SUX



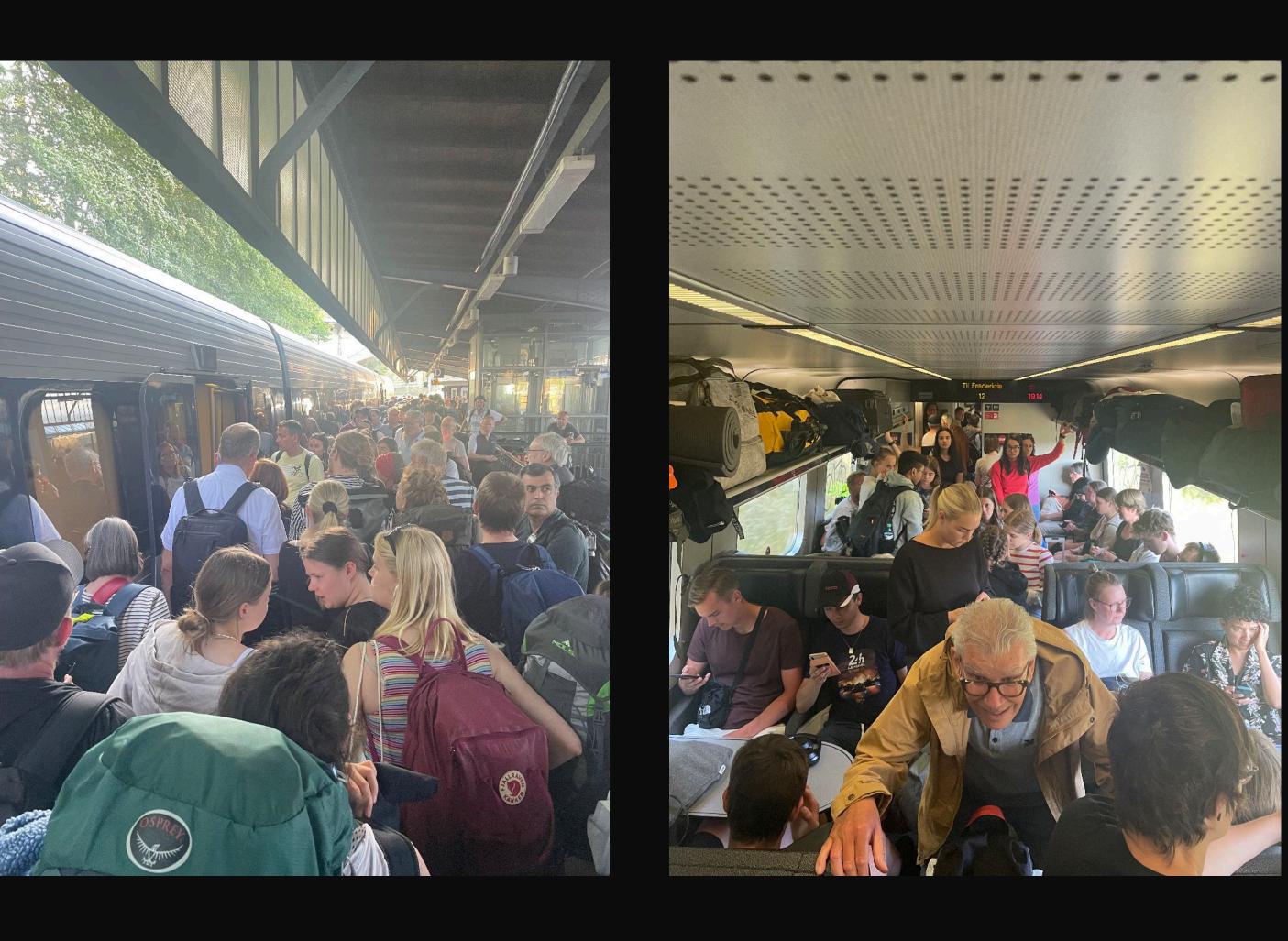


Sustainable UX

Creating Sustainable Digital Products



SUX





Acting sustainable can be difficult.





"We stopped seeing sustainability and labor rights as a risk and burden and instead as a source of innovation. If you flip it to be about an innovation opportunity, people step into that space with less fear."

Hannah Jones

Nike's VP of Innovation Accelerator and former Chief Sustainability Officer



Thorsten Jonas

Digital Sustainability Trailblazer Founder of the "SUX Network"

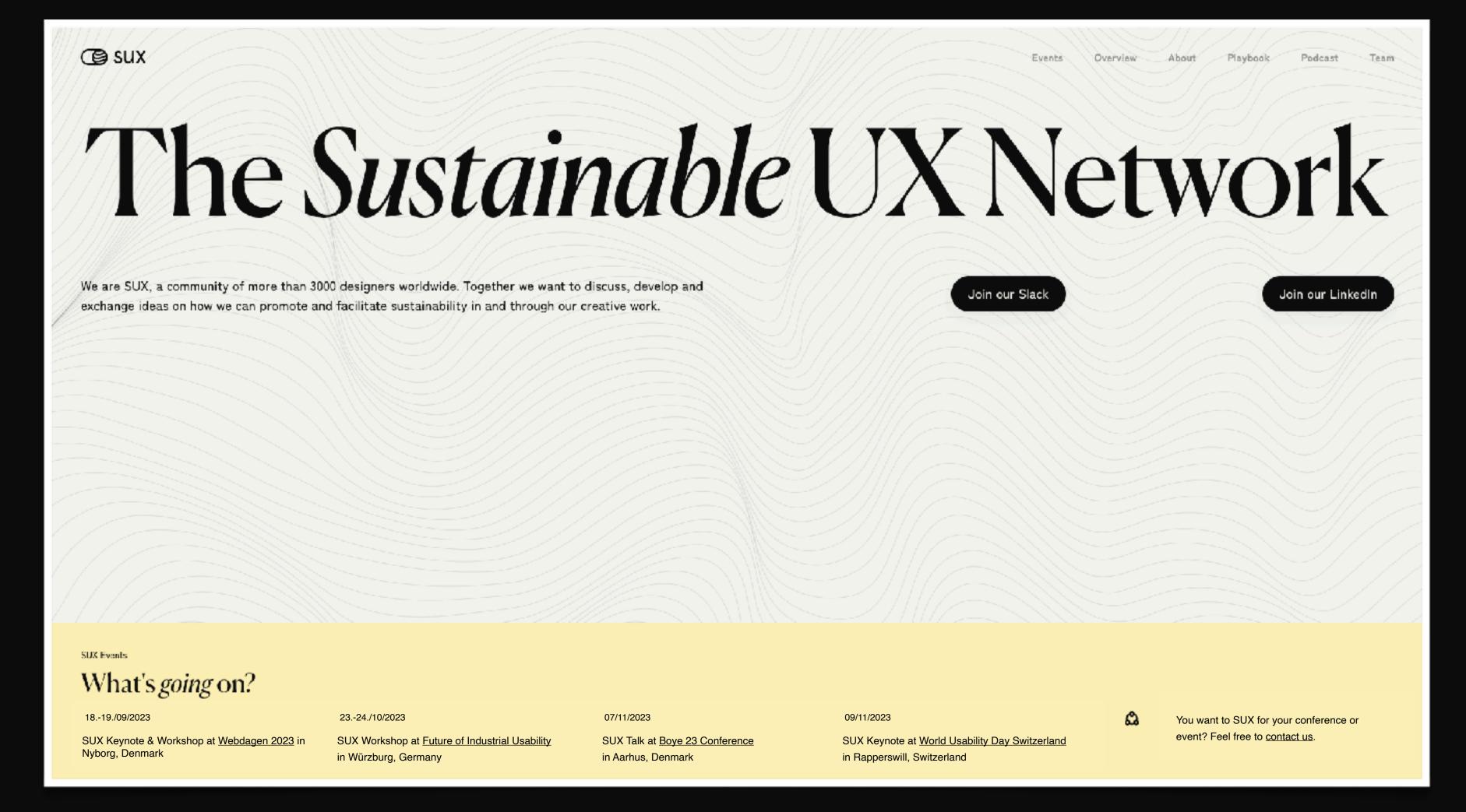
Web: sustainableuxnetwork.com

Web: thorstenjonas.com

Insta: @dolbydigger



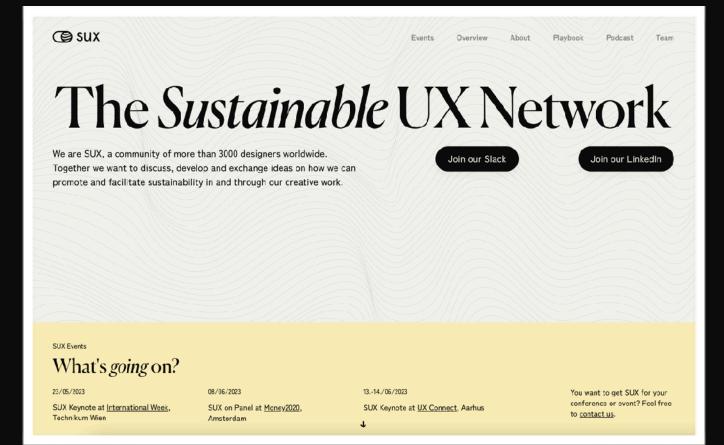






Making sustainability Default in all productdesign processes.

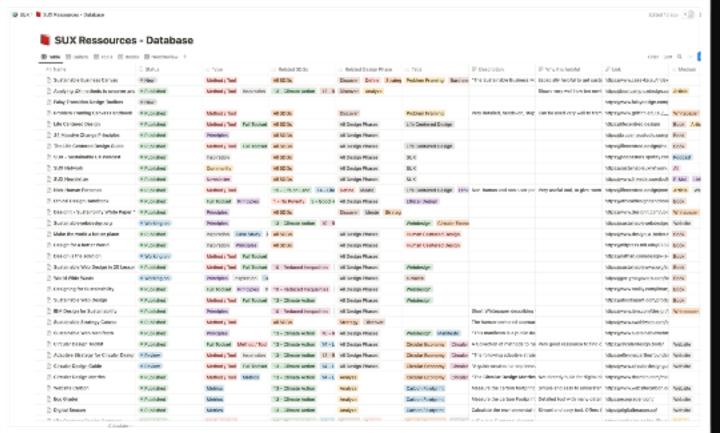


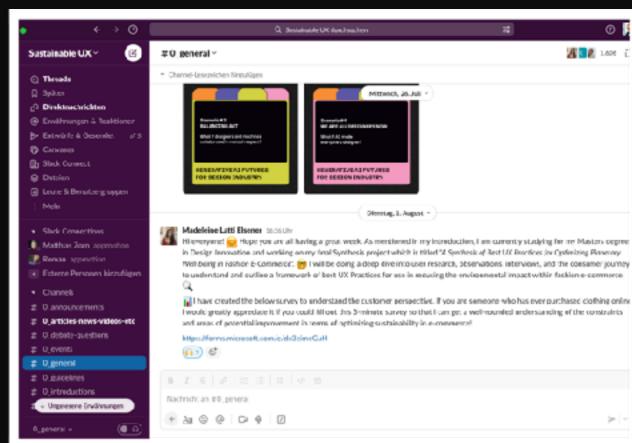




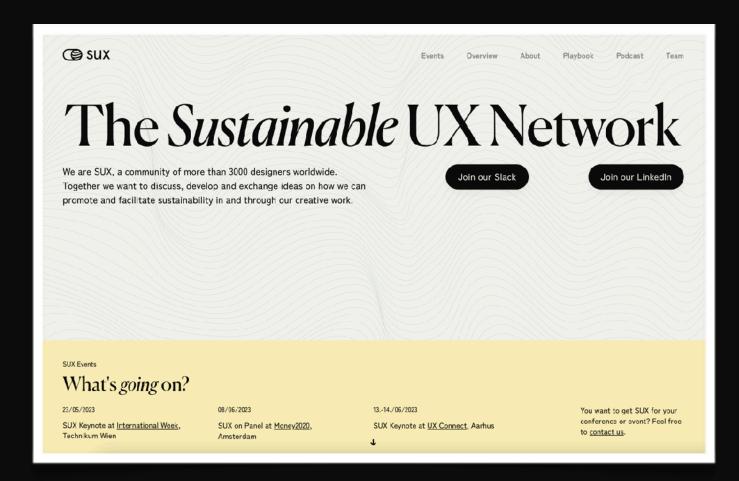






















sustainableuxnetwork.com

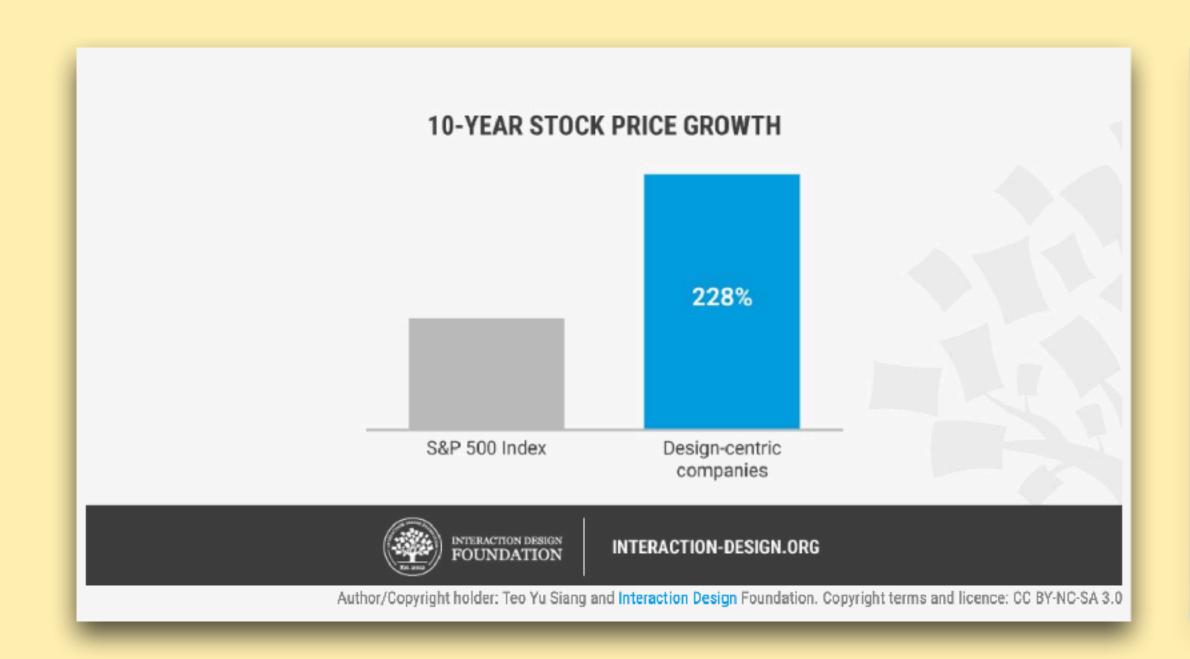


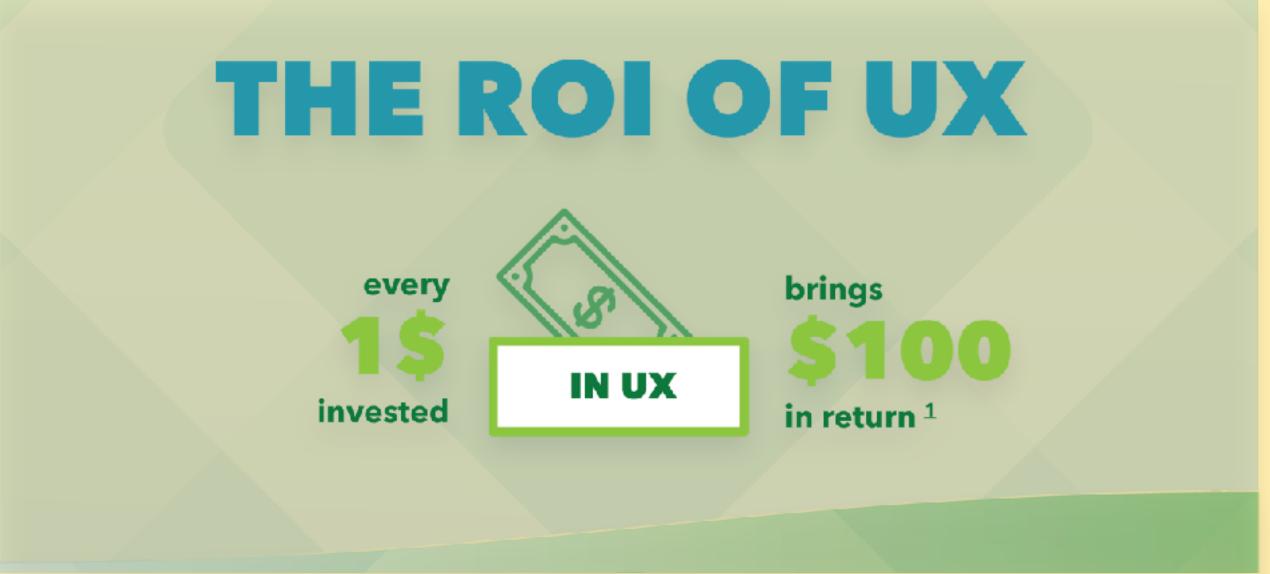
"User experience (UX) design is the process, design teams use to create products that provide meaningful and relevant experiences to users."



"Human-centered Design (HCD) is an approach to problem-solving ... that develops solutions to problems by involving the human perspective in all steps of the problem-solving process."









Most of us use *UX* and *Human Centered Design* to build "better" Products & Experiences.





The Internet is responsible for 3,7% of the global green house emissions per year.

Source: BBC, 2020

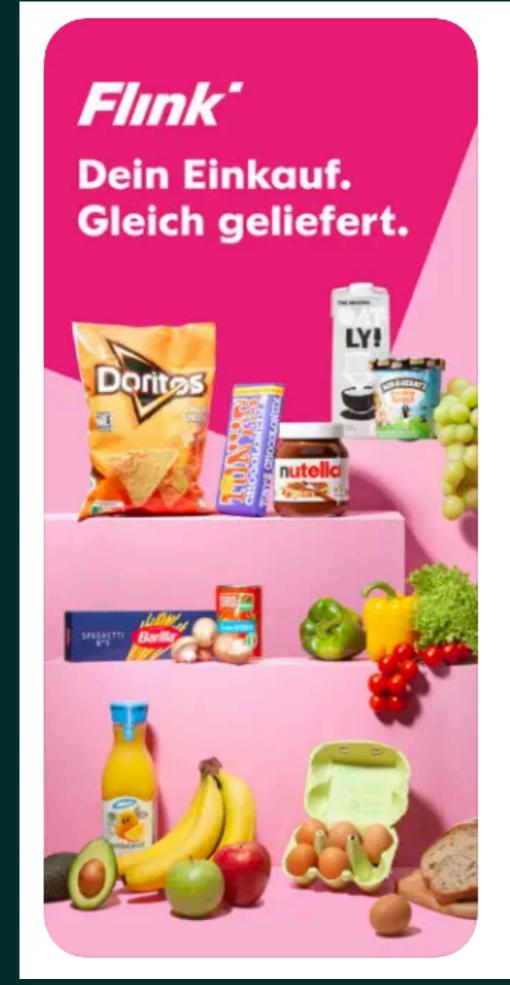


A website with 2,5 million visits per month easily "emits" 20 tons of CO2 - each month.

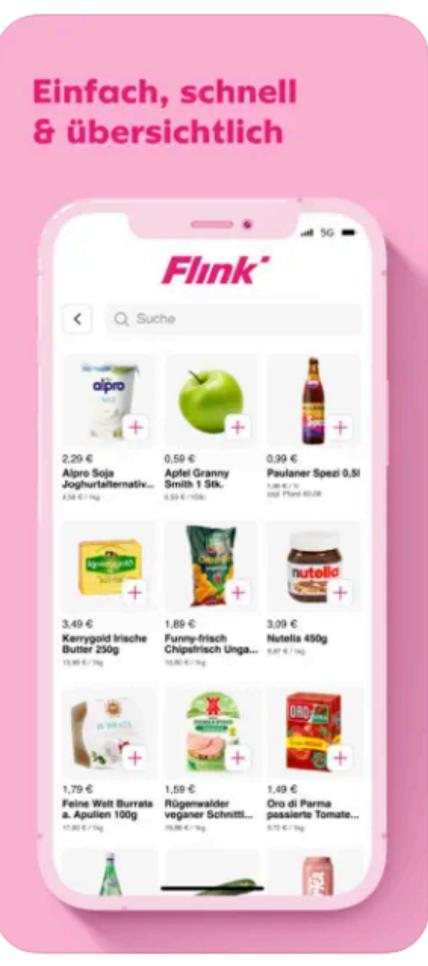


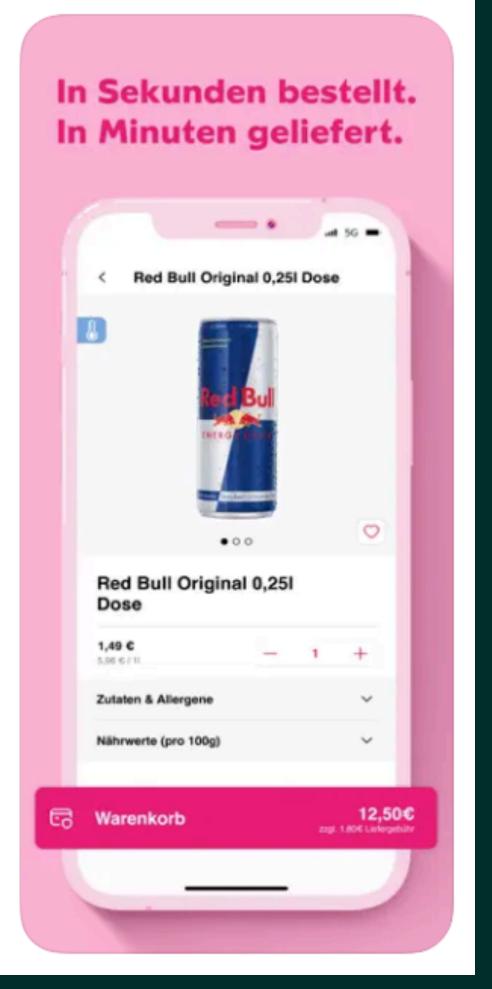
- 2,5 million visits per month
- 10 page views per visit
- 0,8g CO per page view
- 20 tons of CO2 per month
- Flying Copenhagen NY 20 times











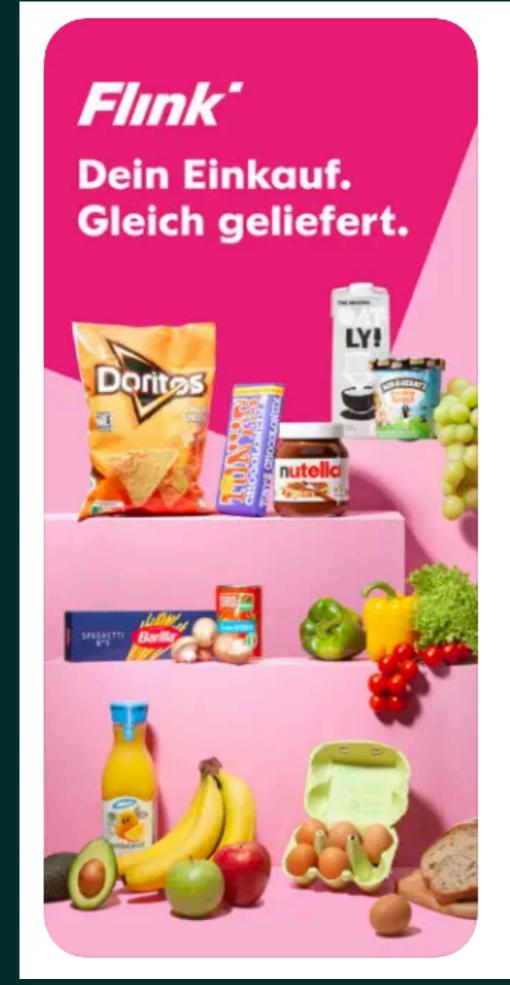


Flink & Co try to find any loophole to undermine workers rights.

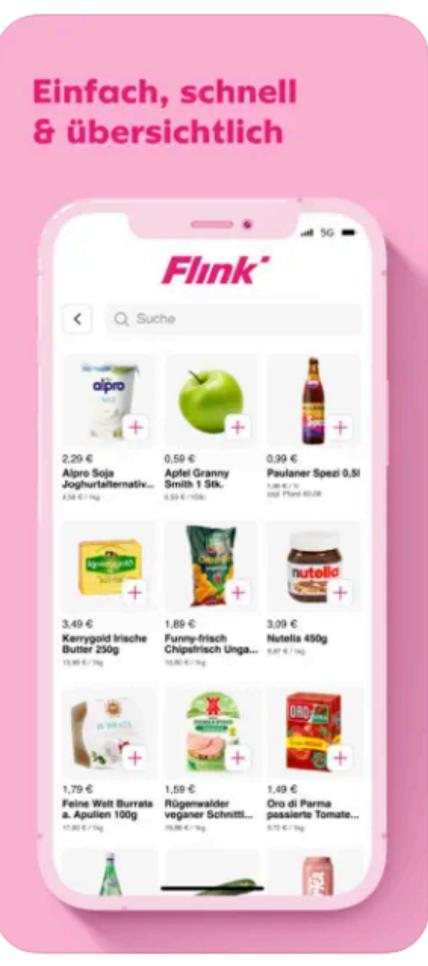


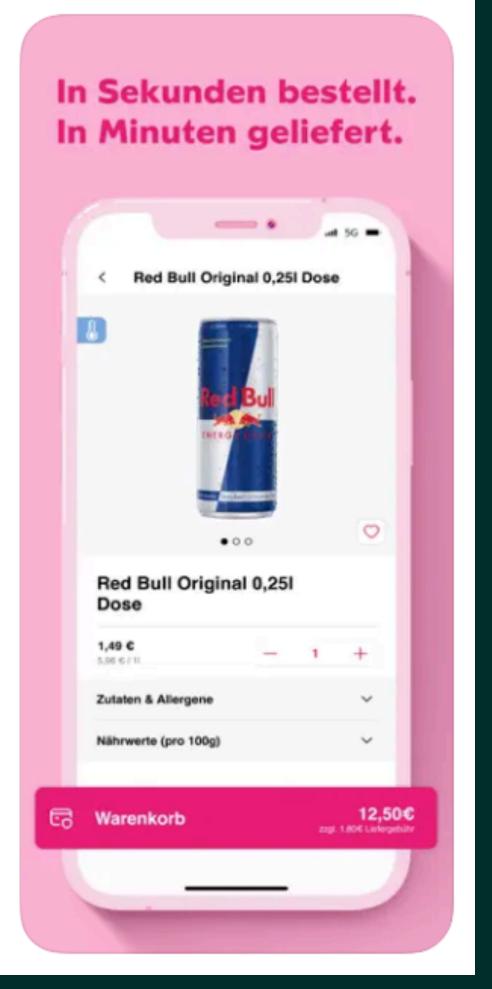
Small grocery stores in our city die due to the destructing biz-models of Flink & Co.







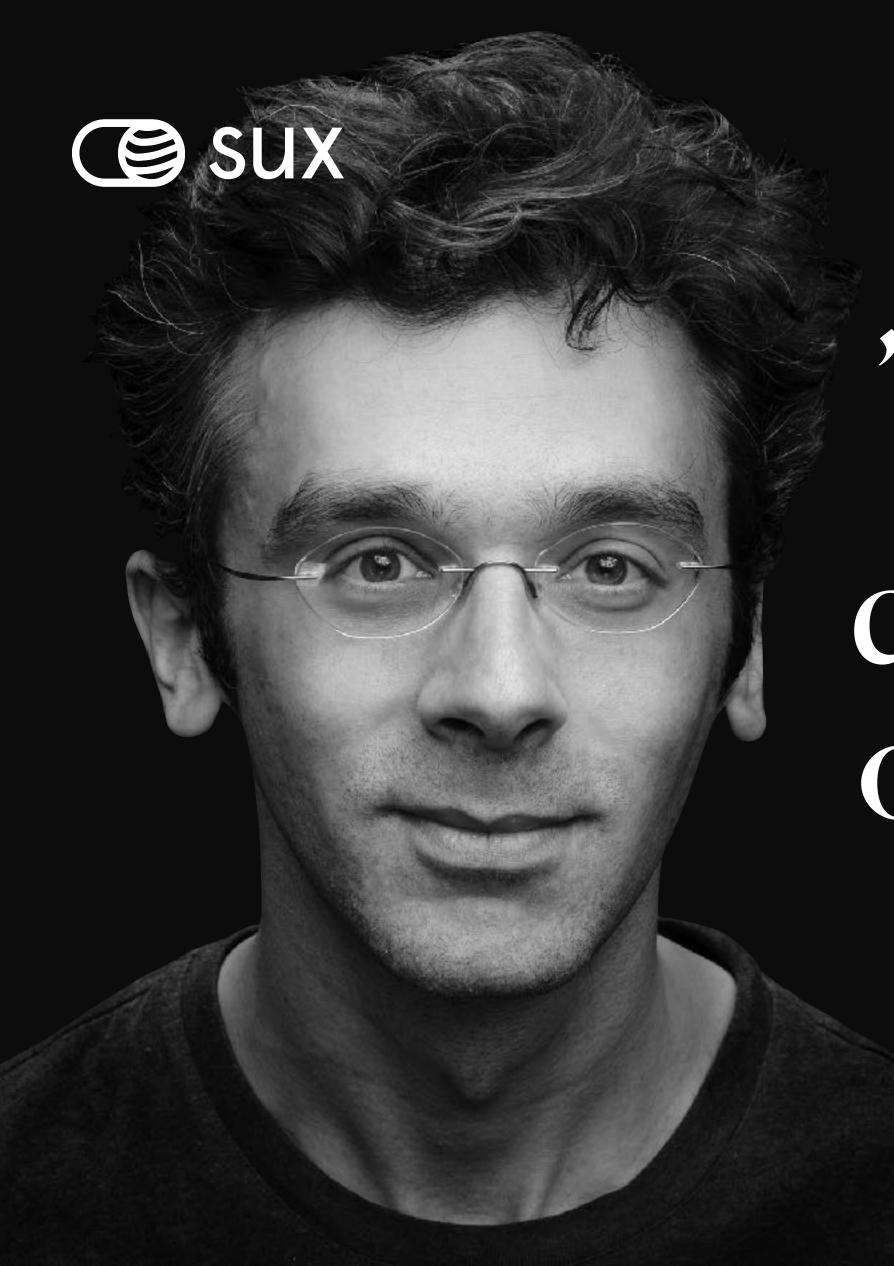






Too often

someone or something else pays the prize for the great product we built for the user.



"When designers center around the user, where do the needs and desires of the other actors in the system go?"

Kevin Slavin



We need to move from a human to a humanity and environmental centered design approach.



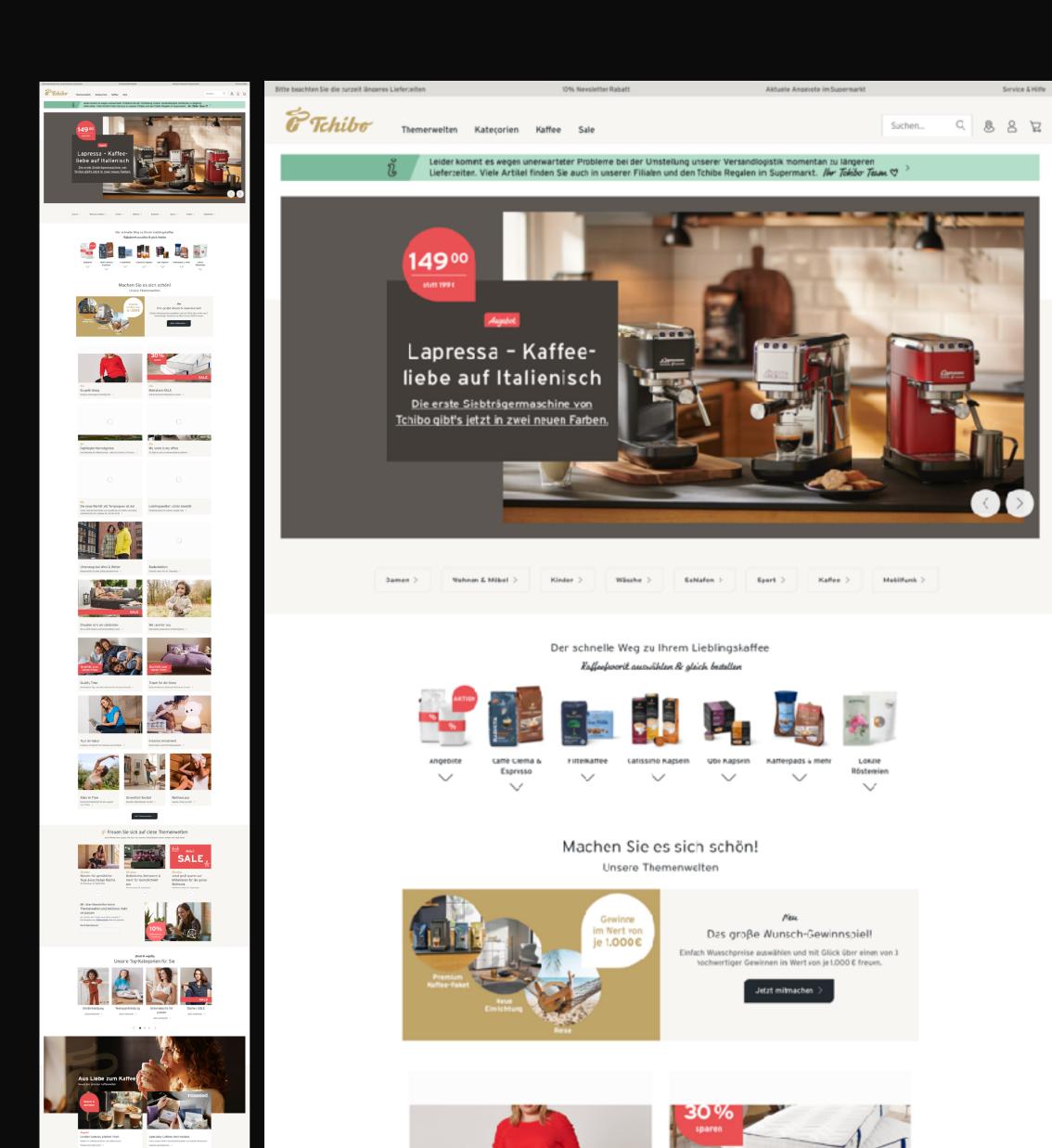


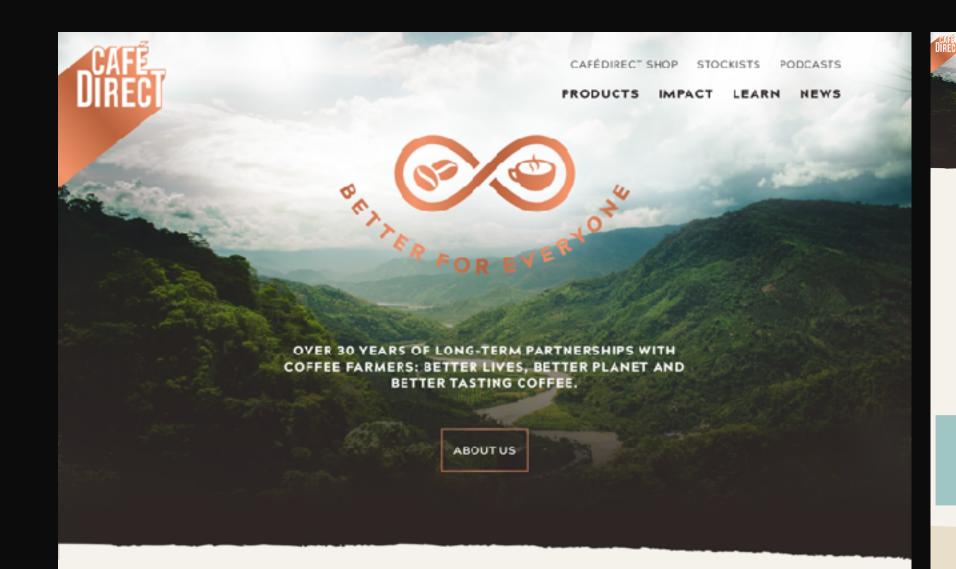
Build for less Carbon Emissions



of emissions are determined in design phase

SUX





Over 30 years of driving positive change

With our long-term partnerships farmers are able to grow exceptional quality coffee, restore their environment and benefit their communities.

This makes life better for them and a better cup of coffee for you.

Drink up - it's better for everyone.







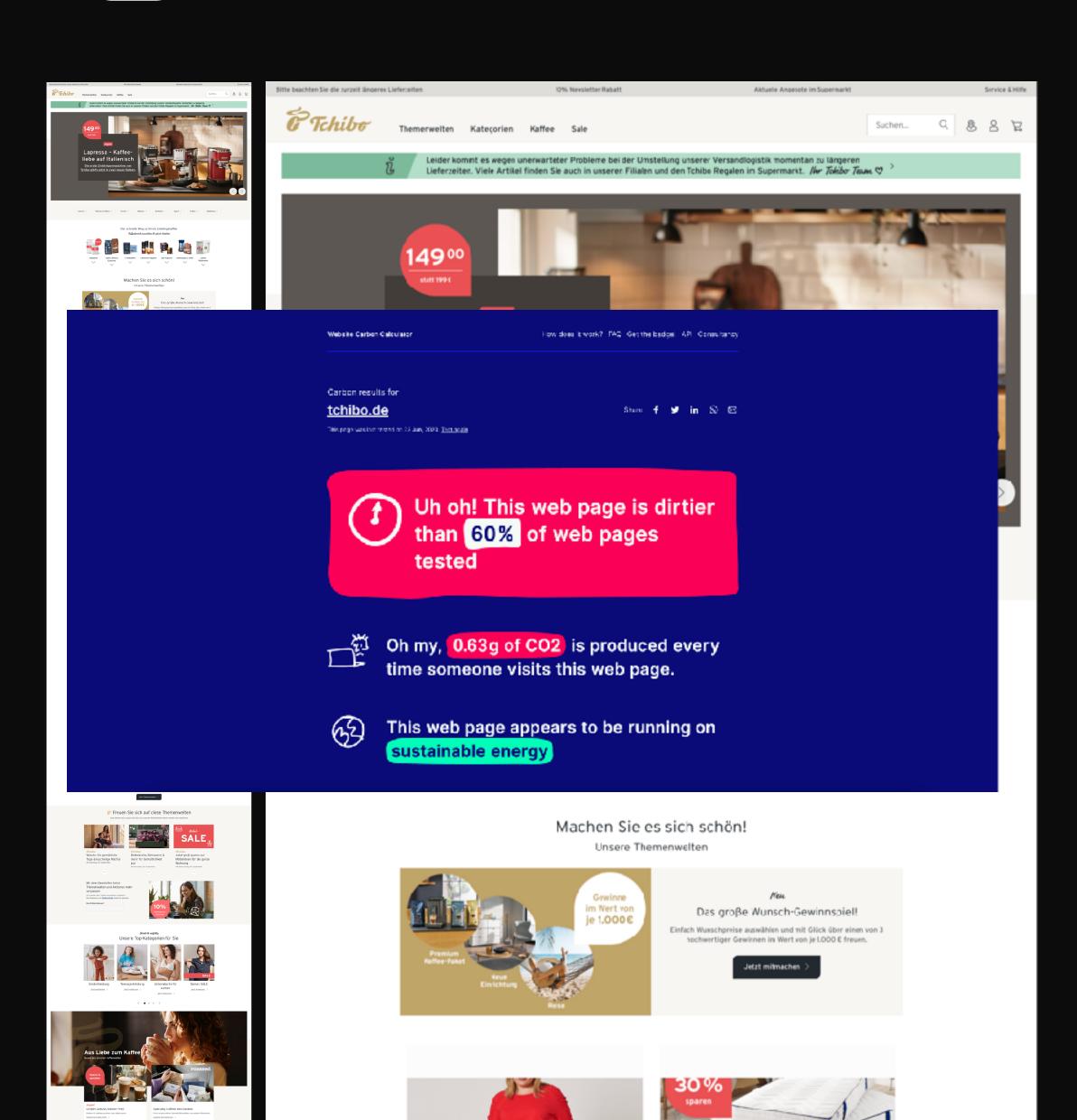


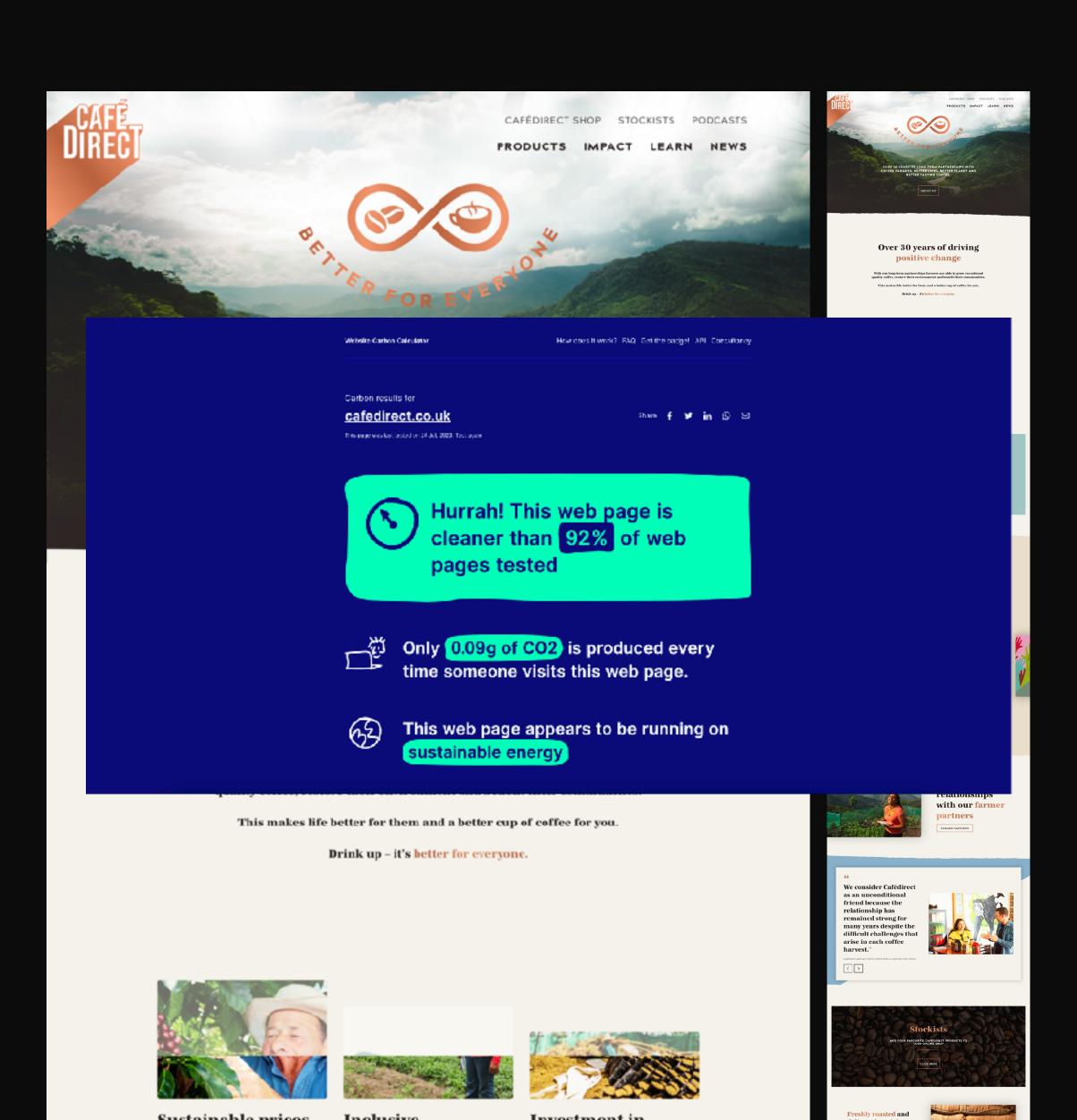
Over 30 years of driving

Better lives, better planet, <mark>bette</mark>r

We have direct

SUX



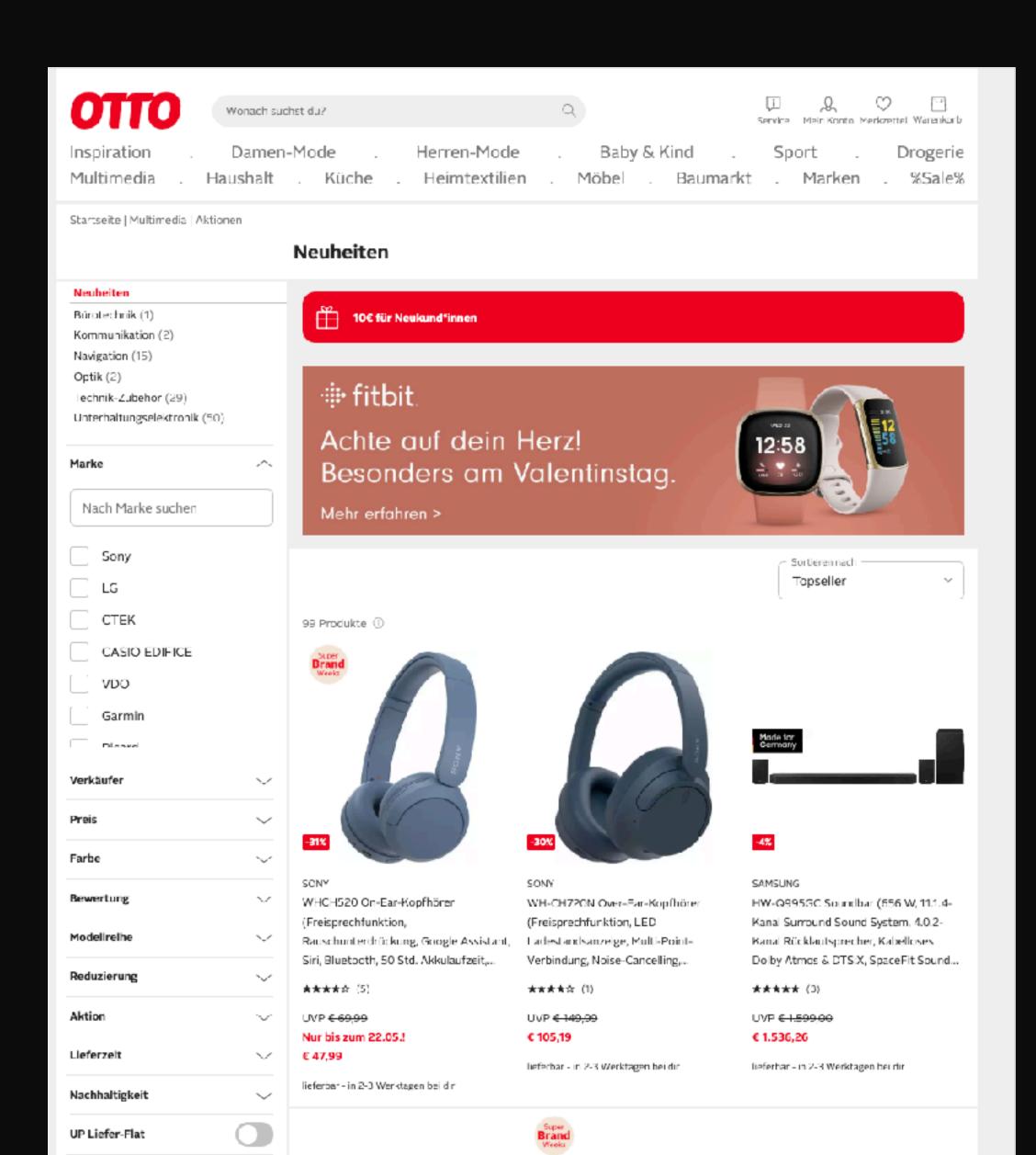




Reminder:

- 2,5 million visits per month
- 10 page views per visit
- 0,8g CO per page view
- 20 tons of CO2 per month
- Flying Copenhagen NY 20 times







And we need to talk about AI. You will use it, but use it wisely and less than you would want to.



HATS STORFE WALKER ROSTNERS FER IN 2023 Y-UN AM

The Generative Al Race Has a Dirty Secret

Integrating large language models into search engines could mean a fivefold increase in computing power and huge carbon emissions.



ILLUSTRATION: JACON: YARLIEW; BETTY IMPORE

IN EARLY FEBRUARY, first Google, then Microsoft, announced major overhauls to their search engines. Both tech giants have spent big on building or buying generative AI tools, which use large language models to understand and respond to complex questions. Now they are trying to integrate them into search, hoping they'll give users a richer, more accurate experience. The Chinese search company Baidu has announced it will follow suit.



But the excitement over these new tools could be concealing a dirty secret. The race to build high-performance, AI-powered search engines is likely to require a dramatic rise in computing power, and with it a massive increase in the amount of energy that tech companies require and the amount of carbon they emit.

"There are already huge resources involved in indexing and searching internet content, but the incorporation of AI requires a different kind of firepower," says Alan Woodward, professor of cybersecurity at the University of Surrey in the UK. "It requires processing power as well as storage and efficient search. Every time we see a step change in online processing, we see significant increases in the power and cooling resources required by large processing centres. I think this could be such a step."

RE:WIRED	GREEN 2022: James McBride
HOST POPUL	SECURITY The US is Openly Stockpiling Dir on All its Citizens SCLL CARERON
HOST POPUL	The US is Openly Stockpiling Dir on All its Citizens

Design for less carbon emissions

"Third-party analysis by researchers estimates that the training of GPT-3, which ChatGPT is partly based on, consumed 1,287 MWh, and led to emissions of more than 550 tons of carbon dioxide equivalent."

Source: Wired

https://www.wired.com/story/the-generative-ai-search-race-has-a-dirty-secret/



HOME LATEST ARTICLES * CALENDAR PI EXPERTS IN THE NEWS INFO FOR MEDIA INS DE LICR P UCR MAGAZINE * NEWS > APRIL 28TP, 2003 >> AIPROGRAMS CORSUME LARGE VOLUMES OF SCARCE WATER All programs consume large volumes of scarce water UCR study finds that keeping servers powered & cool at cloud data processing centers has high water costs



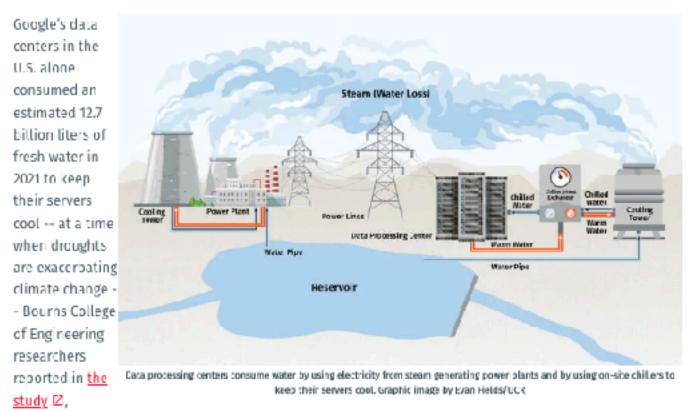
April 28, 2023





very time you run a ChatGPT artificial intelligence query, you use up a little bit of an increasingly scarce resource: fresh water. Run some 20 to 50 queries and roughly a half liter, around 17 ounces, of fresh water from our overtaxed reservoirs is lost in the form of steam emissions.

Such are the findings of a University of California, Riverside, study that for the first time estimated the water footprint from running artificial intelligence, or AI, queries that rely on the cloud computations done in racks of servers in warehouse-sized data processing centers.



published online by the journal arXiv as a preprint. It is awaiting its peer review.

Design for less carbon emissions

"Run some 20 to 50 queries and roughly a half liter, around 17 ounces, of fresh water is lost in the form of steam emissions."

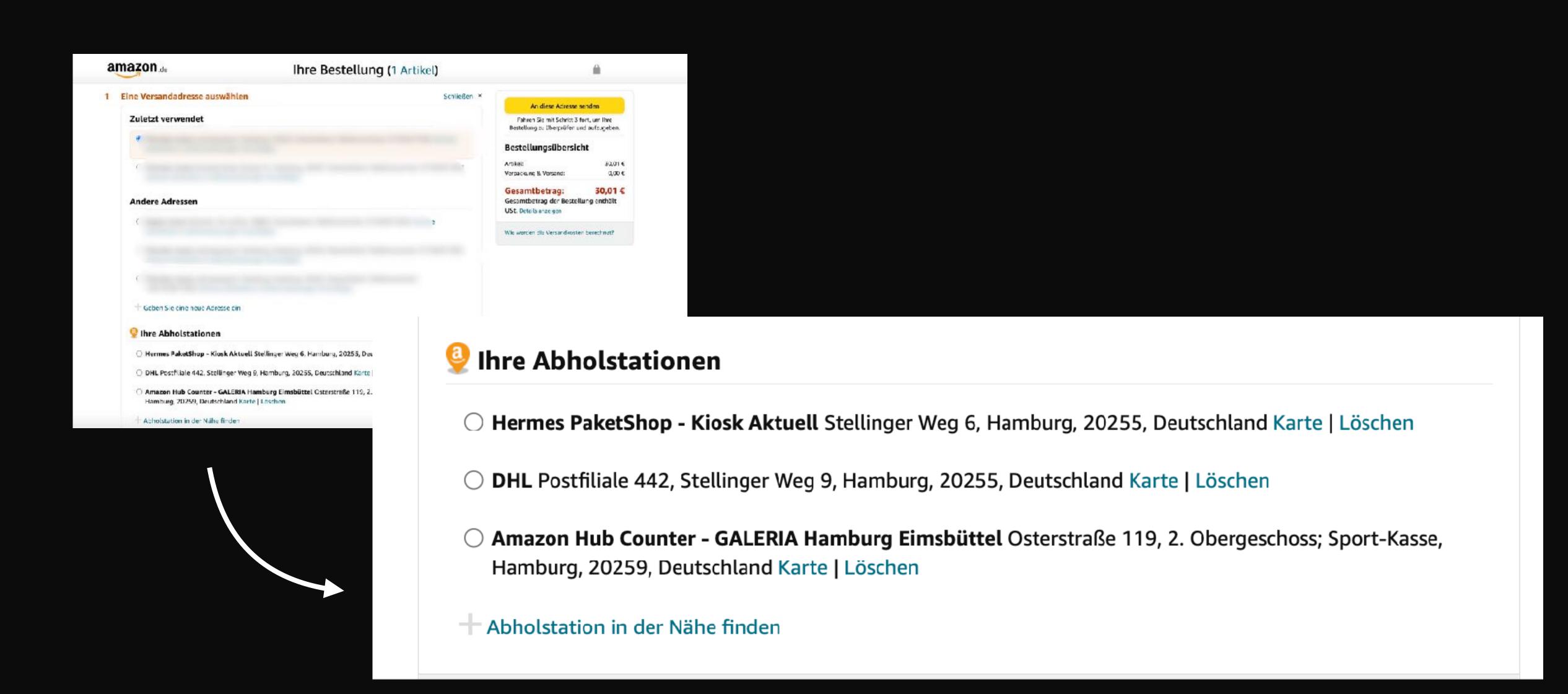
Source: University of California, Riverside https://news.ucr.edu/articles/2023/04/28/ai-programs-consume-large-volumes-scarce-water



Build to drive Sustainability



Design to drive sustainability





We need to help our users to act more sustainable.

1 Educate Users

Explain the impact and offer a low impact alternativ - pages with less pictures and colors or less emails, for example.

2 Create new Defaults

Make sustainable choices default. Shift from Opt. In to Sustainability to Opt. Out

3 Low Impact Alternative

Offer a low impact alternativ - being it a website or a more sustainable way to fulfill the users need.



Solve the right problems.



Solve the right problems







The age of extinction Carbon offsetting

This article is more than 3 months old

Revealed: more than 90% of rainforest carbon offsets by biggest certifier are worthless, analysis shows

Investigation into Verra carbon standard finds most are 'phantom credits' and may worsen global heating

- 'Nowhere else to go': Alto Mayo, Peru, at centre of conservation row
- Greenwashing or a net zero necessity? Scientists on carbon offsetting
- Carbon offsets flawed but we are in a climate emergency

The age of extinction is supported by

the guardian .org

About this content

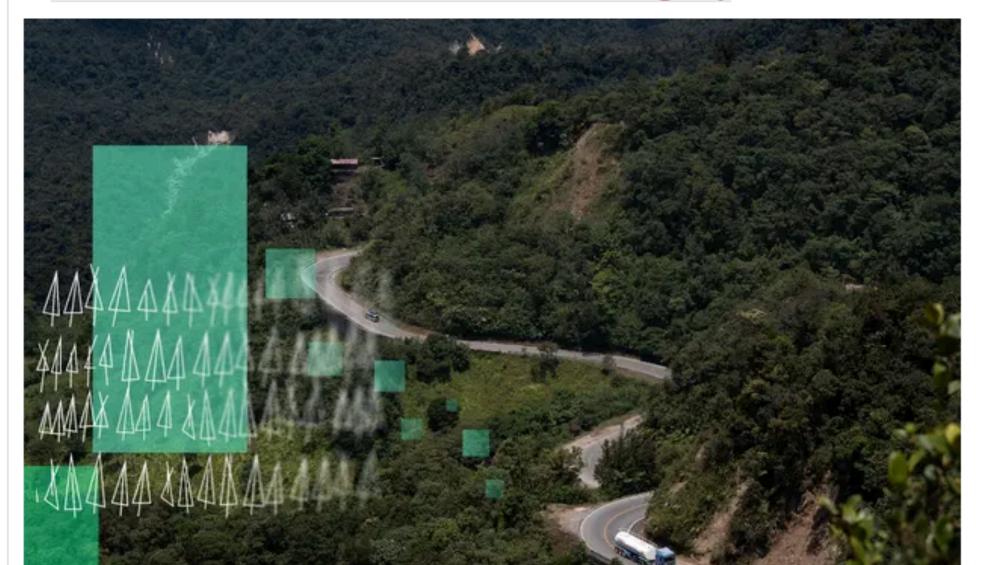
Patrick Greenfield

梦@pgreenfieldukWed 18 Jan 2023 14.00 GMT











Solve the right problems

Wonach suchst du?		□ & ♥ □ ervice Mein Konto Merkzettel Warenkorb
nspiration . Damen . Herren . Kinder . Multimedia . Haushalt . Küche . Heimte		
1 Mein Warenkorb 2 Anmelden 3 Prüfen & Absenden 4 Danke!	!	Zur Kasse 〉
отто		
Reebok Classic »CLASSIC LEATHER SHOES« Sneaker 42, FTWWHT-FTWWHT-PUGRY3 (€ 59,99) Auf den Merkzettel lieferbar - in 2-4 Werktagen bei dir	1 ~	90,00 59,99
	Gutschein / Rabatt Die Eingabe von Gutscheinen ist im Kassenb	oereich möglich.
	Zwischensumme Versandkosten (Paket)	59,99 2,95
	Gesamtsumme alle Angaben in Euro, inkl. Steuer	62,94
	Du sparst bei deinem Einkauf: Wir liefern CO ₂ -neutral durch Kompensation	30,01



Solve the right problems

	Wäsche/Bademode . Sport . Schuhe . Spielze			
Multimedia . Haushalt . Küche . Heimter	xtilien . Möbel . Baumarkt	. Marken . %Sale?		
1 Mein Warenkorb 2 Anmelden 3 Prüfen & Absenden 4 Danke!		Zur Kasse)		
отто				
Reebok Classic »CLASSIC LEATHER SHOES« Sneaker	- Anzahl -	90,00		
42, FTWWHT-FTWWHT-PUGRY3 (€ 59,99)	1 ~	59,99		
Auf den Merkzettel				
lieferbar - in 2-4 Werktagen bei dir				
	Gutschein / Rabatt	^		
	Die Eingabe von Gutscheinen ist im Kasse	nbereich möglich.		
	Zwischensumme	59,99		
	Versandkosten (Paket)	2,95		
	Gesamtsumme	62,94		
	alle Angaben in Euro, inkl. Steuer			
	Du sparst ber deinem Finkauf:	30,01		
	Wir liefern CO ₂ -neutral durch Kompensatio	on		



Frame problems the right way.



Frame problems the right way







THE NEW YORK TIMFS, SUNDAY, NOVEMBER 23, 1924.

NATION ROUSED AGAINST MOTOR KILLINGS

THE need for vigorous na-tion-wide settion to pro-mote street and highway safety has prompted Secretary Houses to call a conference at representatives of the various aponcies interested in checking the steady increase in vehicular accidents. The conformer will be held in Washington on Dec. 18. It will treat the subject from traffic control, construction and engineering, city planning and noming, insurance, education and the motor vehicle and public

ince appealing than the horrors of many. The automobile lowes us as a far more destructive piece of

The recicios motoripi deals mere doeth then the artiferyman. The rean the pirect sense her safe than the man in the trench.

vatty thousand of our men were Miled In action or died of wounds to the nineeen months of this country's participation in the Werld War. This is at the Dale of 5,000 fatalities a worth—a medical everage when compared with the startfing tell of 7,000 lives destroyed contilly by accelerate in the United States.

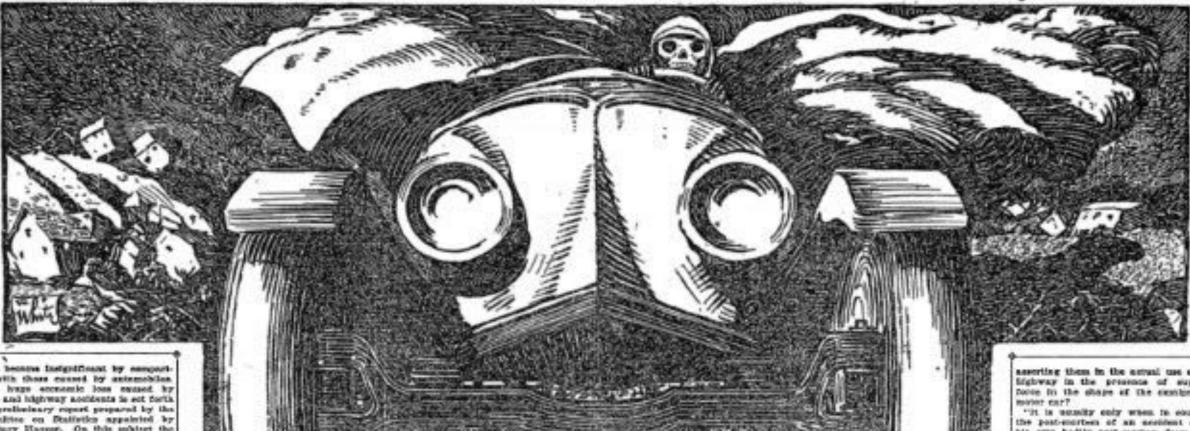
The arrestest sloute techni factor is the automobile. It left a sharables to it waler as it coursed through 1935. It secons for 16,450 virtiess. According to the trugts ante minhaps recorded in the first shee marries of this year there will be ut the backming of Occher approximately 24,000 motor duaths had already ber

A conference called by Beardary and with those caused by antemobiles. The lump economic loss caused by fined picture of the public accident situ-ation. This committee is pincing pur-ticular emphasis upon the annual report productionally 100,000 accesses in which

Sections had year was given as 19,450. "These two items, supplied to 22,600 Succession in their greats crossing aroundly.

Succession in 1909, Henry of the 1,000 who died in street car mishaps were passen-gers of machines wruch to high-new other motion, such as delays, compension

Secretary Hoover's Conference Will Suggest Many Ways to Check The Alarming Increase of Automobile Fatalities.—Studying Huge Problem



the deliberations upon exceet and bight atreet and highway accidents to set forth. way accidents. A Committee on Stating in a preliminary report prepared by the ties was appointed by Mr. Hower to Committee on Statintics appainted by sagain the conference with a chancily de-forcedary Hower. On this subject the

of the United States Course Server on personal injuries occur can probably moreofity statistics, which revealed that \$2,021 persons died in vehicular ratchner been made. The most opportunities to to 1932, an increase of alread 2,560 over based upon the usual linking of \$5,000 Walle the anasher killed in orionsaldin per title and average of \$175 for each personn) indure.

the motor car was also concerned in familities and 679,000 non-fatal injuries. ether highway fatall es. The Constitution propertiesty, give an apprentuate total Bureau charges such orthogon to the of \$190,000,000. Add to this we average heartest vehicle involved. A collision be- actual property durange of \$50 due to all tween a trair and an astropoldic is class and deals involving either personal in-ation as a train accident. When street jury or properly demand former-valively same are blacked upon the records. There intal estimated last of meanly \$600,000,000

sense interarban Problems. Motorcrocks ac-sounted for 200 deaths and all other ve-

The Modern Juggerraut.

yet involving undoutcelly, a large such various parts of the emission parts of the emission of any open to make any open to m test. In this category would be in- lated in such a way as to bring out tradied the governal transporter that are supposed to lie in out opposition. It contemplates the re- legal rights that are supposed to lie in out opposition, and the desired such that are supposed to lie in out opposition. It is not opposition, both the trade of accidents and the feature in a contemplate of streets of frain-

right now.
"Under present "conditions there is a deadly competition between pedastrian and meteriat for " use of these strips of territory we 'call street a conflict leadly to it wayfarer, with the wietory to the motorist.

"Frankly, th-te langely a ma .: or at de drops at write it backbulled comes ered from his other self subbed the

wheel. As both must use the highway and as two holles cannot occupy the rame space at cace, when the re need, on they so edien do, what is the MORNARCHE, 1998 M. a. The transfing and numbing moment entimes. He mant 'In far relief. The spirited mother who send her title

thild oil to school or not to play, the faltering aged person who tremslocally Isospie a crisicing much hape some surrease of their similary. Consumoty, the conscioutions operator who with terms rives seen the foot durt out into his very poth from some negacetal discoion is recitled to some regard.

"As It stands, the motorist has wen ids contest for the use of the streets ver the foot massengers, daughts the present efforts of police, courts and meand his kind. "The contacts! has inspired

"If we have fulled adequately to regu ete remorists shall we exceed fixy bet-It is well enough to condense the "laylighway in the presence of superior reckloss individual who is best on getbecome to the shape of the sumbrement than there, whether on or off a crosswalk, without looking or governing his the post-mortem of an account or of any and the under-overage is prostinguous at own bodily post-species from much and ateriness of our population who do and don't that the pedestrian is, so to not use the best judgment became they speak, allowed to earloy his legal sights: memor and who, encoperated by Most of us prefer not to full visites as never heating, anver coding train of authe price of such recourse. O'Byen was toward that editions will recordingly broken upon the highway so quoted as serving that 'most of us are fast on to upon all calculations of time still addicted to habits on the street and space, try to thread their way which were suitable to the life of a c percention ago when all vehicles were I disagree emphatically.

As to Regulating Jaywalkers.

torse draws. The medien street salls

for an entirely new set of babils and

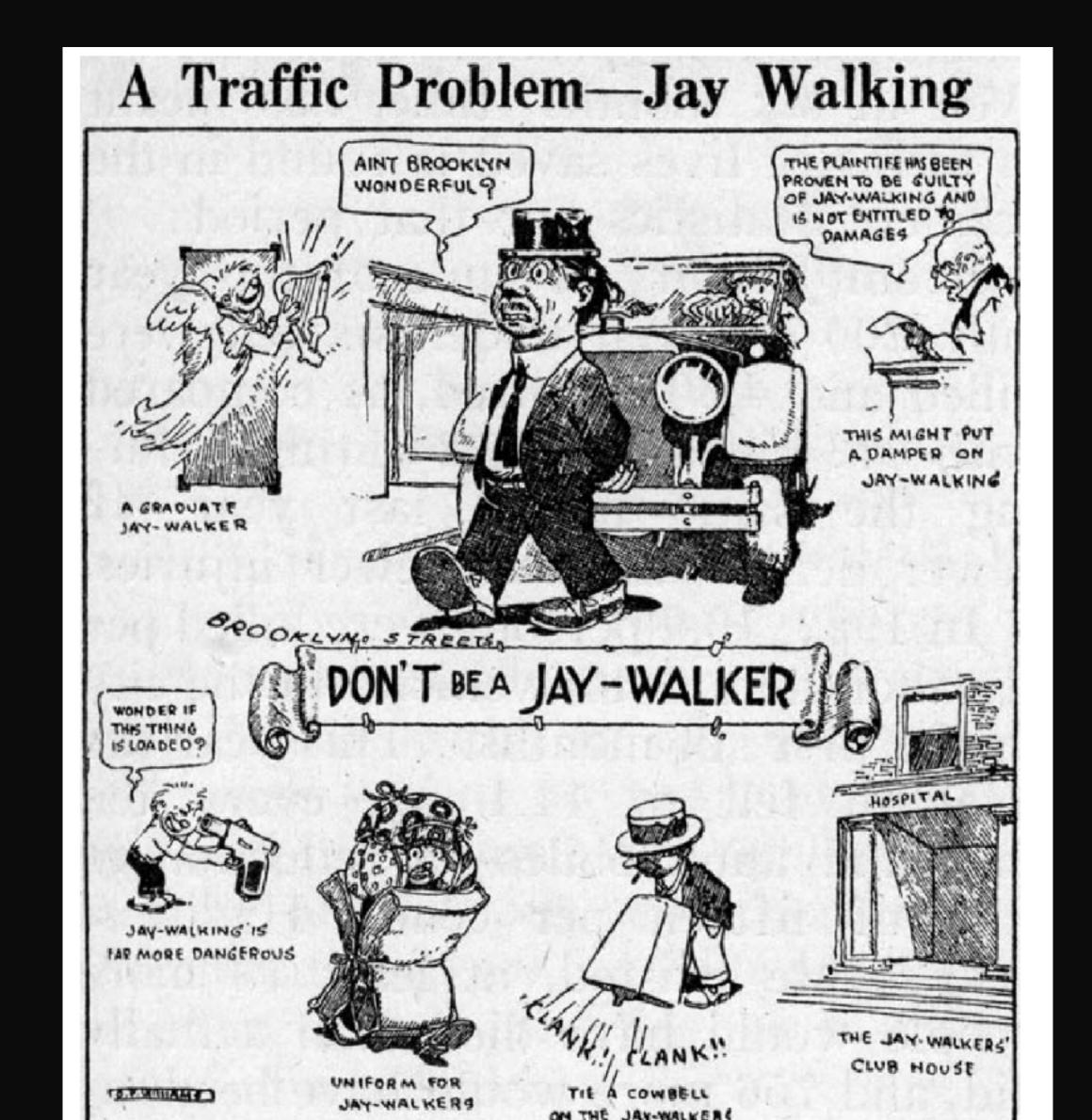
Pedestrian Like a Robbit,

vehicle driver.

for a kind of alerteness and premaritor. "Any regulating of the pedestrian is which we did not seem drawn of twenty to be done with continu. His constitution and the pedestrian fluid continues and the pedestrian fluid continues of the read and tentile regulations. To since in the hands of any single official such as the Police Conseilables of "Any regulating of the pedestrian is this or any other city the appearation power to prosudgote sodes for his con-duct is a questionable expedient, no mat-"In short, this serves notice on the he. It teaches too shouly upon the ISpedestrians that he uses the public there- ortics of the citizen.

oughtures at his pech, a state of things "If it is to be done at all let some which we know only too well called in previou and reasonable law or ordinance







DO YOU KNOW YOU ARE GUILTY

OF JAYWALKING—when you cross streets carelessly!

JAYWALKERS, who cross in the middle of the block; who fail to look, or who are otherwise careless, endanger only themselves.

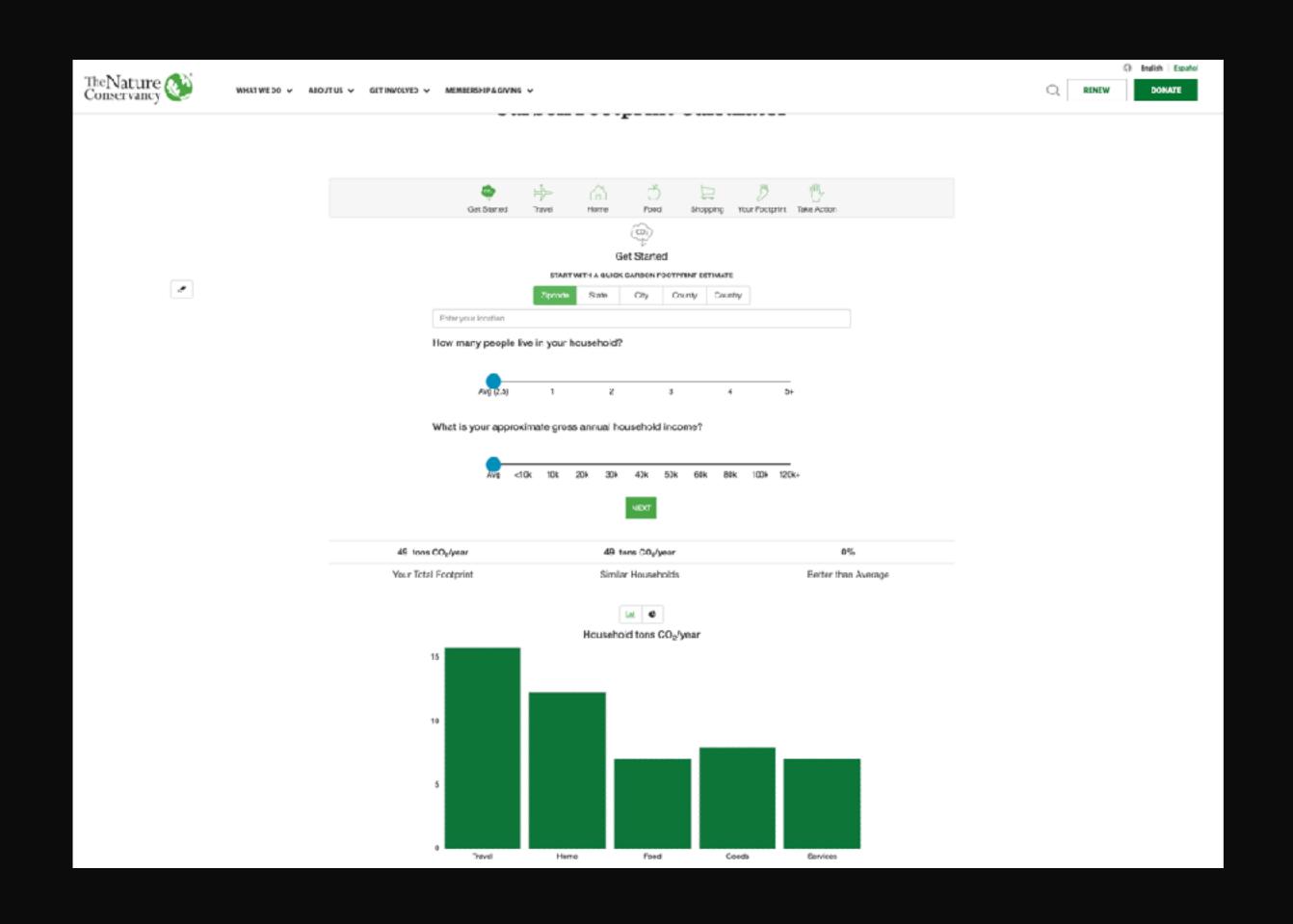
CROSS ONLY AT CROSSINGS—If Traffic Officer is there wait for his signal.

ALWAYS LOOK LEFT-LOOK RIGHT! CROSS STREETS CAREFULLY.

BUREAU OF PUBLIC SAFETY, POLICE DEPARTMENT, CITY OF NEW YORK



Frame problems the right way







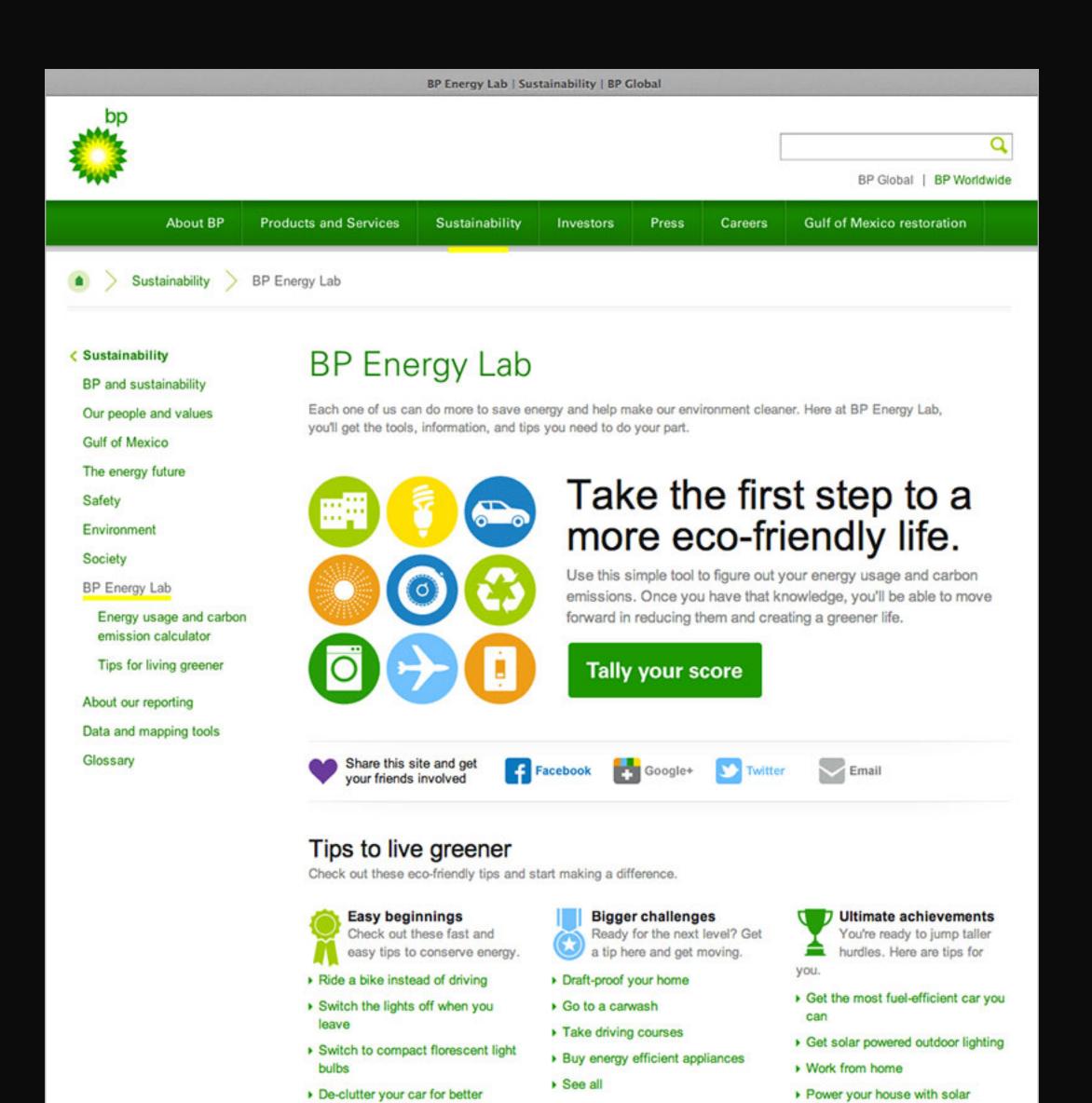
Frame problems the right way

Reduce your carbon footprint. But first, find out what it is.

Call it your mark on the world. It's the amount of carbon dioxide emitted due to your daily activities—from mowing your lawn to vacuuming your home. Find out the size of your household's carbon footprint, learn how you can reduce it, and see how we're reducing ours at bp.com/carbonfootprint. It's a start.



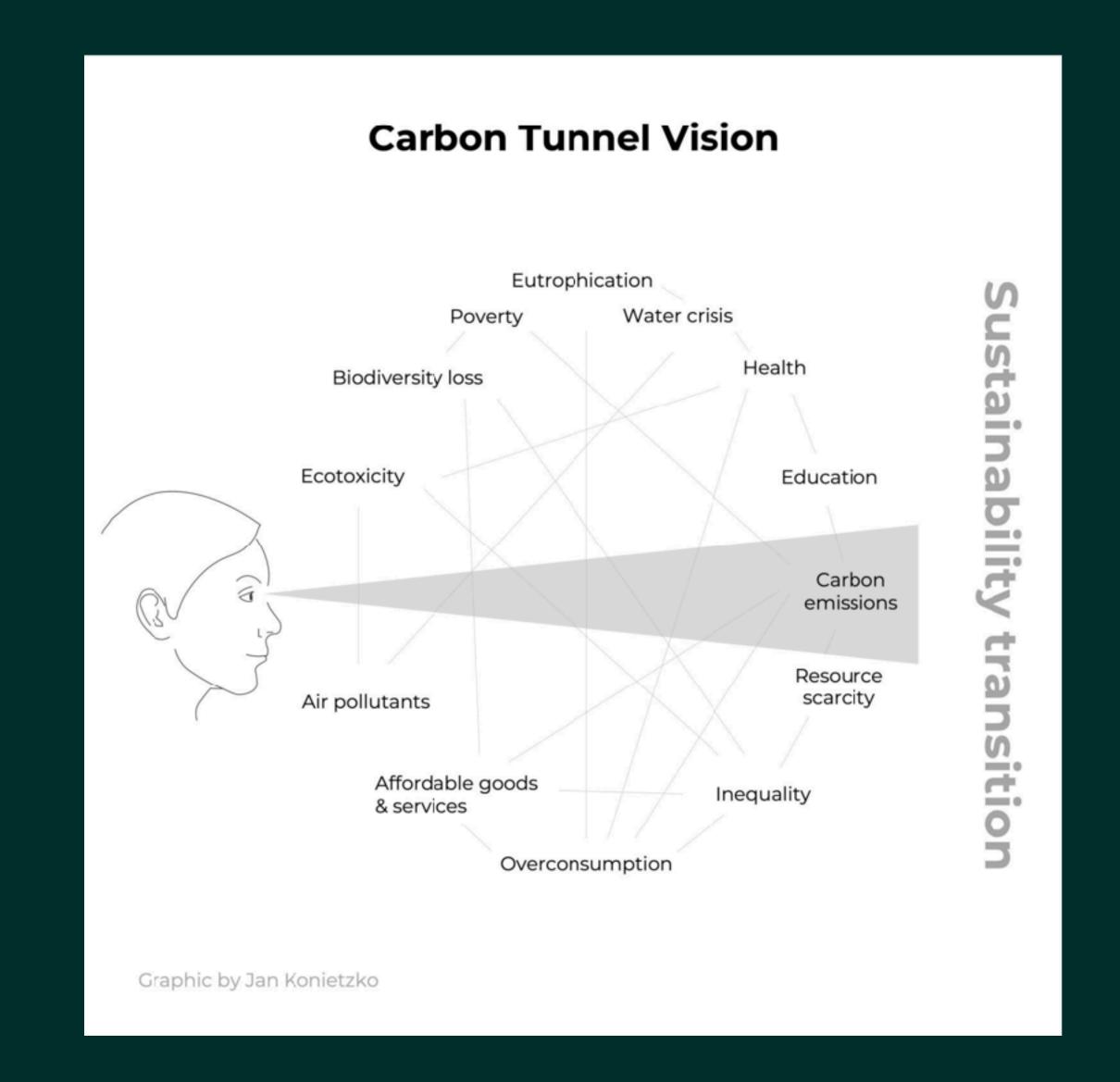
beyond petroleum[®]





Design for all aspects of sustainability.







What have we won, if we save the world only for us, who were lucky enough to be born on the rich side of the planet?



Or what have we won, if we save the planet, but continue having more and more cases of depression and burnout?

SUSTAINABLE GALS





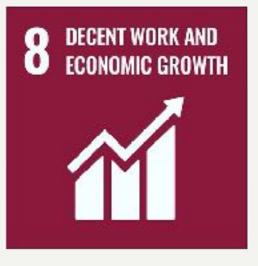








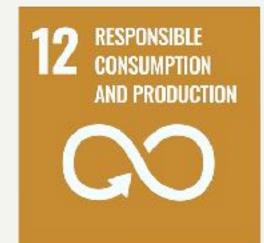
























https://sdgs.un.org/goals



Build for Equality.



Fail fast, fail often fails us as the "one & only" mantra.





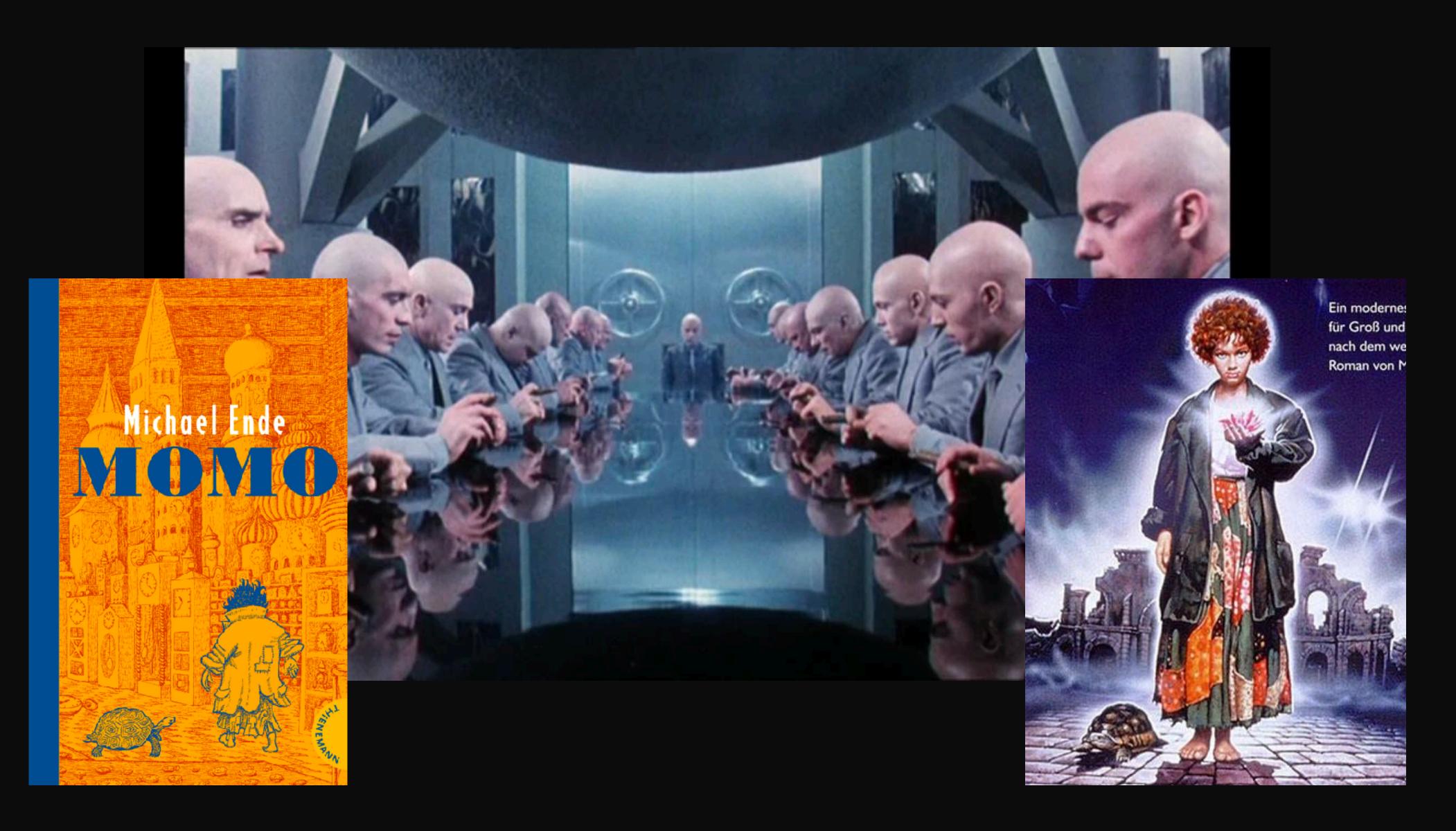




Build for less User Addiction









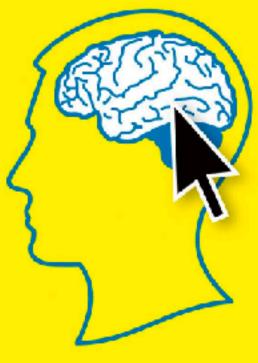
Design for the user

NATIONAL BESTSELLER

"A must-read for everyone who cares about driving customer engagement."

—ERIC RIES, author of The Lean Startup

HOKED



How to Build
Habit-Forming Products

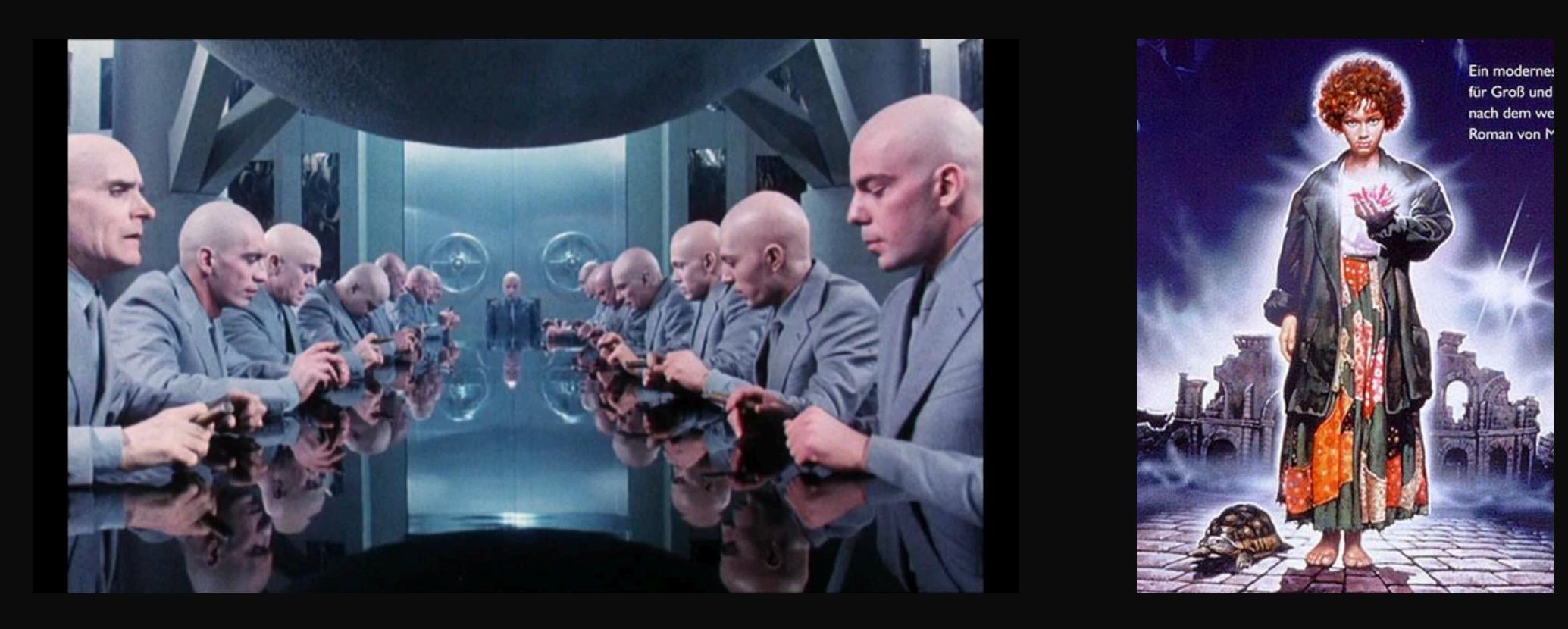
UPDATED

NIR EYAL

WITH RYAN HOOVER

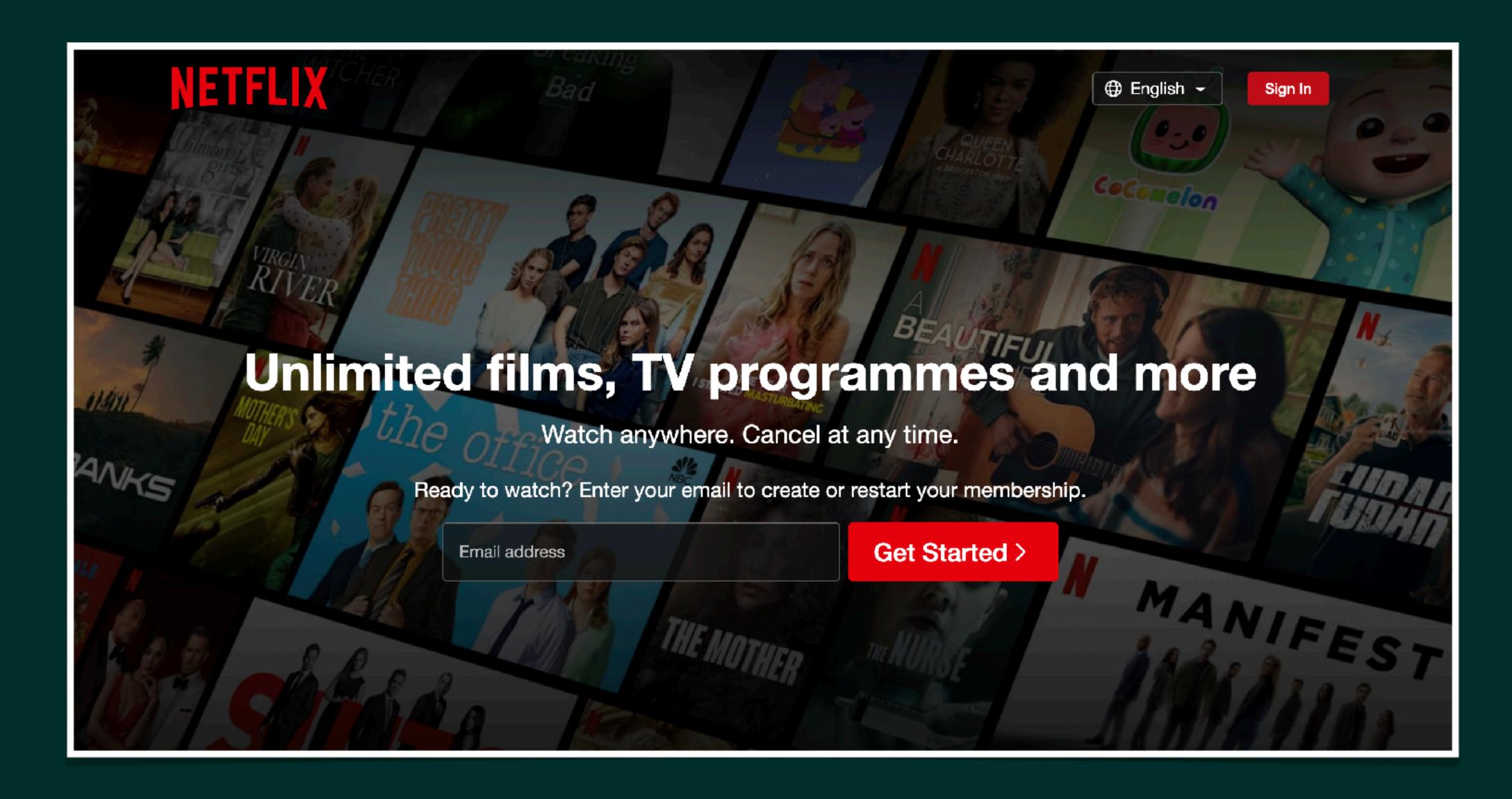










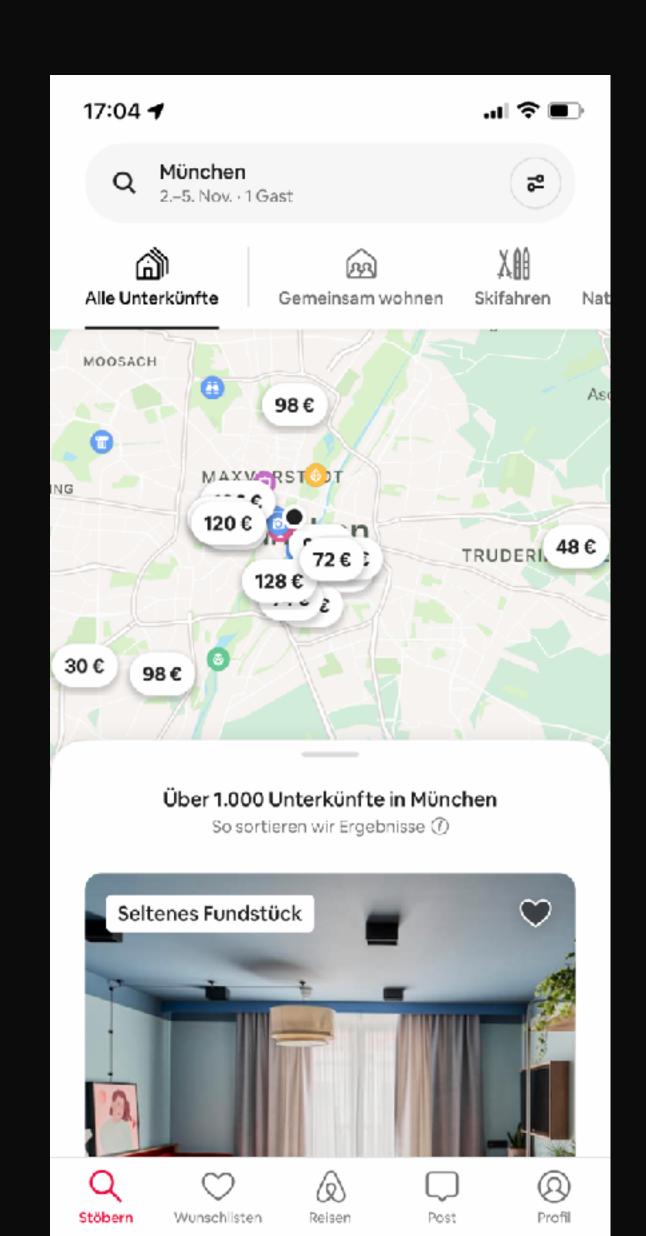


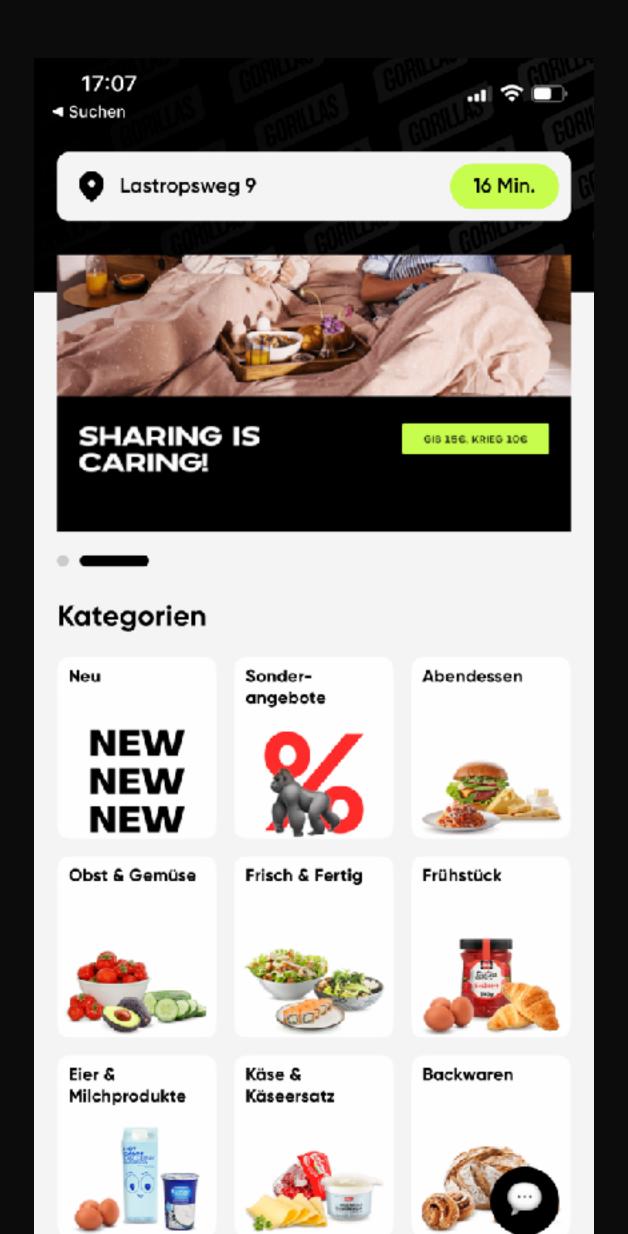


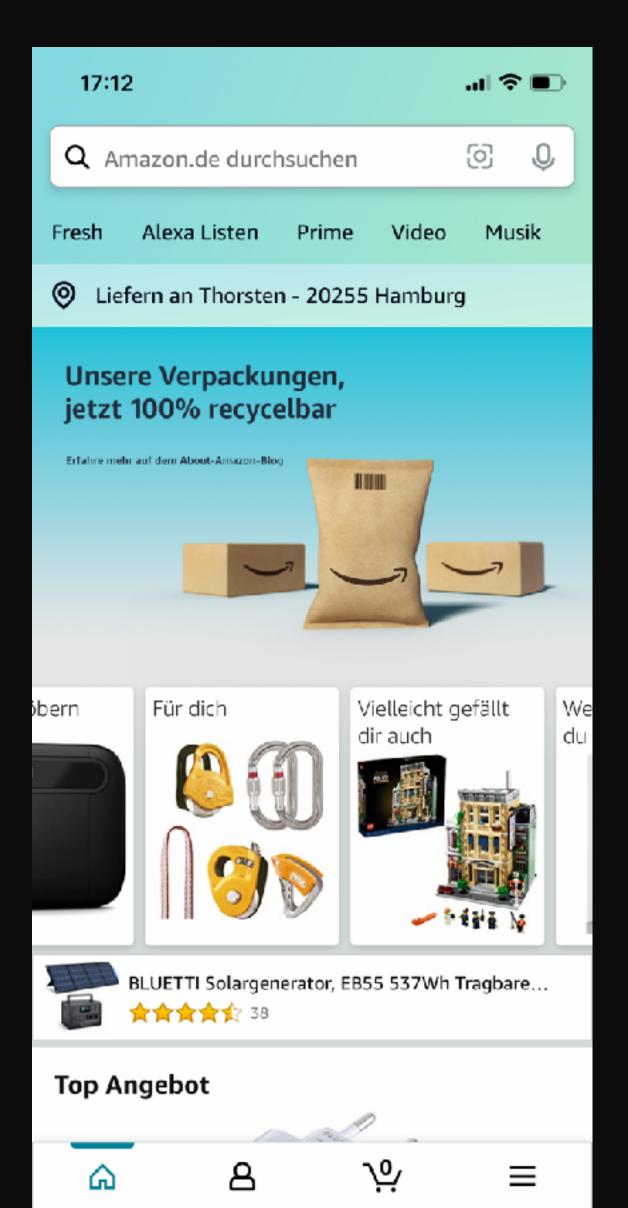
Buildfor SULLOUNGING eco-systems.



Consider surrounding eco-systems.









Everything we build is part of a bigger system. We must not design for our users only, but for all actors.

1 Embed on Strategic Level

Create transparency about the negative impacts of the experience on strategic level.

- Sustainable Business Model Canvas
- Sustainable Strategy Canvas

2 Embed on Tactical Level

Create transparency about the negative impacts of the experience on the building level.

- Sustainable User Journeys
- Actor Personas



Sustainable User Journeys

Journey:					Sux
					sustainableuxnetwork.com
••••••					
	Step 1	Step 2	Step 3	Step 4	 Step n
Steps					
Goals					
Actions					
User Feelings					
Pain points					
Other Actors					
Human					
Non-Human					
Environmental sustainability					
Environmental pain points					
Ideas/Opportunities					
Social sustainability					
Social problems and pain points					
Ideas/Opportunities					
Mental sustainbility					
Mental pain points					

Source: SUX Network



But, come on. Good points, but, it's not a business case..



Design for business

edie

Sustainability

Net-Zero

Business leadership

22nd February 2023

News Topics Business Leadership Month Mission Possible Podcasts Resources Events Clubs More

HSBC adds greenwashing to risk matrix

By Sarah George



The addition was confirmed through the bank's latest annual report and accounts this week, which also confirmed Q4 2022 profits of more than £4.3bn – an increase of some 90% year-on-year.

"Expectations with respect to the intersection of environmental, social and governance (ESG) issues and financial crime as our organisation, customers and suppliers transition to net zero, are increasing, not least with respect to potential 'greenwashing'," the report states, in a section on top and emerging risks driven by external factors.

"Companies also face a heightened regulatory focus on both human rights issues and environmental crimes, from a financial crime perspective," the report adds.

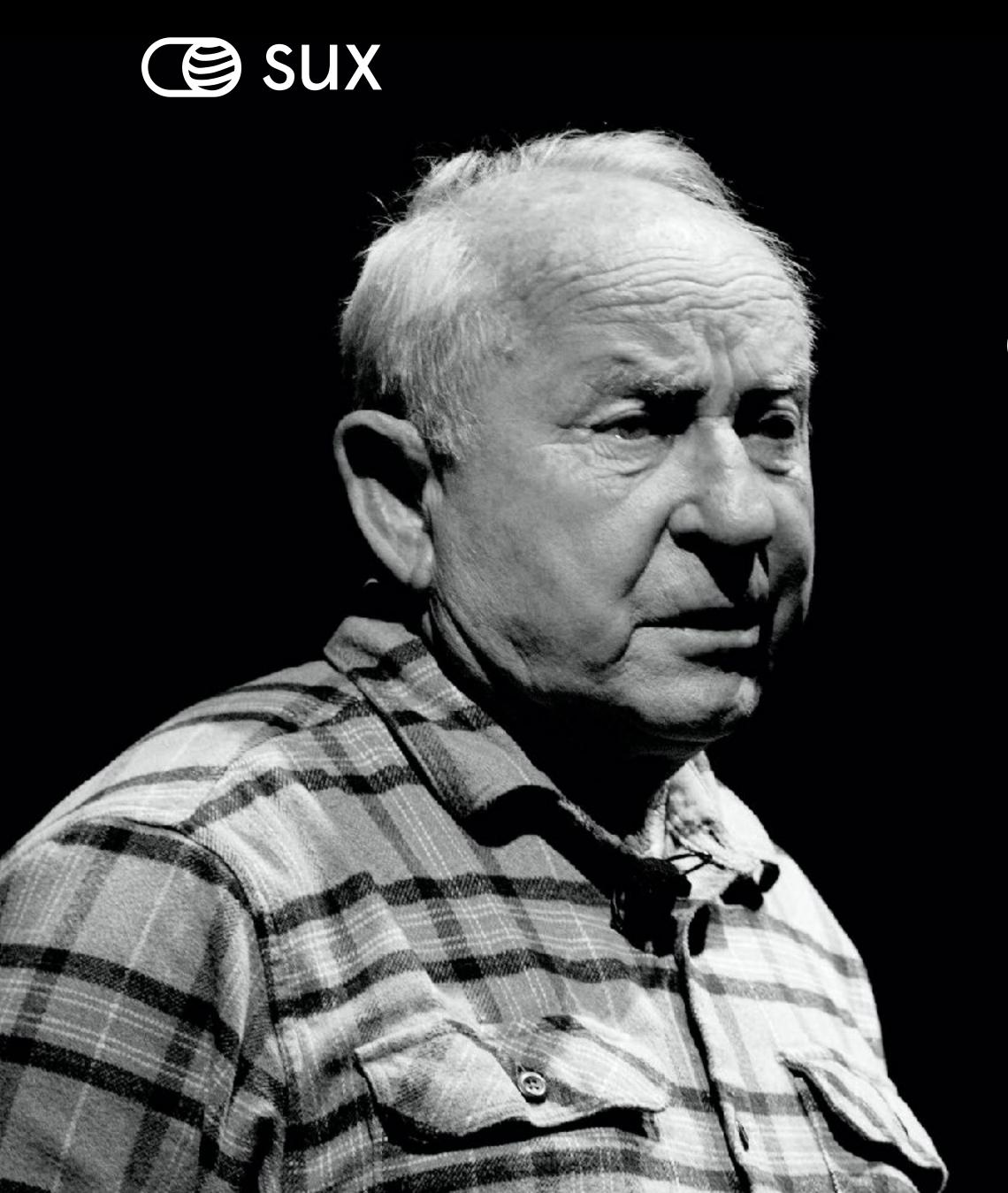
Elsewhere in the report, HSBC confirms that it will update its climate plan by the end of the year, including new measures to measure and address climate-related risk. "We are also enhancing our

Source: edie

https://www.edie.net/hsbc-addsgreenwashing-to-risk-matrix/



"We found that organisations that focus on sustainable product design not only stand to gain from improved compliance, reduced emissions, and reduced resource scarcity concerns, but can also reap benefits such as increased revenue growth and improved relationships with customers and employees."



"Despite the challenges involved, we've found that every time we've elected to do the right thing, even when it costs twice as much, it turned out to be more profitable."

> Yvon Chouinard Founder Patagonia



What should you do now?



Incorporate true Sustainability Narratives in your team/company.

User value

Incorporating sustainability in your digitale experiences becomes crucial for a good relationship to your users/ customer.

Employee value

Creating sustainable products improves the relationship to the employees of a company.

Business value

Sustainable products can create more revenue growth already today and make sure you still have a business in 5 years.



Create Transparency about the negative impacts of your (digital) product

Carbon Footprint

What is the Carbon footprint of your digital product?

Actors & Impacts

Who are the other actors in the context of your digital product? Who and what is impacted by your product?

Unintended Consequences

Are there unintended Consequences of your digital product - on other actors, the environment or the users?



Start making Sustainability *Default* in your product building/design processes.

Sustainable Strategy

Incorporate Sustainability in your product (and company) strategies from the beginning.

Additional Goals

- How much less carbon will your product emit in 12 months?
- Which unintended consequences can be lowered or fully avoided in 12 months?

Sustainable Design/Building

- Start using Carbon Friendly design and build practices: Elements, Fonts, Images, Caching, etc.
- Identify and use Sustainable Defaults



It is a mindset shift.

We need to change the way of thinking digital product creation by asking the right questions, setting new layers and KPIs and shifting the narrative beyond our classic mindsets.





"For there is always light, if only we're brave enough to see it. If only we're brave enough to be it."

Amanda Gorman

