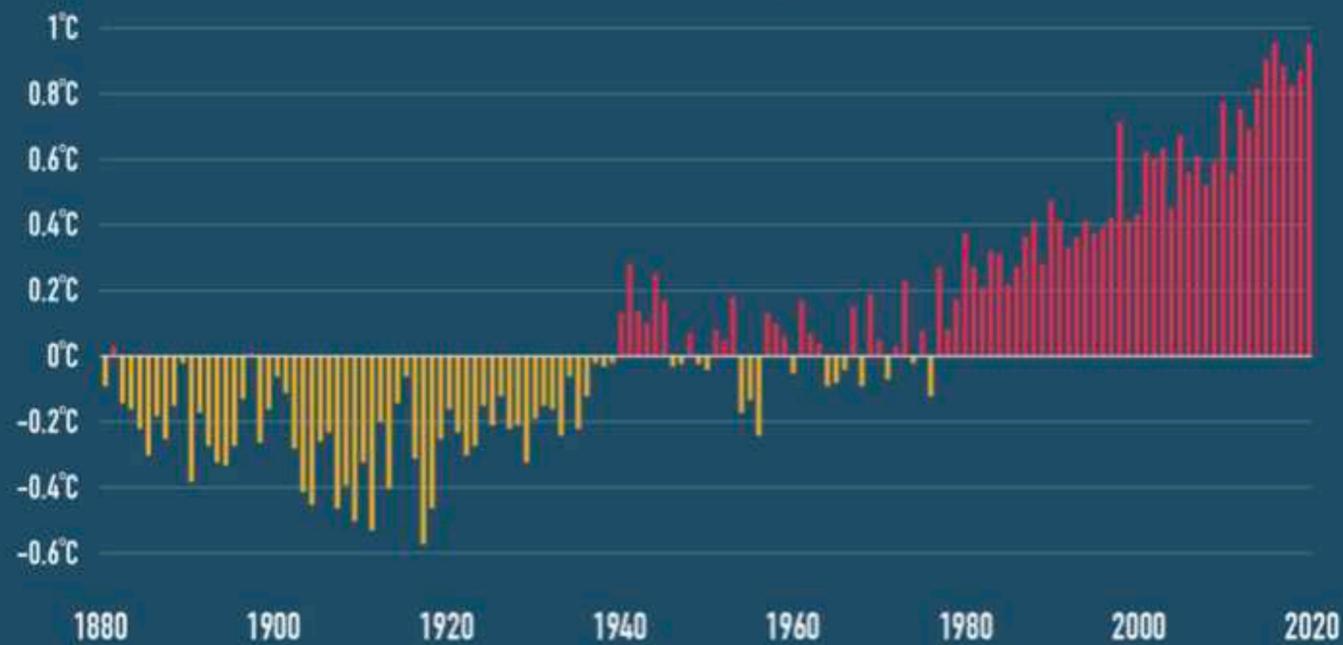
CO2 EMISSIONS - IN GIGATONES

BUSINESS AS USUAL



Source: The Economist

GLOBAL LAND AND OCEAN TEMPERATURE ANOMALIES, 1880-2020



National Centers for Environmental Information, "Climate at a Glance"



PROFIT

GROWTH

ENVIRONMENTAL THREATS ARE AMONG SOME OF THE GREATEST BY LIKELIHOOD

Top Risks by likelihood

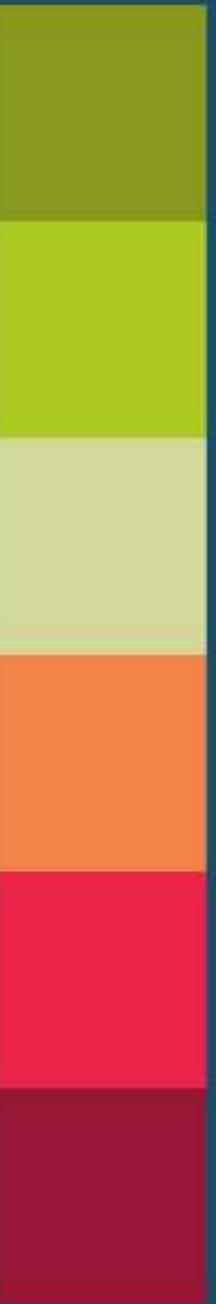
- 1 Extreme weather
- 2 Climate action failure
- 3 Human environmental damage
- 4 Infectious diseases
- 5 Biodiversity loss
- 6 Digital power concentration
- 7 Digital inequality
- 8 Interstate relations fracture
- 9 Cybersecurity failure
- 10 Livelihood crises



PROFIT

GROWTH

Least
at risk



Most
at risk



СВОМЛН

ЪВОЕП



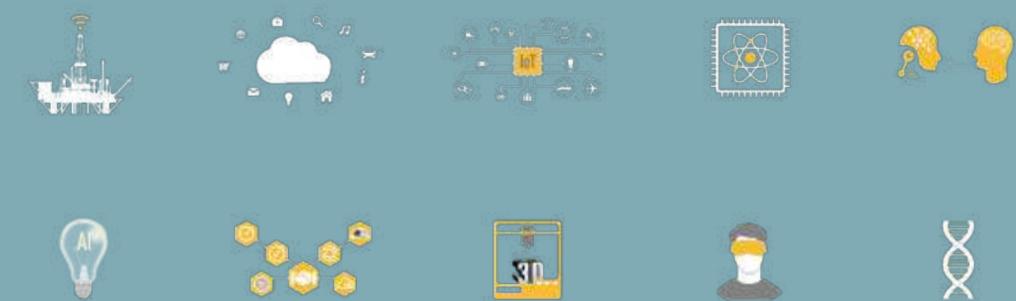
Wir werden alle Tools (Wissenschaft & Technologie) haben die wir brauchen – jetzt geht es um die TELOS

Telos | τέλος: "end, 'purpose', or 'goal". A term used by Aristotle to refer to the full potential or inherent purpose or objective of a person or thing

- PEOPLE
- PLANET
- PURPOSE
- PROSPERITY

PROFIT

GROWTH



E.O. Wilson, Oxford 2009: “The real problem of humanity is the following: We have **paleolithic emotions**, **medieval institutions** and **godlike technology**. And it is terrifically dangerous, and it is now approaching a point of crisis overall.”

PEOPLE



PLANET



PURPOSE



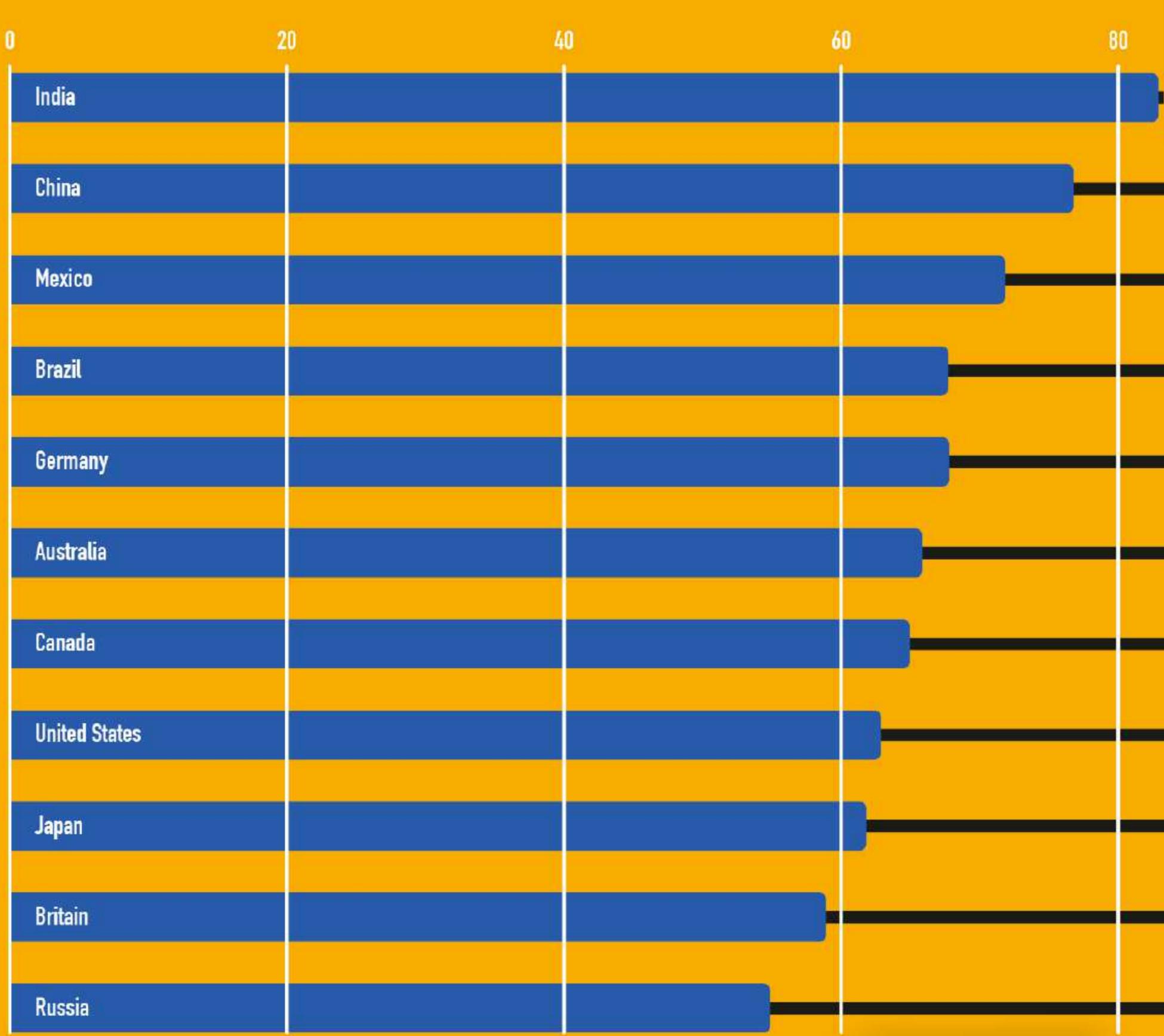
PROSPERITY



Purpose (Sinn) wird das wichtigste PRODUKT



Май 196



via The Economist Nov 2021

CEOS SHOULD STEP IN WHEN THE GOVERNMENT DOES NOT FIX SOCIETAL PROBLEMS

% saying, selected countries, Oct-Nov 2020

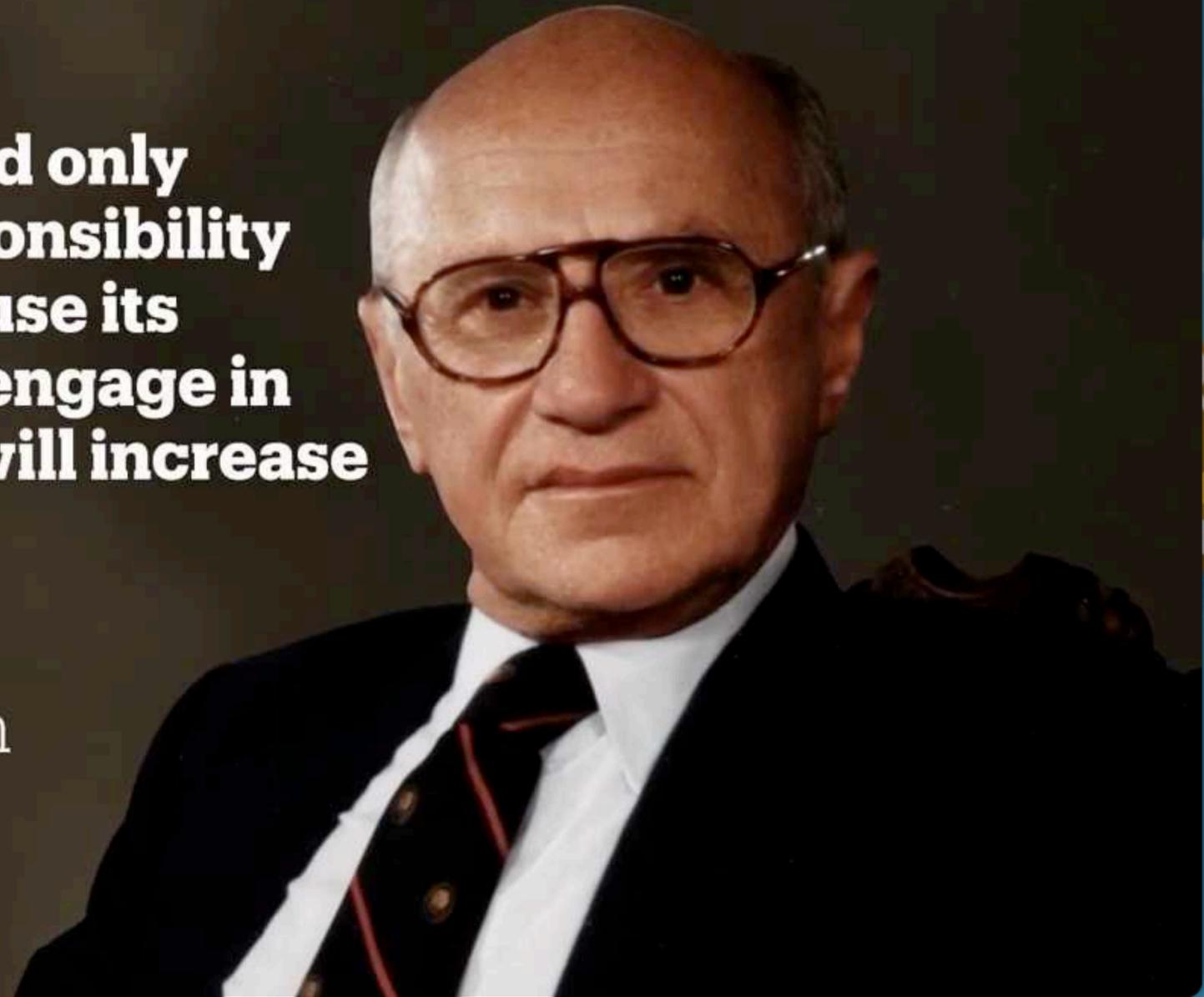
Wessen Job ist 'Die Gute Zukunft' ?



TRT WORLD

‘There is one and only one social responsibility in business, to use its resources and engage in activities that will increase its profits’

Milton Friedman



'Critical': Mark Carney launches Net Zero Financial Services Providers Alliance

Eighteen organisations spanning breadth of financial service industry form financial sector's newest climate-focused coalition



Let's Talk Tax Havens: The EU Blacklist And The Pandora Papers

Tax Notes Staff • 02:29pm EDT



Government urged to back vaccine patent waiver as protesters march on Downing Street

Ministers' current position is 'morally obscene' and 'short-sighted', says Global Justice Now

Rory Sullivan • 1 day ago



Government must support waiver of Covid vaccine patents

Intellectual property rules are currently blocking vaccine production

Christine Kelly • Fri, Sep 24, 2021, 06:00

Tesla Share Price Slides After Musk Promises to Sell \$21 Billion Stake

Car maker's chief executive asked Twitter users whether he should sell a 10th of his Tesla stock

By • Updated Nov. 8, 2021 6:26 am ET



Government told COVID vaccine patent waiver threatens global inoculation



Just Capital CEO Martin Whittaker believes good things will happen

Whittaker describes how business can turn idealism into purposeful reality.

by Betsy Kim



Larry Fink says pledges from large public companies won't get us to net zero

Chief executive sees a big gap opening up



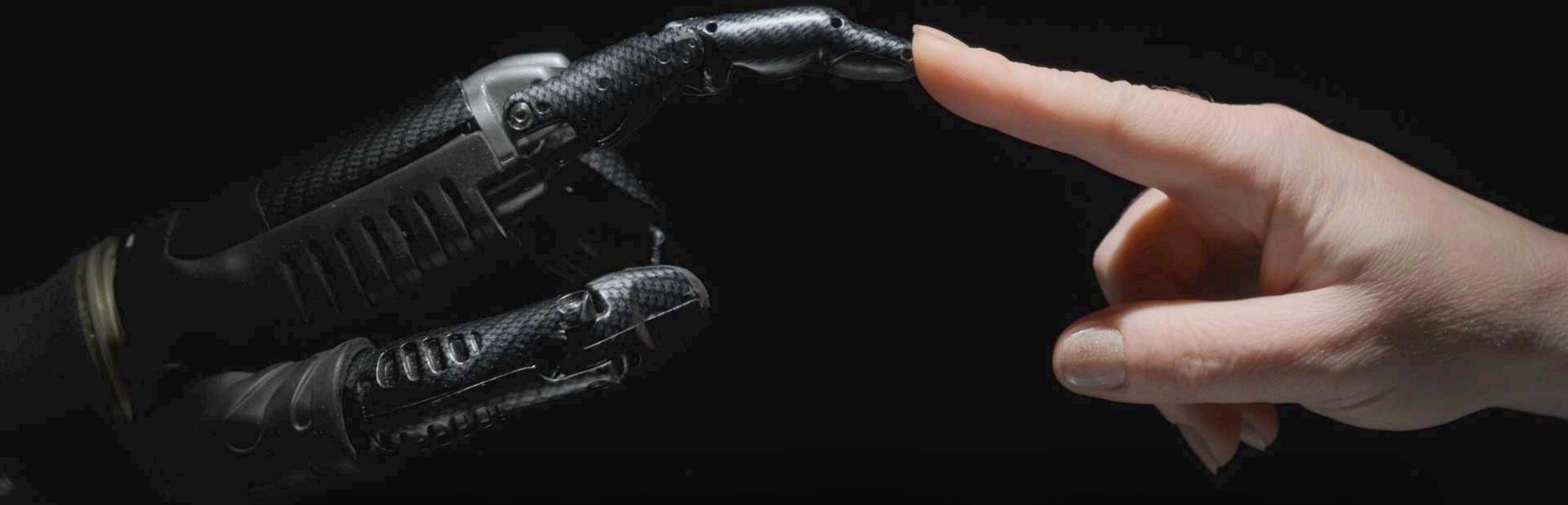
Hundreds of CEOs, celebrities, corporations join forces to oppose 'discriminatory' voting legislation

In addition to big companies and their leaders, the statement's signatories include major law-firms and nonprofits.

Jane C. Timm is a senior reporter for NBC News. • April 14, 2021, 2:39 PM CEST



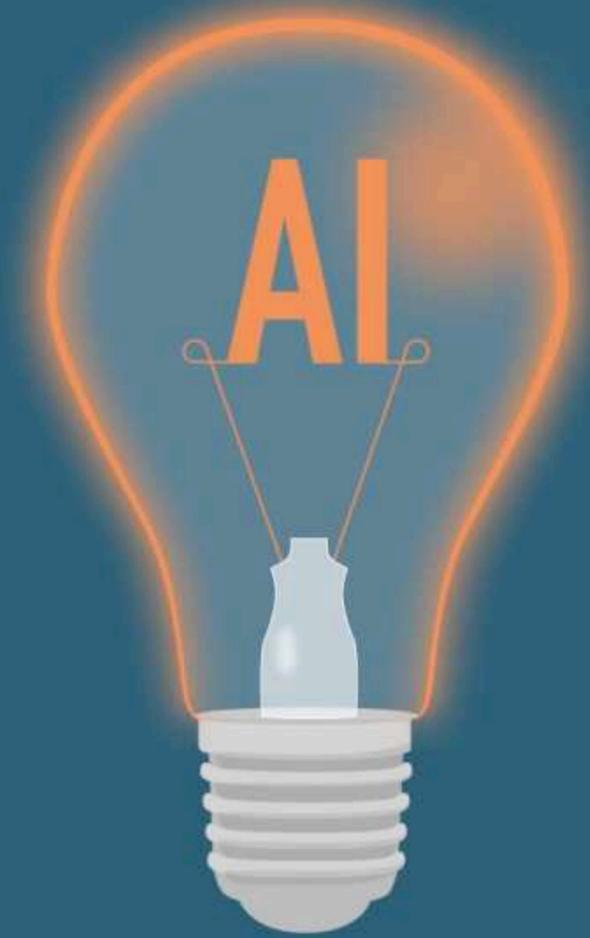
(Digitale) Ethik



“Technology can do great things – but it does not want to do great things; it doesn’t want anything”

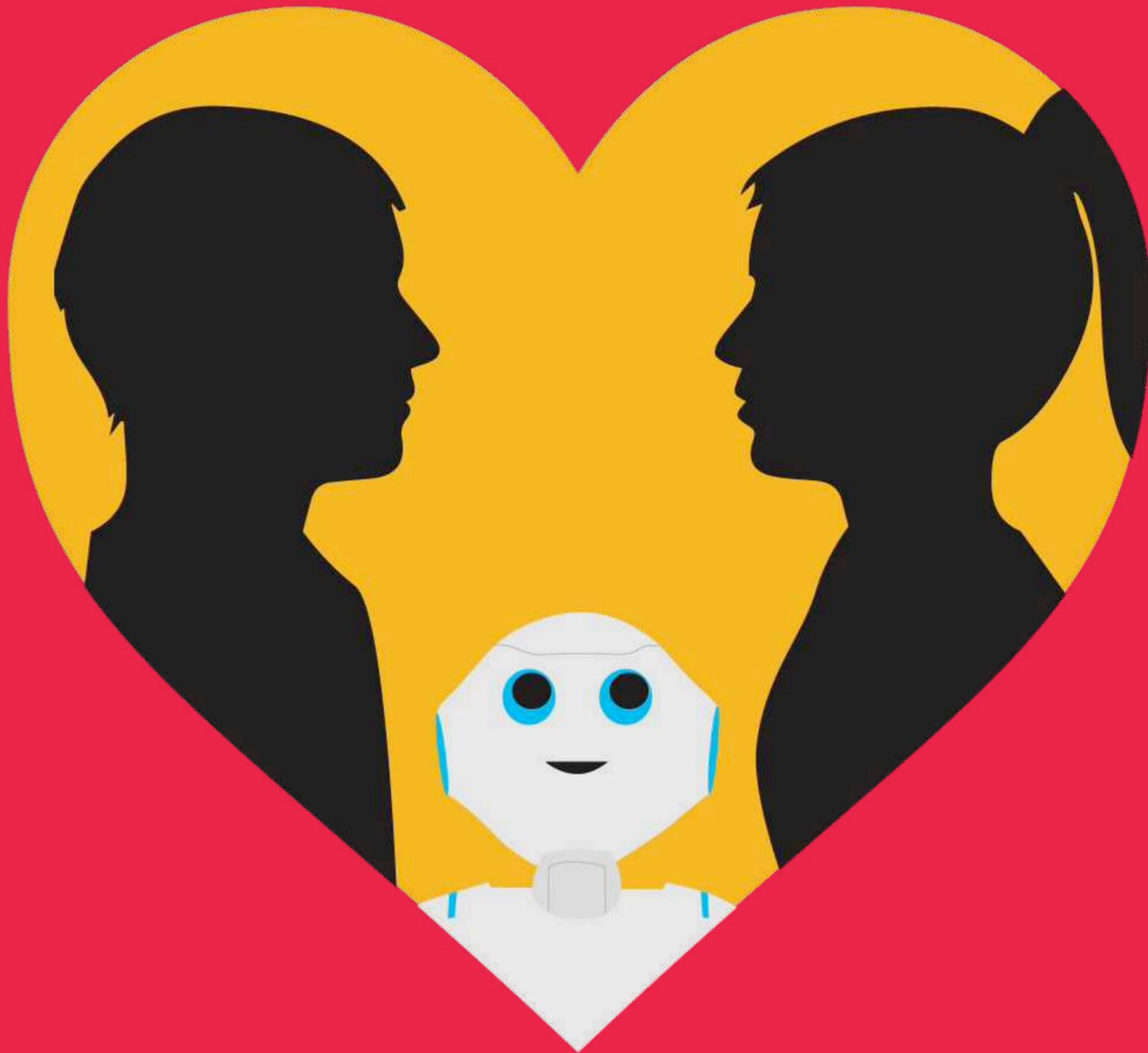
Tim Cook (CEO, Apple)

Too much of a good thing can be a very bad thing

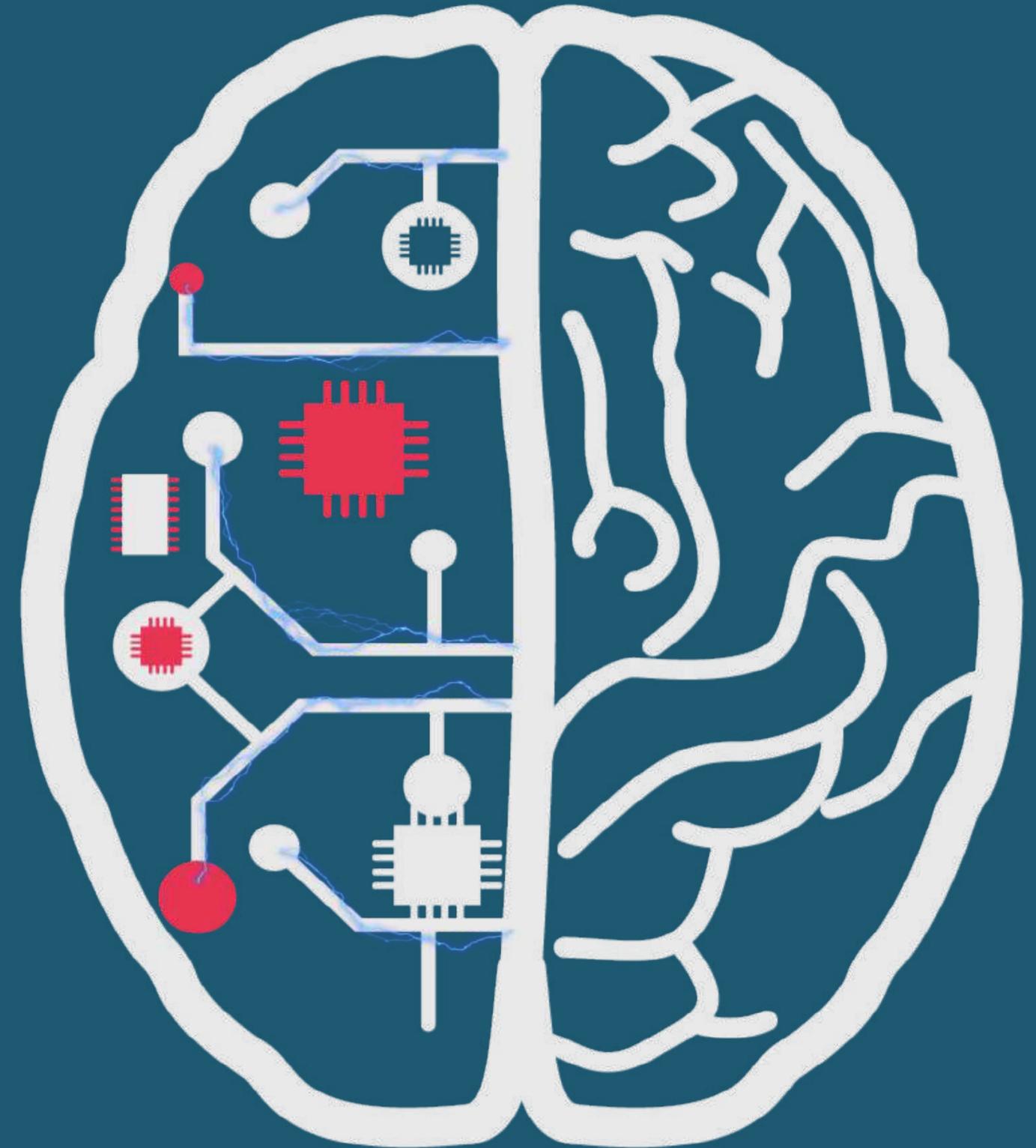


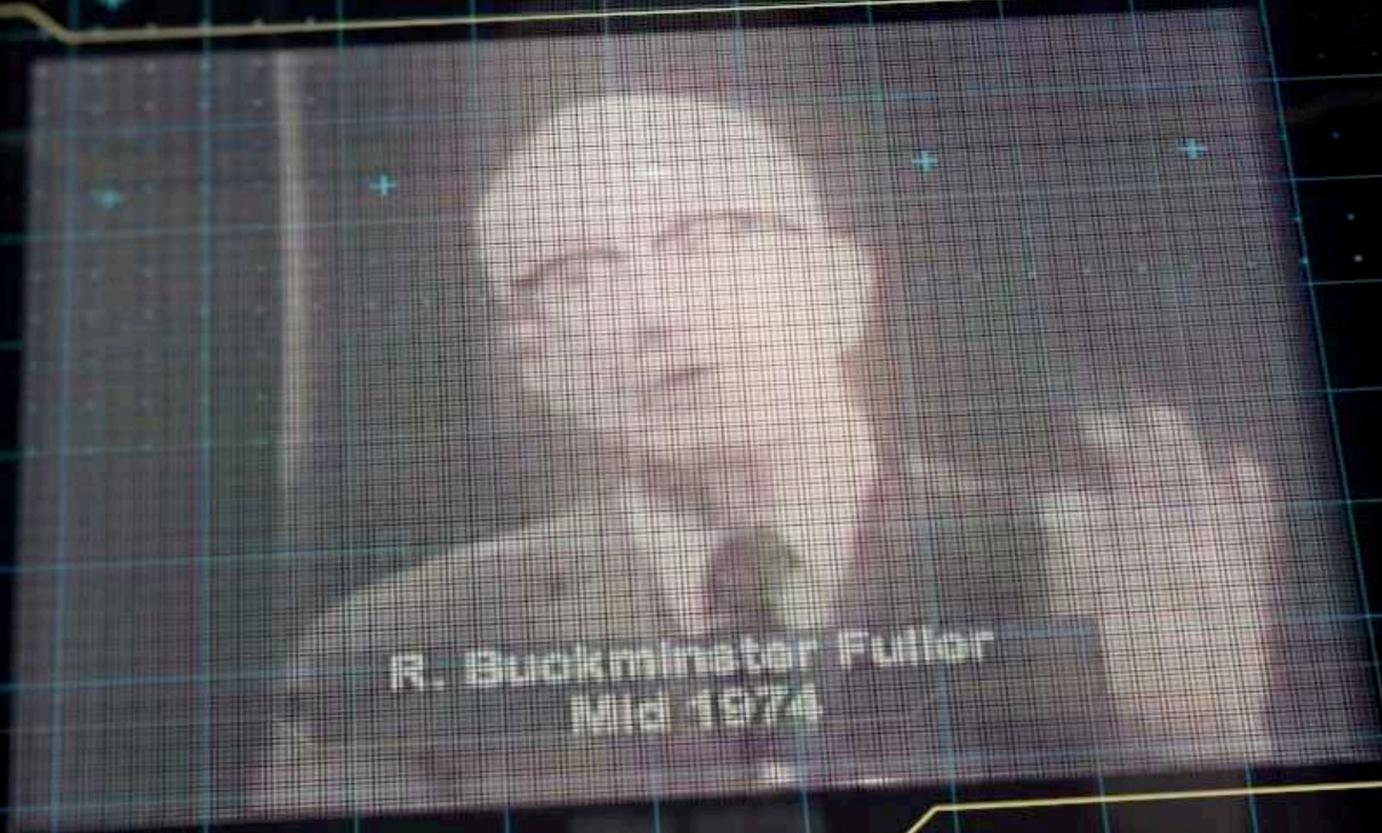


Entmenschlichung



Reduktionismus





R. Buckminster Fuller
Mid 1974

"Humanity is acquiring
all the right technology
for all the wrong reasons."

R. Buckminster Fuller

Technologie treibt unseren Fortschritt aber ETHIK definiert unsere Gesellschaft



TECHNOLOGY HAS NO ETHICS

Gutes Geld mit nicht so guten Dingen verdienen

At McKinsey, Widespread Furor Over Work With Planet's Biggest Polluters

A letter signed by more than 1,100 employees has called for change at the consulting firm, which has advised at least 43 of the 100 most environmentally damaging companies.

Oct. 27, 2021, 5:00 a.m. ET



Coca-Cola, Pepsi and Unilever are world's biggest plastic polluters

Monday, 25 October 2021



Beef Industry Tries to Erase Its Emissions With Fuzzy Methane Math

A new campaign asserts, incorrectly, that cows in the U.S. "may not be contributing much at all to global warming."

More stories by Ben Elgin - 19 October 2021, 12:00 CEST

Big tech's pro-climate rhetoric is not matched by policy action, report finds

Laura Paddison



Historical climate emissions reveal responsibility of big polluting nations

Six of top 10, including China and Russia, yet to show ambition on emissions cuts before Cop26

Damian Carrington

Which countries are historically responsible for climate change?

Which countries are historically responsible for climate change?

1850 - 2021

CoP 26: World is on the line at Glasgow

ExxonMobil has spent more than \$39 million to manufacture doubt about climate science



Some airlines risk failure if they do not cut emissions faster - industry report

Wed, 27 October 2021, 5:04 am



Big Tech says it wants to solve climate change. Its lobbying dollars say otherwise.

Big Tech is losing the climate lobbying war to Big Oil.



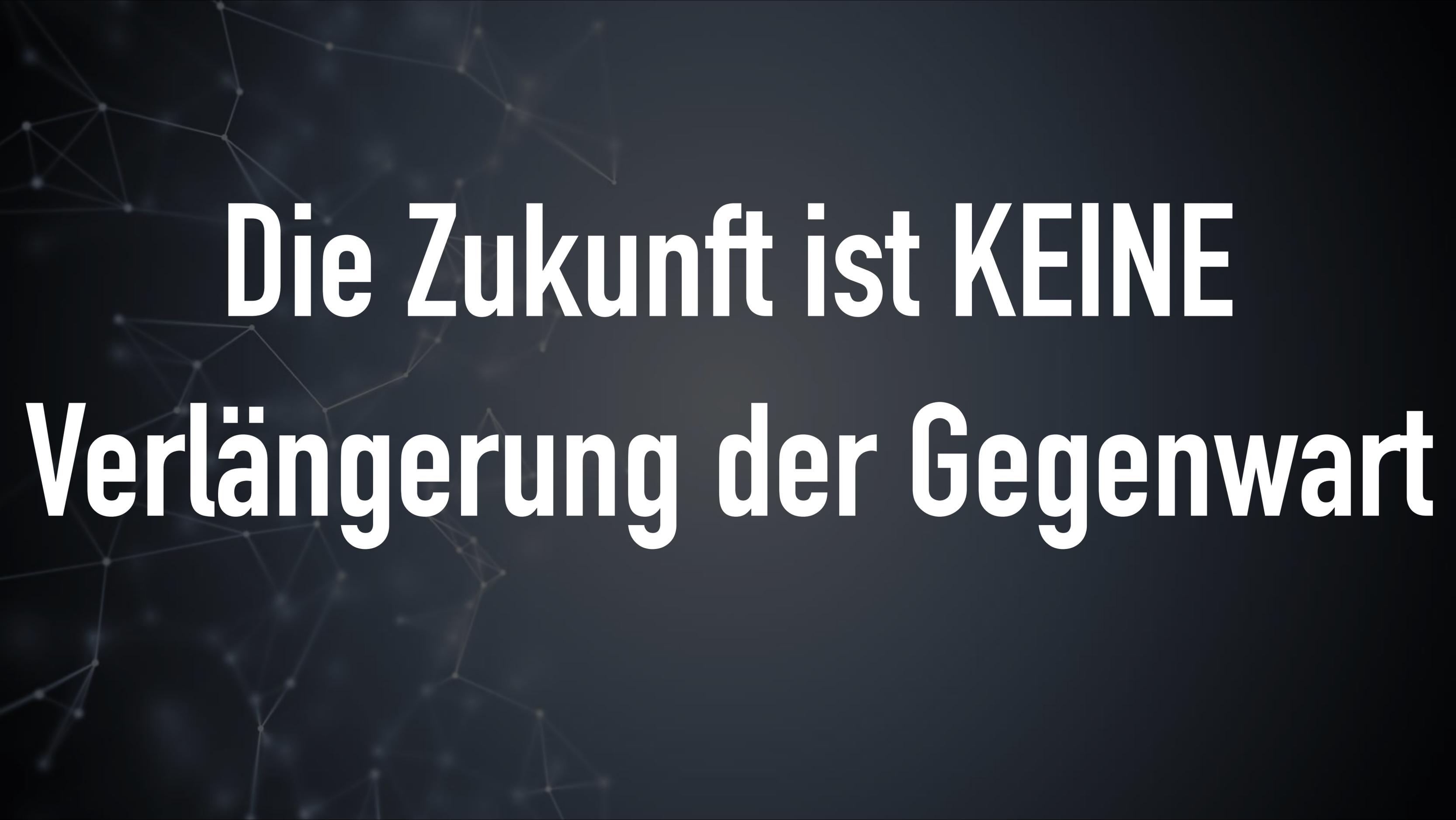
Saudi Arabia Pledges 'Net Zero' Carbon Emissions by 2060

Goal doesn't include emissions from the massive amounts of oil the kingdom exports to other countries

Updated Oct 24, 2021 3:14 pm ET

Technologie umarmen aber nicht Technologie werden





**Die Zukunft ist KEINE
Verlängerung der Gegenwart**

~~UNDENKBAR~~

...NEUES NORMAL



CARBON TAX



At McKinsey, Widespread Furor Over Work With Planet's Biggest Polluters

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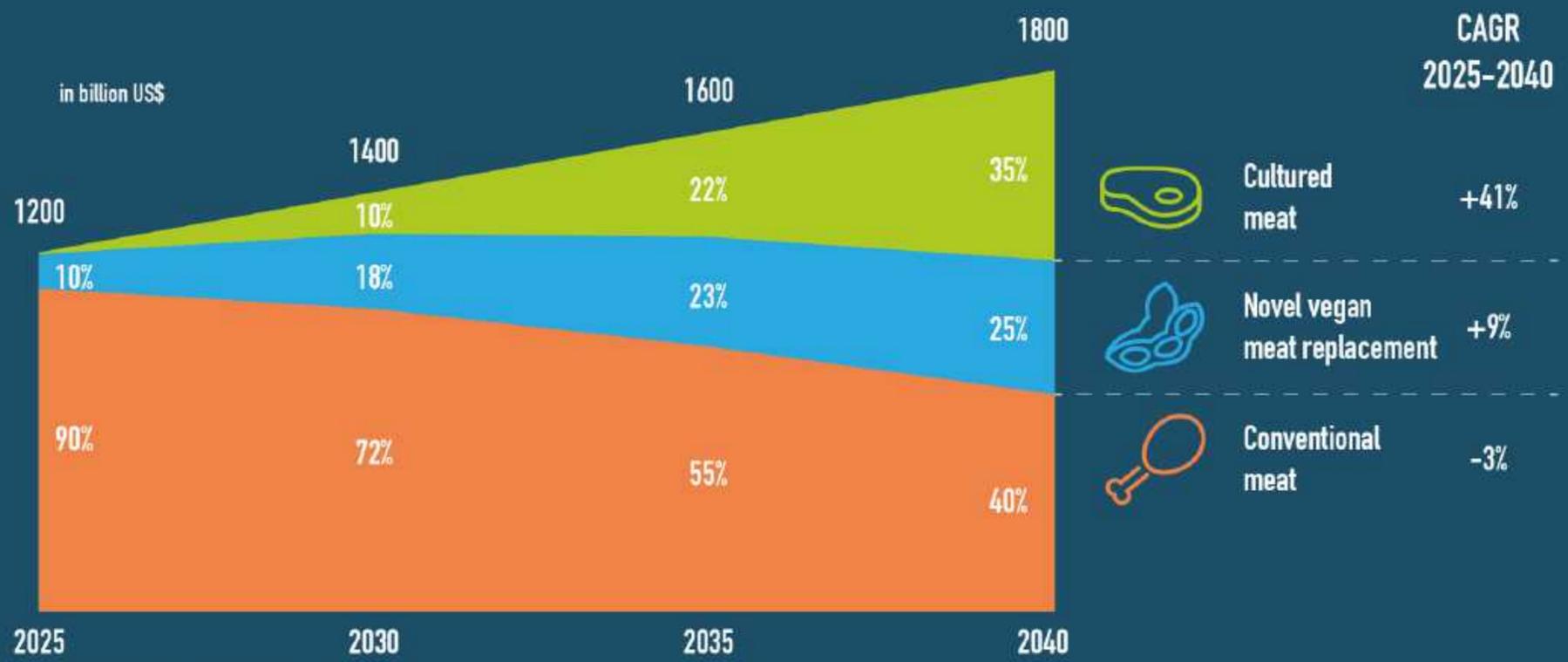
Goal doesn't include emissions from the massive amounts of oil the kingdom exports to other countries

By and · Updated Oct. 24, 2021 3:14 pm ET

UNTHINKABLE

...NEW NORMAL

GLOBAL MEAT CONSUMPTION



Source: United Nations, World Bank, Expert interviews; A.T. Kearney analysis



New Zealand

Germany

Iceland

Finland

Denmark

Sweden

Taiwan

Bangladesh

Singapore

Nepal

Ethiopia

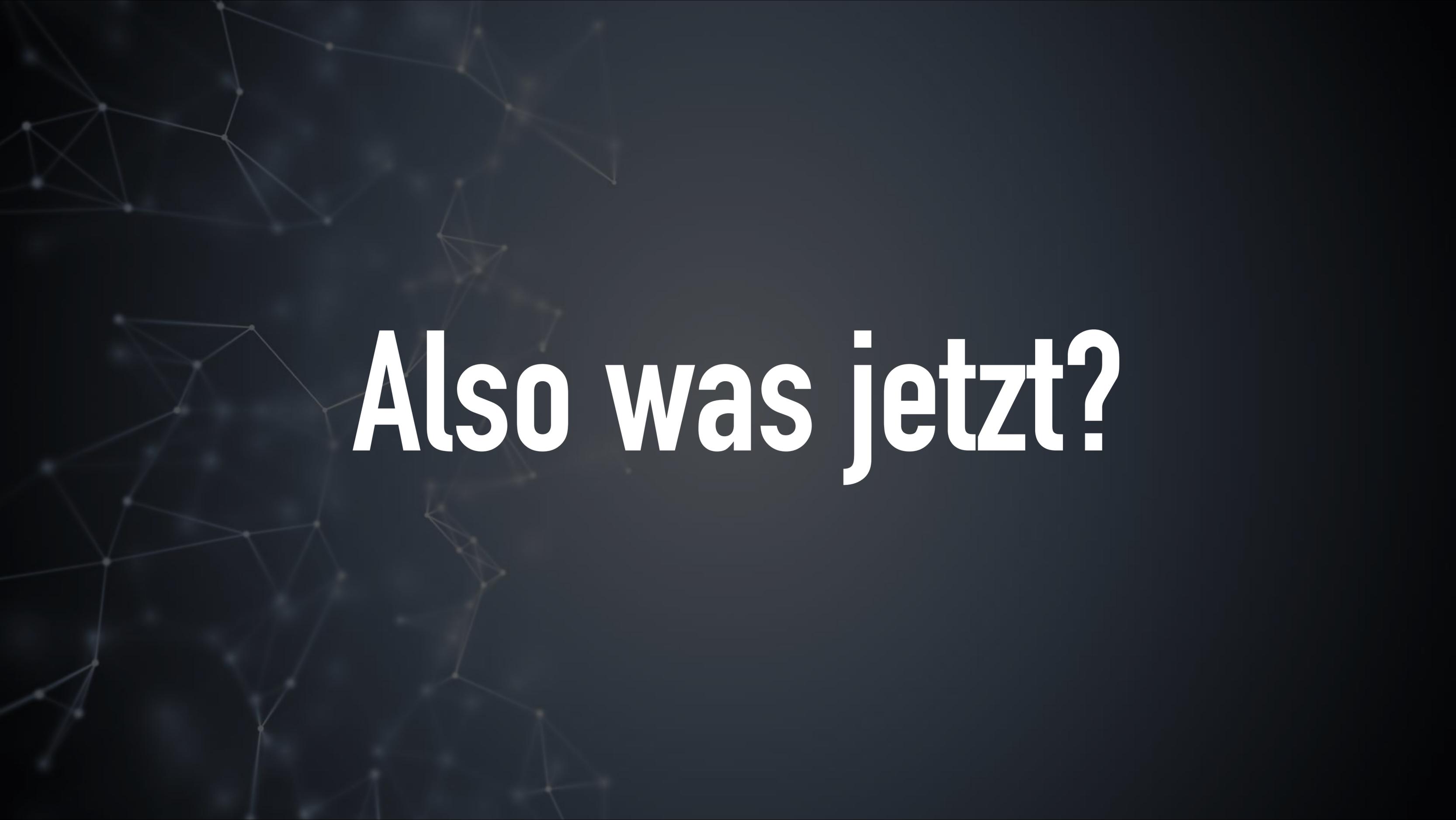
Namibia

Bolivia

Georgia

Estonia

Lithuania



Also was jetzt?

~~Was bringt die Zukunft?~~

**Welche Zukunft wollen wir
für unsere Kinder?**



So wie wir die Zukunft sehen, so handeln wir; so wie wir handeln, wird sie!



PLEASE REBOOT

Keeping the caution!



90%

Uninstalling fear...

Das Future Mindset



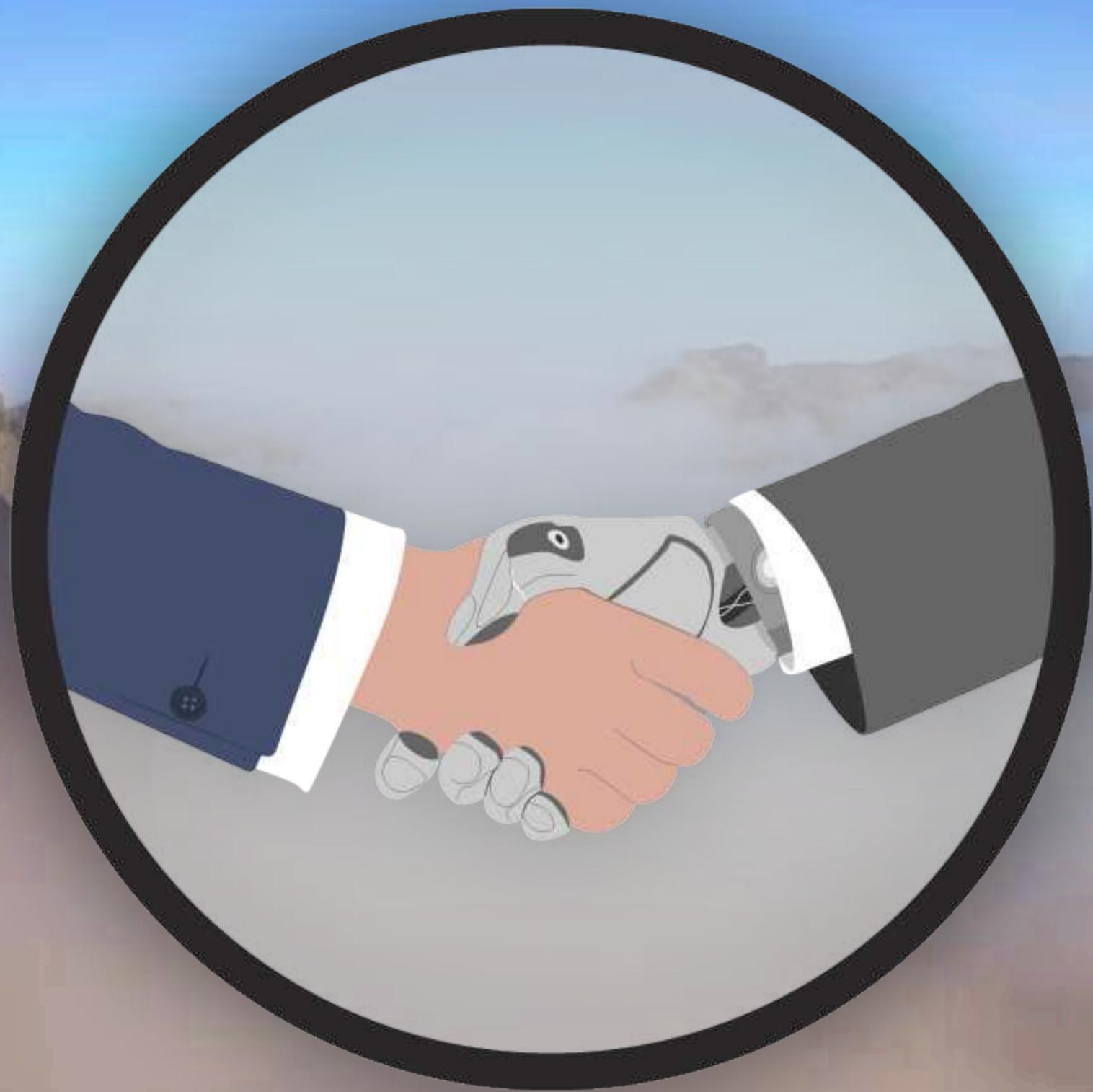
**DIE ZUKUNFT
gehört
denen die sie
kommen hören!**



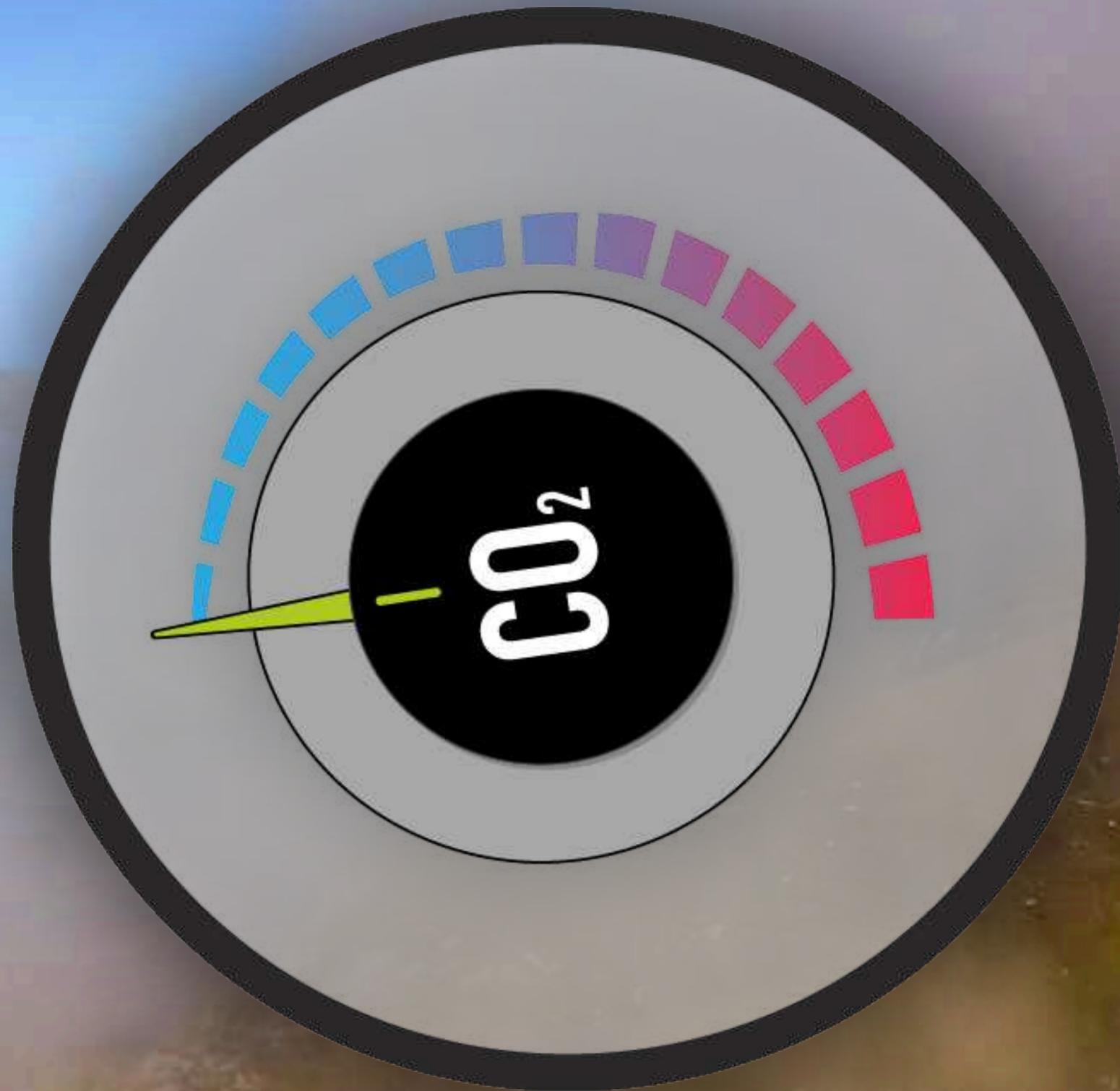
Die Vergangenheit respektieren. Die Gegenwart genießen.

Die Zukunft VORSTELLEN.





DIGITIZATION



DECARBONIZATION



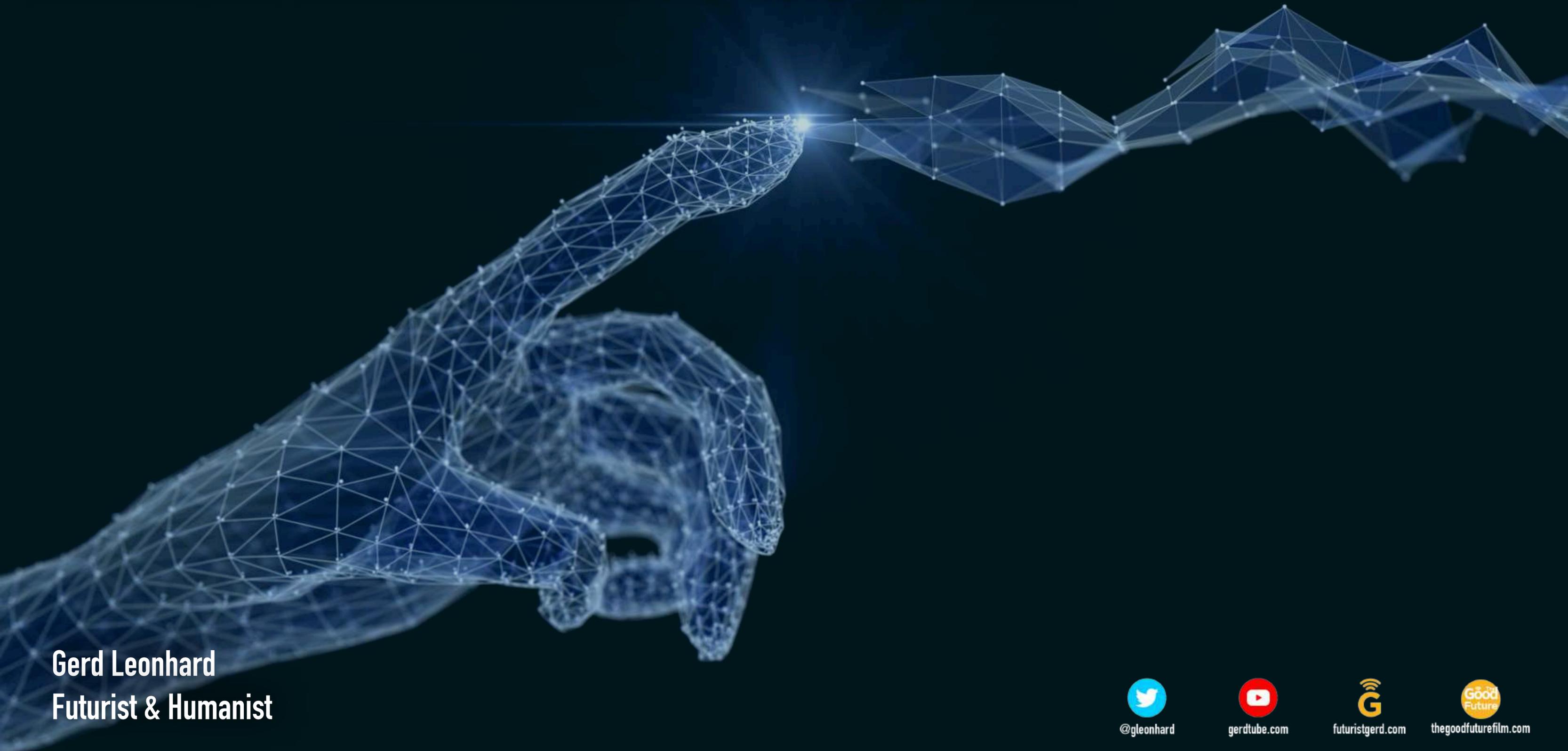
REFORMATION

Die gute Zukunft oder die schlechte Zukunft: UNSERE WAHL

THE GOOD FUTURE



Danke für eure Zeit und Aufmerksamkeit



Gerd Leonhard
Futurist & Humanist



@gleonhard



gerdtube.com



futuristgerd.com



thegoodfuturefilm.com