

Faculty of Design

2021

## Storytelling for Systems Design: Embedding and communicating complex and intangible data through narratives

Talgorn, Elise and Hendriks, Monique

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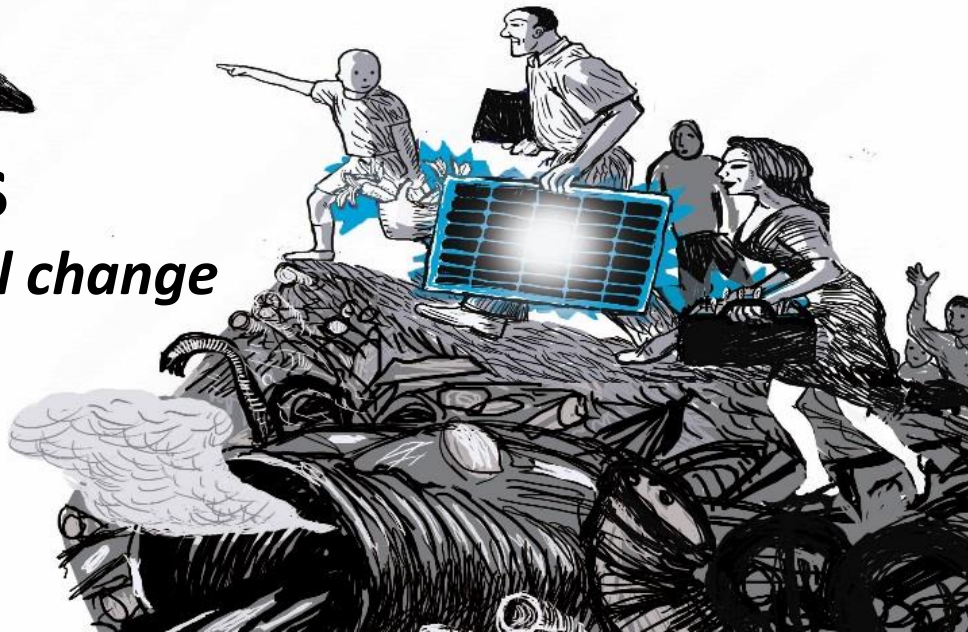
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# Designing Transitions

*or how we can empower radical change*

Prof. dr. Derk Loorbach

Delft, 04-11-2021



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## Dutch Research Institute For Transitions

Academic research, consulting,  
education, activism

Social enterprise

30+ employees

Founded in 2004

### **mission**

Accelerate and guide just  
sustainability transitions by  
developing knowledge in and with  
practice

## Design Impact Transition platform

Transdisciplinary and transformative  
research, education and engagement

Strategic university platform

Core team and academics with impact  
assignments

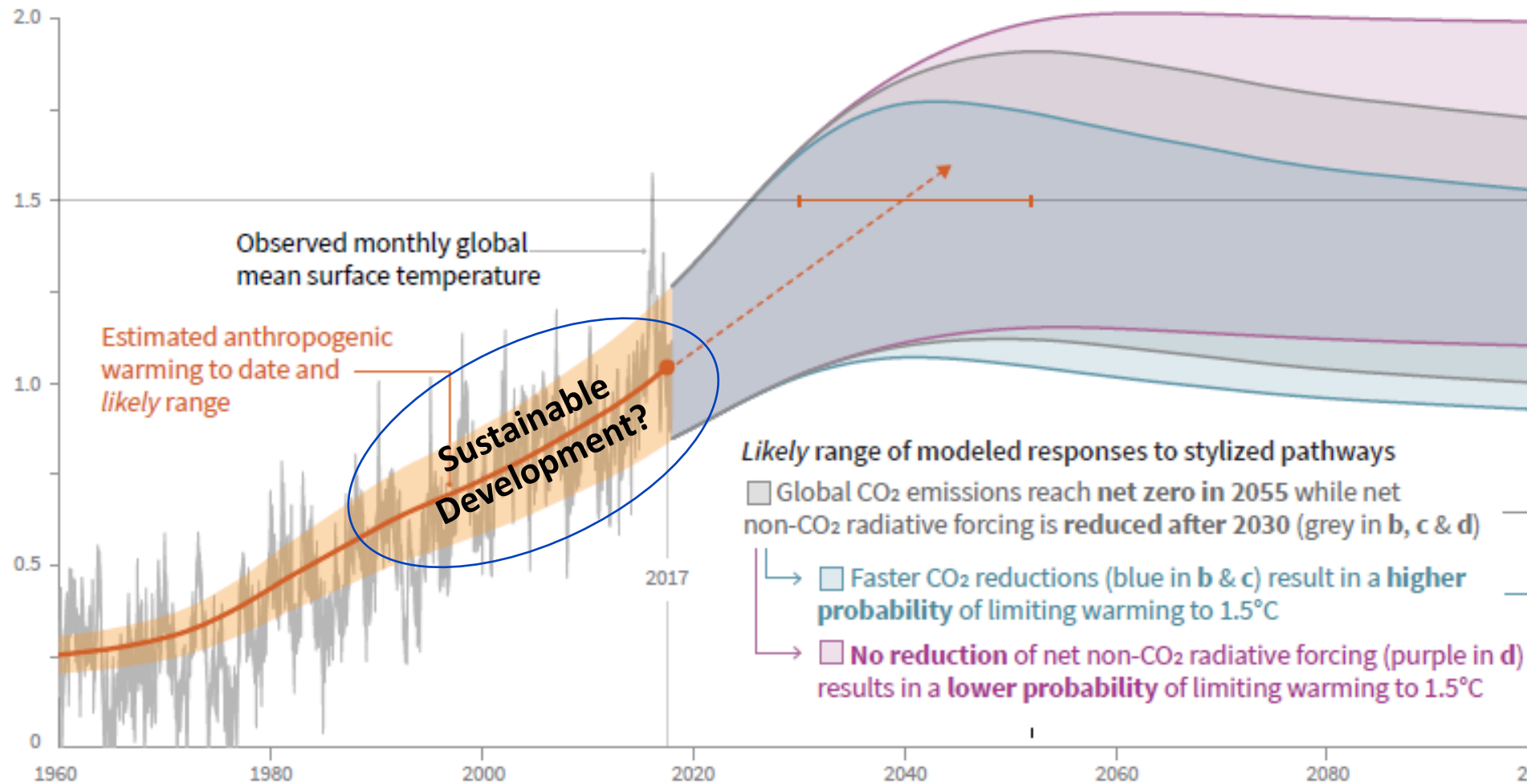
### **mission**

Establish and institutional space  
for transformative academic work  
at EUR

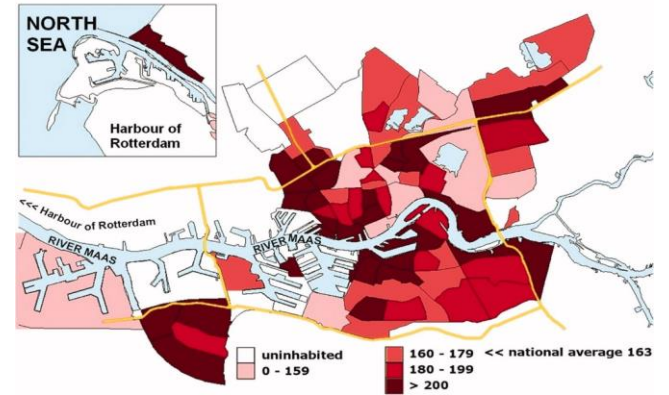
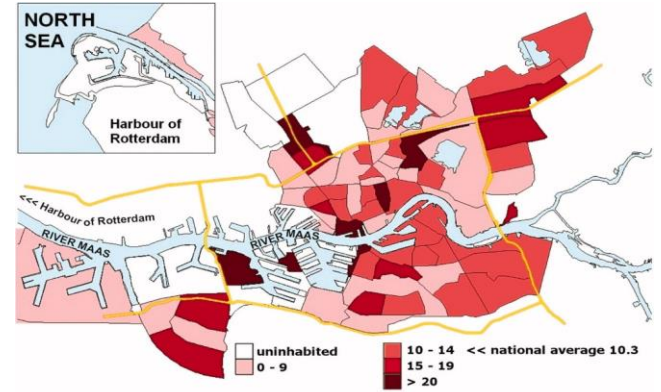
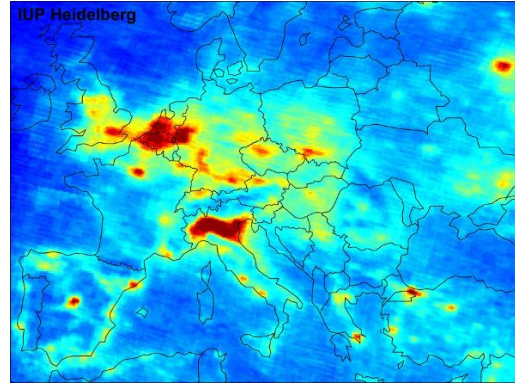
**Come join the DIT launch November 25!**



# Global warming relative to 1850-1900 (°C)



# Persistent problems



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# Regime

Dominant and shared ways of **thinking, organising and doing** in a societal (sub)system

**cultures:** shared values, paradigms, worldviews, discourses

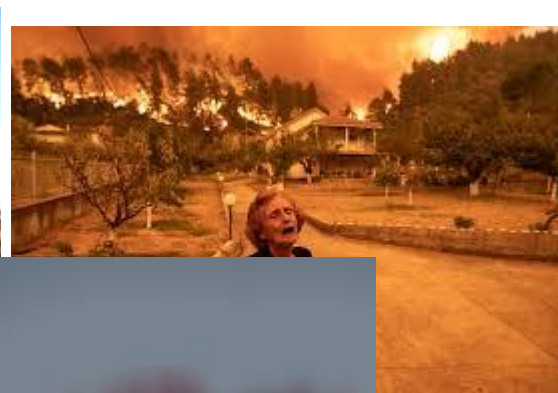
**structures:** institutions, economic structures, physical infrastructures

**practices:** routines, behavior, action, lifestyles



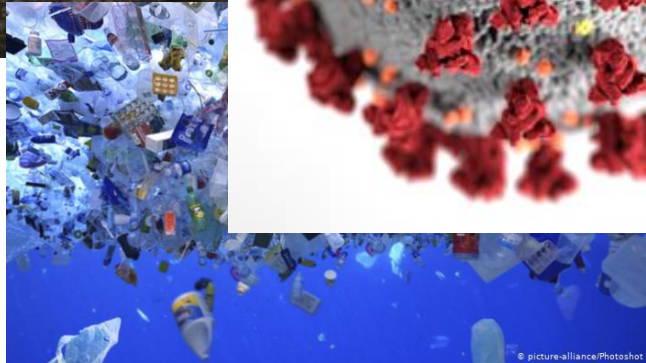


dr



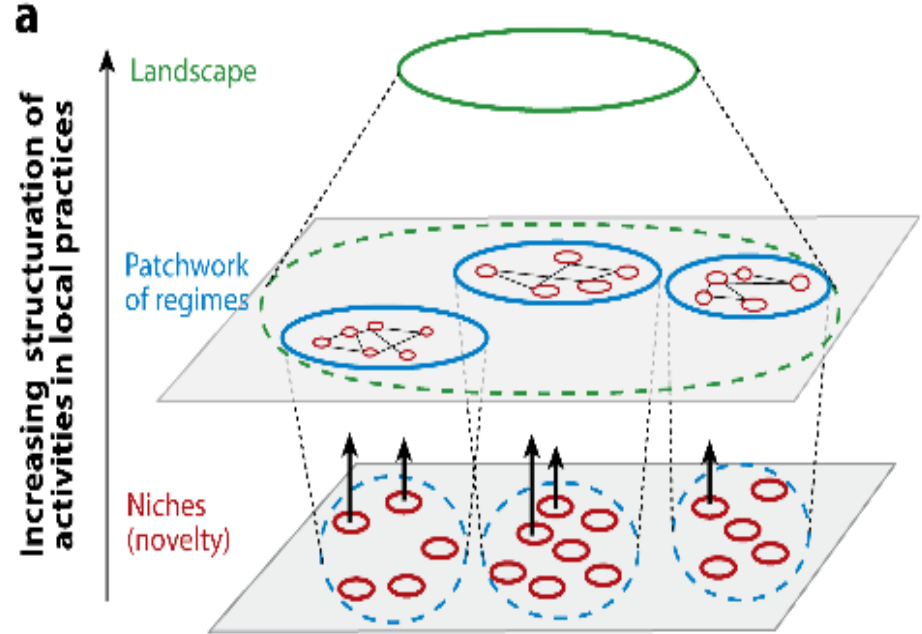
# COVID-19

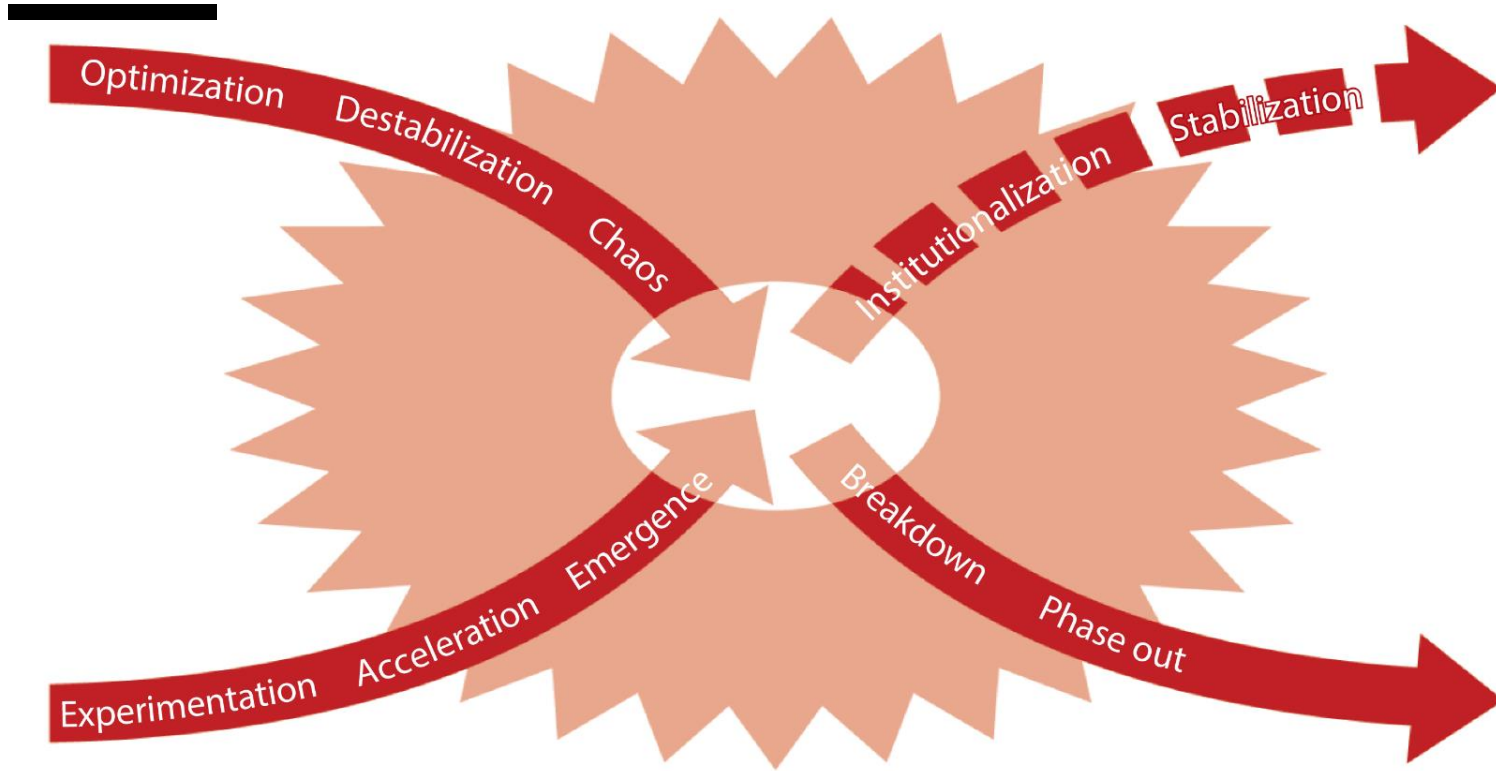
CORONAVIRUS DISEASE 2019

A large central graphic featuring a 3D model of a coronavirus particle on the left, which is spherical with a grey surface and red, crown-like spikes. To the right of the model, the text "COVID-19" is written in large, bold, white capital letters, with "CORONAVIRUS DISEASE 2019" in smaller white capital letters below it. The background of this section is a blurred image of a crowd of people.

## Transition: out of equilibrium

A process of structural, non-linear systemic change in dominant regime that takes place over a period of decades (Rotmans et al, 2001, Grin et al, 2010)





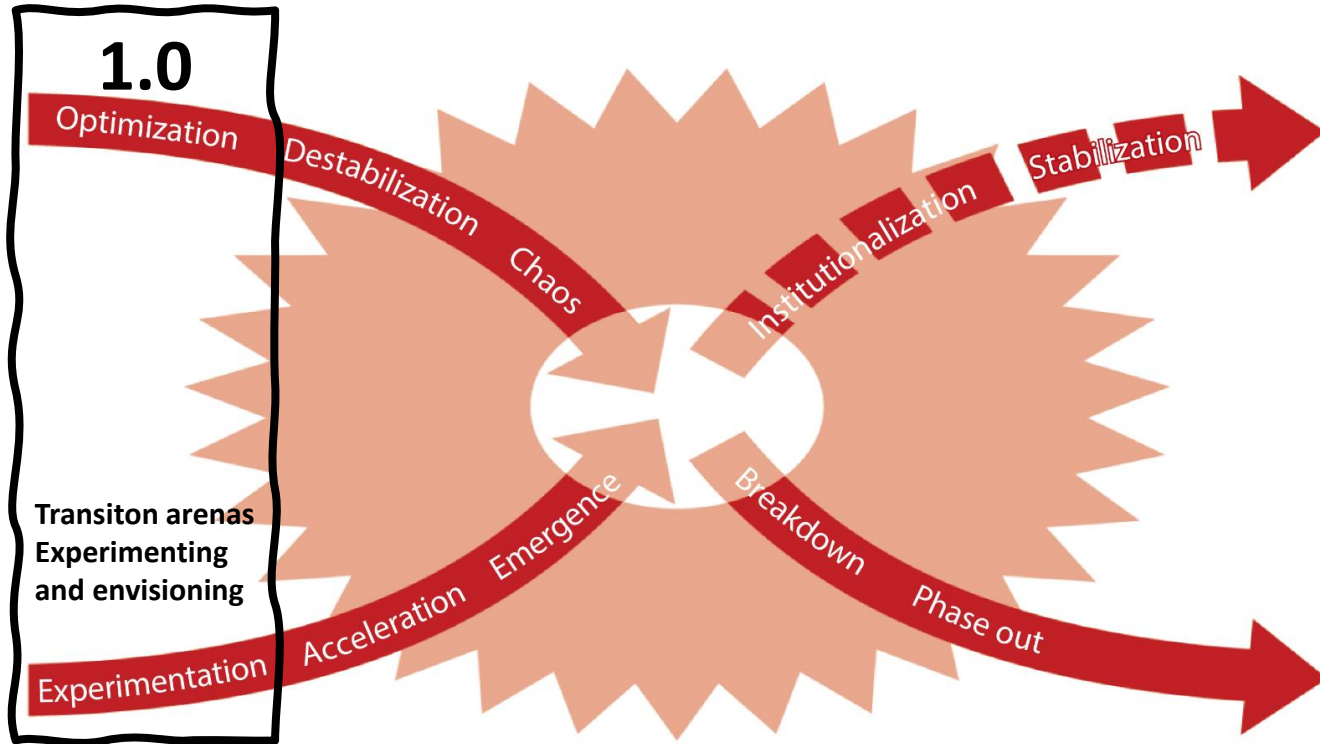
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## Transition governance principles: design logic?

Radical on the long-term, diplomatic on the short-term

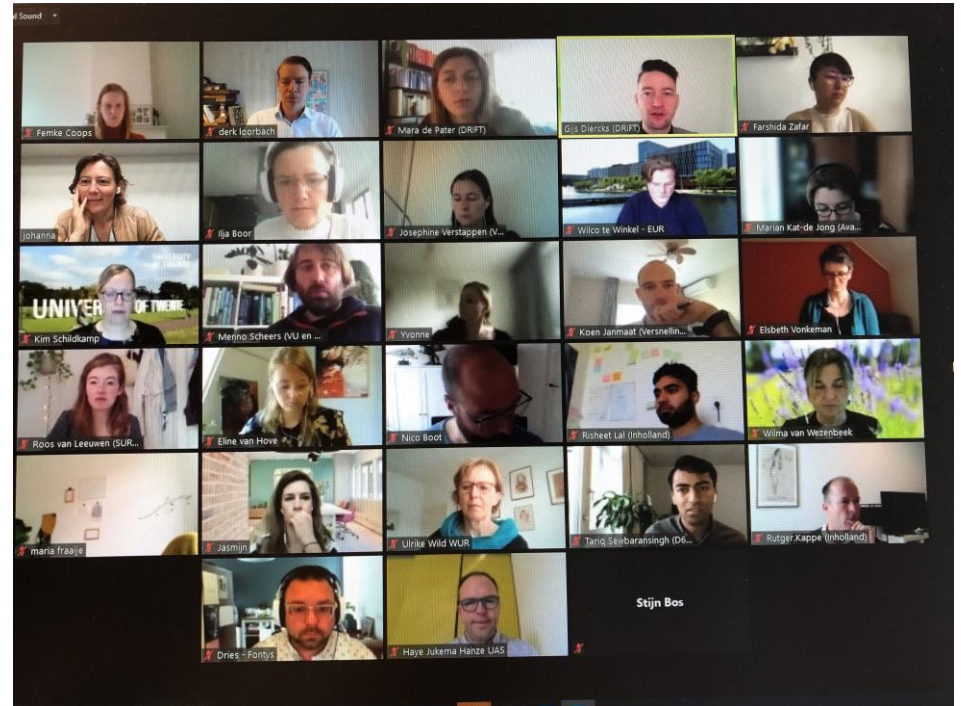
- **Systemic:** *engage with emerging dynamics across societal levels*
- **Back-casting:** *taking desired transition as starting point*
- **Selective:** *focus on transformative agency already engaging with transition*
- **Adaptive:** *experimenting towards multiple goals and transition pathways*
- **Learning-by-doing and doing-by-learning:** *ensure monitoring and reflexivity*

# Creating transformative discourse, triggering destabilisation and accelerating transformative innovation



## Transition arena higher education

- 4 sessions online
- Individuals from (applied) uni's, politics, SURF, government
- New transition narrative about digitalization and future of HE



het onderwijsstelsel  
is enorm  
gegroeid



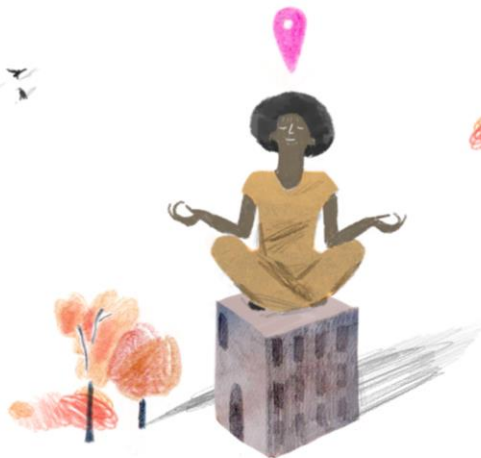
op je 12<sup>e</sup>  
spring je  
door een  
hoepel  
heen



Lerenden geven  
hun eigen leerpad vorm



Bij leren is  
blended de norm



Hoger onderwijsinstellingen  
dienen als thuisbasis



Docenten werken samen in teams  
waarbij ze een diversiteit in  
disciplines en rollen inbrengen



Een gemeenschappelijke  
fundering op basis van  
Open Education





## DEELNEMERS IN BEELD

Aldo Dorsman, Alicia Hobbel, Cemile Sezer, Daan van der Have, Eelco Rietveld, Frank Van Wijngaarden, Guiliano Mingardo, Jorn Wemmenhove, Louis Kooyman, Mano Radema, Martin Van der Does, Matthijs Van Ruijven, Quinten Passchier, Shurdon Faneyte, Stella Leijten, Steven Somsen, Vincent Luyendijk, Dries Gysels, Chris Roorda, Derk Loorbach, Irma Bijl-Rodenburg, Martin Guit, Bertus Postma, Marjolein van Doorn en Melissa Groen in 't Wout

## Social mobility

IN BEELD: Wethouder Langenberg opent BMX-fietsschool



### BikePark

Fietsparkeren combineren met andere diensten & "openklappen" naar omgeving (ism Magis010)

### Kinderfietsenplan

Grootschalig verzamelen van kinderfietsen; beschikbaar stellen & laten pimpen door kinderen op Zuid (ism ANWB)

### Fietsvriendelijke scholen

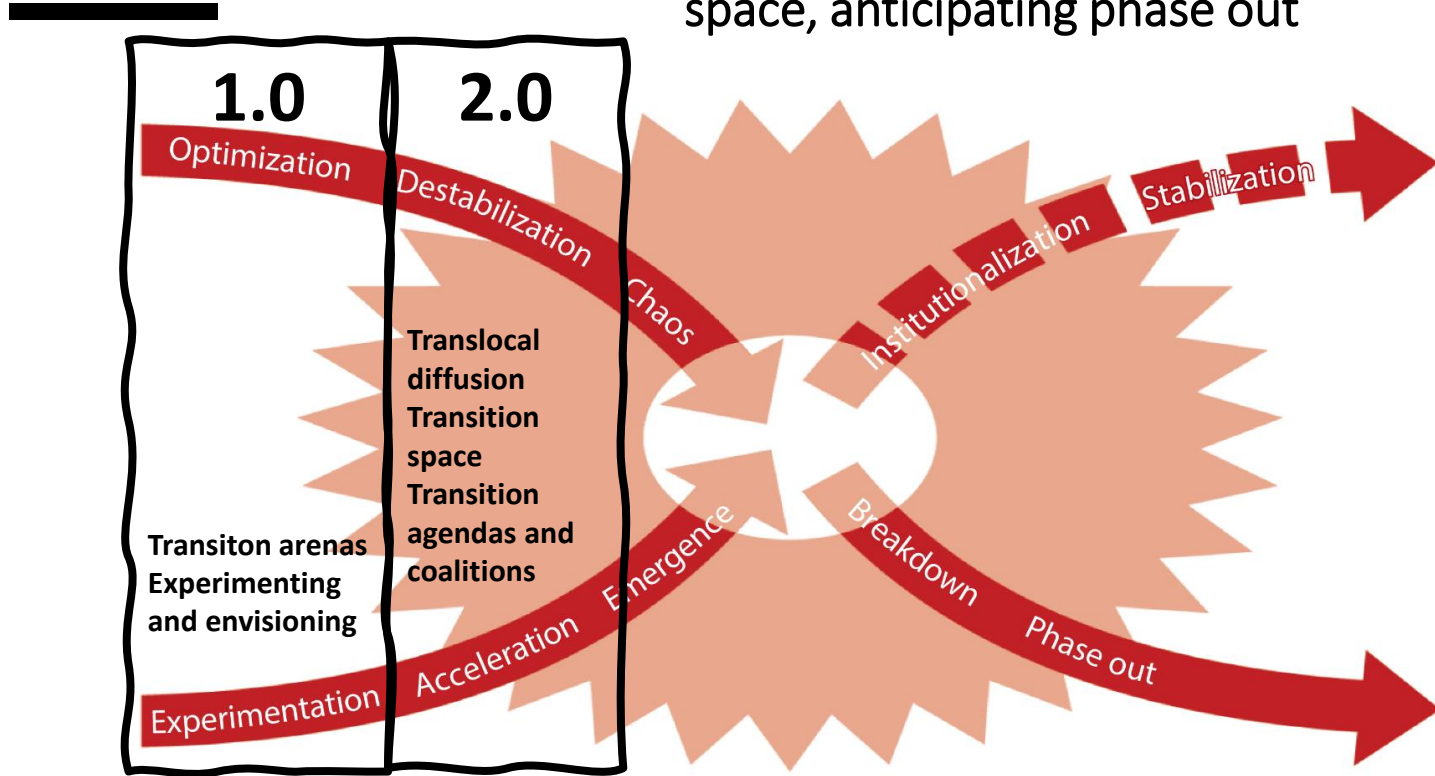
Scholenprogramma voor veilige schoolomgeving & opbouw fietscultuur (ism BMX fietsschool en PothPieK architecten)



# Policy transition



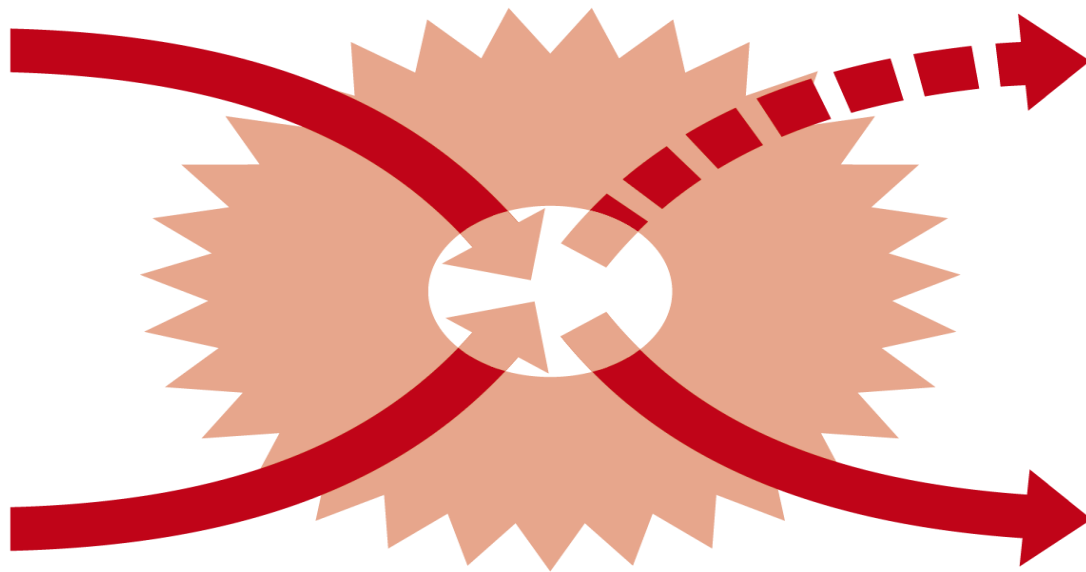
Connecting transformative agency, developing competitive niche-regimes, creating transition space, anticipating phase out



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## Transition governance mix

*Transform the  
existing*



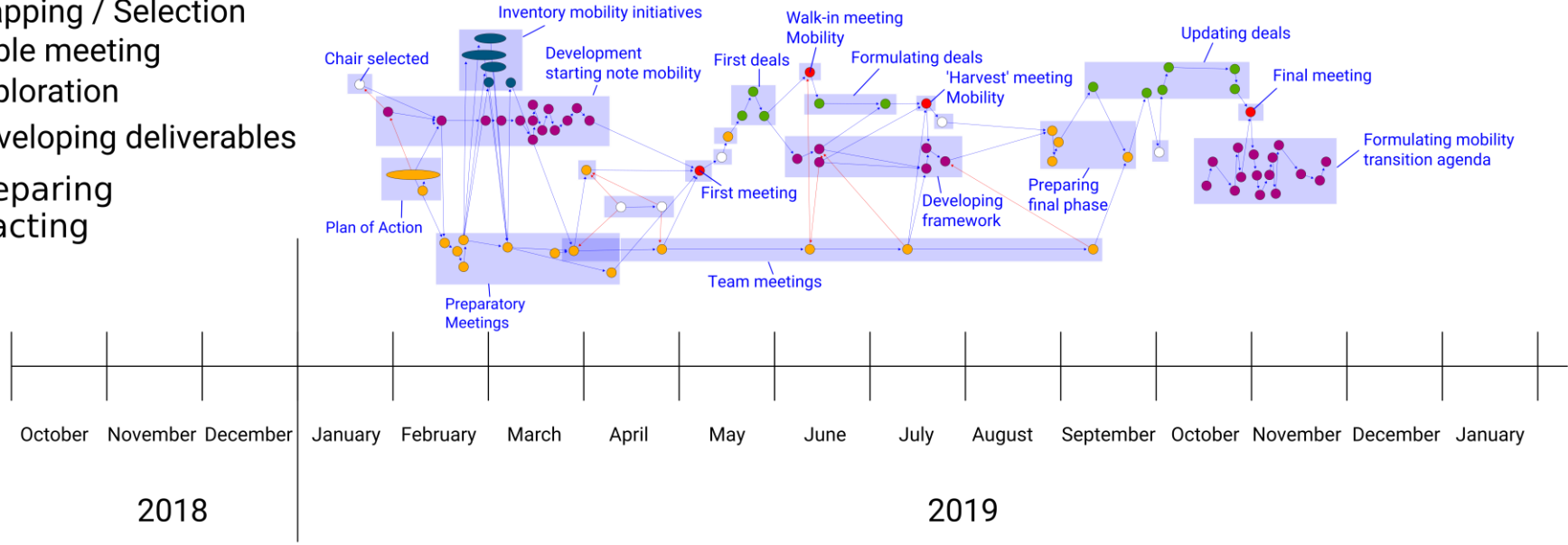
*Guiding  
direction,  
reflexivity and  
learning*

*Phase out the  
undesired*



# LEGEND

- Planning / preparation
- Mapping / Selection
- Table meeting
- Exploration
- Developing deliverables
- preparing
- ← reacting



# Urban mobility transition

Pricing

'Omgevingsvisie'

Optimization

Zoning plans

Destabilization

Zero emission zone

Circulation plans

Chaos

Traffic rules

Cooperative sharing

Fietsen op Zuid

Local green

E-logistics

City Lounge

Emergence

Healthy schools

Parklets

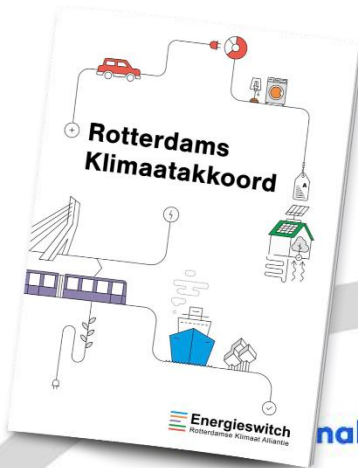
Free floating

Acceleration

Citizen infra

Experimentation

Happy Streets/  
Parking day



Stabilization

Stabilization

- 100% Emission free
- Affordable and fun for all
- 60% reduction of cars
- Slow has right of way
- Healthy living environment

Standard street design

Breakdown

Fossil subsidies

Individual fossil car

Phase out

Street parking



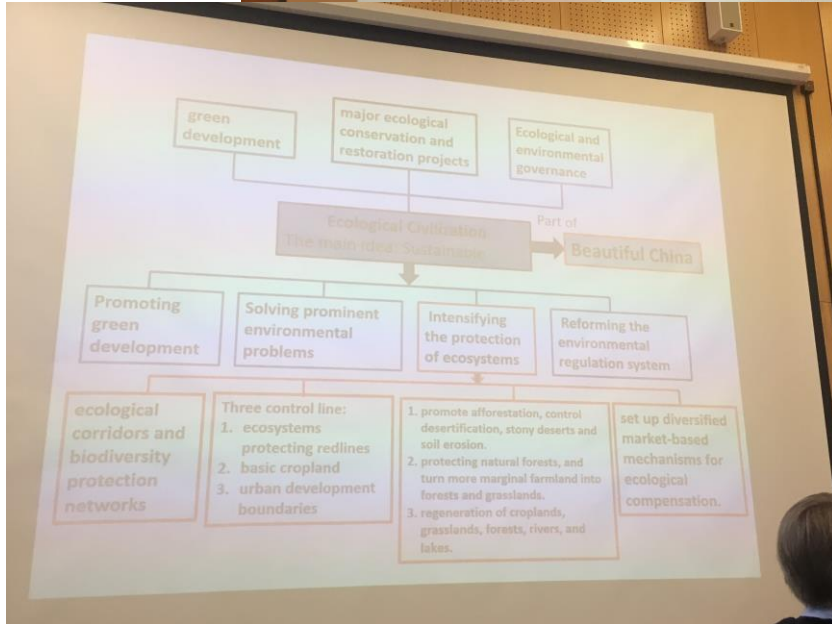
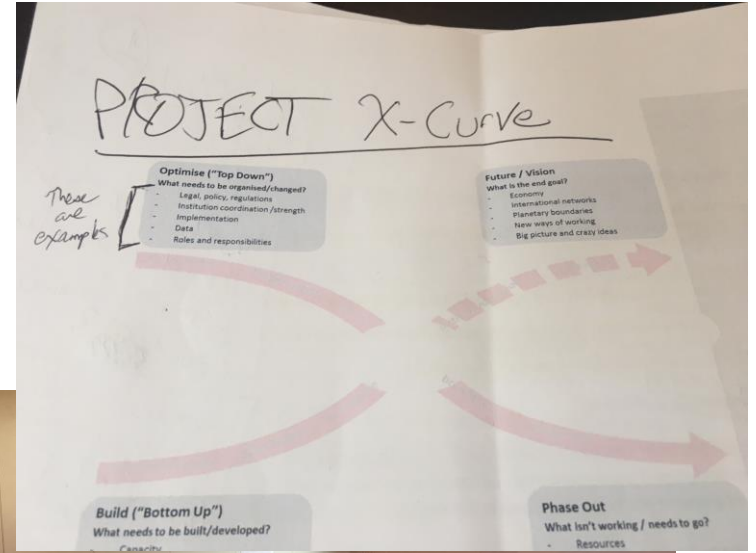
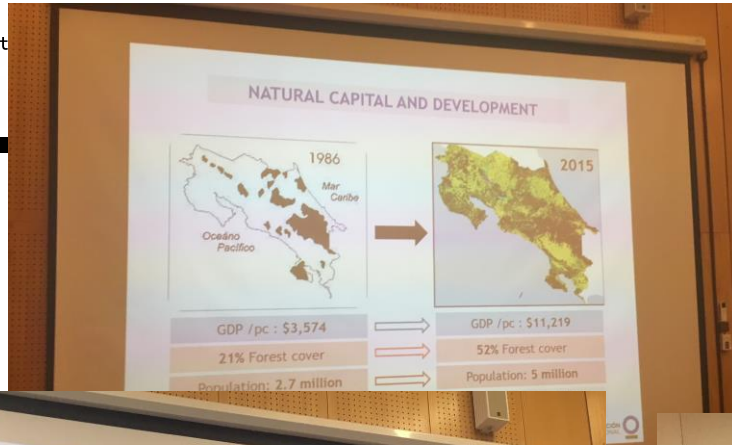
Het Rotterdams  
Klimaatakkoord  
Op 22 november 2018 ondertekend door

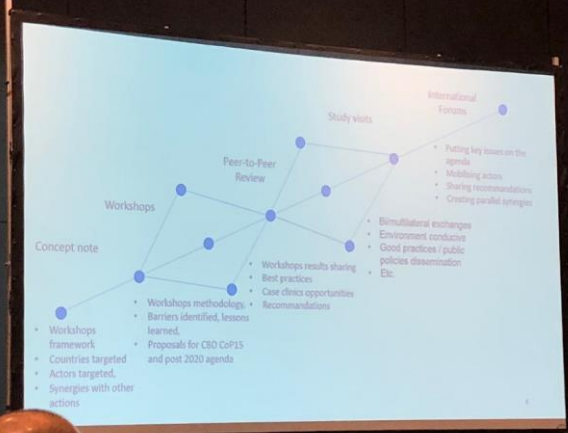
Rotterdams  
Klimaatakkoord



Energieswitch  
Envestra | Atlantic







## COP14 Side-event Invitation

# TOWARDS POST-2020



Which are the lessons learnt from the preparations and the recent diplomatic achievements in international environmental and sustainable development negotiations to reach an ambitious and effective follow-up to the Strategic Plan for Biodiversity?

**Sunday, November 18, 6:15 p.m.**  
**El Wadi contact group 6 room - building 1**

Financed by  Organised by 



25 YEARS  
 Convention on Biological Diversity  
 SACRIFICING LIFE ON EARTH

# COP14



**UN BIODIVERSITY CONFERENCE**  
 Investing in biodiversity for people and planet  
 COP14 - CP/MOP9-NP/MOP3  
 Sharm El Sheikh, Egypt, 2018



# "Transformative change"

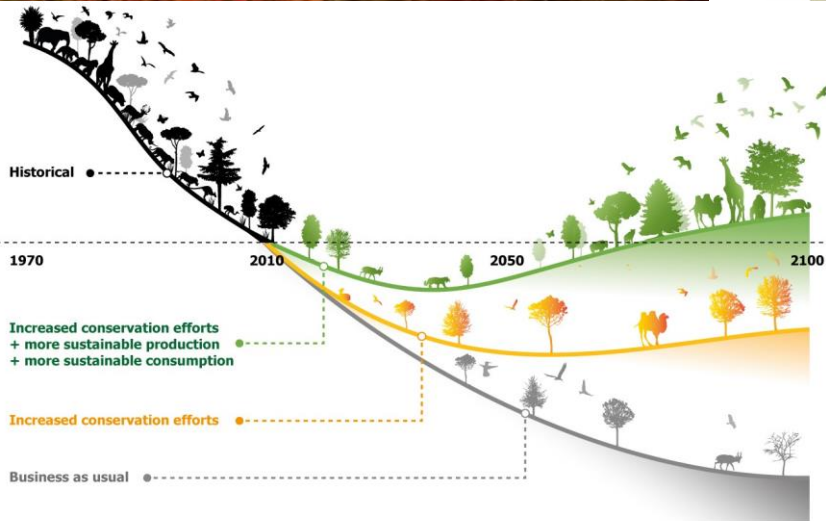


means a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values.

By its very nature, transformative change can expect opposition from those with interests vested in the status quo.

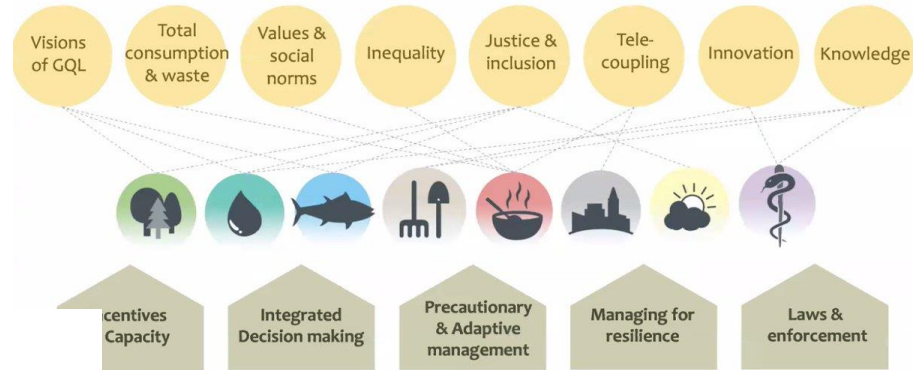
But such opposition can be overcome for the broader public good.\*

—IPBES  
Global Assessment



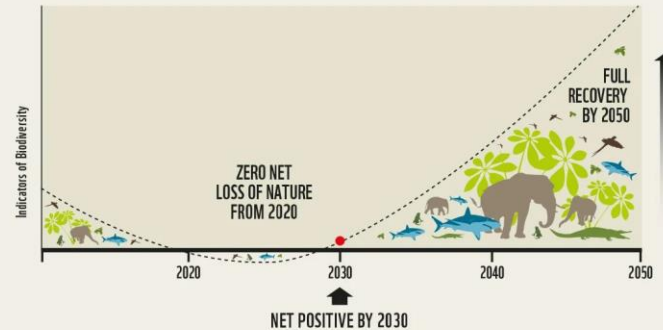
This artwork illustrates the main findings of the article, but does not intend to accurately represent its results (<https://doi.org/10.1038/s41586-020-2705-y>)

## LEVERAGE POINTS



LEVERS for transformative change

## Global Goal for Nature: Nature Positive by 2030



# Transitions in the making?

**“The people of the world do not want half measures or empty promises. They are demanding transformative change that is fair and sustainable... Together, let us kick-start a decade of delivery and action for people and planet.”**



António Guterres, Secretary-General of the United Nations

**Neste and Mirova back Recycling Technologies to accelerate transition to circular economy for plastic**

NESTE

mirova  
Investing in sustainability

Recycling Technologies

## The EU Green Deal

The European Green Deal is about **improving the well-being of people**. Making Europe climate-neutral and protecting our natural habitat will be good for people, planet and economy. No one will be left behind.

The EU will:



Become climate-neutral by 2050



Protect human life, animals and plants, by cutting pollution



Help companies become world leaders in clean products and technologies



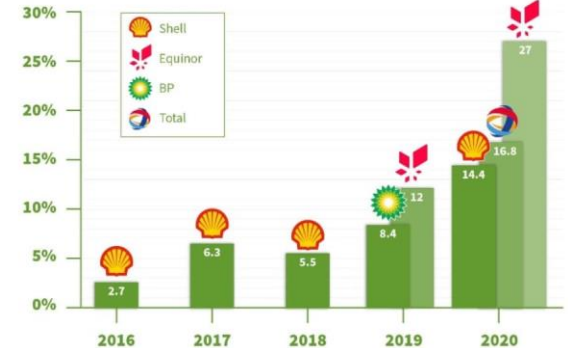
Help ensure a just and inclusive transition

## Votes for Climate Resolutions

Follow this

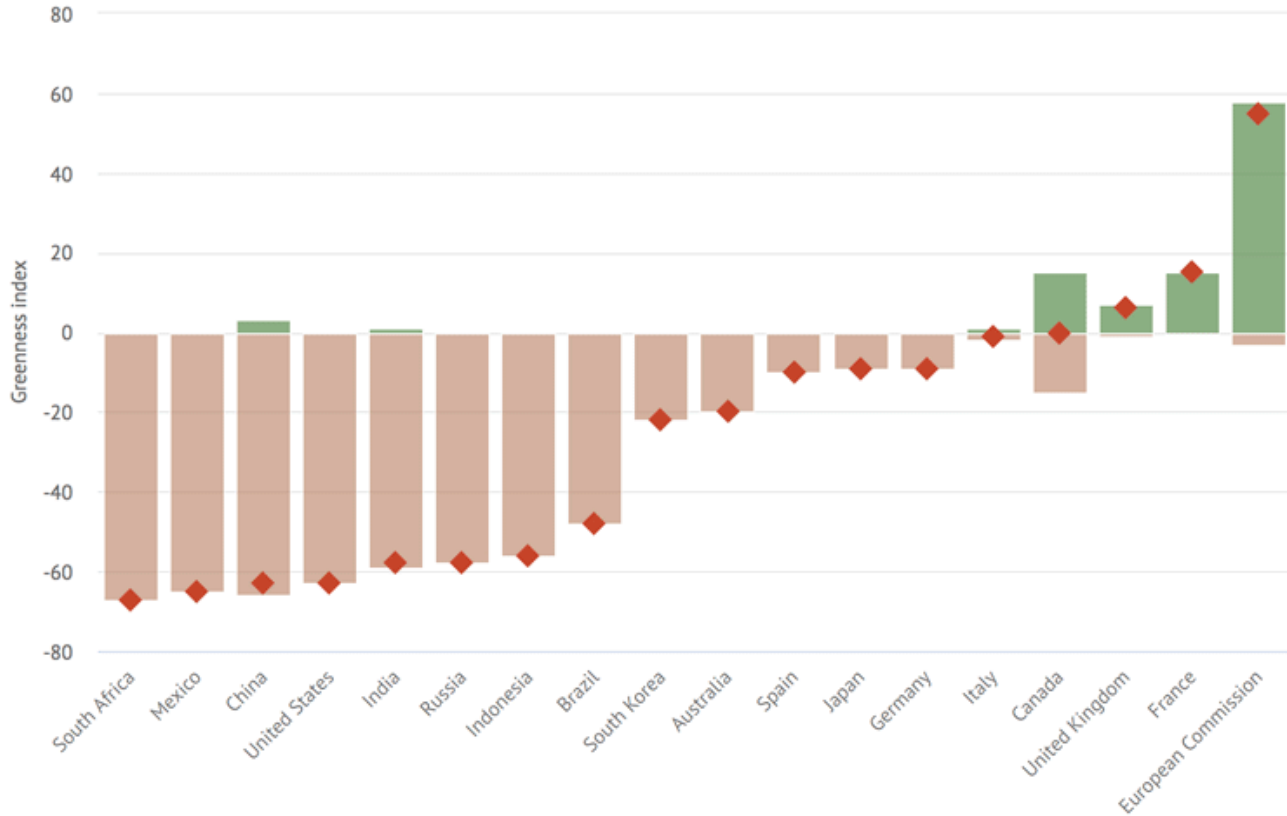
Shareholders support the company to set Paris-aligned targets for all emissions (Scope 1, 2, and 3\*)

\* Scope 3 = product emissions  
Total: filed by institutional investors



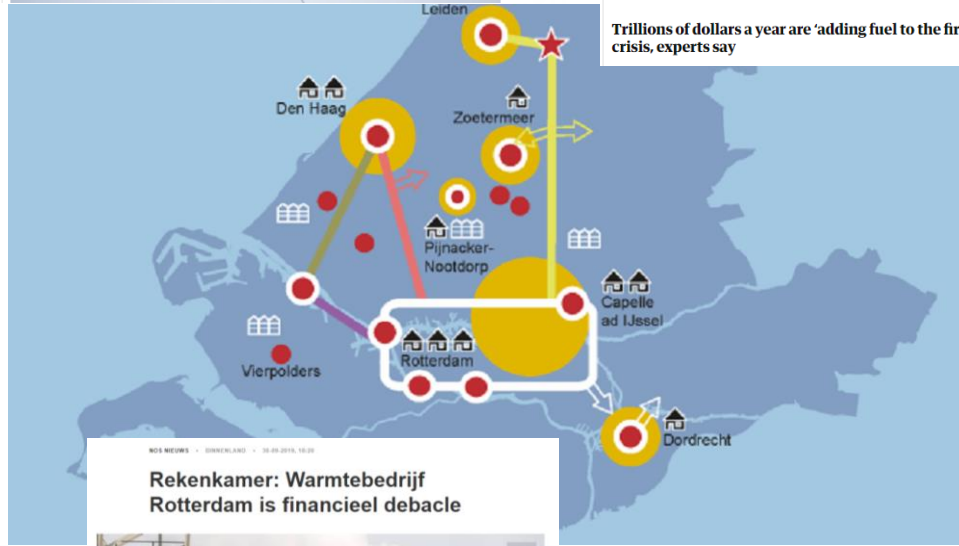
## 'Potentially damaging' stimulus measures dominate so far, according to Vivid Economics

The **overall ratings** in Vivid's 'Green Stimulus Index' are dominated by measures it rates as **"brown"** rather than **"green"**



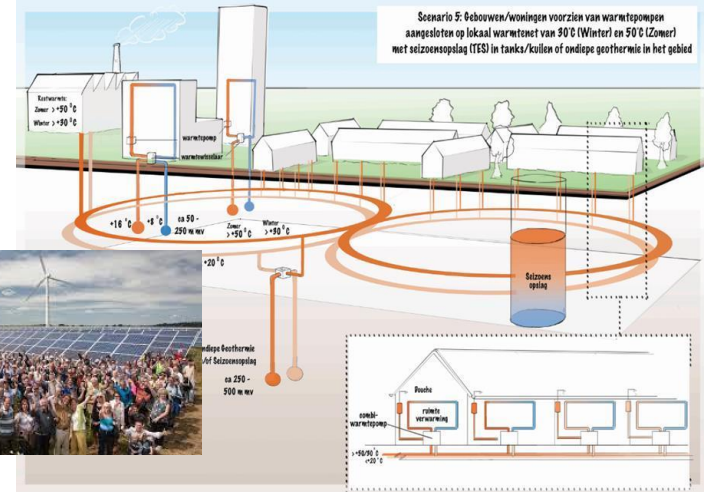
## UK to offer £265m in subsidies for renewable energy developers

Wind, solar and tidal projects will compete for contracts, including funding for onshore schemes

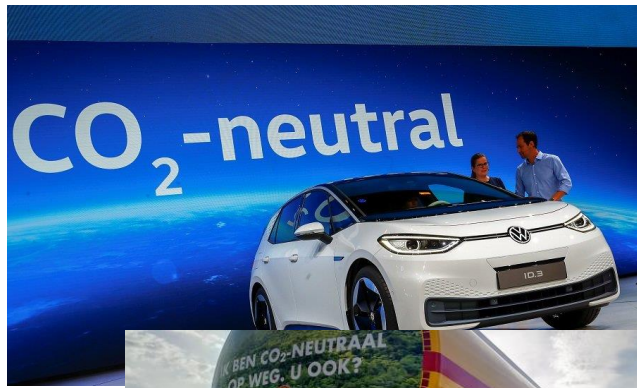


## Fossil fuel industry gets subsidies of \$11m a minute, IMF finds

Trillions of dollars a year are 'adding fuel to the fire' of the climate crisis, experts say







NEWS

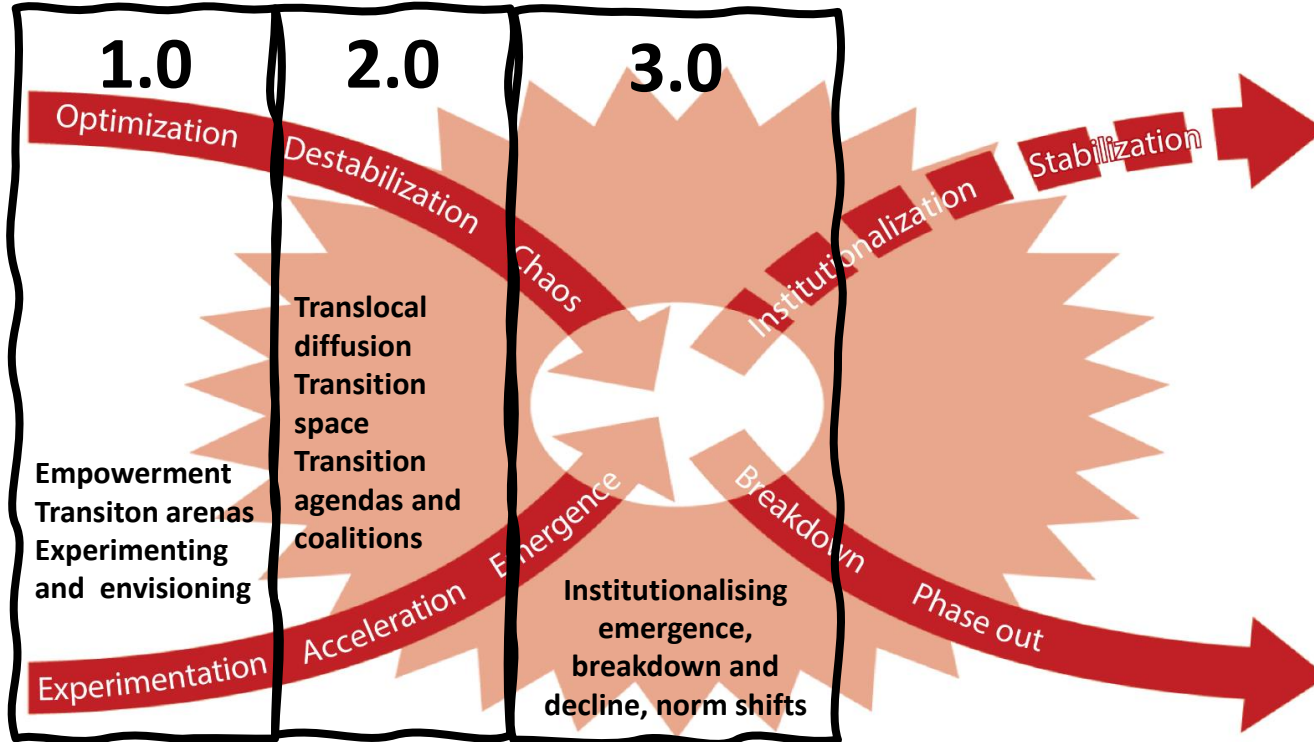
## Germany to pump additional €3 billion in ailing automotive industry

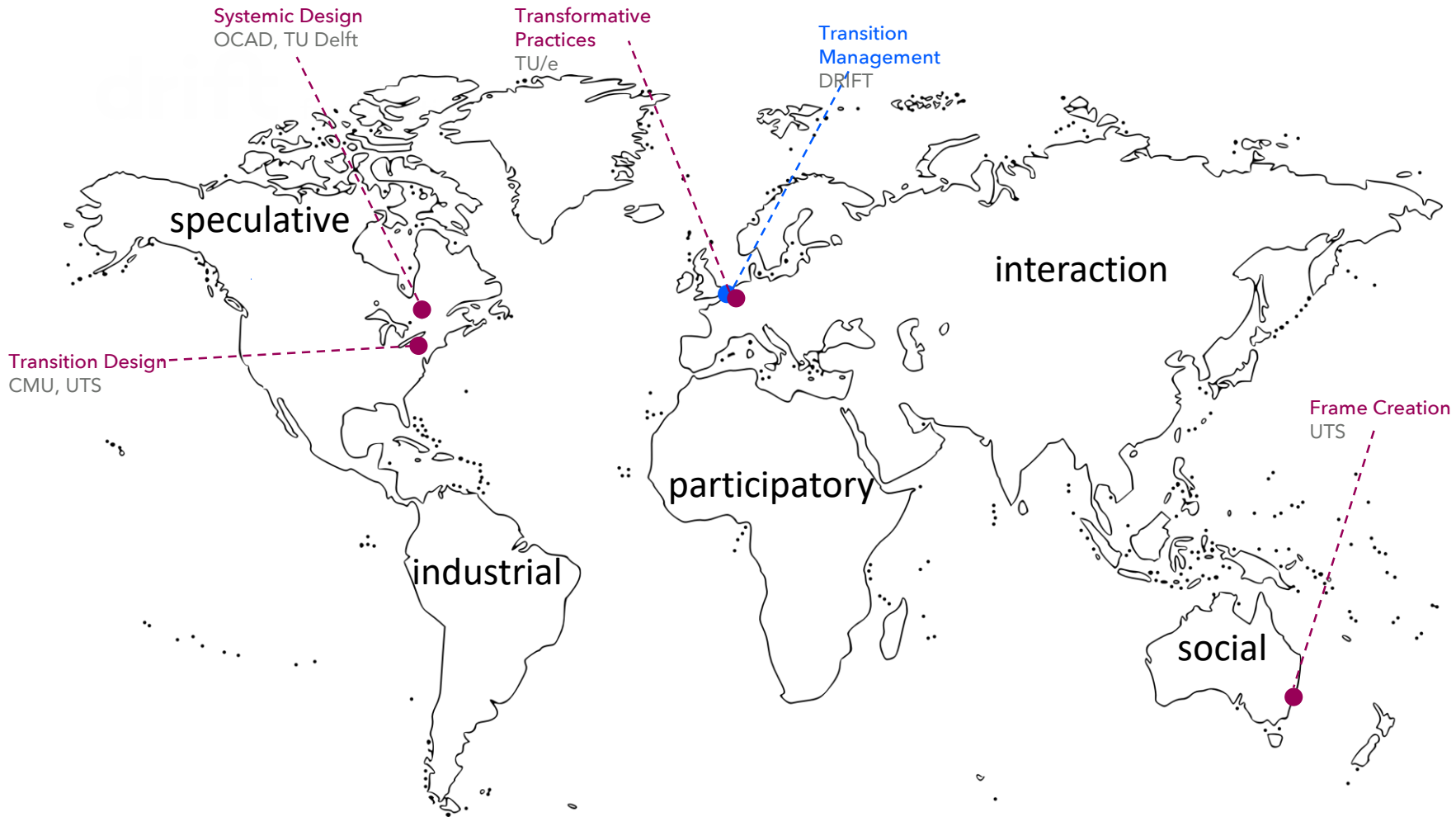
The investment will extend a subsidy for electric vehicles and attempt to secure jobs that are in jeopardy due to the coronavirus pandemic. The announcement follows talks between Chancellor Merkel and industry heads.





Catalyse radical transitions, develop socio-political momentum, accelerate breakdown





## Making radical transitions visible

Commons  
based local

Social  
shared  
mobility

Nature  
positive new

Ecological  
infrastructure

Regenerative  
nature

29.03.2021

## DERK LOORBACH APPOINTED CHIEF CURATOR 10TH IABR, SHOCK AND ROLL (2022)

The board of the International Architecture Biennale Rotterdam (IABR) has appointed director of *Dutch Research Institute for Transitions* (DRIFT) and professor of *Socioeconomic Transitions* at the Erasmus University Rotterdam's *Erasmus School of Social and Behavioural Sciences* DERK LOORBACH as chief curator of the next edition of the IABR, SHOCK AND ROLL.

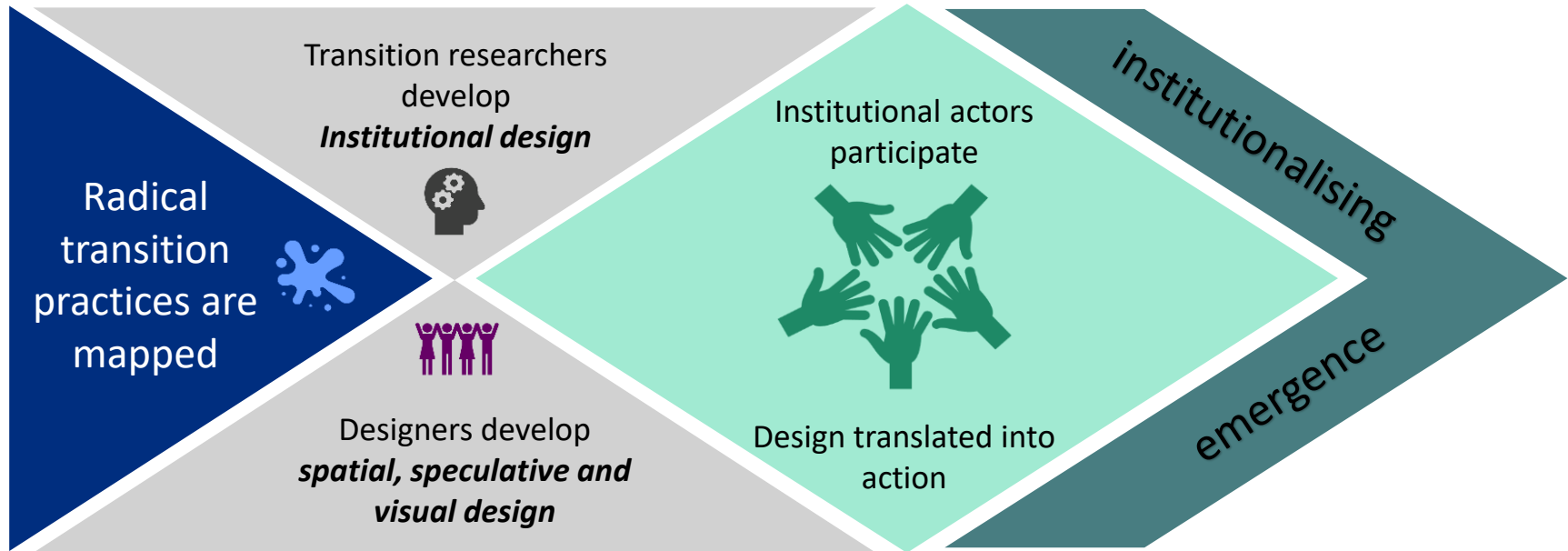
SHOCK AND ROLL will open in the fall of 2022 and is the first in a new series of biennales that will go all out for transition. The series will focus on the urgent need to put into design practice the all-embracing change to which science incites us, which the Paris climate objectives call for, to which the



- Global call for transition practices
- TM 3.0 process
- International exhibit and cultural program fall 2022

- ▶ Design usually starts from within the system, whereas transition starts from outside the system
- ▶ Design works more tangible whereas transition works more cognitive
- ▶ Designers try to be inclusive within their processes, whereas transition is more selective

## 'Development by design'



**drift** for transition



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[www.drift.eur.nl](http://www.drift.eur.nl)

[www.twitter.com/drk75](https://www.twitter.com/drk75)

*Erasmus*