

# Nachhaltigkeit & Innovation: Stoff für den Erfolg

**Dr. Stefan Gara**

**ETA**  
Umweltmanagement



# Youth Encounter on Sustainability - Kenya 2012



**Nachhaltigkeit & Innovation:  
Stoff für den Erfolg**

Dr. Stefan Gara  
ETA  
Umweltmanagement   
© 2012 Gara | 10.10.2012 | www.eta.at





Solarlampenproduktion  
in den Armutsvierteln  
Nairobis



# Aus meinem Tagebuch ...



Ethiopian Tannery, Äthiopien



Hyper Cycle Systems Corporation, Japan

**CleanMed Europe**  
The International Healthcare Congress on Sustainable Products and Practices

Verantwortung für Mensch und Umwelt  
**PVCfrei**  
Wiener Krankenhausleiternverband

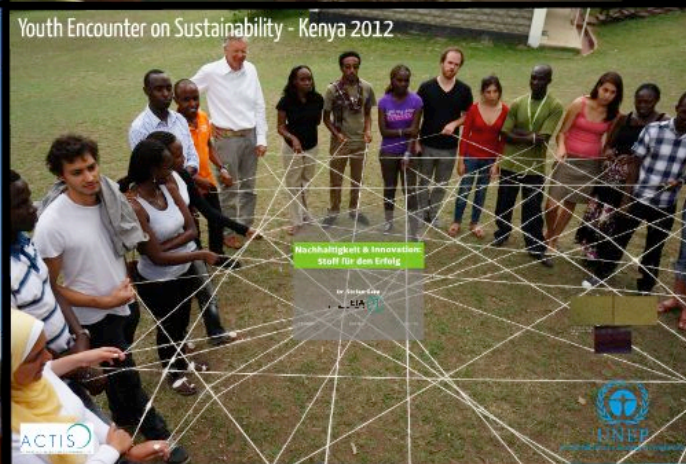
**Mehrwegsysteme**



**H  
SPITAL**



**Health Care**  
Without Harm



Training & Projekte mit Studenten weltweit

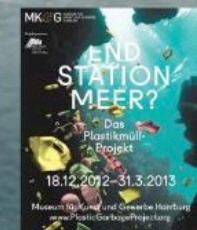
# Ist Nachhaltigkeit nur eine Modeerscheinung?

... das wäre eine fatale Fehleinschätzung!

Auf jedes Kilo Plankton kommen sechs Kilo Plastikmüll. Bis zur Zersetzung in zirka 500 Jahren werden Meerestiere diese Partikel schlucken und daran verenden.

Die Moralisierung der Märkte ist das gesellschaftliche, die Paradoxie der Knappheit das wirtschaftswissenschaftliche Phänomen.

[http://www.bertelsmann.de/epapers/ty\\_34/024\\_31\\_07\\_12\\_06endokonz.pdf](http://www.bertelsmann.de/epapers/ty_34/024_31_07_12_06endokonz.pdf)



"Trash waves" in Indonesien © ZAK NOYLEA-FRAME

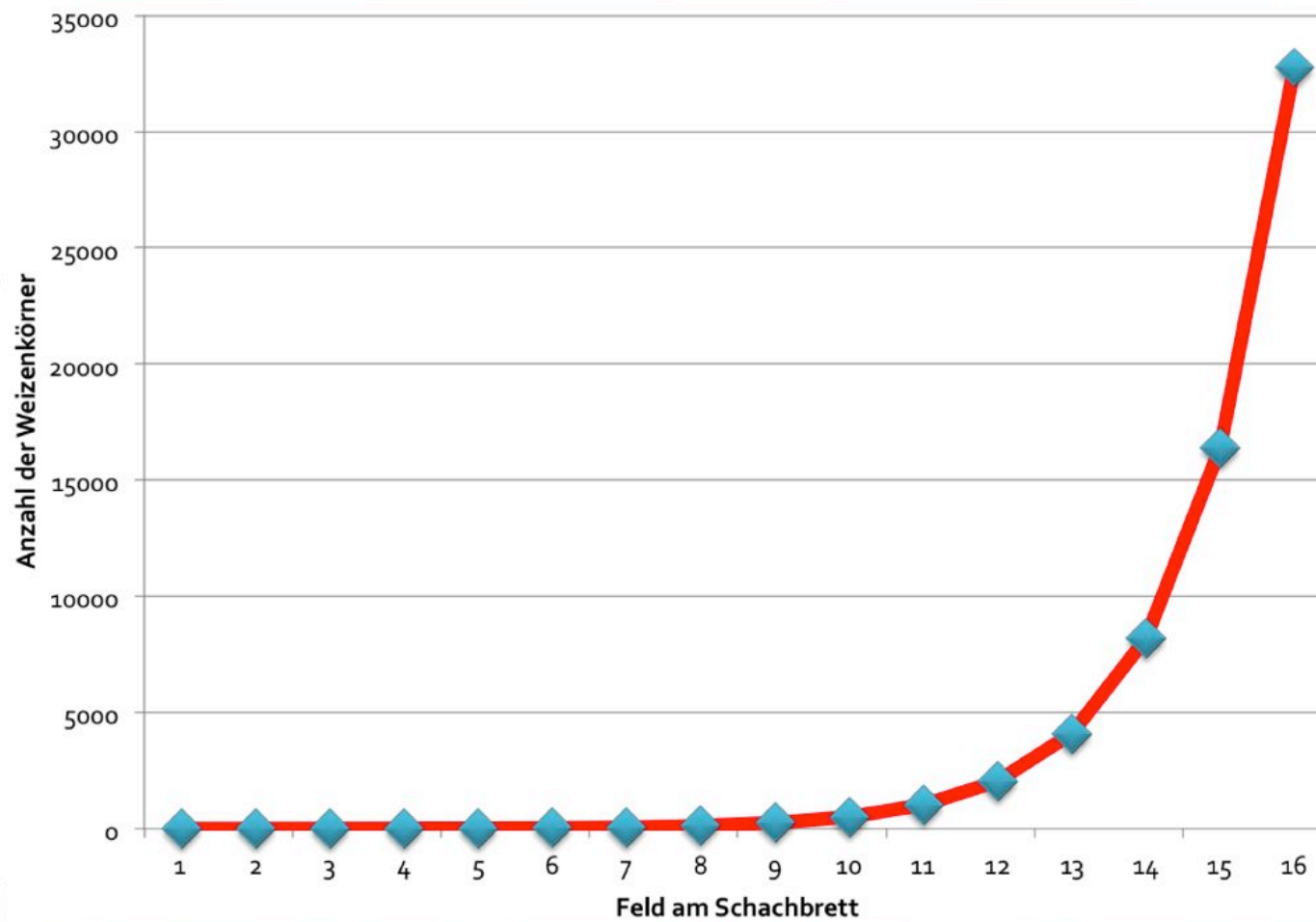
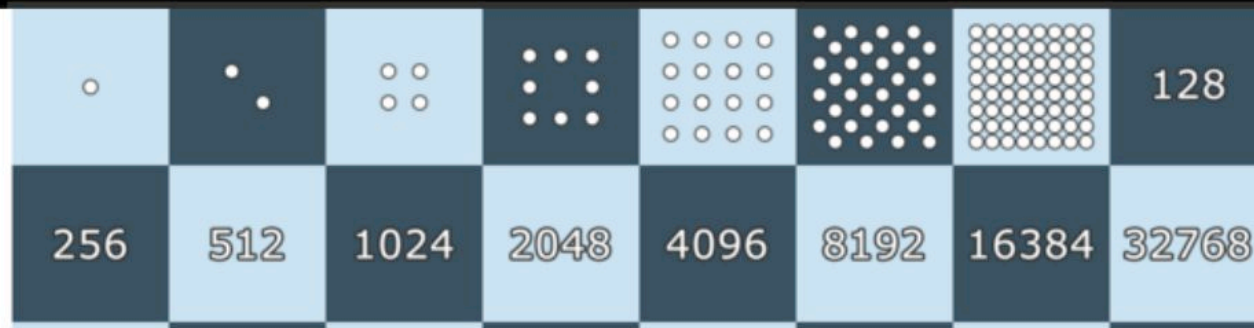
[http://www.buffingtonpost.com/2013/08/10/trash-waves-indonesia\\_n\\_3736913.html](http://www.buffingtonpost.com/2013/08/10/trash-waves-indonesia_n_3736913.html)



Sissa ibn Dahir



[http://commons.wikimedia.org/wiki/File:Lahur\\_Sessa\\_by\\_Thiago\\_Cruz.jpg](http://commons.wikimedia.org/wiki/File:Lahur_Sessa_by_Thiago_Cruz.jpg)







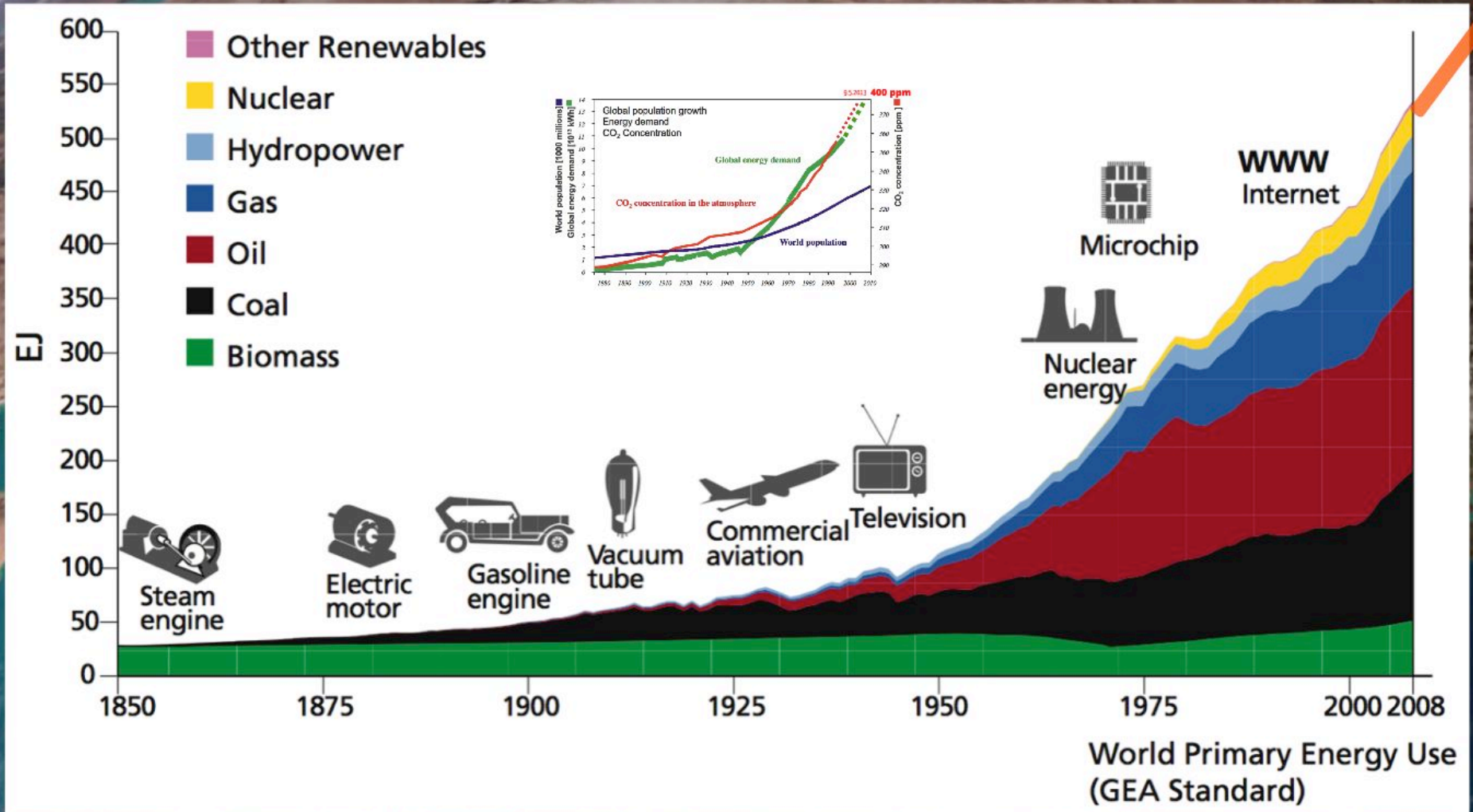
**Das System wird unkontrollierbar**

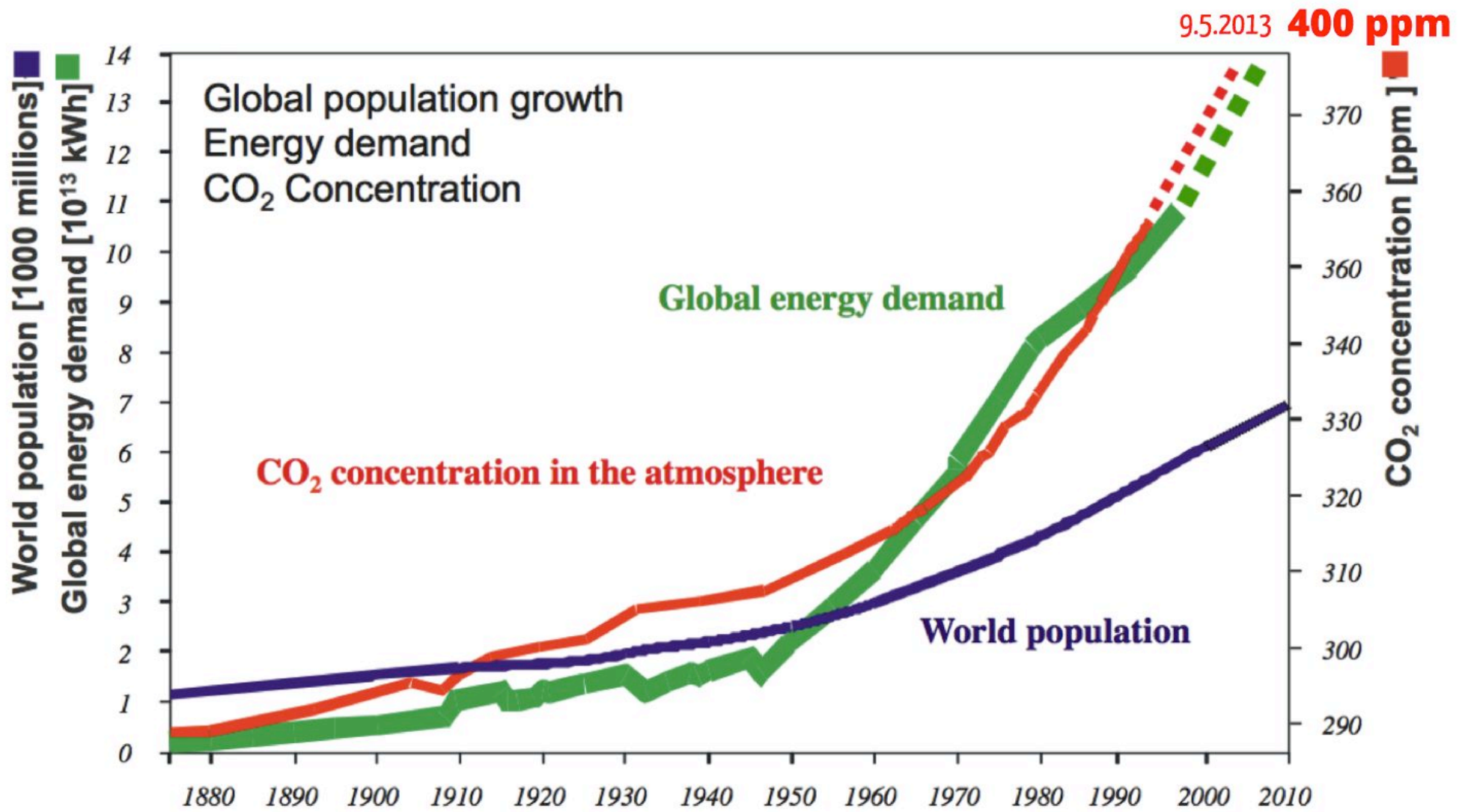
# Exponentielles Wachstum



Menge entspricht ca. 1.500 x der jährlichen weltweiten Weizenernte (922 Mrd t)

# Verdoppelung bis 2050







1.10.2013, Champions League. 20:50 Uhr. Basel, St.-Jakob-Park.

<http://de.eurosport.yahoo.com/blogs/abgeblogged/peinliche-angst-wahrheit-091819022--spt.html>



DEVASTATING FLOODS hit an area with  
over **20,000 FRACKED WELLS**

**Steigendes Risiko ... ökologisch UND **ökonomisch****

Wieviel Kohlenstoff darf noch verbrannt werden  
um **2°C** Erderwärmung nicht zu überschreiten?

... **nur 20%** der Reserven dürften verbrannt werden!

## Unburnable Carbon 2013: Wasted capital and stranded assets



Die nächste Investmentblase ... des fossilen Zeitalters



**ENDSTATION  
MENSCH**

**Über 300 Schadstoffe in der Muttermilch.**



AUGUST 19, 2013

Zakaria: The new al-Qaeda threat / Ted Cruz / Foroohar: Yellen over Summers for Fed chief / Low Rolling in Vegas

# TIME

## A WORLD WITHOUT BEEES



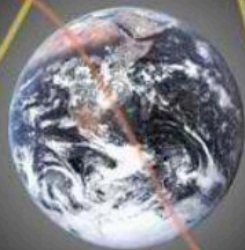
THE PRICE WE'LL  
PAY IF WE DON'T  
FIGURE OUT  
WHAT'S KILLING  
THE HONEYBEE

BY BRYAN WALSH

time.com

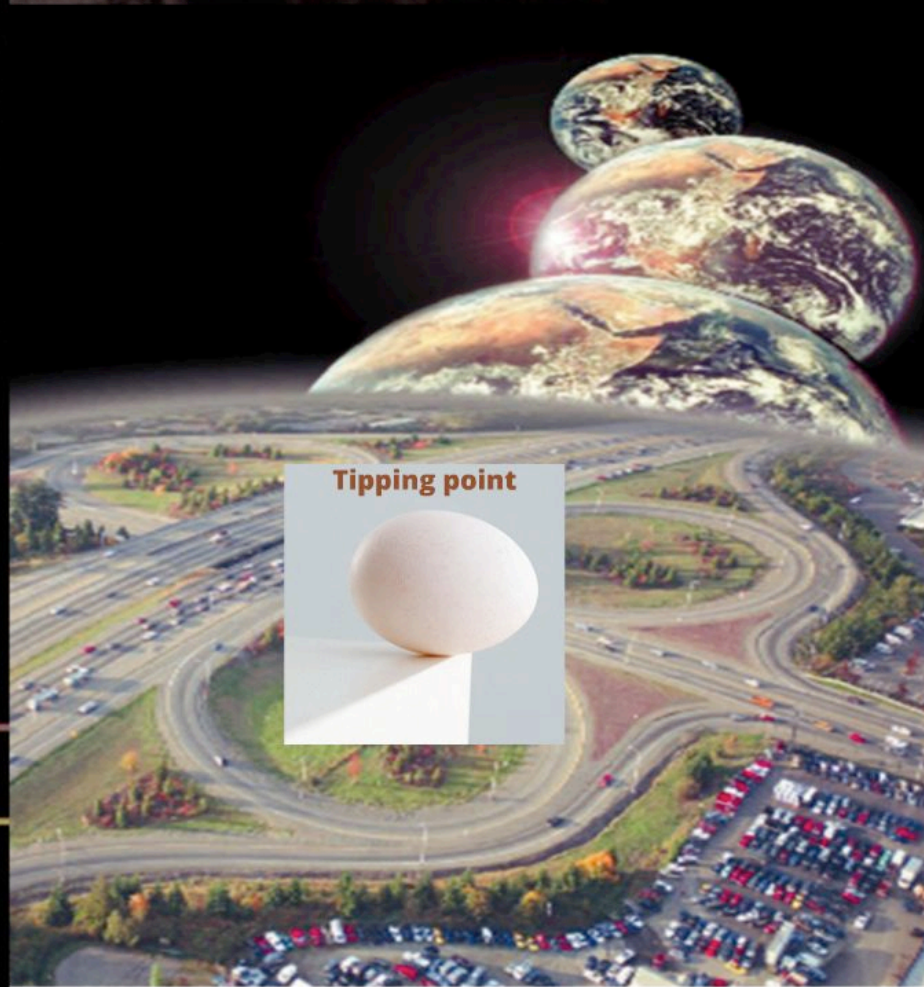


# LIMITS TO GROWTH

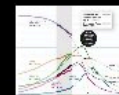


*The 30-Year Update*

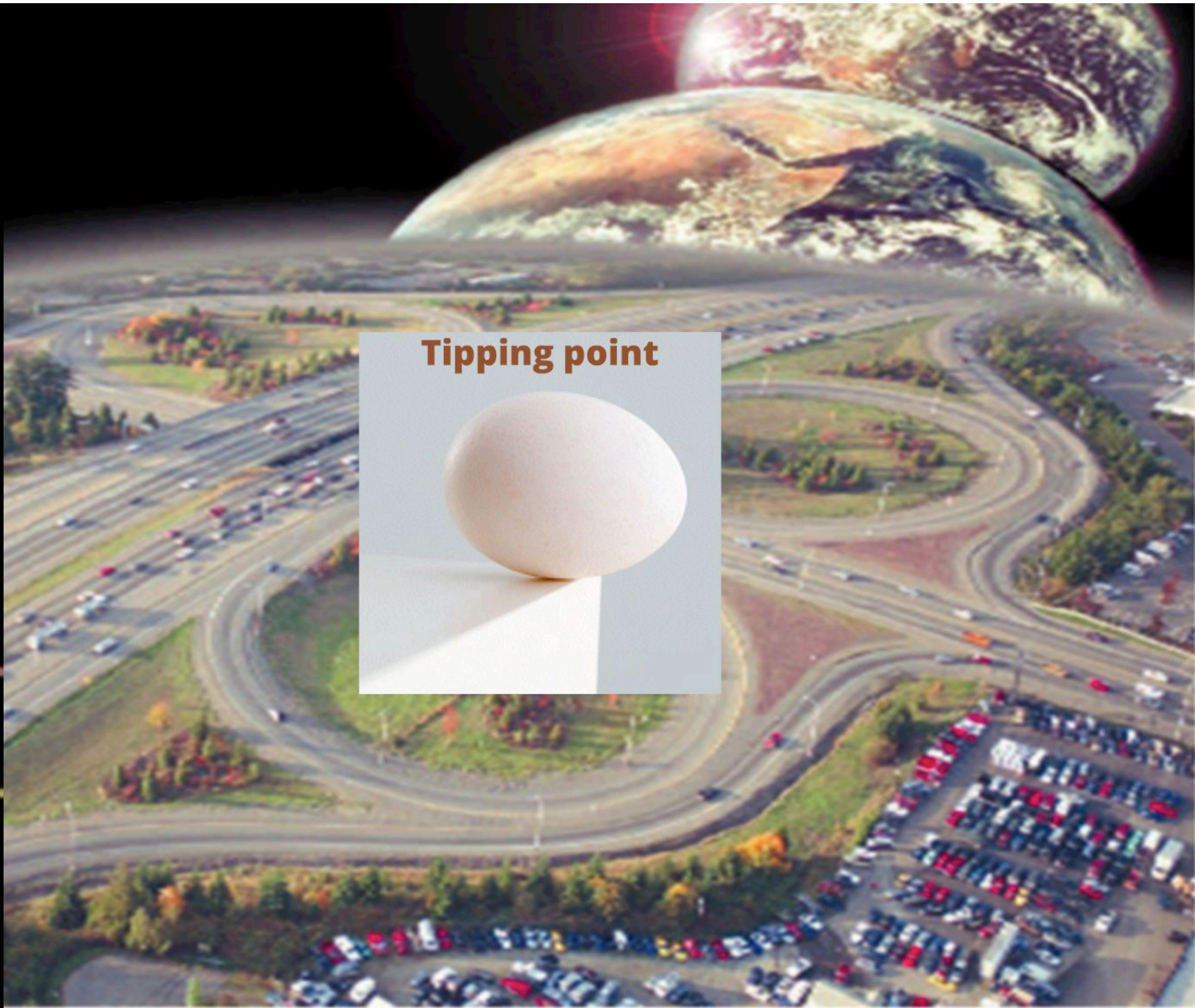
DONELLA MEADOWS | JORGEN RANDERS | DENNIS MEADOWS



**Tipping point**

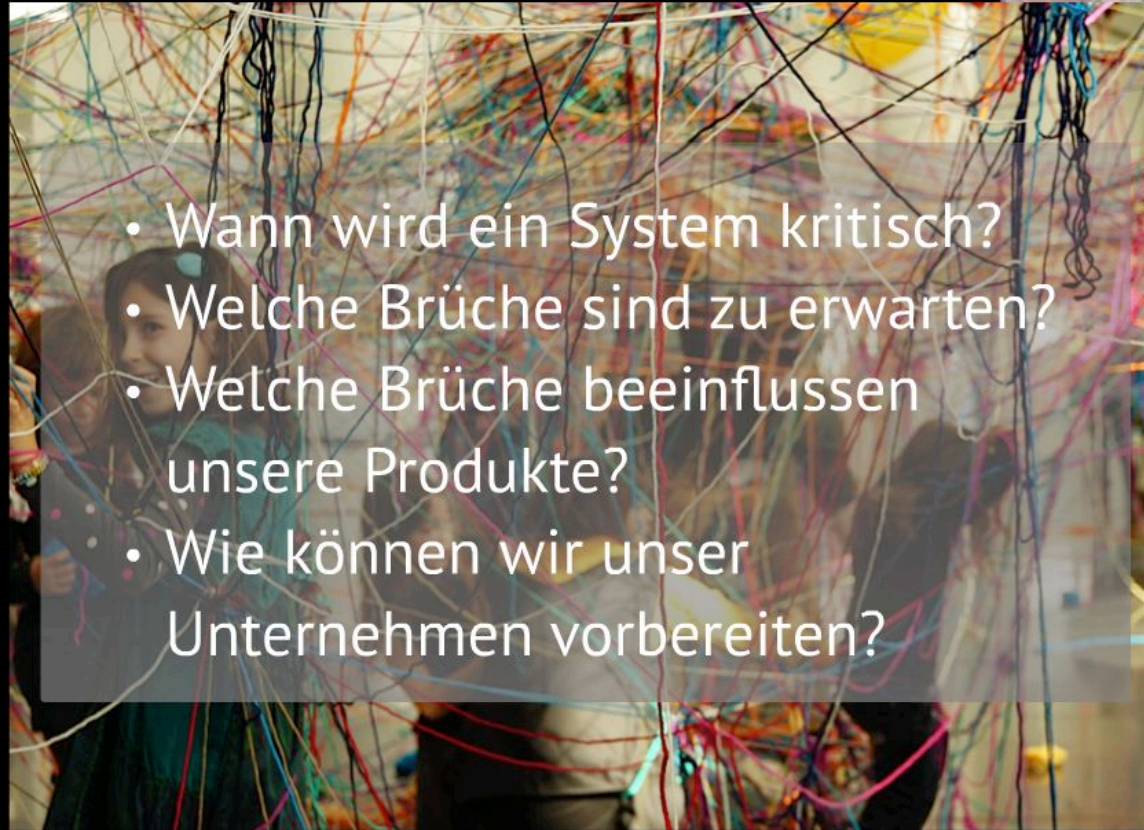


**Tipping point**



# Zukunftsfähigkeit

- Wann wird ein System kritisch?
- Welche Brüche sind zu erwarten?
- Welche Brüche beeinflussen unsere Produkte?
- Wie können wir unser Unternehmen vorbereiten?



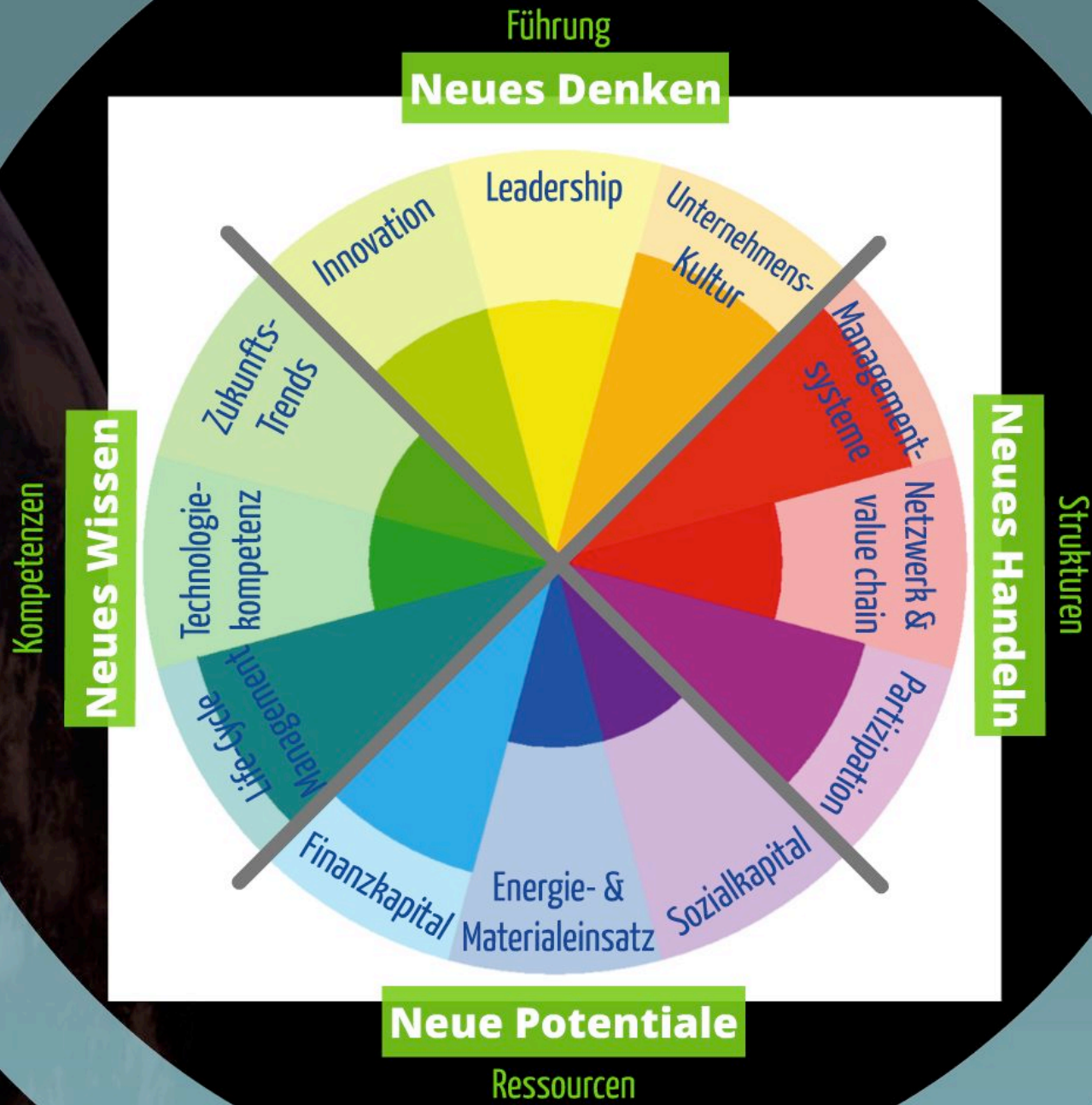
# Sustainability Business Navigator



(c) Elle, Gara, Wimmer

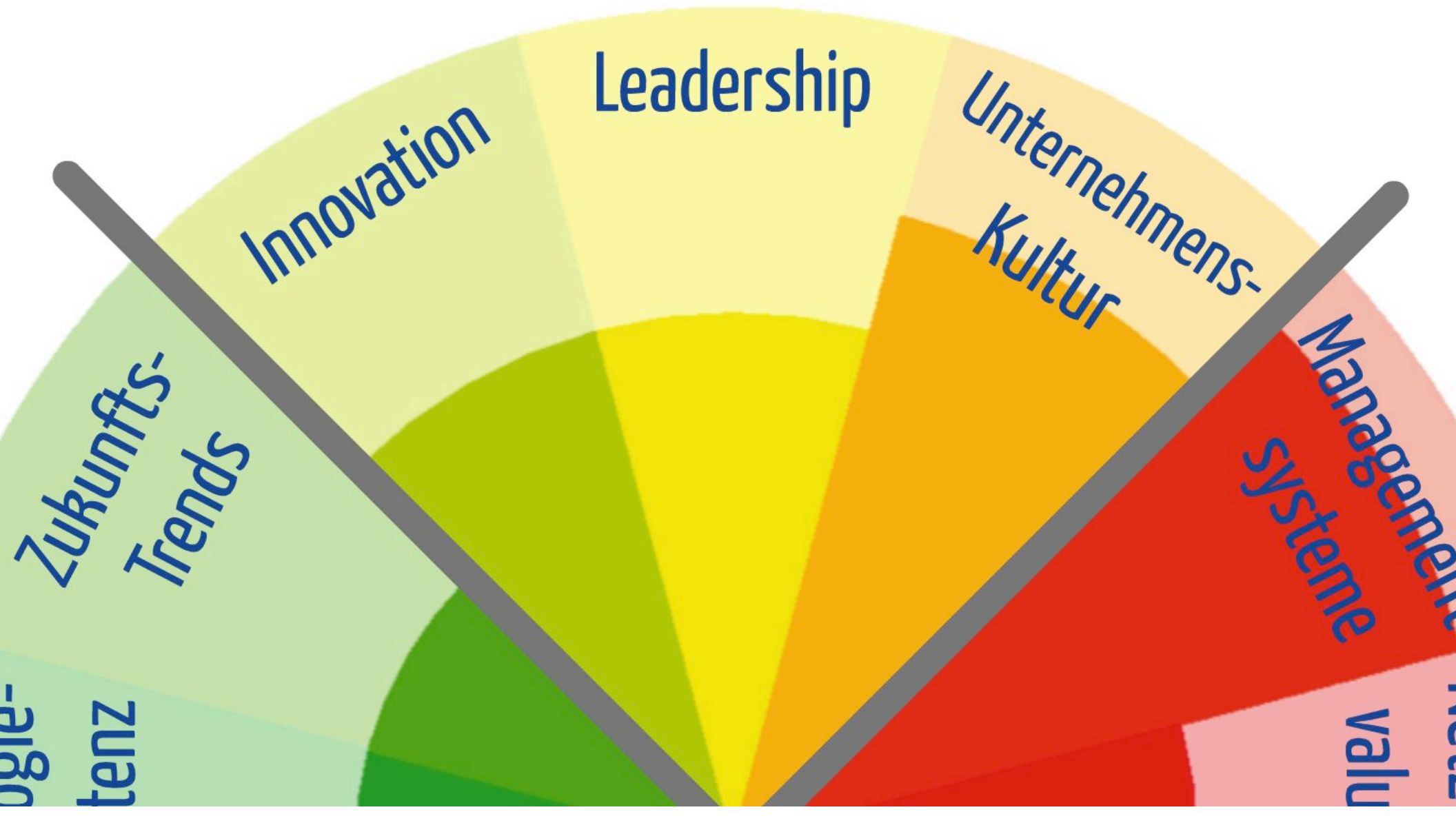
Welche Kompetenzen braucht es  
Welche neuen Strukturen sind  
Wie geht, wenn mit Ressourcen und  
Wie bewertet das für die Führung


# Sustainability Business Navigator



Führung

# Neues Denken





Es geht nicht nur um  
Zahlen, Fakten und  
Labels, die Kunden  
müssen die  
Leidenschaft &  
Humor spüren!

**Leadership und gelebte Partizipation**

## **"Bean-to-bar"**

Direkte Kooperation mit Kakaobohnen  
Produzenten in Lateinamerika





# Verantwortung in der Wertschöpfungskette

**patagonia**

ONLINE-SHOP ÜBER PATAGONIA [Warenkorb](#)

Umweltschutz / The Footprint Chronicles: Unsere Lieferkette

**the footprint CHRONICLES**

Die Footprint Chronicles® nehmen Patagonias Geschäftspraktiken unter die Lupe – mit dem Ziel, unsere Lieferkette offenzulegen und so unsere negativen sozialen und ökologischen Auswirkungen, und die der gesamten Branche, zu verringern. Wir sind lange genug im Geschäft, um zu wissen: Wenn es uns gelingt, eine Belastung zu minimieren, dann werden andere Unternehmen dem Beispiel folgen.

[Zur Karte mit unseren Zulieferern](#)

[Neuigkeiten](#) | [Hintergrundinformationen](#)

**Down Sweater** [View Details](#) [Men's](#) | [Women's](#)

💡  
☔  
CO<sub>2</sub>  
♻️

**The Good**  
We use high-quality goose down, an exceptionally efficient insulator. The down comes from humanely raised geese and is minimally processed. The light shell is made of recycled polyester.

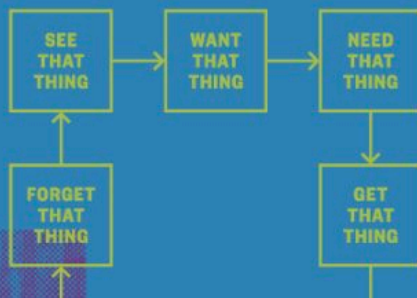
**The Bad**  
We had to increase the weight of the shell fabric when we switched to recycled polyester. The zipper is treated with a DWR that contains perfluorooctanoic acid (PFOA), a synthetic chemical that is now persistent in the environment, and the product is not yet recyclable.

**What We Think**  
We're investigating alternatives to the use of PFOA in water repellents – and looking for ways to recycle down garments.

Call us Monday to Friday +33 (0) 450 88 44 44 | © 2009 Patagonia, Inc. **patagonia**

## Verantwortungsvolle Wirtschaft

Kann Patagonia in einer verantwortungsvollen Wirtschaft überleben?



Ad of the Day: Patagonia The brand declares

**patagonia**

ONLINE-SHOP ÜBER PATAGONIA [Warenkorb](#) [Mein Konto](#) | [Neu](#)

Umweltschutz / The Footprint Chronicles: Unsere Lieferkette

[Karte](#) [S](#)

YY1(YUE YUEN INDUSTRIAL CO., LTD.)  
Schuhfabrik  
Patagonia-Zulieferer seit 2006



roll over the boxes to view product stories

## Down Sweater

[View Details](#) [Men's](#) | [Women's](#)



### The Good

We use high-quality goose down, an exceptionally efficient insulator. The down comes from humanely raised geese and is minimally processed. The light shell is made of recycled polyester.



### The Bad

We had to increase the weight of the shell fabric when we switched to recycled polyester. The zipper is treated with a DWR that contains perfluorooctanoic acid (PFOA), a synthetic chemical that is now persistent in the environment, and the product is not yet recyclable.



### What We Think

We're investigating alternatives to the use of PFOA in water repellents – and looking for ways to recycle down garments.



Call us Monday to Friday +33 (0) 450 88 44 44 | © 2009 Patagonia, Inc

patagonia

patagonia

[ONLINE-SHOP](#)

[ÜBER PATAGONIA](#)

[+ Warenkorb](#)

[Mein Konto](#) | [Neu h](#)

Umweltschutz / The Footprint Chronicles: Unsere Lieferkette

The screenshot shows the website interface for 'respect-code.org'. At the top, there is a search bar with the text 'Suchen ohne Code' and 'oder FXS93'. Below the search bar, the product 'FXS93 / Switcher' is displayed, featuring an orange t-shirt. The product description includes '2657 BAO', 'Made in : INDIA', 'unisex Rundhals T-shirt', and '100% Bio & Fairtrade Baumwolle Max Havelaar'. To the right of the product image are several certification logos: 'BIO', 'certicate', 'REACH CONFORM', 'Oeko Tex 415 L', 'H2O', 'FAIR WEAR', and 'CO2 2,8 kg'. Below the product information is a 'Produktionskette' (Production Chain) section with a map of India. The map shows the production chain starting from 'Baumwolle' (Cotton) in 'SUMINTER INDIA ORGANIC', followed by 'Spinnerei' (Spinning) at 'ALOK INDUSTRIES', 'Wirken-Weben' (Weaving) at 'ALOK INDUSTRIES', 'Färberei' (Dyeing) at 'ALOK INDUSTRIES', and 'Konfektion' (Garment Manufacturing) at 'PREMDURAI EXPORTS - UNIT 2'. The map also shows the location of the production facilities in India.



Faire Produktion  
Transparenz  
Rückverfolgbarkeit

SWITCHER®

auf gut Glück !

H<sub>2</sub>O  
415 L

Produktionskette



Faire Produktion

Wir unterschätzen die gesellschaftliche Dynamik

## "Transparency of the crowd"

### Dirty Laundry

Unravelling the corporate connections to toxic water pollution in China

Die Umweltverschmutzung in China hat den tipping point erreicht.

The hidden price tag

GREENPEACE

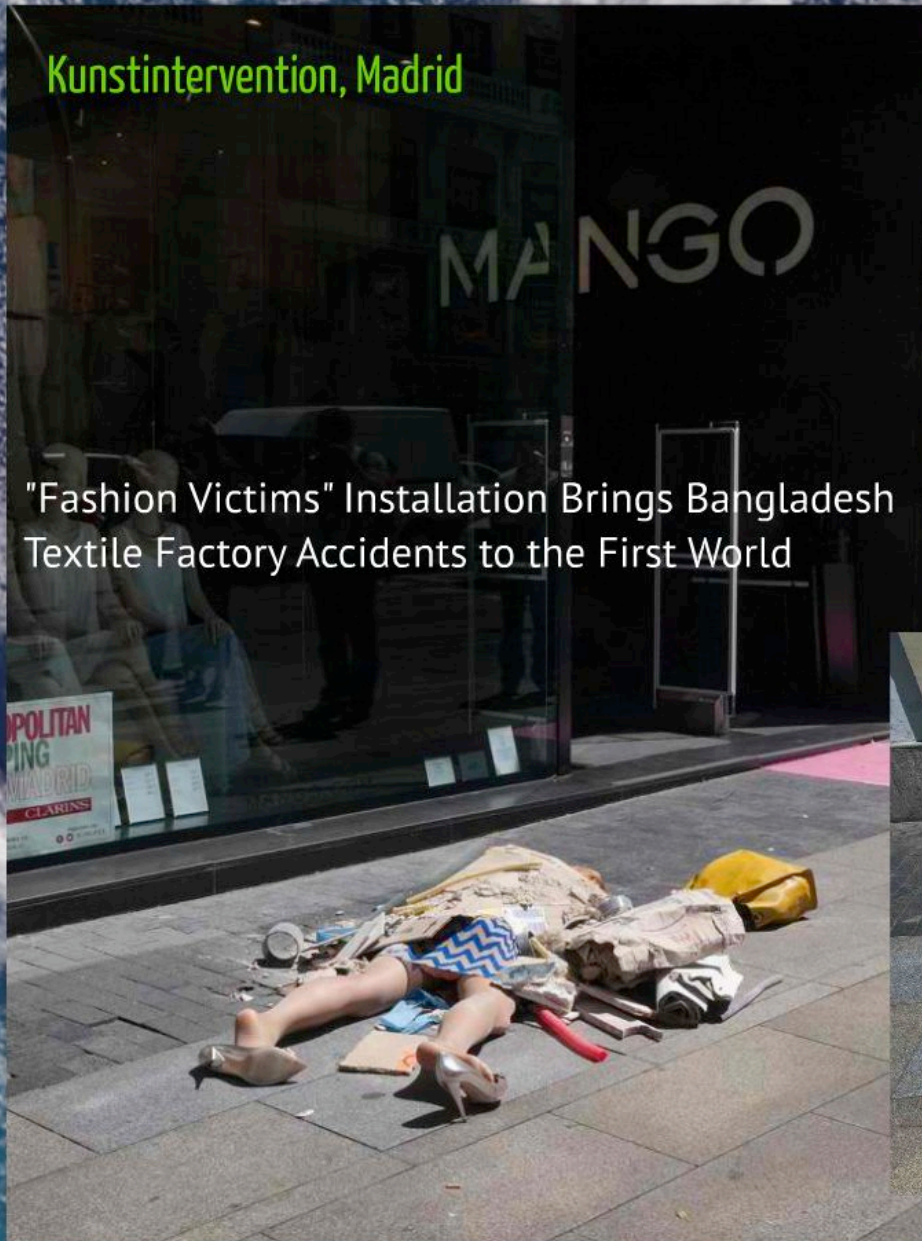
### Toxic Threads: The Big Fashion Stitch-Up

How big brands are making consumers unwitting accomplices in the toxic water cycle



## Kunstintervention, Madrid

"Fashion Victims" Installation Brings Bangladesh Textile Factory Accidents to the First World




<http://dashburst.com/bangaldesh-textile-factory-art-madrid/>

Die Footprint Chronicles® nehmen Patagonias Geschäftspraktiken unter die Lupe – mit dem Ziel, unsere Lieferkette offenzulegen und so unsere negativen sozialen und ökologischen Auswirkungen, und die der gesamten Branche, zu verringern. Wir sind lange genug im Geschäft, um zu wissen: Wenn es uns gelingt, eine Belastung zu minimieren, dann werden andere Unternehmen dem Beispiel folgen.

Zur Karte mit unseren Zulieferern

Neuigkeiten | Hintergrundinformationen

### Down Sweater



The Good  
We use high-quality, exceptionally efficient down comes from humane geese and is minimal weight. The light shell is made of recycled polyester.

- Lightbulb icon
- Recycling symbol icon
- CO<sub>2</sub> icon
- Waste bin icon

Call us Monday to Friday +33 (0) 45

## Verantwortungsvolle Wirtschaft

Kann Patagonia in einer verantwortungsvollen Wirtschaft überleben?




<http://www.patagonia.com/eu/deAT/patagonia.go?assetid=88405>

**ADWEEK** Who Here? Not Like Post? Price Drop? Try Not to Cry?

**Ad of the Day: Patagonia** The brand declares war on consumerism gone berserk, and admits its own environmental failings By Tim Nudd

**DON'T BUY THIS JACKET**



<http://www.adweek.com/news/advertising-branding/ad-day-patagonia-135745>

**patagonia**

ONLINE-SHOP

Umweltschutz / The Footprint Chronicles



Google

# verantwortungsvollen Wirtschaft überleben?

**ADWEEK** **HOT LIST** **Vote Here! Hot List Poll** Pick your favorite shows, mags & more. Presented by Microsoft

**FRIES KING?** Burger King's name change campaign is making the masses confused—and starving!


**Try Not to Cry** GoPro's fireman-saving-cat tearjerker rules YouTube

THE PRESS TELEVISION TECHNOLOGY ADVERTISING & BRANDING ADfREAK VIDEO **SUBSCRIBE** Search

Headlines: Press: Domino Relaunches With E-Comm... TV: Modern Family on USA Rates Ab... Tech: Coming Soon: Ads on Instagram Ads & Brands: WI Advertising Take a Hit Fr...

## Ad of the Day: Patagonia The brand declares war on consumerism gone berserk, and admits its own environmental failings By Tim Nudd

November 26, 2011, 1:13 PM EST Advertising & Branding



**DON'T BUY THIS JACKET**

THIS SEASON, SHARE SOME VALUES  
Learn more about our Common Threads Initiative, and take the pledge to reduce consumption

**TAKE THE PLEDGE**

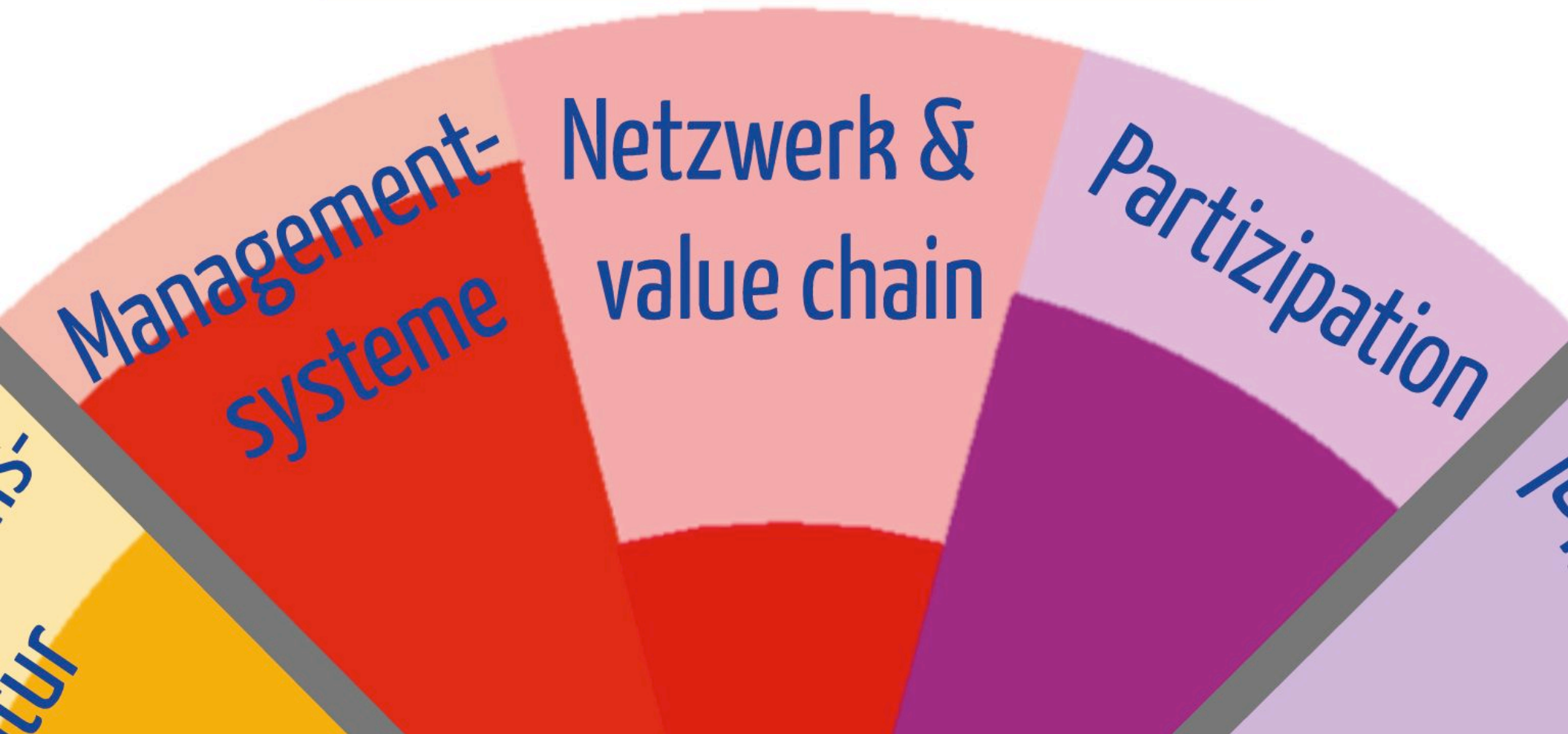
<http://www.adweek.com/news/advertising-branding/ad-day-patagonia-136745>

<http://www.patagonia.com/eu/deAT/patagonia.go?assetid=88405>



# Strukturen

## Neues Handeln



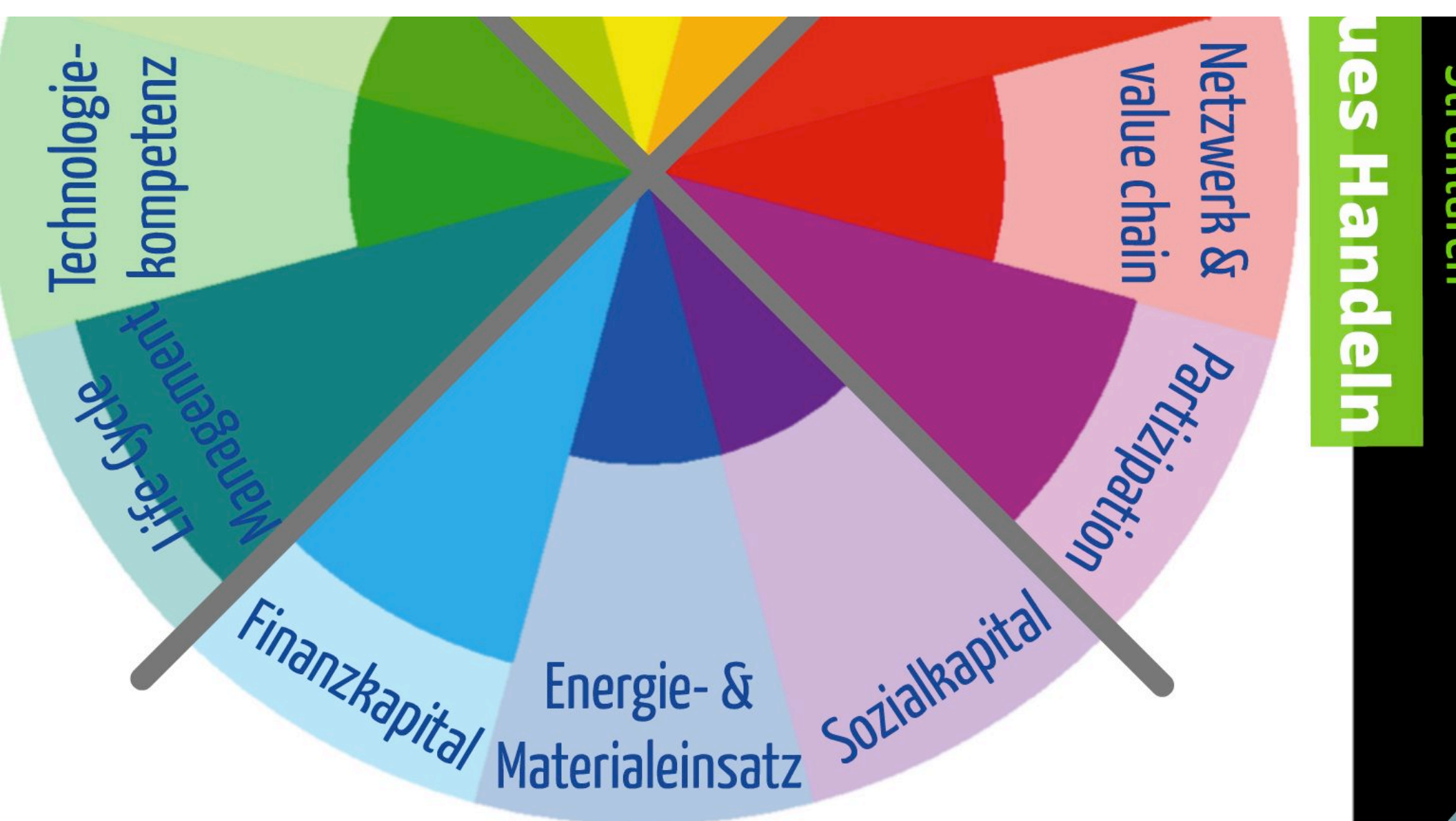
# DAS OFFENE BUCH



seit 1995 gelebtes Umweltmanagement

UMWELT- UND  
NACHHALTIGKEITS-  
BERICHT 2010

**Murauer**  
BIER



**Neues Handeln**

**Neue Potentiale**

**Ressourcen**

Schuster bleib **nicht** bei deinen Leisten



(c) Stefan Gara

Stefan Gara

# "Crowd funding" als Gemeinschaftsmodell



**ssen**

**ologie-  
mpetenz**

**Zukunfts-  
Trends**

**Innovation**

OCTOBER 30, 2009: EUROPEAN LEADERS ENDORSE THE OBJECTIVE OF AN 80% - 95% REDUCTIONS IN CO<sub>2</sub> EMISSION BY 2050.

## EU Roadmaps 2050

Reduktionsziele 2050

80 - 95% CO<sub>2</sub>

50 - 70 % Energie





# **Radikale Transformation unseres Wirtschaftsstils**





# "Neue industrielle Revolution"

## Re-Lokalisierung

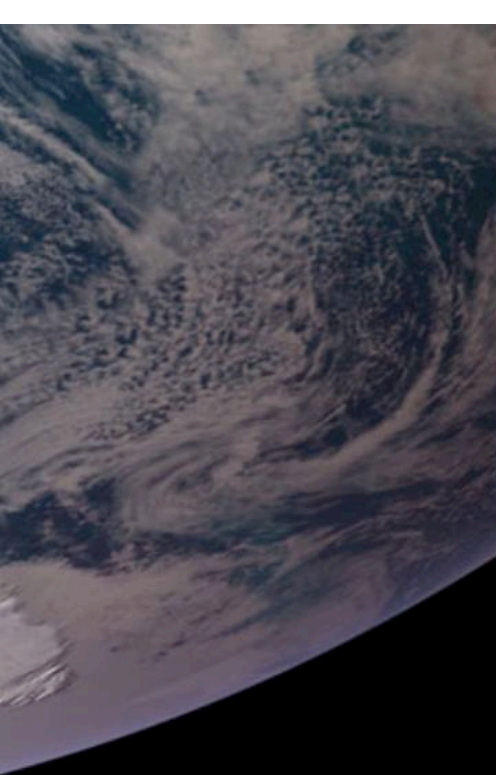
- > Vernetzte kleinräumige Strukturen als „Kernzellen“



## Re-Dimensionierung

- > Neue Skalen für „Wachstum“

## Re-Individualisierung

- > Prosumer
- > Kostenvorteile durch Massenproduktion nehmen stark ab



Urban und Freizeit / Life and Fun  Wohnen / Housing 

# MADE 4 YOU


Herausgeber / Editors  
 Christoph Thun-Hohenstein  
 Hartmut Esslinger  
 Thomas Geisler







# Design für

# den Wandel /

# Design for

# Change

 MAK

Designkonzepte / Design Concepts  Urban und Leben / Life and Work  Designkonzepte / Design Concepts  Urban und Leben / Life and Work  Designkonzepte / Design Concepts  Urban und Leben / Life and Work 

Design with a purpose



# Global Design Winner of "Reconnect Your Space" Competition



Design with a purpose

<http://www.designwithpurposeblog.com/2013/05/16/global-design-winner-of-reconnect-your-space-competition/>

## MADE 4 YOU

Herausgeber / Editors  
Christoph Thom-Holzerstein  
Harald Esslinger  
Thomas Guller

Design für  
den Wandel /  
Design for  
Change



WELCOME

Int

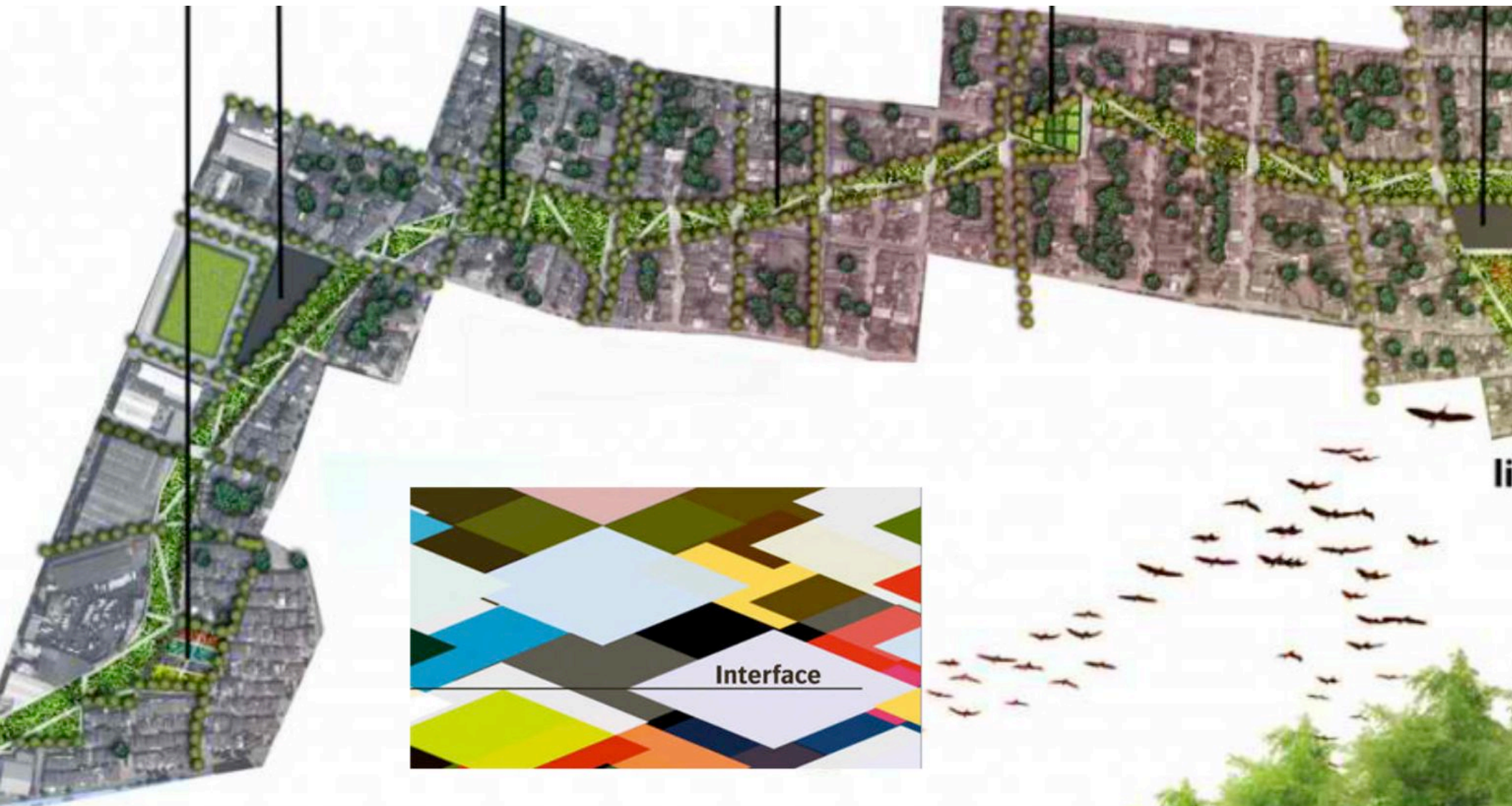
COMP

SUSTAINA

THE

Read a

the pat





COMPANY

PRODUCTS

SUSTAINABILITY

INVESTOR RELATIONS

NEWSROOM

SUSTAINABILITY

**ENVIRONMENTAL PRODUCT DECLARATION**

Produktname: ...  
 Produkttyp: ...  
 Hersteller: ...  
 Standort: ...

Produkttyp: ...  
 Produktname: ...  
 Produkttyp: ...



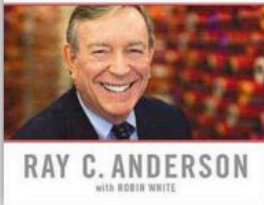
*The Interface Story*  
*Our Progress*  
*Our Challenges*  
*Get Engaged*

## Toward A More Sustainable Way of Business

In 1994, Interface® Founder Ray Anderson challenged us to pursue a bold new vision "Be the first company that, by its deeds, shows the entire world what sustainability is in all its dimensions: people, process, product, place and profits - and in doing so, become restorative through the power of influence" The Interface journey toward sustainability has been a momentous shift in the way we operate our business and see the world. Move through these pages for a closer look at our progress, and find out how to get involved in our Mission Zero® journey.

### CONFESSIONS OF A RADICAL INDUSTRIALIST

PROFITS, PEOPLE, PURPOSE—DOING BUSINESS BY RESPECTING THE EARTH



#### THE INTERFACE STORY

Read about how our journey started and the path we followed.



#### OUR PROGRESS

Learn about what we accomplished and how we got there.



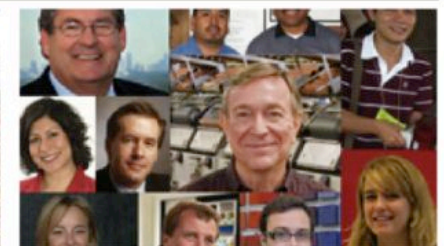
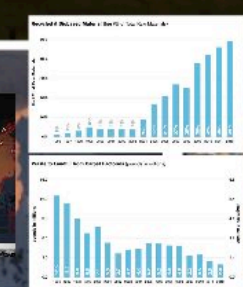
#### OUR CHALLENGES

Understand hurdles we have yet to overcome on our journey.



#### GET ENGAGED

Ask questions, make suggestions and offer advice on our journey.

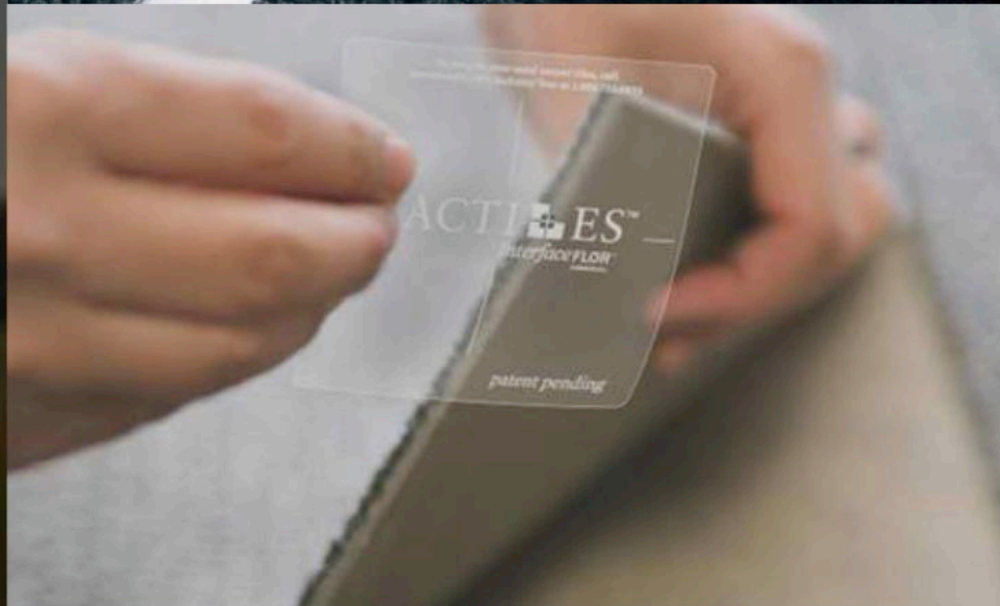




## **MISSION ZERO**

Das Versprechen alle negativen Umweltauswirkungen von Interface bis 2020 auf NULL zu reduzieren.

**Systeminnovation - den Teppich zu Ende denken**



In 1994,  
new vision  
what sus  
profits - a  
The Inter  
way we c  
for a clos  
Mission 2

for a  
Mission

We're now sixteen years into our journey and a decade away from the year we predicted for achieving our 2020 Company-wide commitment to Mission Zero. Our extended innovative thinking and commitment as a higher purpose.

We're simultaneously pursuing three paths to sustainability - innovative solutions for reducing our footprint, new ways to design and make products and an recycled and recycled content.

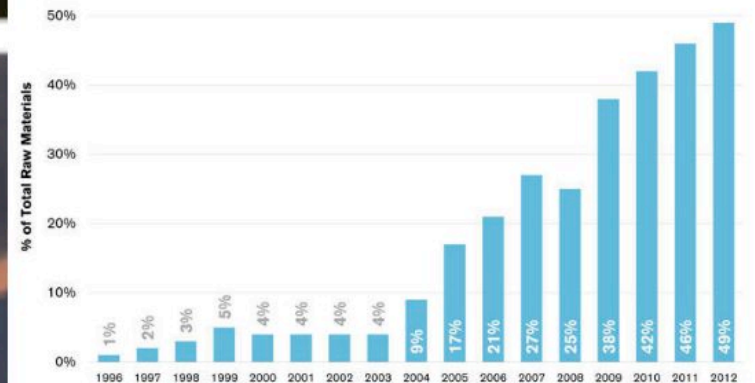
Intention with a path to measure our progress so far and to

**RECYCLED & BIOBASED MATERIALS**

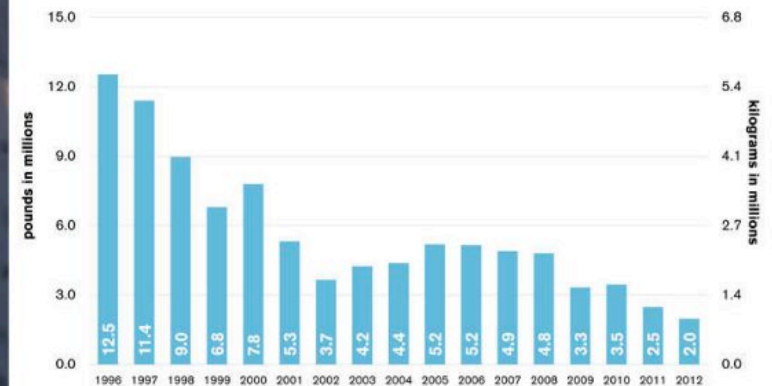
We are increasingly using recycled and biobased materials in our products to meet our goal of 100% sustainable, closed loop products.

[view details](#)

Recycled & Biobased Material Use (% of Total Raw Materials)



Waste to Landfill from Carpet Factories (pounds in millions)



# OUR PROGRESS

Learn about what we accomplished and

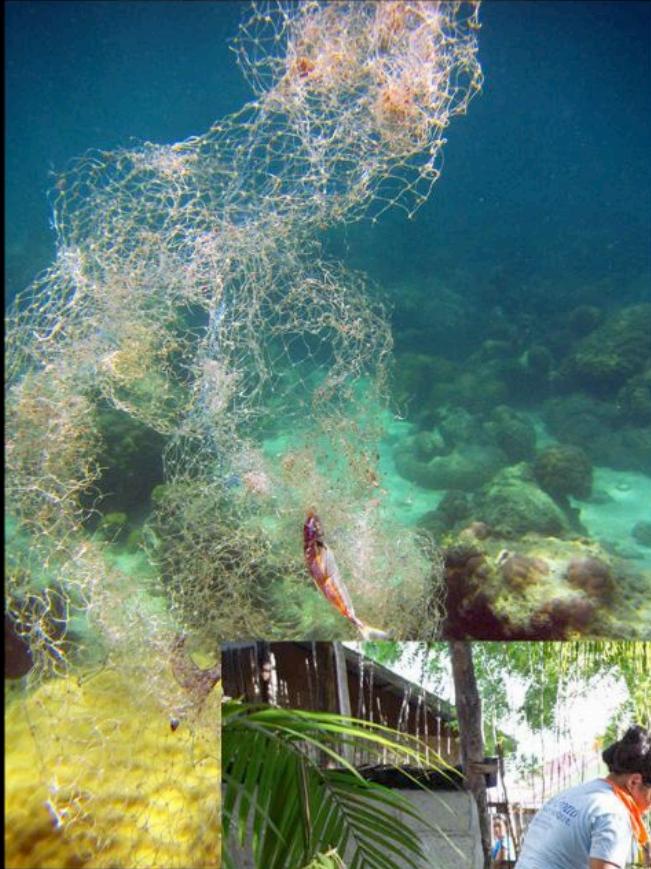
# OUR C

Understa



# NetEffect Carpet aus alten Fischernetzen

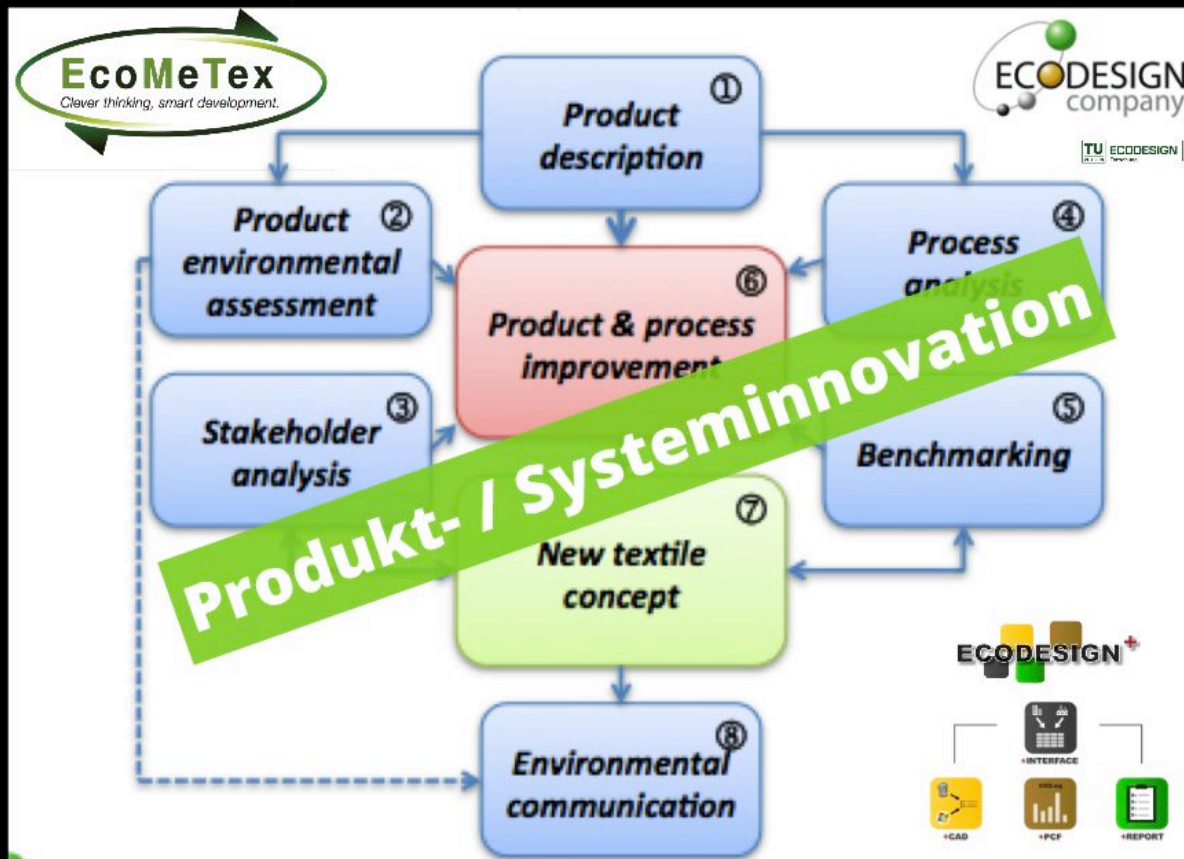
## Philippinen - lokales Community Projekt reduziert Umweltbelastung

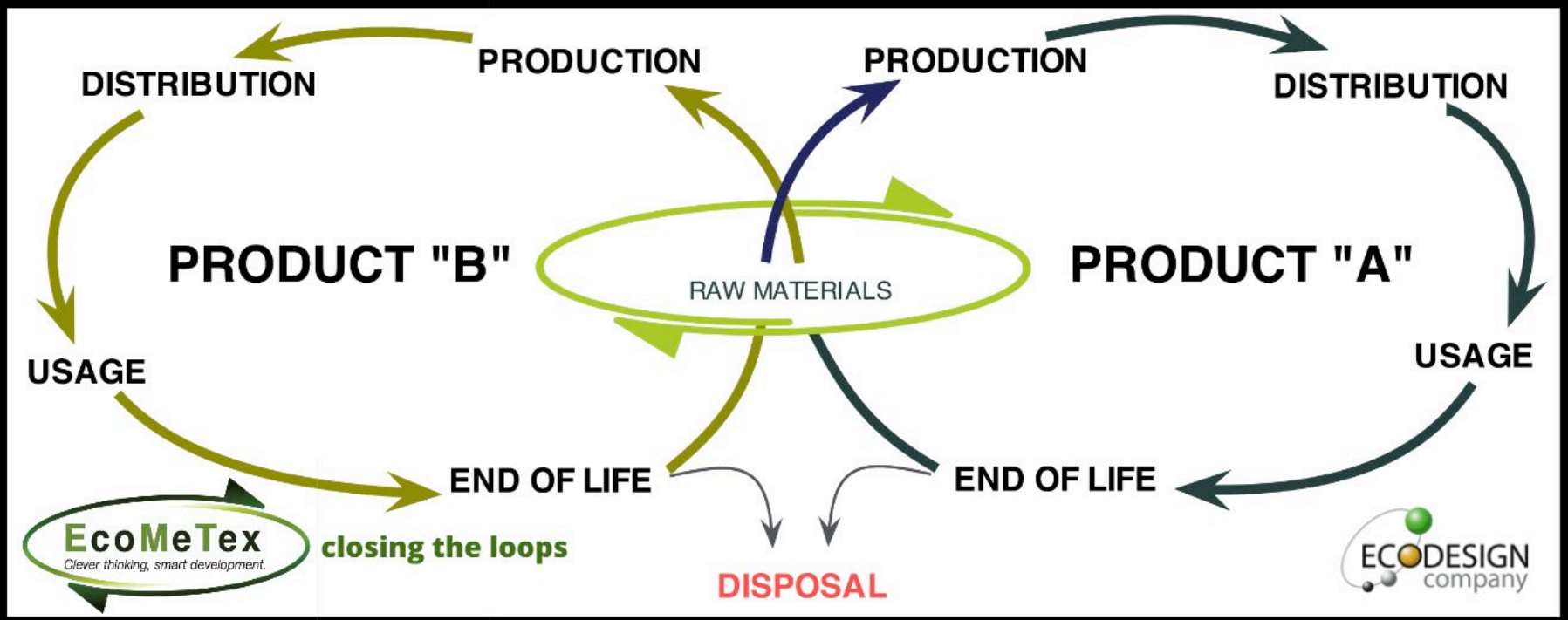
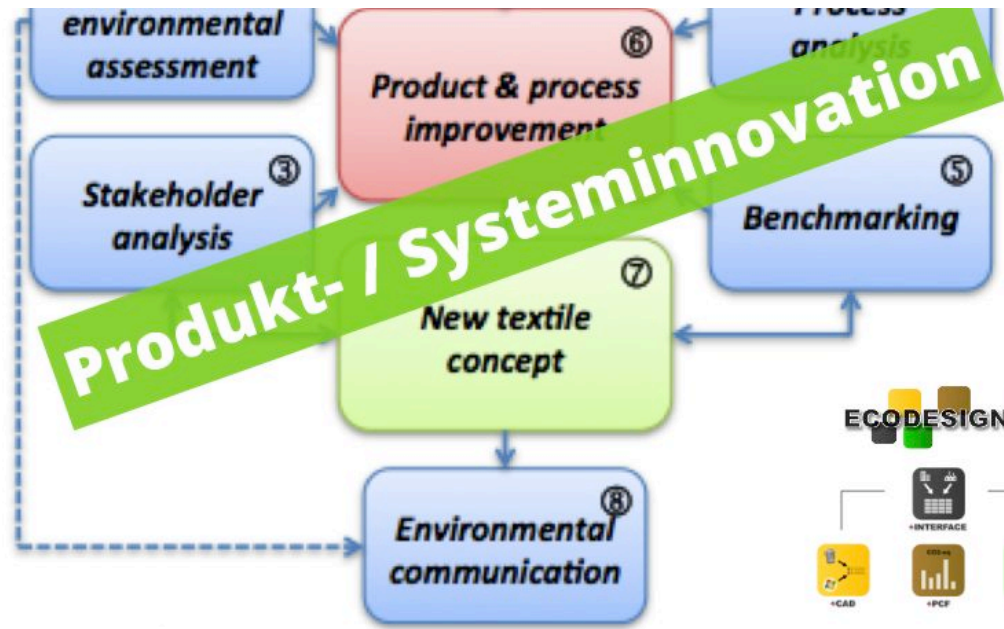


# EcoDesign



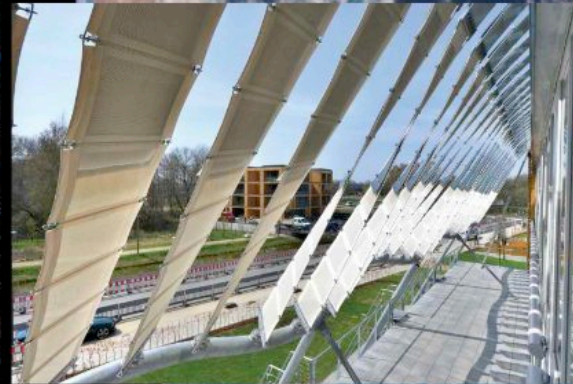
## Ecodesign für Entwicklung textiler Bodenbelag(systeme)



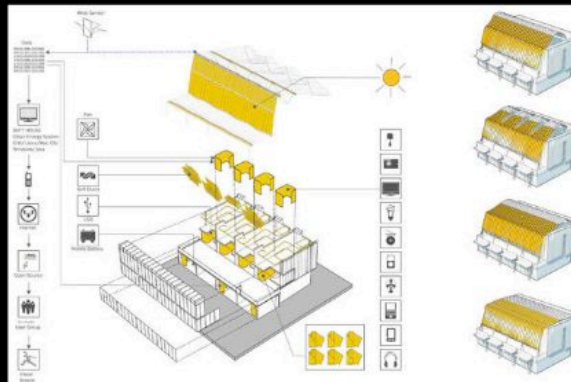


# Transformation der Städte

Energie ernten in den Städten




Resiliente  
Strukturen



<http://mitei.mit.edu/news/building-facades-move-textiles-illuminate>

Gebäude als aktives Element  
im Energiesystem der Zukunft



A CHANGE MAY BE JUST AROUND THE CORNER

**Danke**

### Aus meinem Tagebuch ...

### Zukunftsfähigkeit

- Wann wird ein System kritisch?
- Welche Brüche sind zu erwarten?
- Welche Brüche beeinflussen unsere Produkte?
- Wie können wir unser Unternehmen vorbereiten?

### Transformation der Städte

Energie errichten in den Städten

Resiliente Strukturen

Gebäude als aktives Element im Energiesystem der Zukunft



**MADE 4 YOU**  
/ Design für den Wandel / Design for

