



Transformational Change in Climate Action

Insights from the World Bank and GIZ

Thursday, 25 March 2021

Webinar Objectives

Webinar participants will:

- Learn about recent transformational change frameworks and insights in climate finance;
- Begin to explore opportunities to develop guidance and experimentation on how to catalyze transformational change in climate finance; and
- Identify and discuss examples of climate finance programs that have made progress in considering transformational change.

Webinar Speakers

Jonathan Coony



Senior Climate Finance Specialist
and Global Lead for Green
Competitiveness, World Bank Group

Daniel Kehrer




Climate Change and Environmental
Policy Planning Advisor, Deutsche
Gesellschaft für International
Zusammenarbeit (GIZ)


Webinar Agenda

- Welcome and Webinar Objectives
- Introduction to Transformational Change Work in Climate Finance
- A New Approach to Climate Finance: Key Insights from the World Bank on Transformative Climate Finance
- Moving from Issue to Action: Advancing Transformational Change at GIZ
- Participant Discussion and Panel Reflections
- Wrap Up and May Workshop Preview




A few technical reminders...

 The webinar is being recorded.

 Mute your microphone while others are speaking.

 Raise your virtual hand to contribute to the conversation.

 Allow everyone the chance to speak and listen actively to understand others' views.

 Chat directly to Shelby Thomas if you need technical assistance.



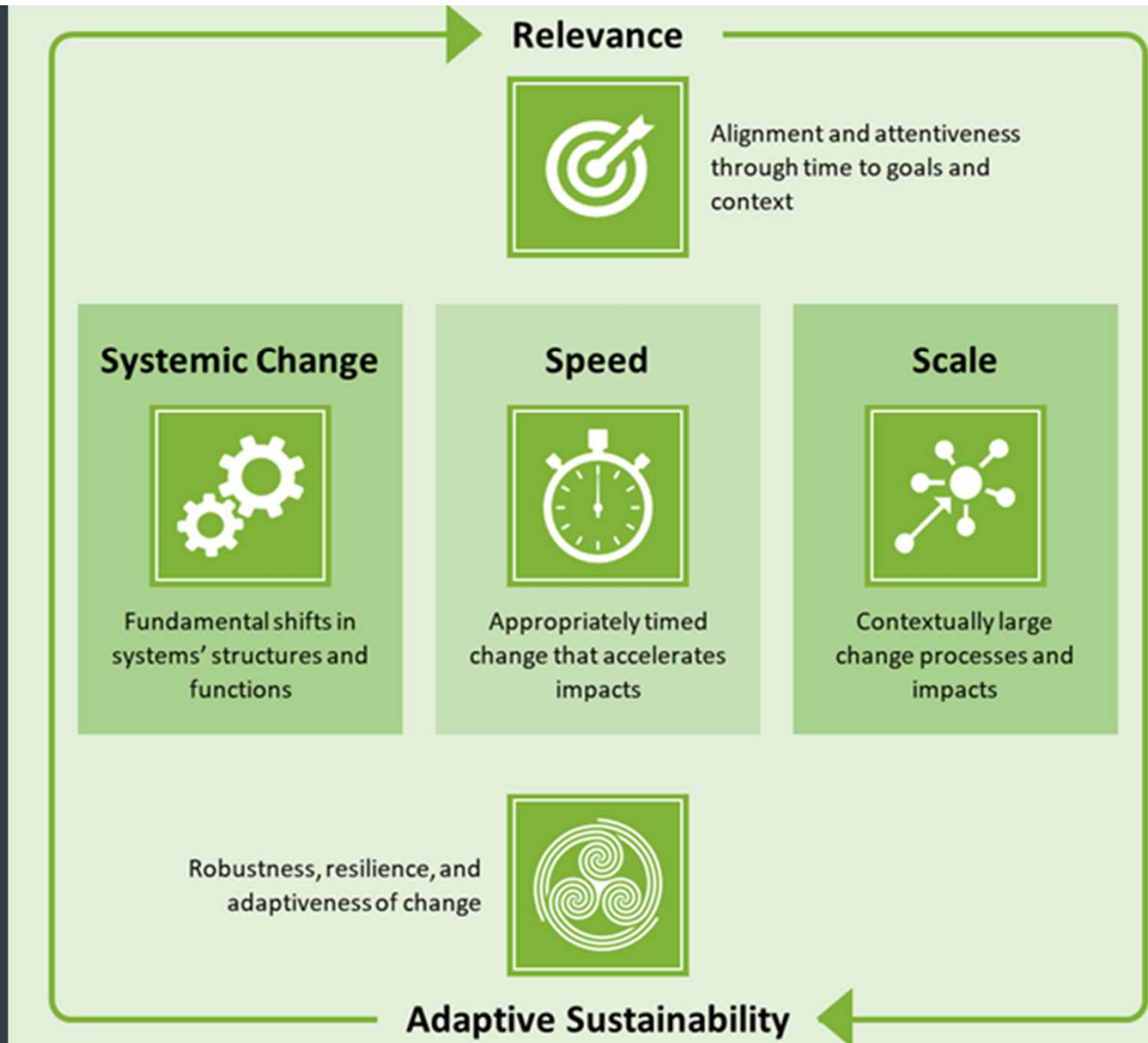
Transformational Change Work in Climate Finance

Nacibe Chemor, TCLP Lead Facilitator

TCLP Working Definition of Transformational Change in Climate Action

Fundamental change in systems relevant to climate action with large-scale positive impacts that shift and accelerate the trajectory of progress towards climate neutral, inclusive, resilient, and sustainable development pathways.

TCLP Dimensions of Transformational Change in Climate Action





A New Approach to Climate Finance

Insights from the World Bank on Transformative Climate Finance

Jonathan Coony, Senior Climate Finance Specialist and
Global Lead for Green Competitiveness, World Bank

Transformative Climate Finance

*How International Climate
Finance can Best Support
Low Emission and Climate
Resilient Development*

Transformational Change in
Climate Finance: Insights from
the World Bank and GIZ

March 2021

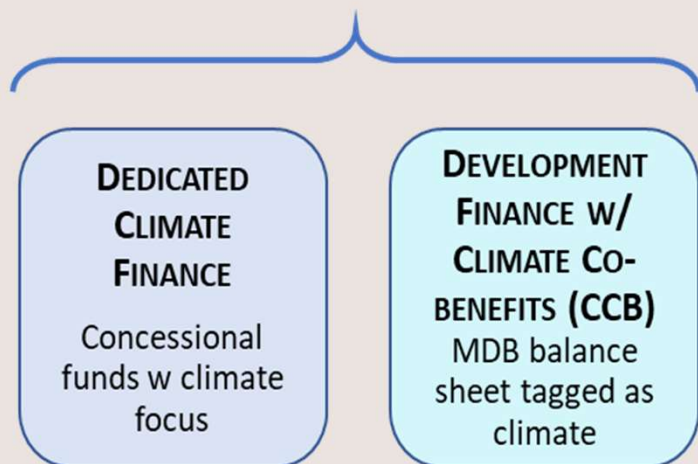


WORLD BANK GROUP
Climate Change

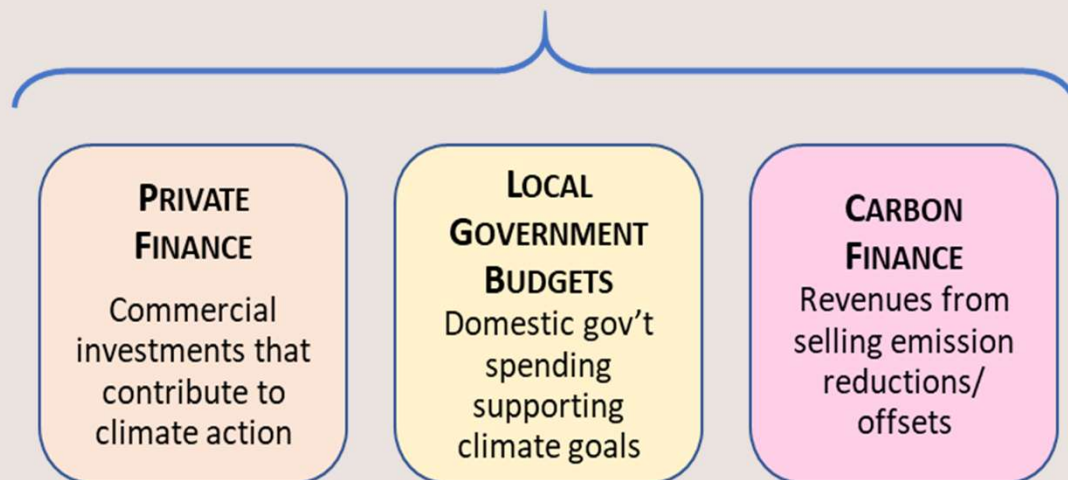
What is Climate Finance?

Definition: Any funds used by developing countries to meet climate goals

INTERNATIONAL PUBLIC CLIMATE FINANCE
Finance deployed through MDB systems



OTHER CLIMATE FINANCE
Add'l finance that can be catalyzed by int'l public climate finance

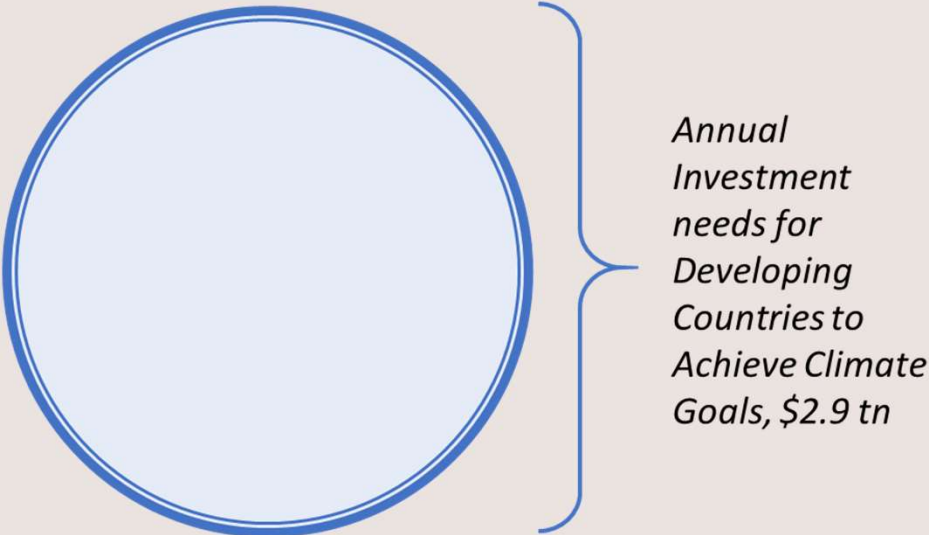


Public Climate Finance Falls Far Short of Investment Needs

AVAILABLE PUBLIC CLIMATE FINANCE WITH MOBILIZED PRIVATE FINANCE



ESTIMATES OF INVESTMENT NEEDS TO MEET DEVELOPING COUNTRY CLIMATE GOALS



Current public + mobilized climate finance levels meet < 3% of investment needs



If All MDB operations were 100% Paris-aligned, would still only meet less than 7% of needs



All MDB operations would need to be multiplied by nearly 15 to reach level of finance needed

Climate Finance can be Particularly Transformative



1. **Private Finance Interest** – climate finance can catalyze increasing demands for climate-smart investments. More than 1/3 of AUM has some climate preference or mandate.



2. **Technological and Industrial Dynamism** – climate finance makes clean tech competitive with ‘brown’ alternatives to trigger follow-on commercial investment. Electricity cost from solar energy fell by 82% since 2010.

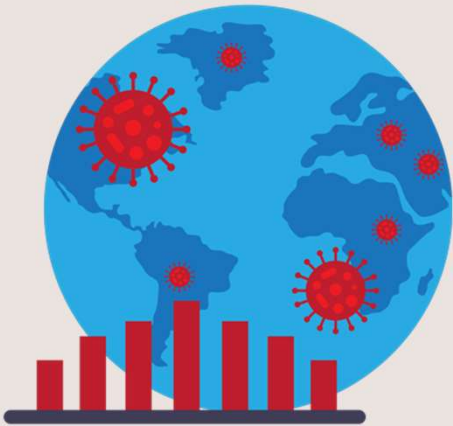


3. **Green Growth Economic Benefits** – greater efficiency, resilience to shocks, and increased investments from climate actions have important multiplier impacts across the economy.



4. **Novelty of Climate Actions** – all aspects of economies are designed for fossil fuels, incl regulations, industrial/financial capacity, etc. Initial changes pave the way for much easier follow-on actions.

The COVID Context - Building Back Better



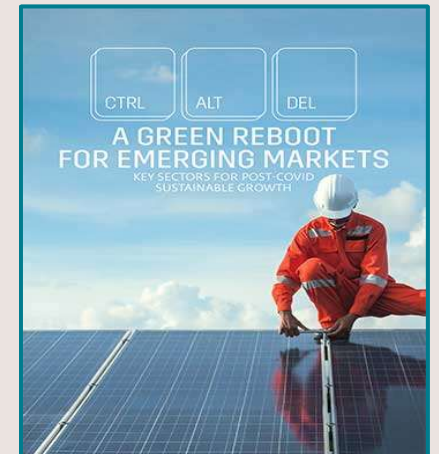
The fiscal stimuli to address COVID-19 and its economic consequences creates **historic opportunity to deploy climate public finance** to drive low-carbon, resilient development.

The resulting tightening of fiscal windows also creates a **necessity to catalyze additional private finance** for cleaner, more robust economies.

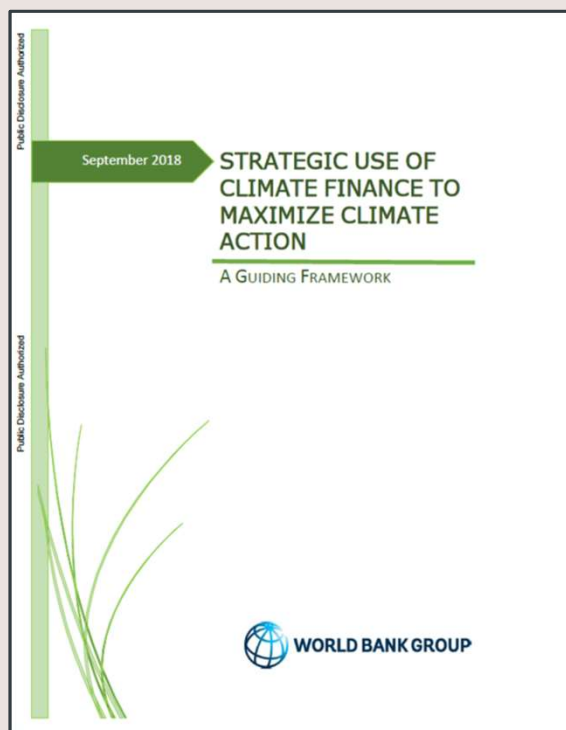
IFC Report: *Ctrl-Alt-Delete: A Green Reboot for Emerging Markets*

Supporting low-carbon investments through COVID-19 recovery funds into 10 sectors across 21 emerging markets has the potential to generate:

- \$10.2 trillion in investment opportunities
- 213 million cumulative jobs
- 4 billion tons CO₂e reduction



Recent reports blueprint transformative climate finance



<https://openknowledge.worldbank.org/handle/10986/30475>



<https://openknowledge.worldbank.org/handle/10986/33917>

Eight Sets of Climate Levers for Transformative Action



1. Project-Based Financing

Finance or project support to enable climate investments
e.g. wind plant, climate-resilient roads



2. Financial Sector Reform

Financial sector regulations that catalyze green investment
e.g. regulations for green bonds, climate risks in portfolio assessments



3. Fiscal Policy

Setting taxes and adjusting spending priorities to support climate action
e.g. green taxes, improved subsidy targeting, green procurement



4. Sector Priorities

Regulatory standards or information provision policies
e.g. energy efficiency standards, building codes



5. Trade Policy

Trade policies to encourage exchange of LCCR products
e.g. carbon border tax adjustment, trade liberalization for LCCR products



6. Innovation and Tech Transfer

Development of new, more effective and cheaper green technologies
e.g. demonstration plants, R&O, SME support, early/discounted financing



7. Carbon Markets

System to define and trade mitigation outcomes for cost efficient mitigation
e.g. emission trading systems, baseline and crediting mechanisms



8. Climate Intelligence and Data

Knowing and planning tools to support policy and investment decisions
e.g. 2050 low-carbon resilience trajectories, NDC implementation plans

High-level Findings for Transformation

1

Plan for the long term

- Align financing decisions with **long-term strategies** for low-carbon resilient development
- **Avoid spending that prioritizes short-term goals** inconsistent with long-term strategies
- Revise **results-frameworks** for long-term transformative impact indicators.

2

Balance allocation among levers

- Complement project-based financing with **more finance to other levers** for systemic, often policy-based, changes
- Strive for a **coordinated approach** with multiple levers

3

Use a range of financial instruments

- **Expand use of instruments** such as policy-based finance, results-based finance, equity finance, and guarantees
- **Combine and coordinate** different financial instruments based on needs of the lever(s)

4

Leverage on a systemic basis

- Allocate public climate finance to **leverage the most additional funds** from other sources.
- Develop and apply methodology **to measure beyond project boundaries** to consider impacts across the economy.

Examples of transformative climate finance by sector

Core DFI Sector and Project

Infrastructure Project

Major project providing essential services to economy and citizens

Ex: power plants, ports



Application of Climate Finance

- TA to understand novel, greener options
- Guarantees to crowd-in private finance
- Concessional blended finance at project level



Catalytic Impacts

- High private finance leverage
- Greater resilience to shocks
- Green co-benefits, eg local pollution, jobs
- Latest technology

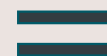
Financial Sector

Support for robust, efficient financial sector to attract and direct funds

Ex: system stability, increased FDI



- TA to learn/apply latest global developments
- Green develop't bank
- Green bonds
- Green asset taxonomy
- Targeted loan subsidies and portfolio rewards



- Increased FDI from green funding sources
- Increased financial sector capacity
- Funds for domestic green companies

Examples of transformative climate finance by sector (cont'd)

Core DFI Sector and Project

Fiscal Policy

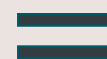
Support to robust and efficient fiscal policy

Ex: taxation, government budgeting



Application of Climate Finance

- TA to apply FFS removal and carbon tax
- Grant/concessional funds for affected people
- TA/funding for carbon-intensive industry



Catalytic Impacts

- Improved fiscal situation
- Vulnerable groups/industries protected
- Greater efficiency of economy

Innovation/PSD

Private sector development (PSD) and innovation capacity

Ex: skills building, RD&D



- TA to learn/apply latest technologies
- Concessional seed capital for green firms
- Green skills
- Connection to international networks



- Growth in green SMEs
- Industry growth in cleantech sectors
- Venture capital
- New green products for local markets

Climate Finance Diagnostics

Apply principles of Transformative Climate Finance to countries and sectors to maximize impact and financial leverage

1. Map Required Climate and Development Steps

- Identify existing long-term climate strategies, incl country NDC
- Map actions to reach identified goals, including interim steps to long-term transformation
- Determine long-term goals
- Estimate financing required to undertake the climate actions

2. Determine Levers to Catalyze Climate Finance

- Identify the levers which can most effectively catalyze additional finance
- Identify one or more goals or interim steps needed to realize the planned long-term decarbonization
- Determine the actions to catalyze additional financing
- Identify the international support – financial and technical – needed for those reforms

3. Comprehensive Climate Finance Plan

- Summarize and categorize the support – financial and technical – needed from international sources to undertake priority actions
- Aggregate cumulative impact of support for combined leveraging effect to catalyze finance to achieve climate goals with minimal fiscal burden
- Identify international climate finance sources

Thank you

Jonathan Coony, jcoony@worldbank.org

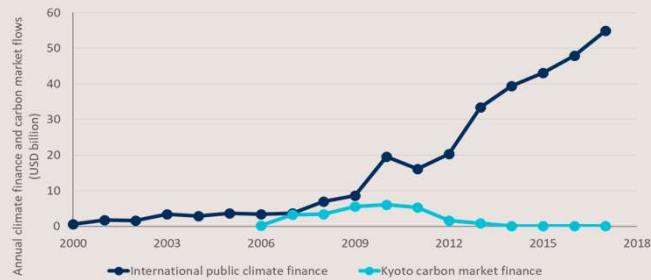


www.twitter.com/jonathancoony

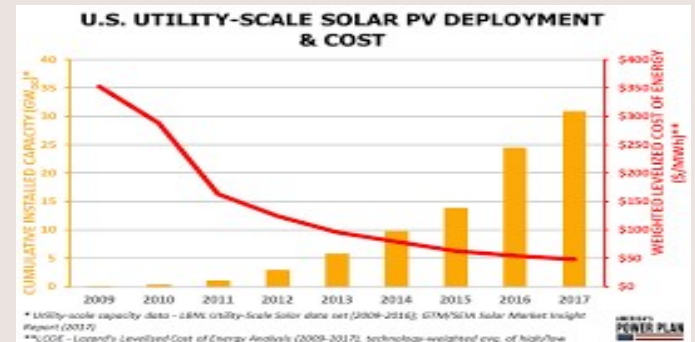
Annex



Changed Landscape for Climate Finance



Two Decades of Progress (and Lessons)



Dynamic Technology Improvement



Economic and Financial Benefits of Clean Development



COVID-19 Economic Recovery

Overview of Climate Levers



Project-Based Financing

Main Interventions

- Invest in projects
- Blended finance
- Manage risks and returns to enable private finance opportunities

Barriers to Action

- Capital constraints
- Limited capacity to deliver effectively

Key Climate Finance Instruments

- Investment financing for de-risking and crowding in other funding
- Technical assistance for enabling investment



Financial Sector Reform

Main Interventions

- Report and manage of climate risk
- Regulate green assets
- Deploy incentives for green investment

Barriers to Action

- Public finance and capital constraints
- Limited institutional and technical capacity
- Perceived conflict w/ development

Key Climate Finance Instruments

- Technical assistance for improving governance, capacity and expertise
- Investment financing for catalyzing green investment support



Fiscal Policy

Main Interventions

- Implement carbon taxes
- Reform subsidies and taxes to incentivize climate action
- Adjust government procurement
- Climate impacts in fiscal planning

Barriers to Action

- Concerns on reducing international competitiveness and distributional consequences
- Capital constraints

Key Climate Finance Instruments

- Policy-based financing
- Technical assistance for addressing knowledge and capacity gaps

Overview of Climate Levers



Sector Priorities

Main Interventions

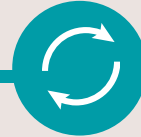
- Implement regulations conducive to LCCR alternatives
- Enforce of green technology standards

Barriers to Action

- Information gaps on policies
- Limited resources and institutional capacity to enforce regulation
- Concerns on reducing international competitiveness

Key Climate Finance Instruments

- Policy-based financing to create incentives
- Technical assistance for knowledge sharing on policy development



Trade Policy

Main Interventions

- Consider trade liberalization
- Apply border carbon adjustments
- Co-ordinate through climate clubs

Barriers to Action

- Tariff revenue reduction
- Insufficient infrastructure
- Technical and political challenges to policy design

Key Climate Finance Instruments

- Trade finance for LCCR goods and services
- Technical assistance for developing climate-friendly trade policy



Innovation and Tech Transfer

Main Interventions

- Public funding for basic research
- Implement R&D tax credits
- Technology transfer policy
- Intellectual property rights
- Green procurement

Barriers to Action

- Limited resources
- Uncertain payoffs
- Limited capacity to develop broader innovation ecosystem

Key Climate Finance Instruments

- Investment financing for high-risk innovation
- Technical assistance for early-stage innovation

Overview of Climate Levers



Carbon Markets

Main Interventions

- Establish domestic carbon markets
- Link markets internationally

Barriers to Action

- Concerns on reducing international competitiveness and distributional consequences
- Uncertainty on carbon prices
- Limited capacity and knowledge

Key Climate Finance Instruments

- Results-based financing for supporting market development
- Technical assistance for establishing and linking markets



Climate Intelligence and Data

Main Interventions

- Long-term planning tools
- Provide policy risk information
- Disaster risk management tools
- Localized climate impacts and opportunities data

Barriers to Action

- Challenges to collect data and develop intelligence
- Limited confidence in accuracy
- Uncertain policy response

Key Climate Finance Instruments

- Technical assistance for building capacity in measuring and using climate data

Methodology to Assess Transformative Impact of Levers

How does it work?

How the lever can drive and scale widespread climate transformation?

- Steps government can take
- Direct impacts
- Potential for transformation

Barriers

What barriers impede these interventions

- Lack of capital
- Lack of knowledge
- Public and private capacity constraints
- Political economy pushback:
 - Industrial competitiveness
 - Social consequences
 - Losing incumbent sectors

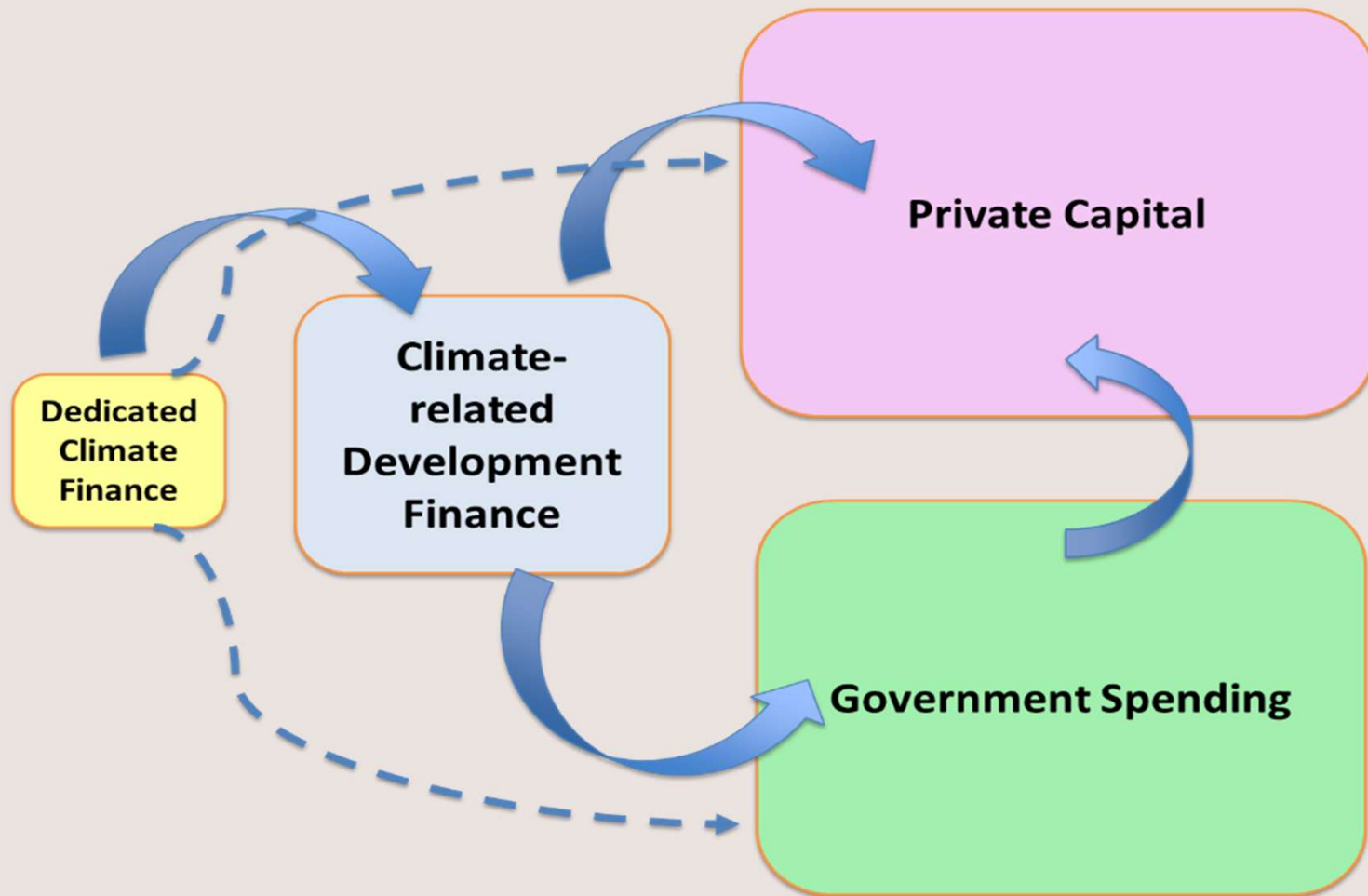
Climate Finance Deployment

How climate finance can address barriers and motivate interventions

- Investment financing:
 - Debt and equity
 - Guarantees
 - Intermediated financing
- Policy-based financing
- Results-based financing
- Trade finance
- Technical assistance

Conclusions

How can climate finance be used most effectively to best address barriers to transformative action?



How Climate Finance Achieves Transformation

Transformation occurs when spillover effects beyond the boundaries of the original project induce follow-on action—with catalyzed financing—even after the public finance is exhausted.

Technology tipping points

Reducing costs of clean tech substantially to reach parity or below costs for incumbent, less climate-friendly technology options

Policy development or implementation

Supporting development, introduction and/or execution of effective climate policies

Institutional or technical capacity

Enhancing skills and/or knowledge of public and/or private actors to pursue future climate action

Knowledge creation and dissemination

Creating and disseminating knowledge that supports climate action

Demonstration effects

Proving the effectiveness of a novel policy, climate technology or business model



Moving from Issue to Action

Advancing Transformational Change at GIZ

Daniel Kehrer, Climate Change and Environmental
Policy Planning Advisor, GIZ

Transforming our work:
Getting ready for transformational projects

Guidance

Daniel Kehrer
GIZ

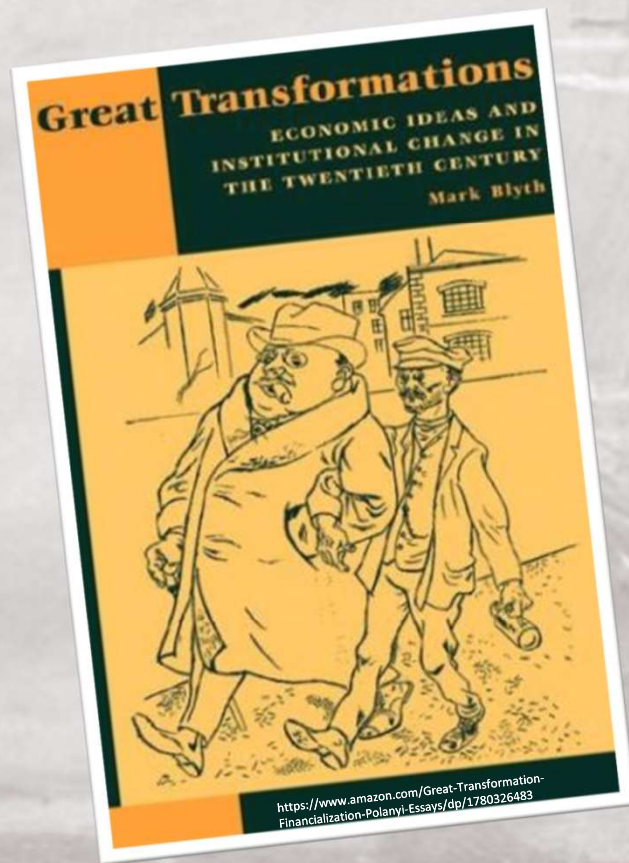


TC journey

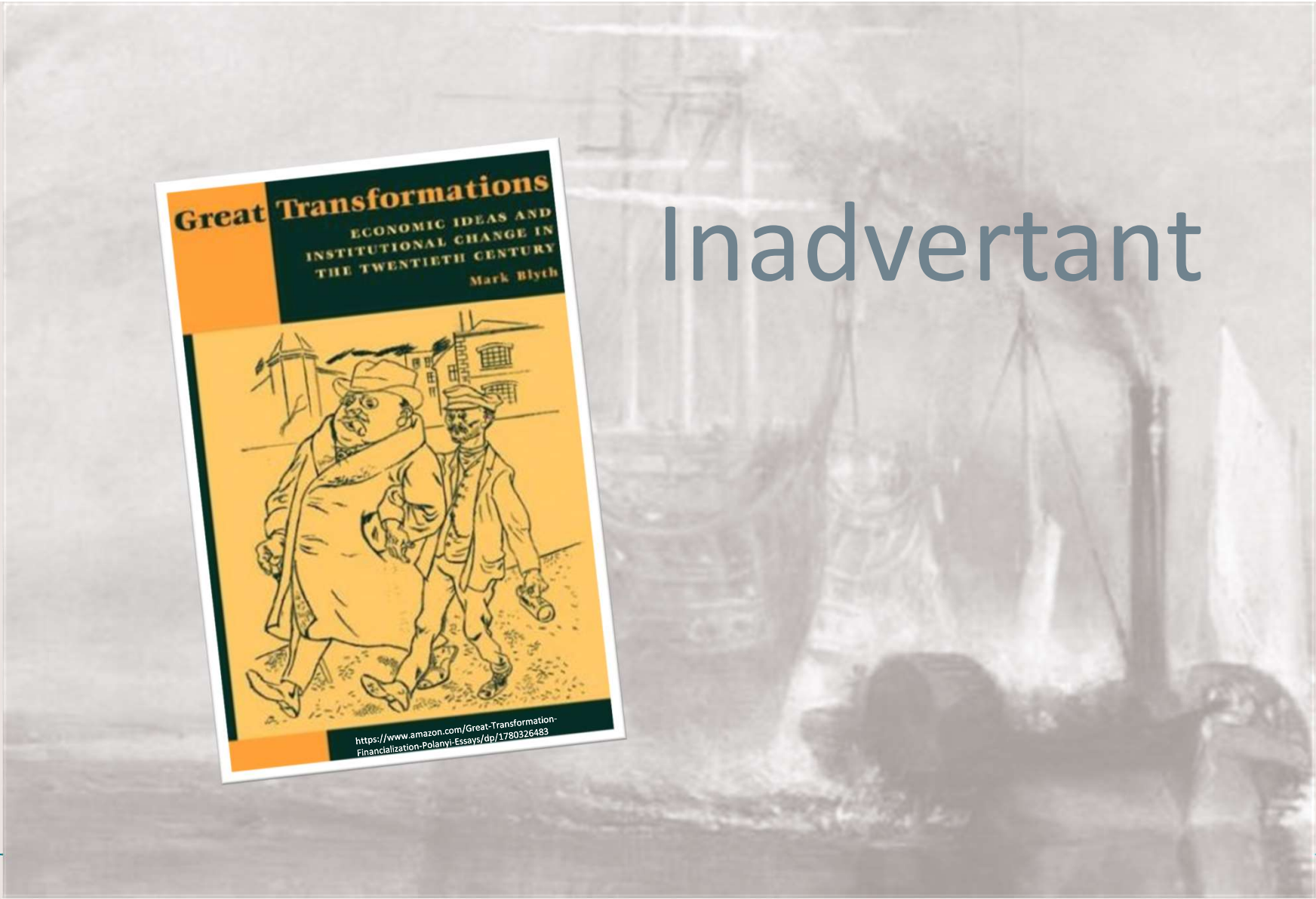


Our Position?





Inadvertant



Inadvertant





UNITED NATIONS

Deliberate

TRANSFORMING OUR WORLD:



THE 2030 AGENDA FOR
SUSTAINABLE DEVELOPMENT

*„We are determined to take the **bold and transformative steps** which are urgently needed to **shift the world** onto a sustainable and resilient path.“*
2030 Agenda

Picture: <http://www.un.org/apps/news/story.asp?NewsID=55219>

1-Oct-19

IDEAS GA, Prague

...ations
sur les Change
COP21/CM
Paris, Fr



*“We need to get from international agreements to **deep and complete transformation of societies.** (...) Individuals have an incredibly important role to play...”*

Patricia Espinosa, Executive Secretary of the UNFCCC, Aug. 2017, Bonn

Picture: <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication>

Transformation text search @international agendas

1. 2030 Agenda (2015)

- a. ...bold and **transformative steps** which are urgently needed to shift the world onto a sustainable and resilient path (...)
- b. ...our world will be **transformed** for the better (...)
- c. ...set of universal and **transformative Goals** and targets (...)
- d. ...supremely ambitious and **transformational vision**. We envisage a world free of poverty, hunger, disease and want, where all life can thrive (...)
- e. We will strengthen the productive capacities of least-developed countries in all sectors, including through **structural transformation** (...)

2. Paris Agreement (2015)

- a. None for 'transform' but for 'transition':
- b. Taking into account the imperatives of a **just transition** of the workforce and the creation of decent work and quality jobs...

3. Addis Ababa Action Agenda of the Third International Conference on Financing for Development (2015):

- a. ...special challenges and needs of landlocked developing countries in **structurally transforming** their economies (...)
- b. ...positive **socioeconomic transformation** in Africa (...)
- c. We encourage both international and domestic development banks to promote finance for micro, small and medium-sized enterprises, including in **industrial transformation**...

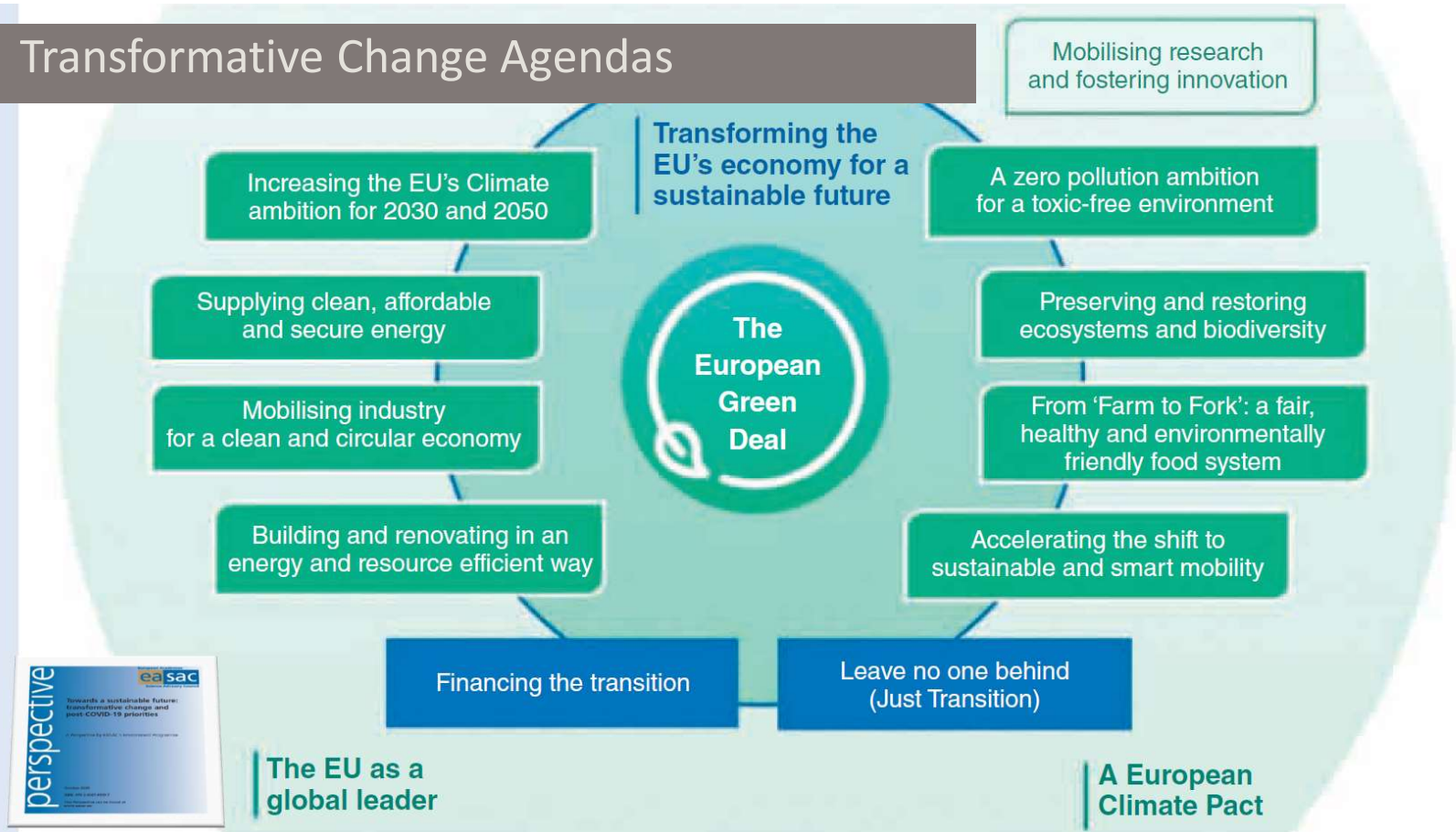
4. Sendai Framework for Disaster Risk Reduction 2015–2030 (2015)

- a. None

5. SIDS Accelerated Modalities of Action [S.A.M.O.A.] Pathway (2014)

- a. ...**transformational and innovative** activities in such areas as access to affordable modern energy services, renewable energy, energy-efficient technologies and low carbon development, in the context of sustainable development

Transformative Change Agendas



Box 4 Figure The European Green Deal (EC, 2019).

From: European Academics Science Advisory Council 2020: Towards a sustainable future: transformative change and post-COVID-19 priorities. A Perspective by EASAC's Environment Programme. EASAC Secretariat, German National Academy of Sciences Leopoldina.

Many definitions & perspectives

“Structural transformation is defined as the transition of an economy from low productivity and labour-intensive economic activities to higher productivity and skill intensive activities. The driving force behind structural transformation is the change of productivity in the modern sector, which is dominated by manufacturing and services.

It is also characterized by the movement of the workforce from labour-intensive activities to skill-intensive ones.” [UN-HABITAT](#)

...transformative changes in the dominant social norms, behaviours, governance and management regimes (...) social-ecological transformations (SETs), which are described as ‘untried beginnings from which to evolve a fundamentally new way of living

Pereira, L., Karpouzoglou, T., Doshi, S., & Frantzeskaki, N. (2015). Organising a safe space for navigating social-ecological transformations to sustainability. *International Journal of Environmental Research and Public Health*, 12(6), 6027–6044.

Transformative change (...) involves changes in all three dimensions of the 2030 Agenda for Sustainable Development: economic, environmental and social. It requires changes in economic structures to promote employment-intensive growth patterns that ensure macroeconomic stability and policy space. In order to make this economic change environmentally sustainable, profound changes are required in production and consumption patterns and energy use through legislation, regulation and public policies. (...) It also means changing norms and institutions, both formal and informal, that shape the behaviour of people and organizations in the social, economic, environmental and political spheres. Transformative change understood in this way is a long-term process (...) and a reversal of the hierarchies of norms and values that subordinate social and environmental goals to economic objectives.

„4 Drivers of Change:

- **Technology change:** This refers to processes that drive research and development, adoption and scale-up of clean technologies.
- **Agents of change:** This pertains to entrepreneurs, the private sector and markets, as well as coalitions and networks as agents of transformational change.
- **Incentives for change:** This refers to economic and non-economic incentives along with disincentives, which play a critical role in shifting technology and societal change.”
- **Norms and behavioural change:** This includes processes that influence awareness and 3 behaviour of people to drive a long-lasting change in societal norms and practices.”

ICAD. (2017). *Transformational Change Guidance - First Draft*.

5 2030 Agenda principles and 7 TransformAbilities

Figure 20: The 2030 Agenda and transformative change



Own graphic. In order to reach the goals of the 2030 Agenda, all forms of change are relevant. The agenda itself builds on 5 overall development principles that have been framed in this way by BMZ and GIZ. The transformAbilities are design principles especially important for the parts of the agenda referring to transformative change. Except paradigmShiftability, they are relevant for other forms of change too (compare Figure 19).

Transforming our work:
Getting ready for transformational projects

Guidance



Desktop Analysis



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety



INTERNATIONAL
CLIMATE INITIATIVE (IKI)



NAMA Facility



GREEN
CLIMATE
FUND



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

TransformAbilities+

Mandatory (blue) criteria are those which are indispensable for defining or bringing about a transformation.

System transformation (transformative relevance)	This distinguishes transformation from other types of change (incremental change and reforms) and as such serves as a measure of the relevance in this context. Aspects of this may be paradigm change, (socio-technical) regime change, or a fundamentally new overall narrative.
Scaling (transformative ambition)	Vertical and horizontal scaling of the disruptive innovation across all levels and sectors of society, up to it becoming mainstream and the dominant paradigm. Without this, the disruptive innovation would remain in a niche and would not replace, or only partly replace, the prevailing system.
Sustainability & resilience (transformative ambition)	Sustainability of the new system over time, closely tying in with the declining resilience of the old system and increasing resilience of the new one. Without this, there is a danger the new system will return to a niche status. Path dependencies of the old and new system are also included here.

Transform-Abilities+

Essential (green) criteria are a range of criteria/abilities need to help influence and if possible accelerate transformations.

ComplexAbility	The ability to deal with, influence and help shape 'super complex' systems. The transformations in this context are generally at the highest levels of complexity, because the aim is to change entire social systems. Characteristics of complex systems include emergent, non-linear and sometimes abrupt developments which are hard to predict. This demands transformative interventions, flexibility and adaptability in particular (adaptive management).
Capacity to facilitate	The ability to navigate transformative processes in highly complex environments. This includes permanent professional and locally recognised support for shaping the process and for facilitation, along with resources such as sufficient time, money, suitable locations and methods.
Multidimension-Ability	The ability to address various social levels such as science, civil society, business and politics, in order to advance transformation across the whole of society. This requires particular facilitation (see boundary workers), resources (boundary objects) and forms of organisation (boundary organisations)
Social-ChangeAbility	The ability to shape social change to allow transformative innovations to become a new mainstream and establish new values, norms and behaviours. This in turn increases the probability that other dimensions, such as politics, economy and technology, will also adapt and that the new system will become more resilient to changes such as political change.
Reciprocity	Enabling reciprocity as a key characteristic which bolsters both acceptance and resilient complex systems. It is in the nature of complex systems that they cannot be controlled through a one-sided top down approach, but rely on a high degree of self-organisation and self-regulation in order to evolve. A new system can therefore be at risk if, for example, it is prescribed and/or controlled from the top down.
Social justice	The ability to promote social justice (cf. LNOB). Transformational change is the most radical/disruptive form of change and thus also runs the greatest risk of producing losers, those who have fewer opportunities in the new system. Conversely, actors may perceive themselves as losers in the current system (cf. intergenerational justice) and therefore set their sights on a transformation.

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Responsibility

GIZ is responsible for the content of this publication. The views expressed in this paper are purely those of the author and may not in any circumstances be regarded as reflecting an official position of the BMU or GIZ.

Eschborn, November 2020

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Transformative project design



Published by **giz** Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of:  Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

of the Federal Republic of Germany

What happens in and around GIZ?



TC value proposition



Why Transformation?





<https://cosmos-images2.imgix.net/file/spina/pixto/15248/180605-fossilfuel-full.jpg?ixlib=rails-2.1.4&auto=format&ch=Width%2CDPR&nc-max&w=835>

Why Transformation?



<https://circulartayside.co.uk/wp-content/uploads/2018/06/Linear-economy-image-adj.png>

Linear economy

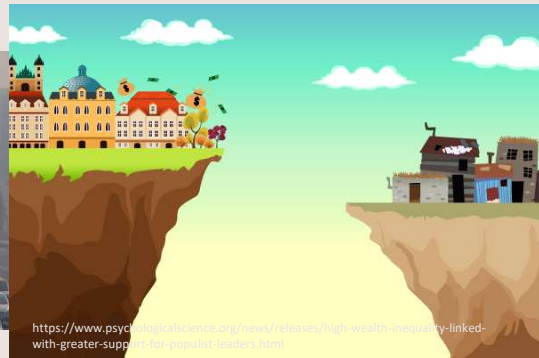
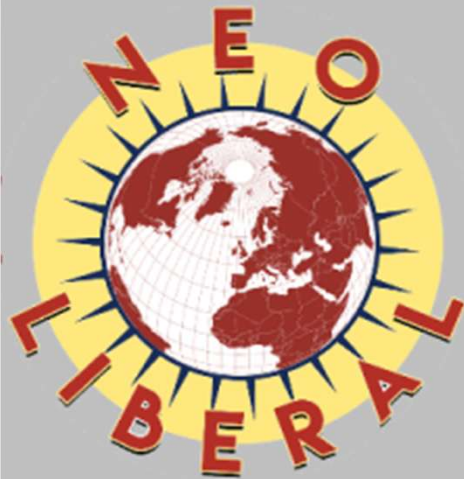


Image: Kate Raworth and Christian Guhaire/The Lancet Planetary Health



Why Transformation?



*Free markets,
Free trade,
and the
freedom to
think.*



Why Transformation?



<https://criticallegalthinking.com/wp-content/uploads/2014/02/Capitalism.jpg>

Why Transformation?



<https://www.psychologicalscience.org/news/releases/high-wealth-inequality-linked-with-greater-support-for-populist-leaders.html>

Why Transformation?

Crisis

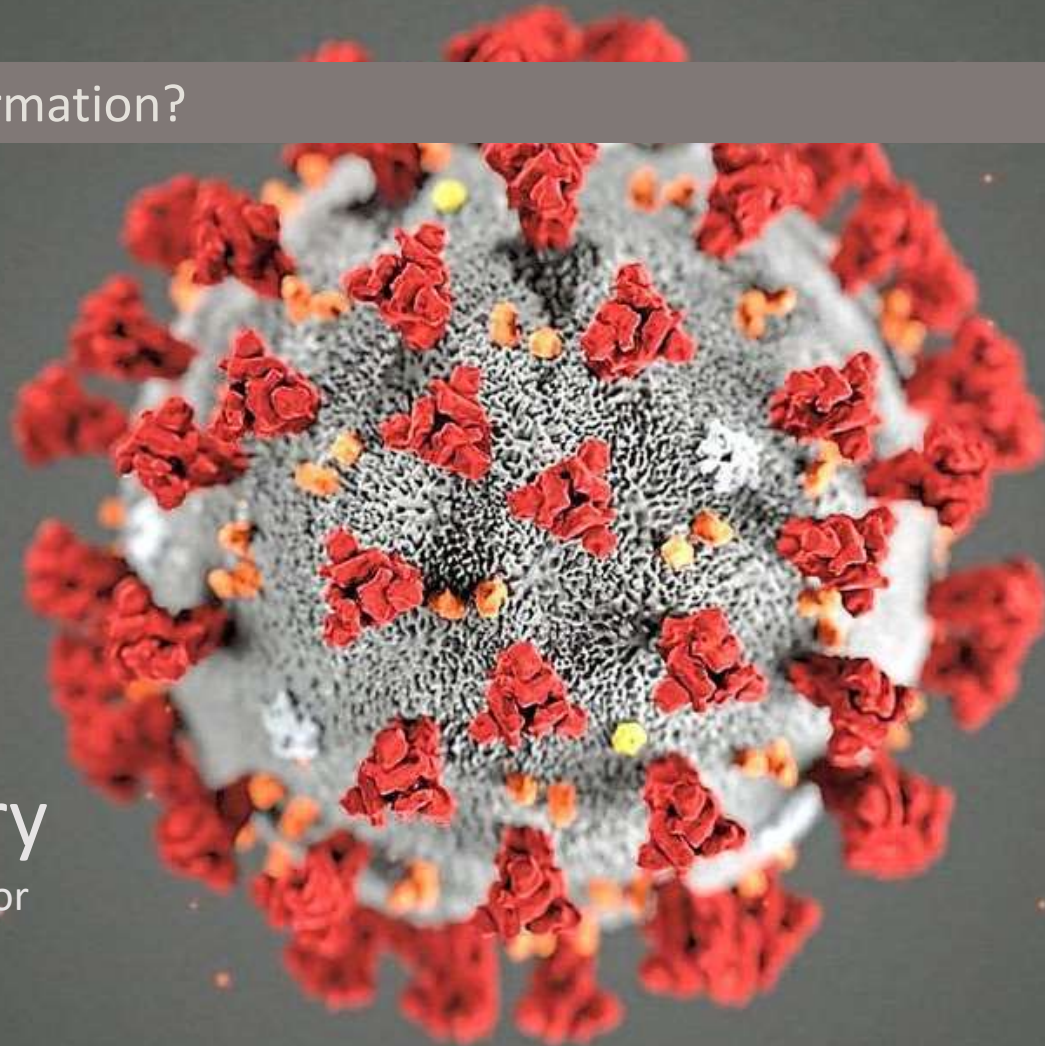
> System Limits

Learning

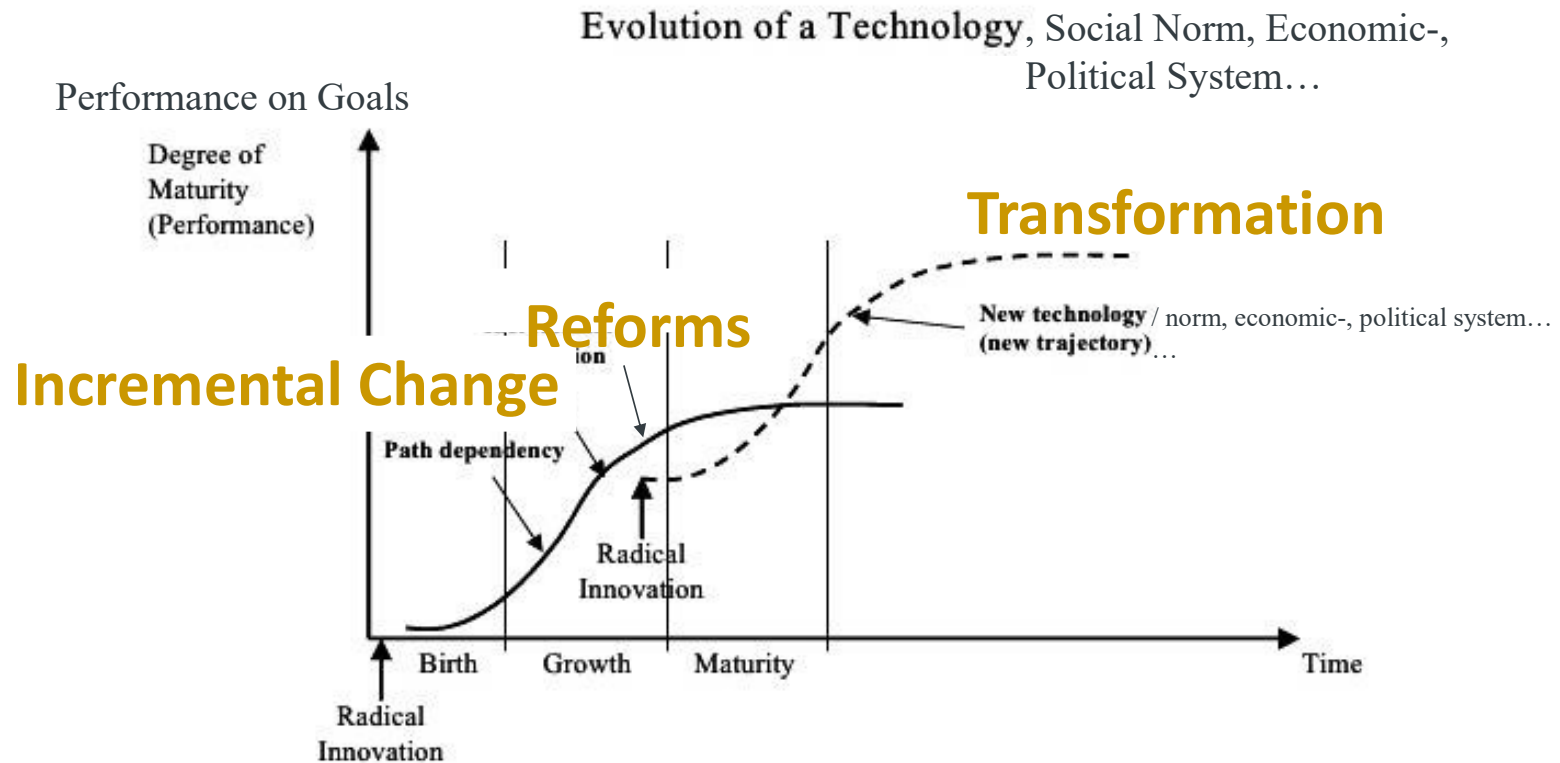
> Wicked Problem
Solving

Recovery

> Momentum for
Transformation



Incremental change, reforms vs. transformation



A system *sticks to a given trajectory*
as long as incremental innovation are favoured to prevent sunk costs
from changing the basic technology, social norm, economic-, political system...

From: Joachim Hafkesbrink

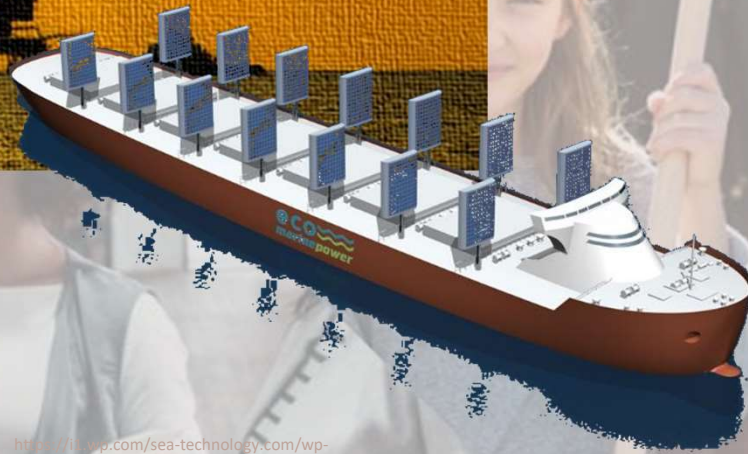
<https://www.slideshare.net/johaf/technological-paradigm-shifts-updated>

Time for transformations

https://www.energynews.com/wp-content/uploads/2018/06/shutterstock_201349887.jpg

...to address the

- ecological
- social &
- economic crises...



https://it.wp.com/sea-technology.com/wp-content/uploads/2017/09/aquarius_eco_ship_2a.jpg?w=1024&c768&ssl=1

Scope



3 types of change

Incremental:

More of the same (size, number...), scaling within **same system**



Reform:

Structural change within same system



Transformation:

New system, identity, purpose, function, paradigm, narrative, regime, ...



Pictures:
lifecycle.onenessbecomesus.com
<https://www.butterfliesandmoths.org>

Transformative Change – examples



<https://cosmos-images2.imgix.net/file/spina/photo/15248/180605-fossilfuel-full.jpg?ixlib=rails-2.1.4&auto=format&ch=Width%2CDPR&fit=max&w=835>

Transformative Change – examples





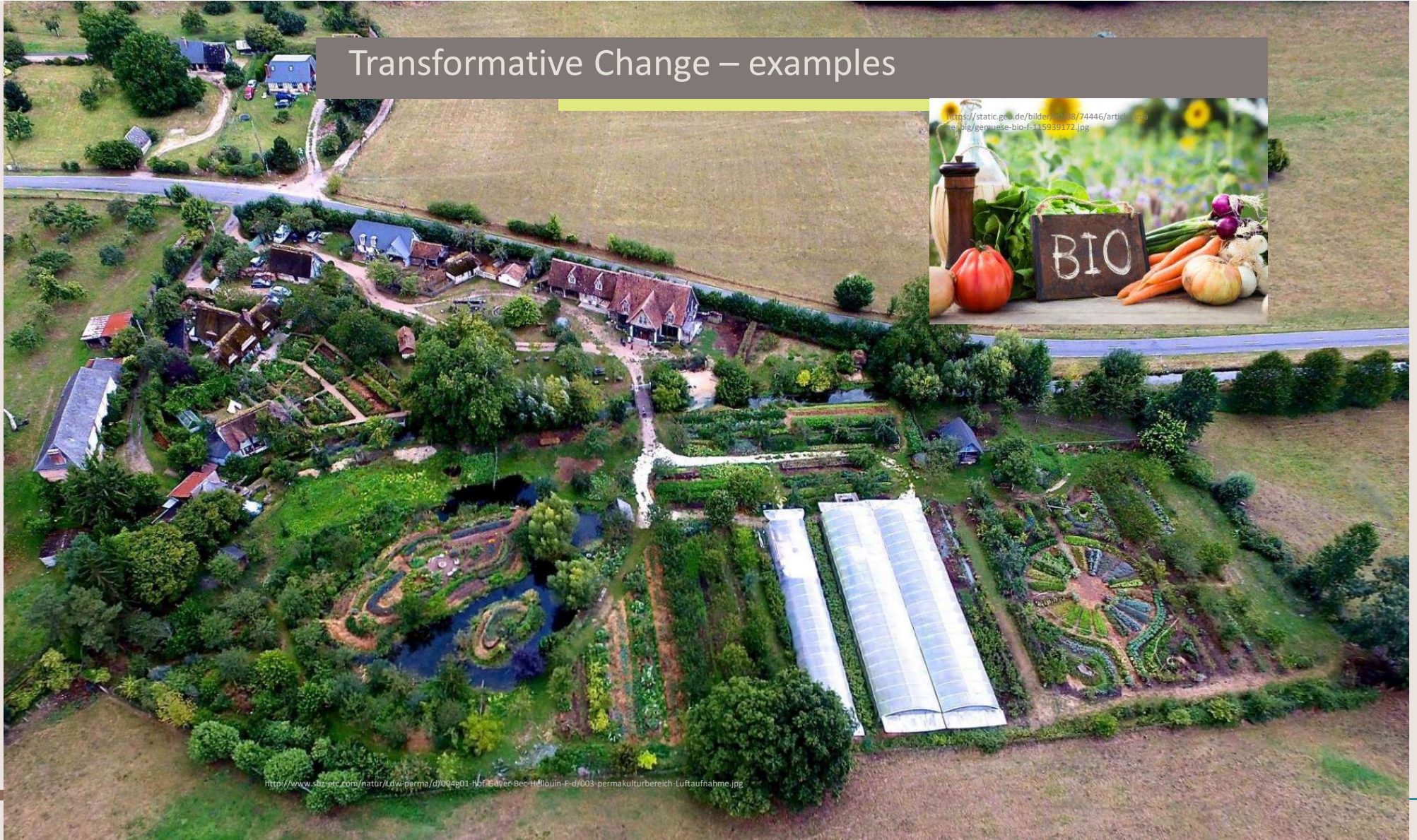
https://taz.de/picture/460128/948/N1_aufmacher-RGB.jpg



https://media1.faz.net/p/mmedia/aktuell/wirtschaft/149237566/1.2128589/article_multimedia_overview/industrielle-tierhaltung.jpg

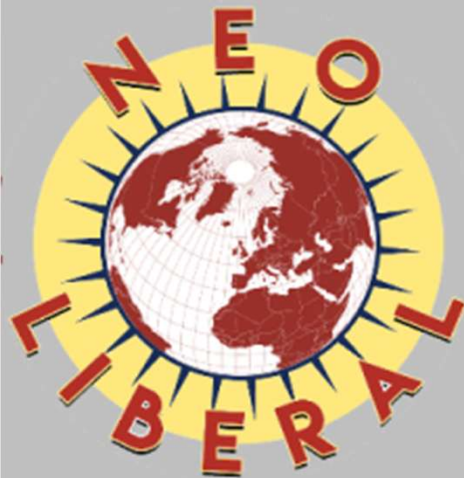
<http://cdn2.sustainabilitylabs.org/ecosystem-restoration/wp-content/uploads/2014/11/image110.png>

Transformative Change – examples



<http://www.sbz-etc.com/natur/Ldw-perma/d/004801-Nof-Cuayr-Bec-Hd-louin-F-d/003-permakulturbereich-Luftaufnahme.jpg>

Transformative Change – examples



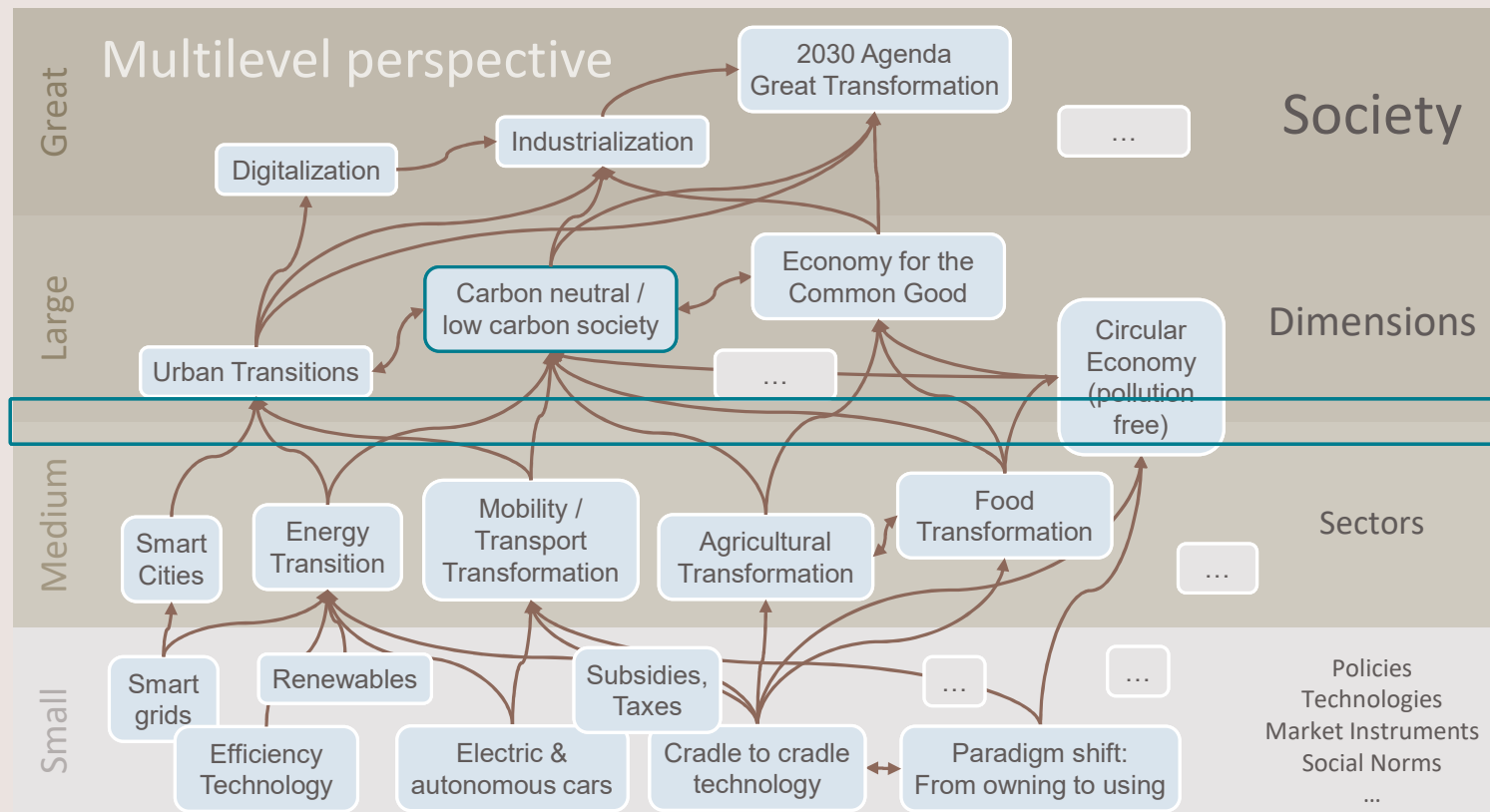
**Free markets,
Free trade,
and the
freedom to
think.**



THE COMMON GOOD

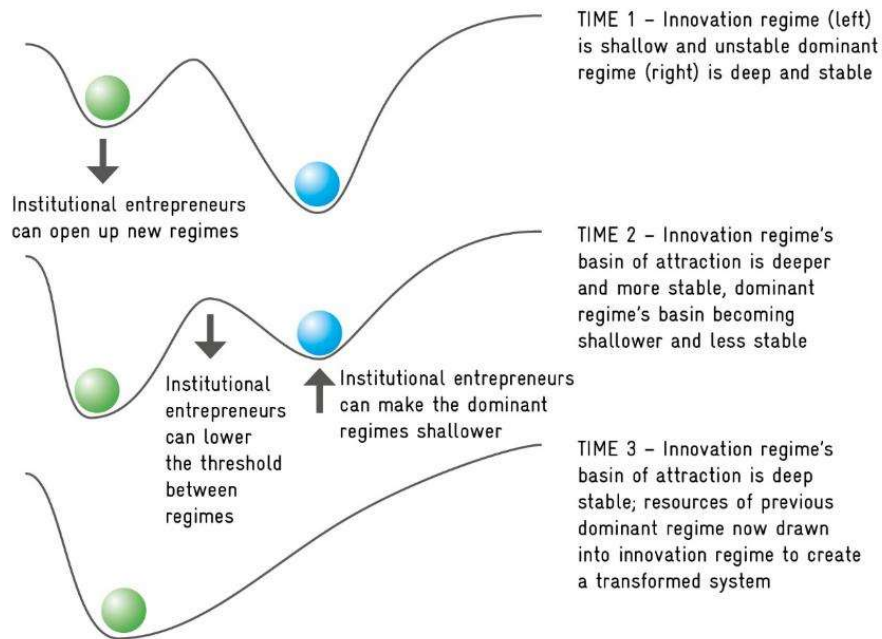


Multilevel perspective, interdependence, multi scope



1st point for action:
Being sharp about transformation:
recent vs. anticipated system

Figure 16: Transformation from a resilience perspective



... emphasizing the role of institutional entrepreneurs (from Westley et al. 2011, own illustration).

- ✓ From mitigation in general towards **GHG neutrality**
- ✓ **Linking** of GHG neutrality to lower level (e.g. sectoral) transformation fields

Purpose & Audience



- Continuous learning / improvement of TC **approaches, methods, tools...** (intervention design/action)
- Impulses for transforming our work: **comissioning processes, project cycles, M&E, budgeting, project types...** (conditions for interventions)
- Honest brokering for normative joint **agenda setting:** ‚time for transformations‘ (development priorities)



- All for **better / faster / more ambitious TC** and hence **development progress, solving the crises**



Project developers
and implementers

Supporting
/ M&E...
units

Comissioning
parties

Sectoral units

Society

GIZ,
German
bilateral
cooperation
& beyond

Issue to Action?

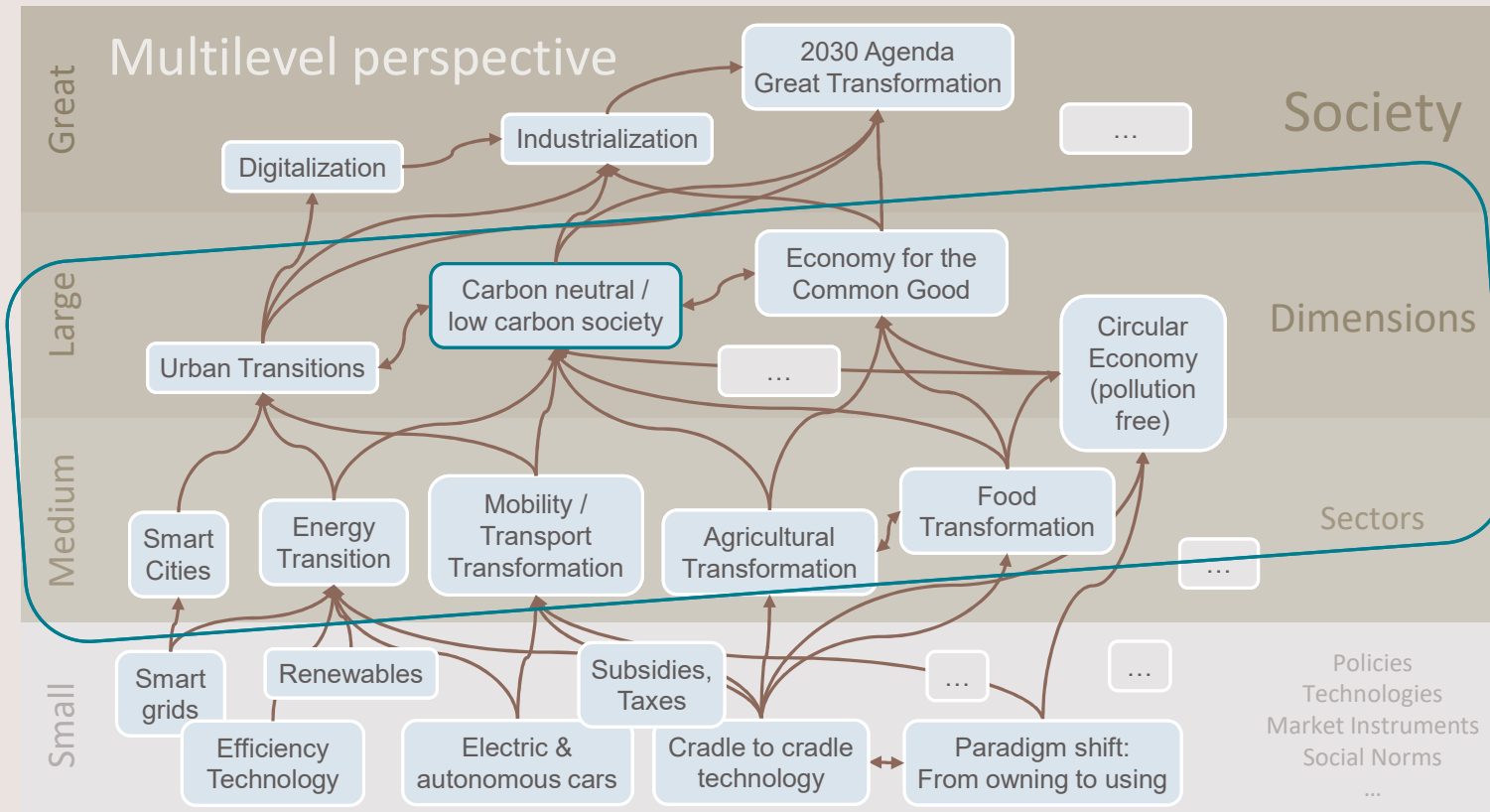
Reflections on how to
support use of TC concepts
and further evolution in
practice

„Let's act our way into new ways of thinking“



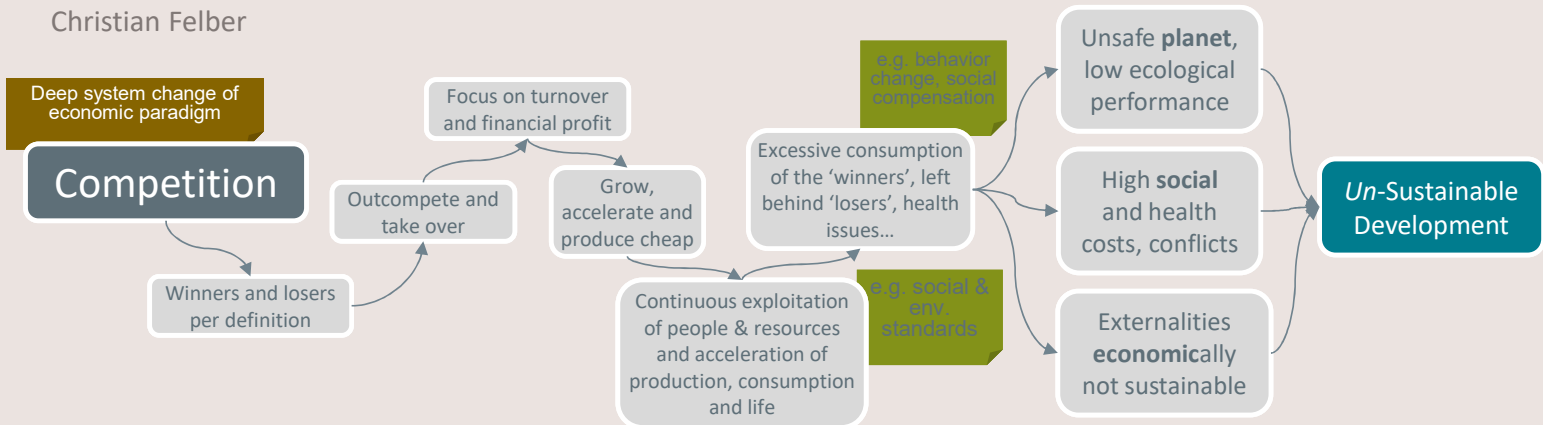
Intervention Content (what to do)

Getting to medium & large levels



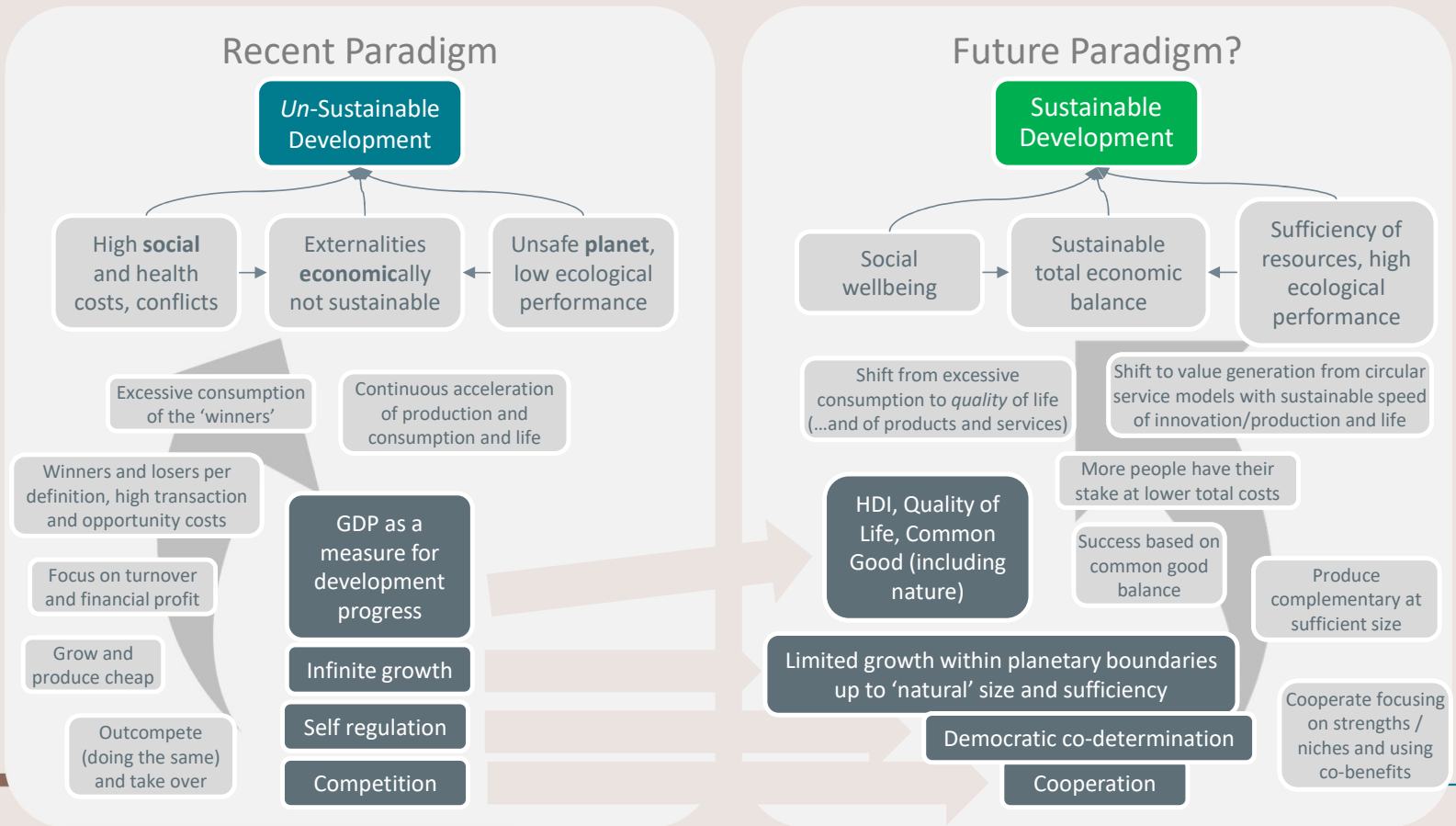


„The one who causes the biggest damage, has the biggest competitive advantage“
Christian Felber





Economic 'deep system' change



Transformative Change – examples

COMMON GOOD MATRIX 4.1

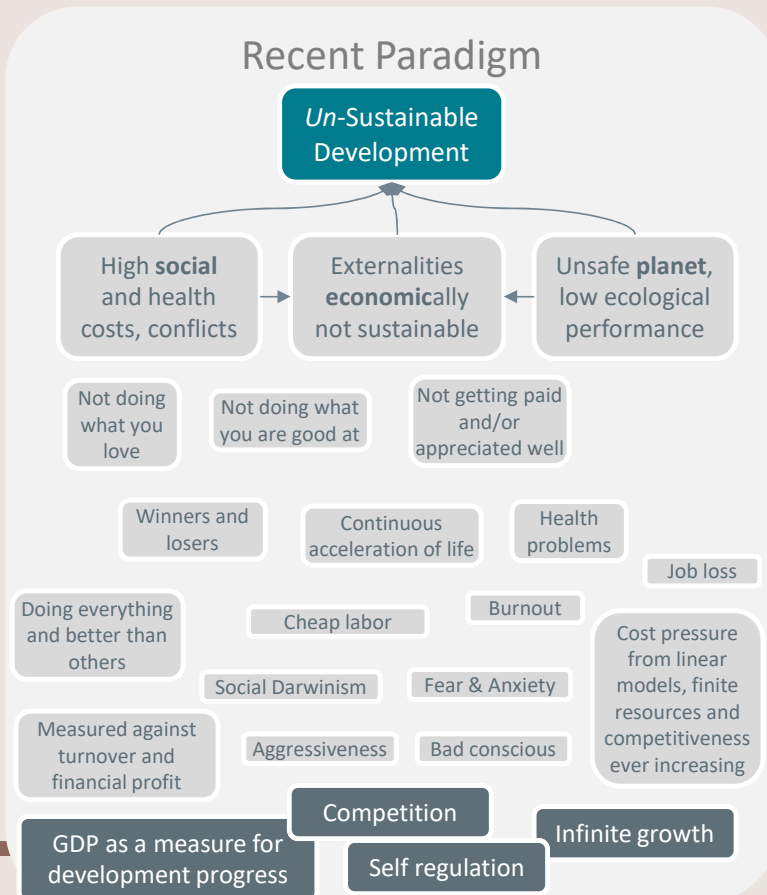
This version is valid for Common Good Balance Sheets generated in 2013



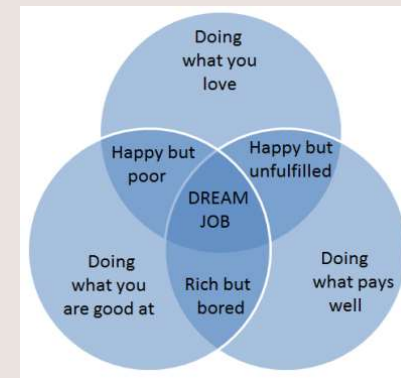
STAKEHOLDER	VALUE	Human dignity	Cooperation and Solidarity	Ecological Sustainability	Social Justice	Democratic Co-determination and Transparency
A) Suppliers	A1: Ethical Supply Management Active examination of the risks of purchased goods and services, consideration of the social and ecological aspects of suppliers and service partners					90
B) Investors	B1: Ethical Financial Management Consideration of social and ecological aspects when choosing financial services; common good-oriented investments and financing					30
C) Employees, including business owners	C1: Workplace quality and affirmative action Employee-oriented organizational culture and structure, fair employment and payment policies, workplace health and safety, work-life balance, flexible work hours, equal opportunity and diversity	C2: Just distribution of labor Reduction of overtime, eliminating unpaid overtime, reduction of total work hours, contribution to the reduction of unemployment	C3: Promotion of environmentally friendly behavior of employees Active promotion of sustainable lifestyles of employees (mobility, nutrition), training and awareness-raising activities, sustainable organizational culture	C4: Just income distribution Low income disparity within a company, compliance with minimum and maximum wages	C5: Corporate democracy and transparency Comprehensive transparency within the company, election of managers by employees, democratic decision-making on fundamental strategic issues, transfer of property to employees	90 50 30 60 90
D) Customers / Products / Services / Business Partners	D1: Ethical customer relations Ethical business relations with customers, customer orientation and co-determination, joint product development, high quality of service, high product transparency	D2: Cooperation with businesses in same field Transfer of know-how, personnel, contracts and interest-free loans to other business in the same field, participation in cooperative marketing activities and crisis management	D3: Ecological design of products and services Offering of ecologically superior products/services; awareness raising programmes, consideration of ecological aspects when choosing customer target groups	D4: Socially oriented design of products and services Information, products and services for disadvantaged groups, support for value-oriented market structures	D5: Raising social and ecological standards Exemplary business behavior, development of higher standards with businesses in the same field, lobbying	50 70 90 30 30
E) Social Environment: Region, electorate, future generations, civil society, fellow human beings, animals and plants	E1: Value and social impact of products and services Products and services fulfill basic human needs or serve humankind, society or the environment	E2: Contribution to the local community Mutual support and cooperation through financial resources, services, products, logistics, time, know-how, knowledge, contacts, influence	E3: Reduction of environmental impact Reduction of environmental effects towards a sustainable level, resources, energy, climate, emissions, waste etc.	E4: Investing profits for the Common Good Reducing or eliminating dividend payments to extern, payouts to employees, increasing equity, social-ecological investments	E5: Social transparency and co-determination. Common good and sustainability reports, participation in decision-making by local stakeholders and NGO's	90 40 70 60 30
Negative Criteria	Violation of ILO norms (international labor standards) / human rights -200 Products detrimental to human dignity and human rights (e.g. landmines, nuclear power, GMO's) -200 Outsourcing to or cooperation with companies which violate human dignity -150	Hostile takeover -200 Blocking patents -100 Dumping Prices -200	Massive environmental pollution -200 Gross violation of environmental standards -200 Planned obsolescence (short lifespan of products) -100	Unequal pay for women and men -200 Job cuts or moving jobs overseas despite having made a profit -150 Subsidiaries in tax havens -200 Equity yield rate > 10% -200	Non-disclosure of subsidiaries -100 Prohibition of a works council -150 Non-disclosure of payments to lobbyists -200 Excessive income inequality within a business -150	

Linking these with dominant narratives

Sustainable Jobs?



Licensed with [CC BY](#)



Licensed with [CC BY-NC-ND](#)

Linking these with economic sustainability

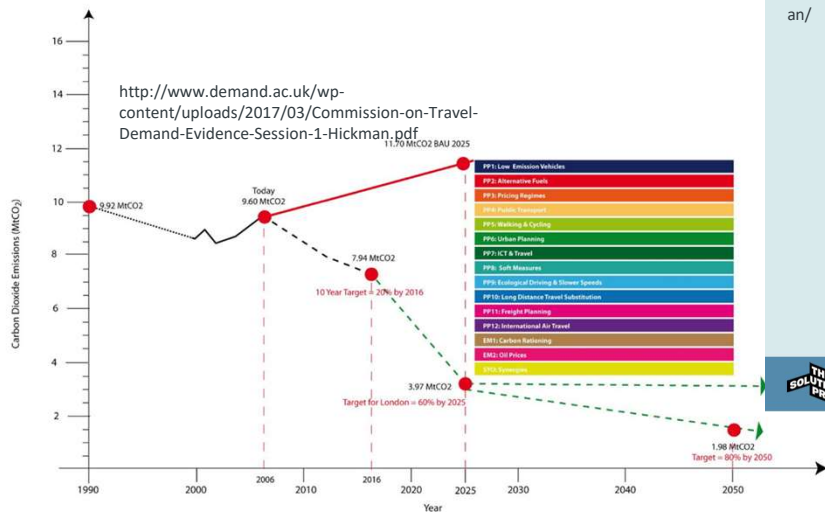


<https://www.energy-vision.de/solarreinigung/ihr-vorteil/>

Macro level joint visioning

- Debate values, measures of progress...
- Backcasting
- High res. modelling e.g. for energy scenarios
- ...

London: Contributions to the Preferred Scenario



Hickman, R. and Banister, D. 2010. Transport and climate change: simulating the options for carbon reduction in London. Transport Policy, 17(2): 110-125.

100% MOROCCO

A vision for the transition to 100% wind, water & solar energy



40-Year Jobs Created
Number of jobs where a person is employed for 40 consecutive years

Construction jobs: **48,143**
Operation jobs: **44,374**

<https://gettotext.com/deutsch/marokko-strebt-bis-2030-50-erneuerbare-energie-an/>

Reducing Energy Demand

Improving energy efficiency and powering the grid with electricity from the wind water and sun positively reduces the overall energy demand.

Current demand → Wind, water, solar

COMMON GOOD MATRIX 4.1

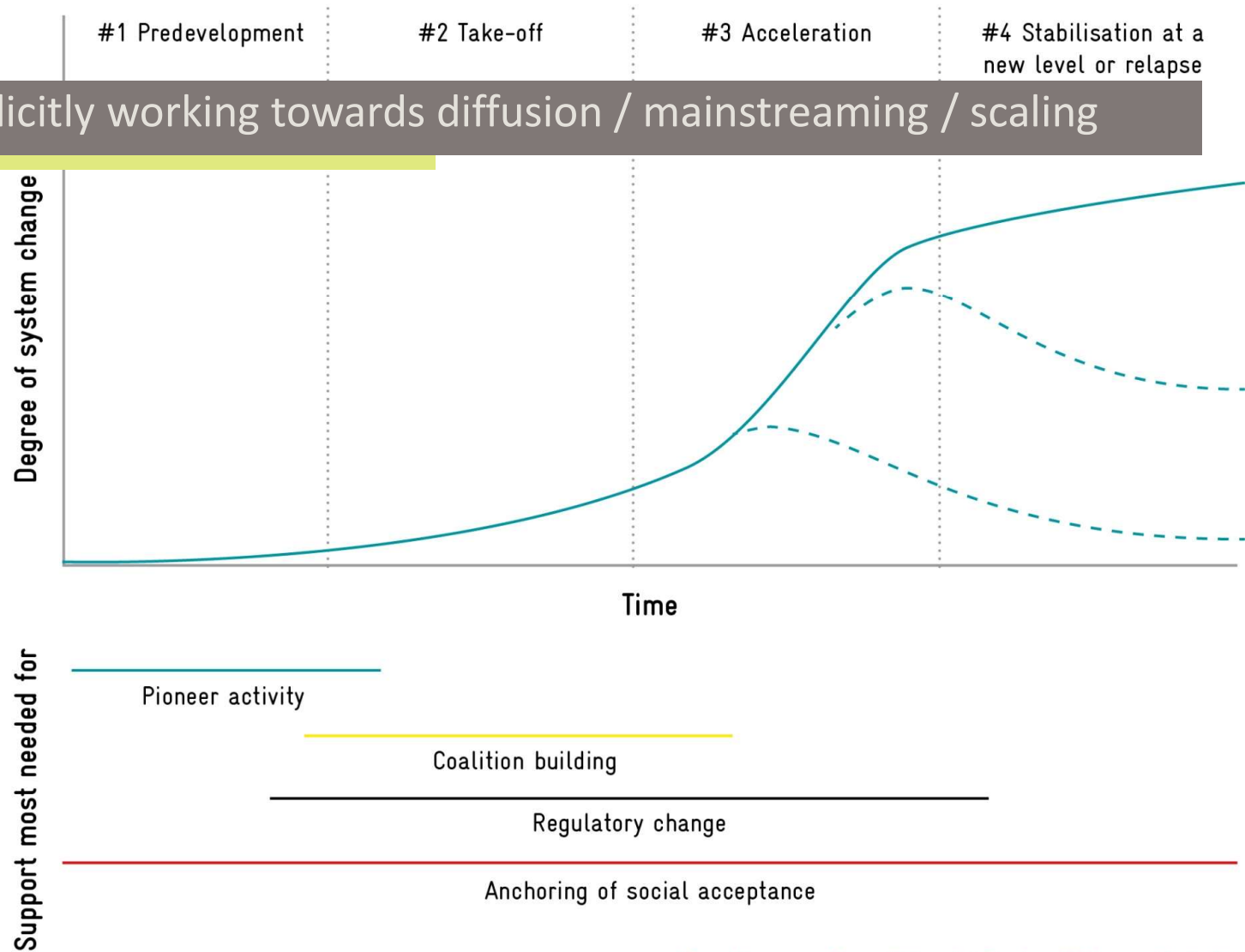
This version is valid for Common Good Balance Sheets generated in 2013

ECONOMY FOR THE COMMON GOOD

An economic model for the future

STAKEHOLDER	VALUE	Human dignity	Cooperation and Solidarity	Ecological Sustainability	Social Justice	Democratic Co-determination and Transparency
A) Suppliers	A1: Ethical Supply Management Appropriate selection of the site of purchased goods and services, consideration of the social and ecological aspects of suppliers and service partners					90
B) Investors	B1: Ethical Financial Management Consideration of social and biological aspects when choosing financial services, common good-oriented investments and financing					30
C) Employees, including business owners	C1: Workplace quality and alternative actions Employee-oriented organizational culture and structure, fair employment and payment policies, workplace health and safety, work-life balance, flexible work hours, equal opportunity and diversity		C2: Just distribution of labor Reduction of overtime, elimination of long wait times, reduction of total work hours, contribution to the reduction of unemployment	C3: Promotion of environmental friendliness Ecological promotion of sustainable lifestyle of employees (mobility, nutrition, training and awareness-raising activities, sustainable organizational culture)	C4: Just income distribution Low income dignity within a company, compliance with minimum and maximum wages	C5: Corporate democracy and transparency Comprehensive transparency within the company, election of managers by employees, democratic decision-making on fundamental strategic issues, transfer of property to employees
D) Customers / Products / Services / Business Partners	D1: Ethical customer relations Ethical business relations with customers, customer orientation and co-determination, joint product development, high-quality of service, high product transparency		D2: Cooperation with business in same field Transfer of know-how, personal contacts and interest-free loans to other businesses in the same field, participation in cooperative marketing activities and crisis management	D3: Ecological design of products and services Offering of ecologically superior products/services; awareness-raising programmes; consideration of ecological aspects when choosing customer target groups	D4: Socially oriented design of products and services Information, products and services for disadvantaged groups, support for value-oriented market structures	D5: Raising social and ecological standards Exemplary business behavior, development of higher standards with businesses in the same field, lobbying
E) Social Environment: Region, ecosystem, future generations, civil society, fellow human beings, animals and plants	E1: Value and social impact of products and services Products and services fulfill basic human needs or serve humankind, society or the environment		E2: Contribution to the local community Mutual support and cooperation through financial resources, services, products, logistics, time, know-how, knowledge, contacts, influence	E3: Reduction of environmental impact Reduction of environmental effects towards a sustainable level, resources, energy, climate, emissions, waste etc.	E4: Investing profits for the Common Good Reducing or distributing dividend payments to owners, payouts to employees, increasing equity, social ecological investments	E5: Social transparency and co-determination Common good and sustainability reports, participation in decision-making by local stakeholders and NGOs
Negative Criteria	Violation of ILO norms (International Labour Organization) Human rights: 200 Products detrimental to human dignity and human rights (e.g. landmines, nuclear power, GMOs): -200 Collaboring to cooperate with companies which violate human dignity: -150	Hostile takeover: -200 Blocking patents: -100 Dumping Prices: -200	Makes environmental pollution: -200 Close violation of environmental standards: -200 Planned obsolescence (short lifespan of products): -100	Unfair pay for women and men: -200 Job cuts or moving jobs overseas despite having made a profit: -150 Subsidies in tax havens: -200 Equity yield rate > 10%: -200	Non-disclosure of subsidies: -100 Prohibition of a works council: -150 Non-disclosure of payments to lobbyists: -200 Excessive income inequality within a business: -150	

Explicitly working towards diffusion / mainstreaming / scaling



From Mersmann, Olsen, Wehnert, & Boodoo, 2014, own illustration

Establish more boundary agency at science, society, policy interfaces

Environment

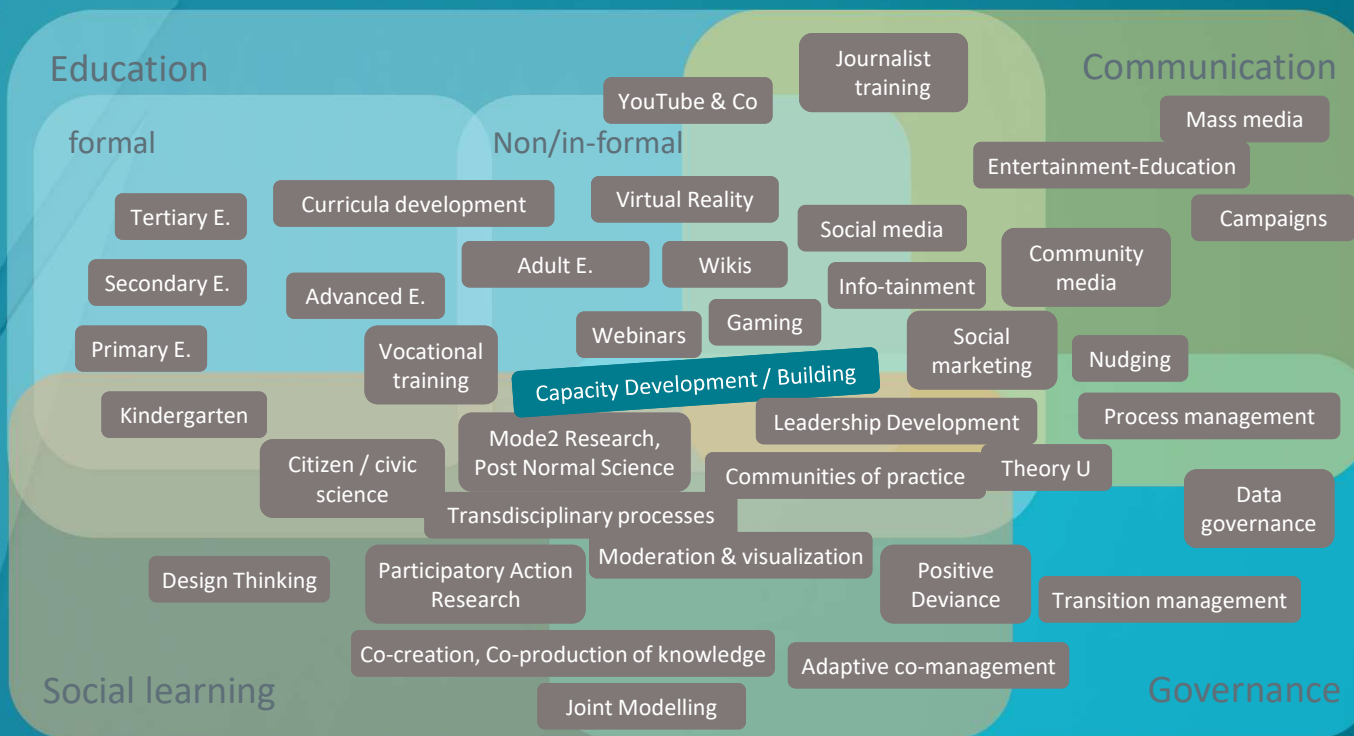
Social sphere from individual to (global) society, involving:
values, cultures, social norms, attitudes, memes, beliefs, knowledge, behaviors, practices

Politics,
legal
norms,
incentives,
institutions

Economy, financial market,
production and consumption
patterns

Science,
technology,
infrastructure

Getting hands on large scale learning & social change

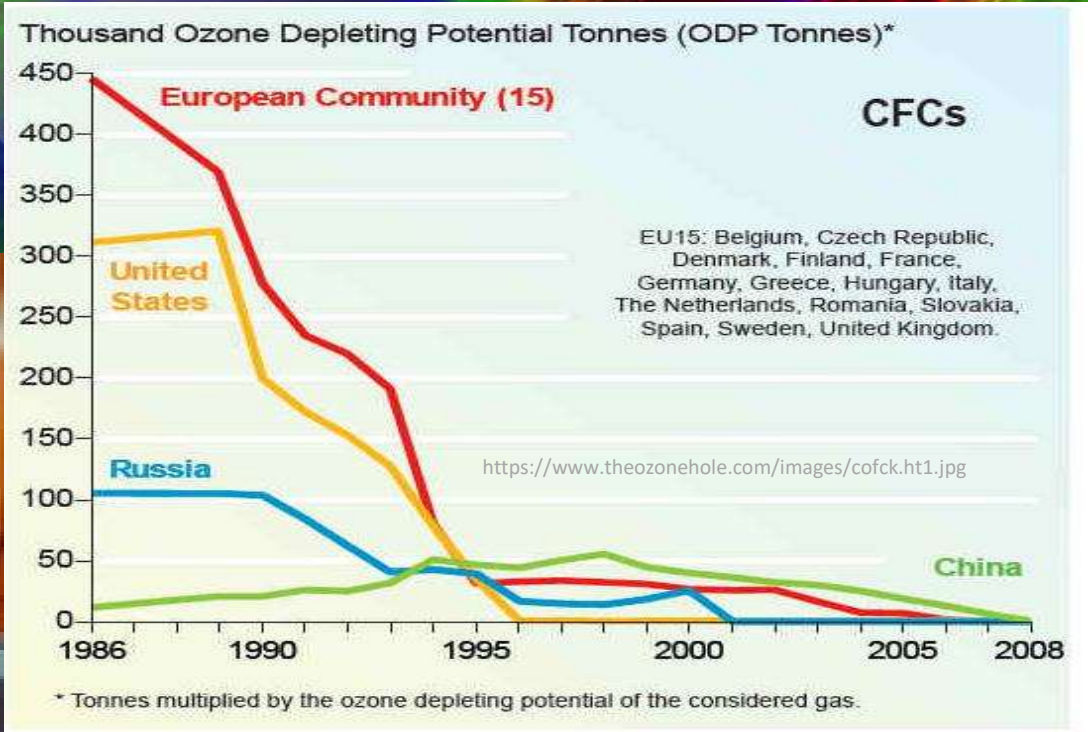


<https://www.silbersalz-festival.com/de/programme/silbersalz-2018-halle-saale/mission-ozonloch-wie-wir-die-erde-gerettet-haben-0>

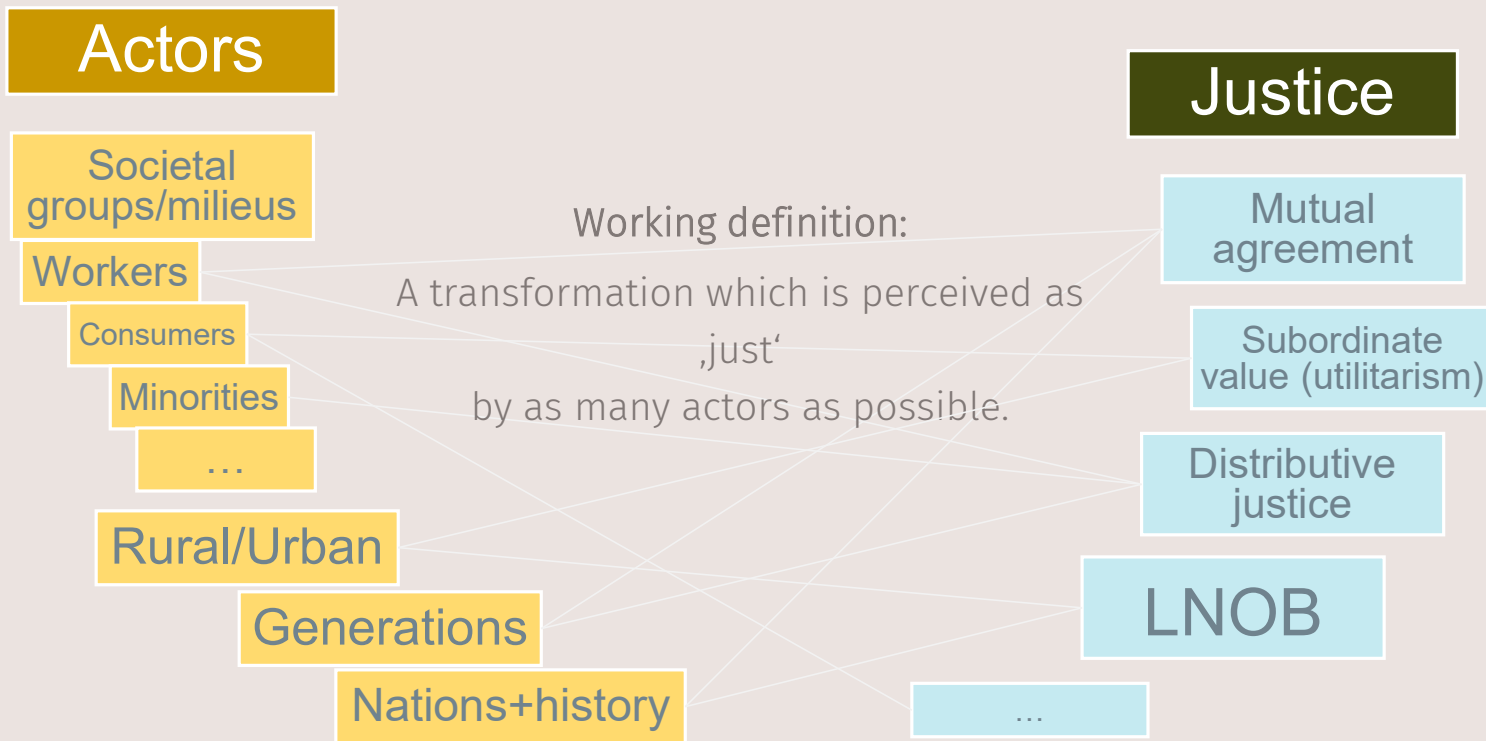
E.g. CFCs (FCKWs)



<https://www.fernsehseiten.de/geschichte-im-osten-folgen/mission-ozonloch-wie-wir-die-erde-gerettet-haben-1246337>



Getting hands on Just Transition



Just Transition Action Fields

Social Change

Engagement

Deliberation

Communication

Social rituals

Skills

Common Good

Social impact assessment

Employment promotion

Cash transfers

Payments for ecosystem services

Social protection

Policy

True pricing system

Economic transformation (e.g. common good)

Fiscal reform

Subsidies

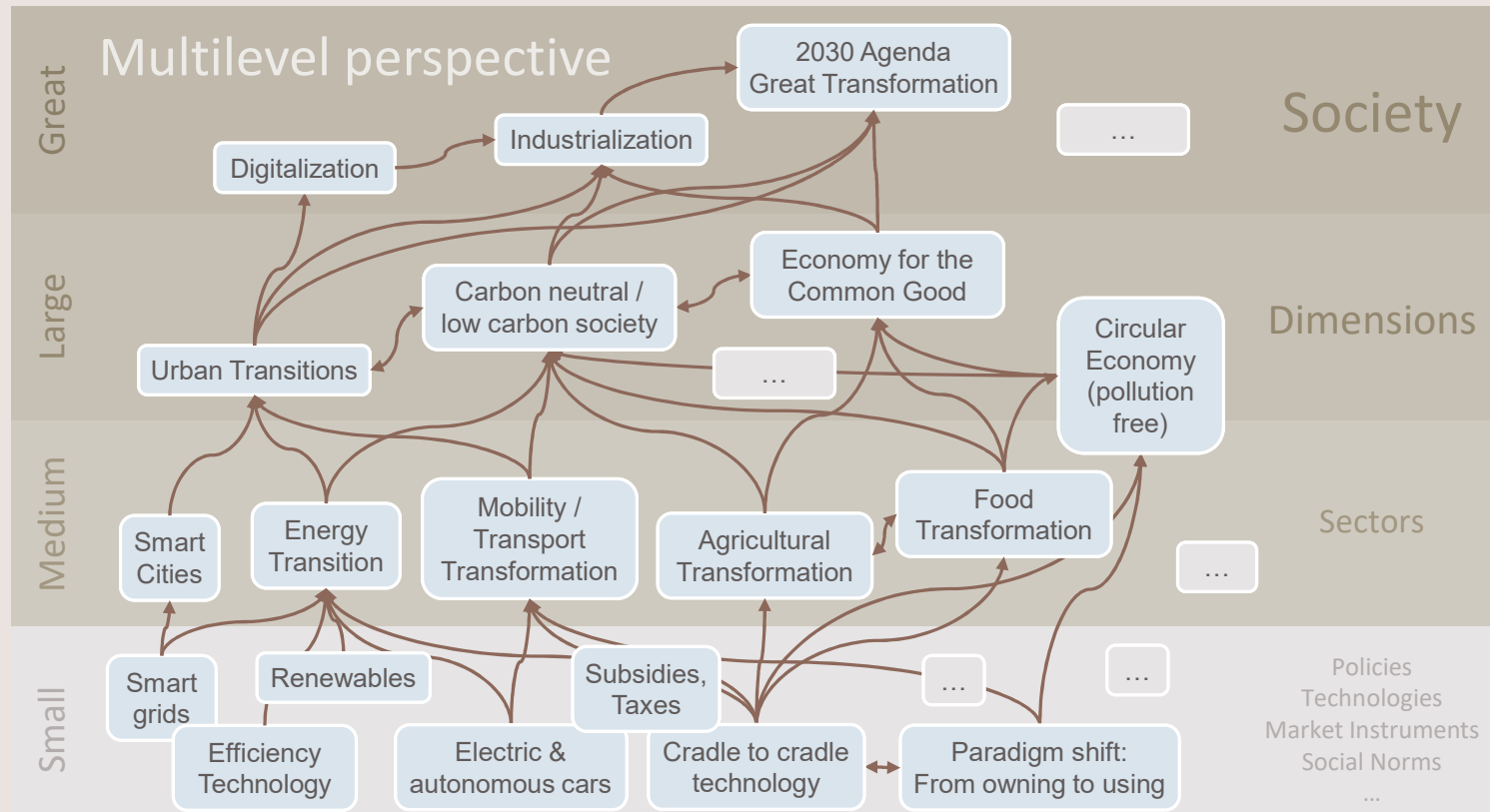
...

...

Intervention Types & Processes (How to do it)

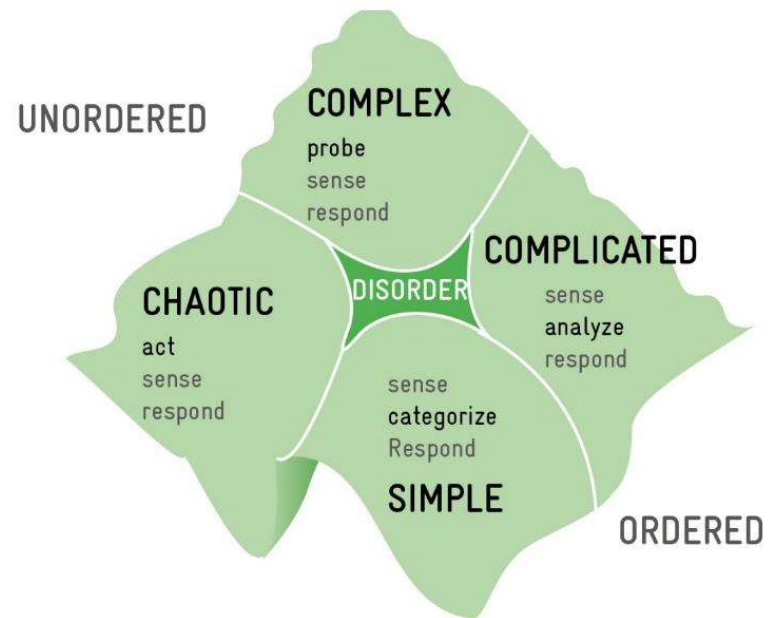
*“We cannot solve our problems with the
same thinking we used when we created
them.”
Albert Einstein.*

Multilevel perspective



Transformation deals with 'super complex' systems

Figure 12: Different Strategies for different types of problems according to complexity theory



It can be assumed that transformation fields as a whole are best described as 'super complex' systems (from Snowden & Boone, 2007, own illustration).

The recently (still) dominant management paradigm

Recent Paradigm

Rationalist, positivist world view

Central power, account & (best practice) objective knowledge

Negotiation & competition (mistrust)

Mainstreaming
(linear)

'Knowledge to action'
(rational design)

Preparation & implementation

(Future) impact promise

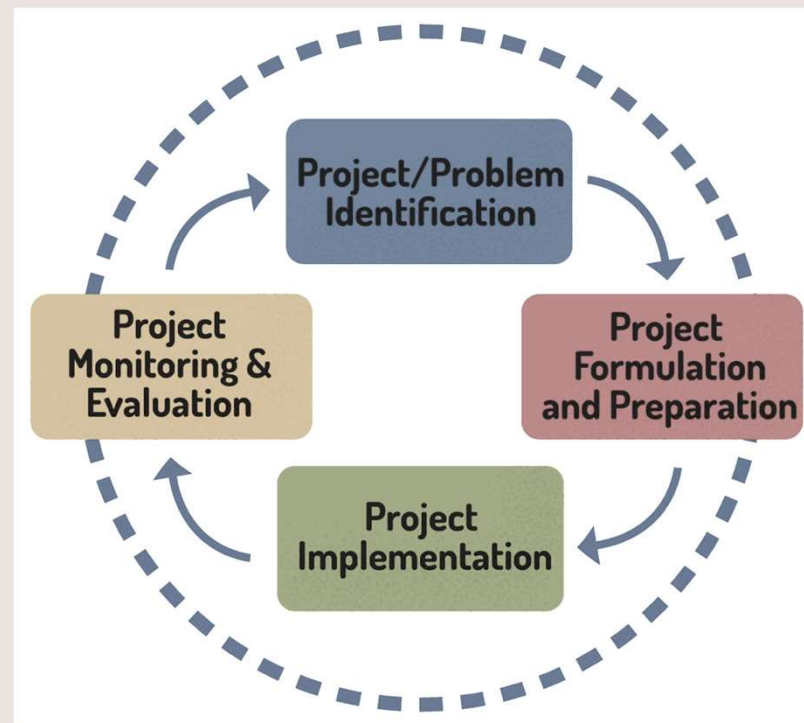
Quantitative indicators as goals

Funding promise

Hierarchies, rules, regulations

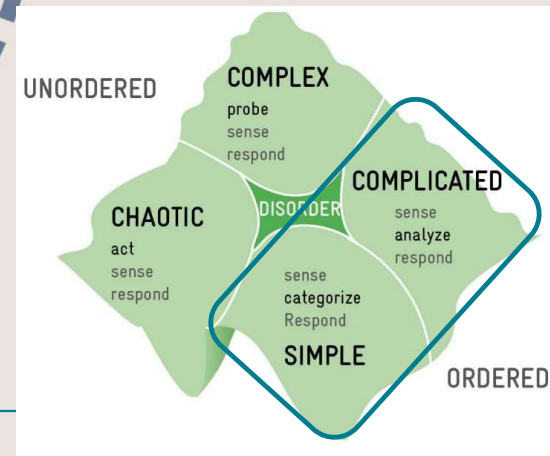
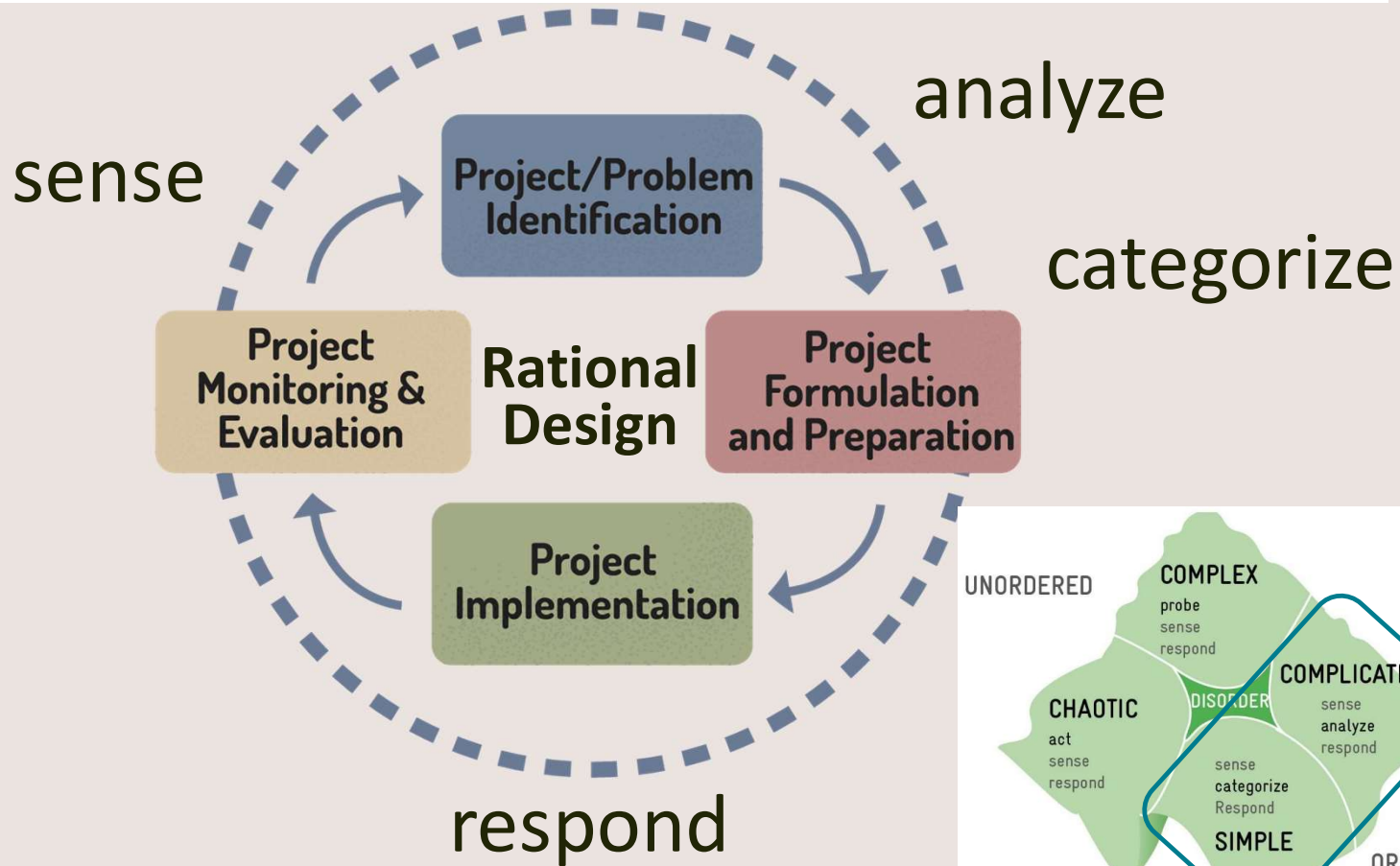
Few delivered **projects**

'Knowledge to Action'
...values, norms



Project-Cycle – simple/complicated management mode

‘Knowledge to Action’ ...values, norms



Impact-Complexity Trap

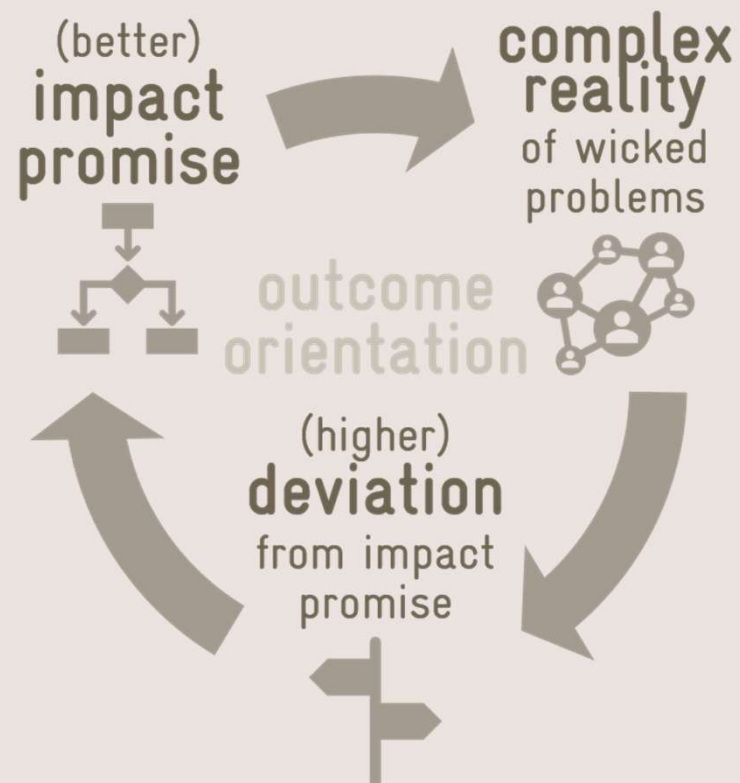
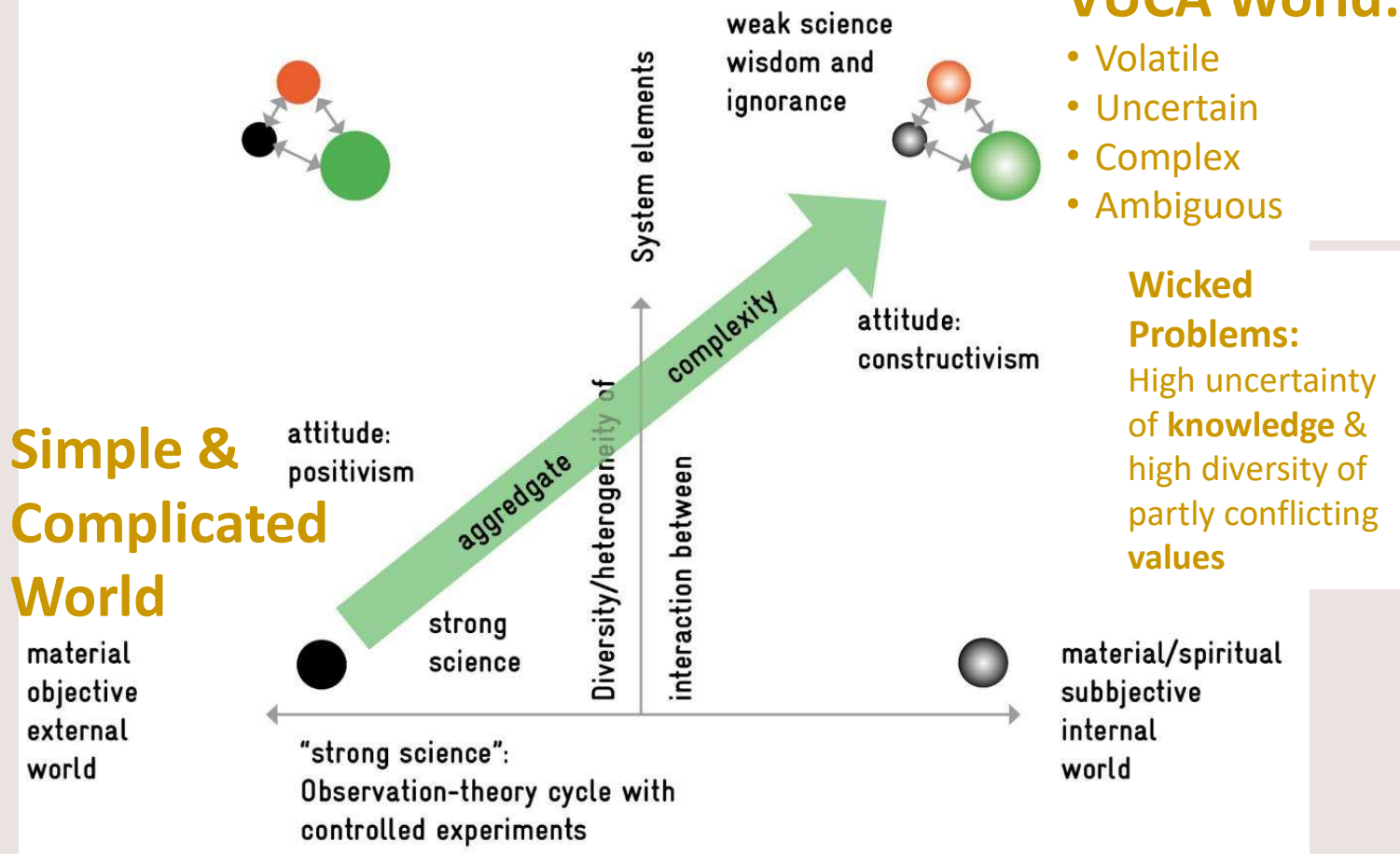


Figure 14: Aggregate complexity



Simple & Complicated World

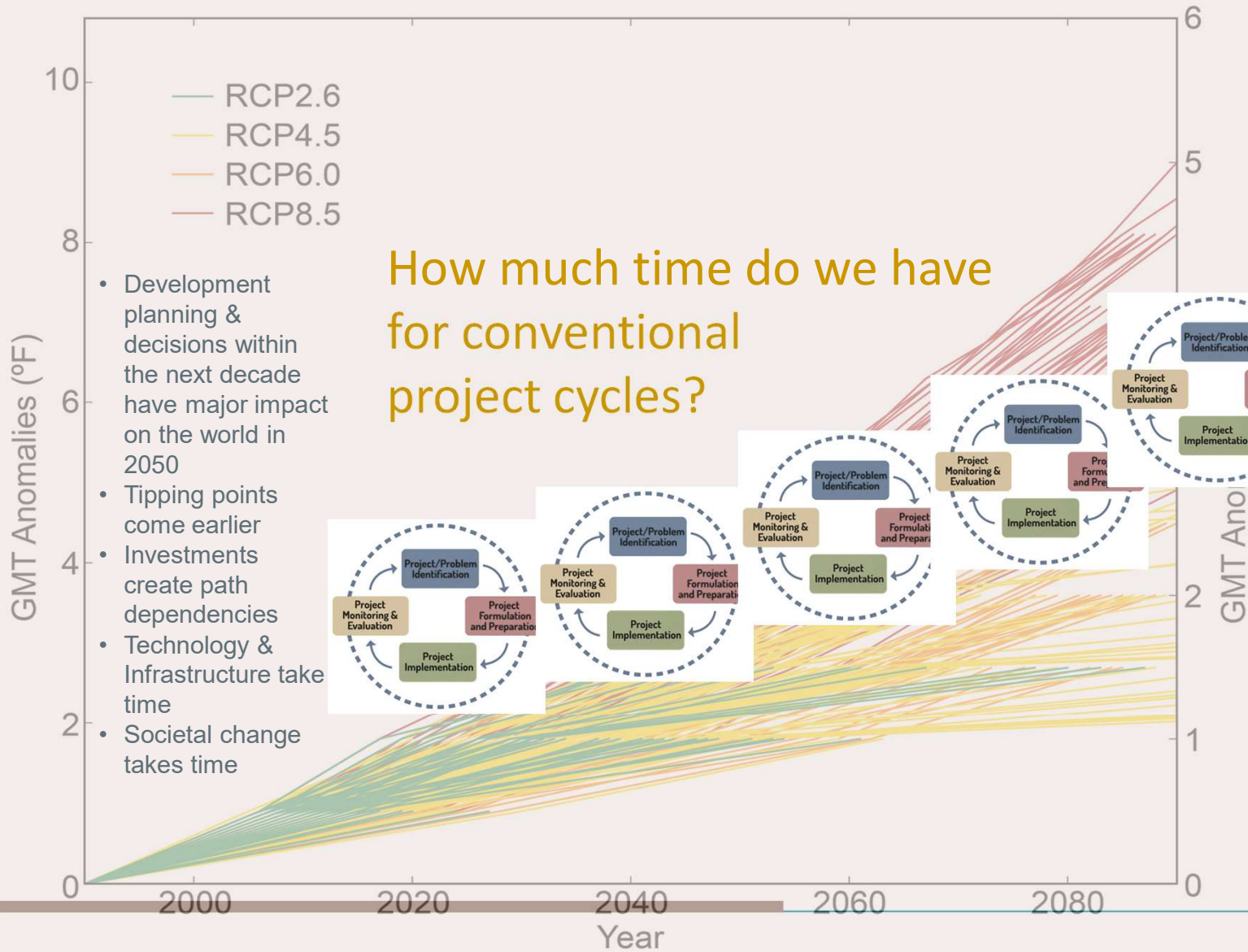
VUCA World:

- Volatile
- Uncertain
- Complex
- Ambiguous

Wicked Problems:

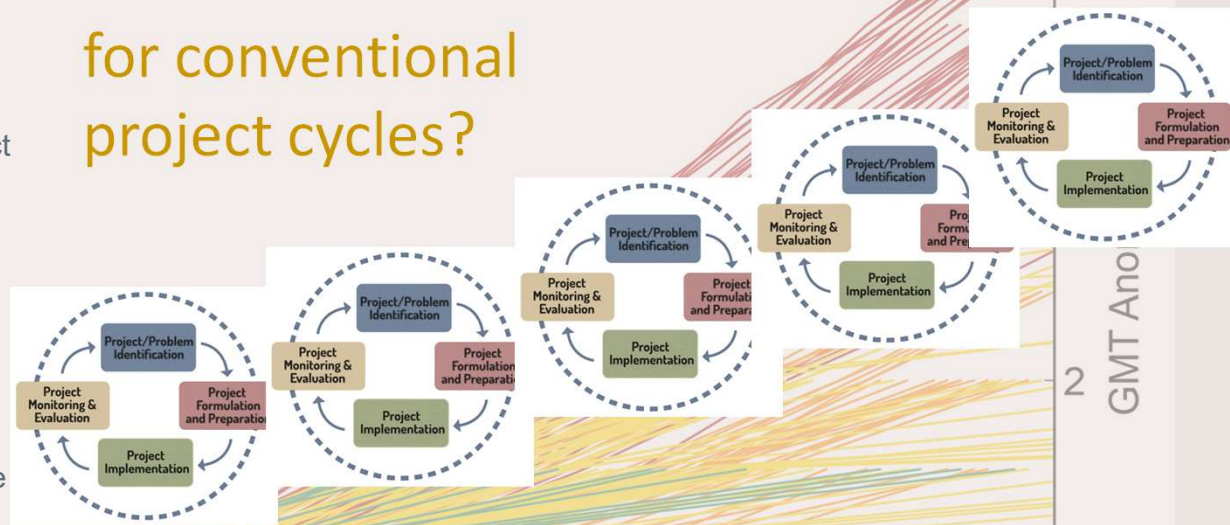
High uncertainty of **knowledge** & high diversity of partly conflicting **values**

... as an increase of interaction between system elements and an increase of the importance of subjective mental worlds (taken from de Vries and Petersen, 2009, own illustration). In a 'super complex' system, of uncounted interactions and uncounted subjective mental models the science and the evidence base gets weak and adaptive, co-creative management a way to navigate.



- Development planning & decisions within the next decade have major impact on the world in 2050
- Tipping points come earlier
- Investments create path dependencies
- Technology & Infrastructure take time
- Societal change takes time

How much time do we have for conventional project cycles?



Process Promise

,transforming our work‘

Accountability?

Permanent accountability
with adaptive management
and co-creative cycles



Criteria for promising project
are its expected capacities to:

- design and facilitate adaptive processes,
- apply complexity-proof methods
- ...

higher
Impact



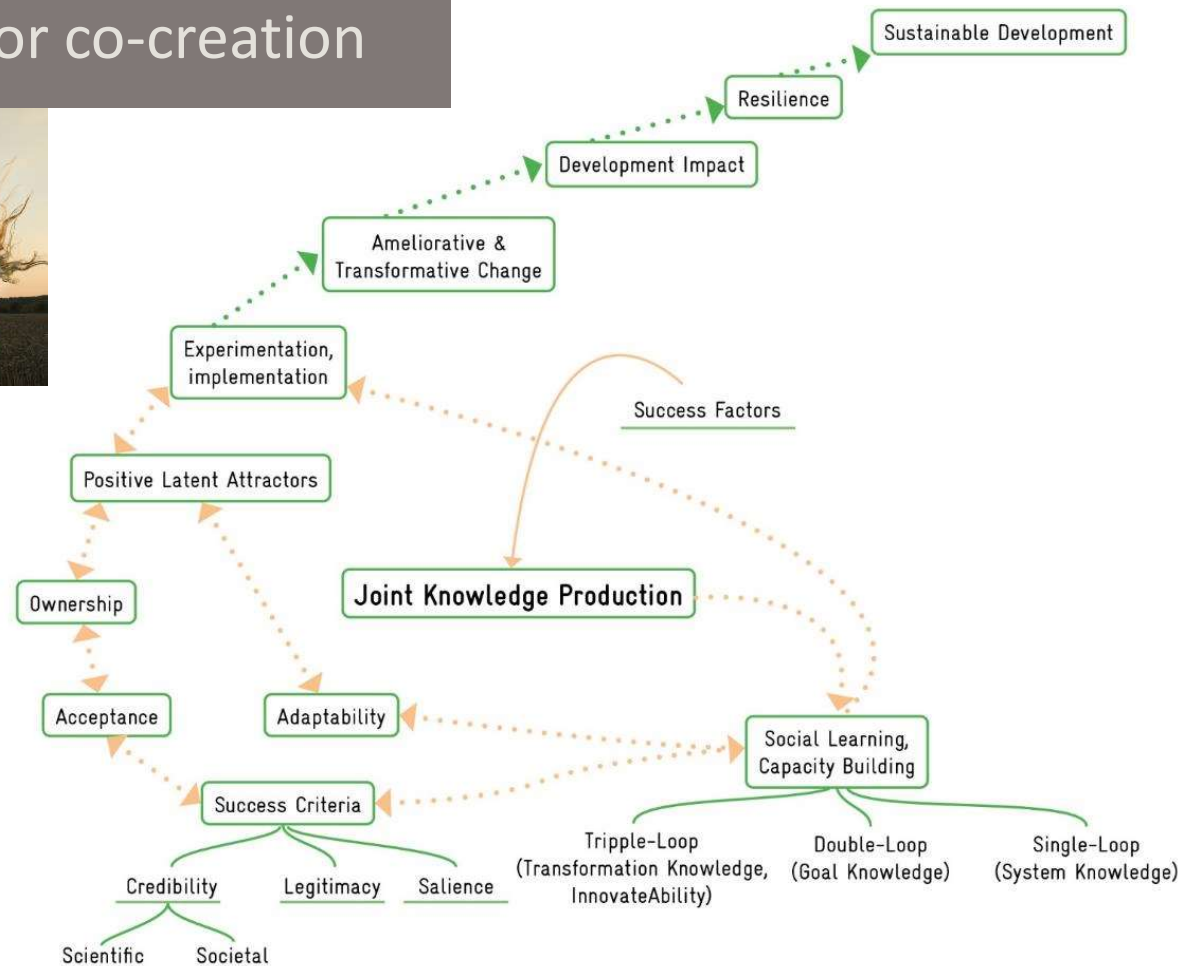
Processes and results are more adapted (relevant) to (changing) context, more legitimate and credible, socially and technically robust/resilient, sustainable.

Figure 7: Causal model for interventions at science-society-policy interfaces

The case for co-creation



<https://www.ula-initiative.eu/en/energy-transition>



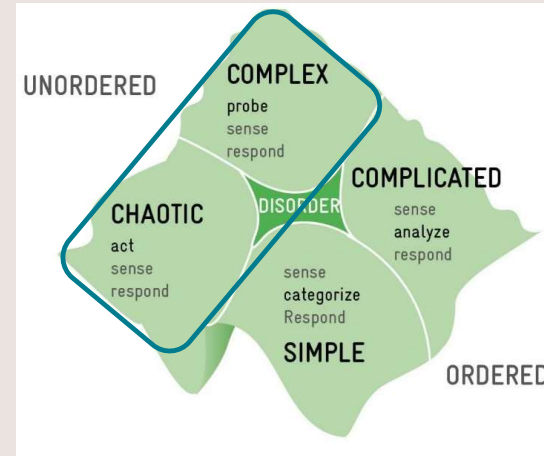
It has been combined from a range of sources (Burns and Worsley 2015; Hegger et al. 2012; Medema, Wals, and Adamowski 2014; Perovic 2014; Sellberg, Wilkinson, and Peterson 2015; Waddell 2016, amongst others in an own graphic).

Navigating Complexity of Transformation

‘Action to Knowledge’

...values, norms,
new ways of thinking

little
preparation,
everything is
intervention



**Local
Partners**

probe,
envison

invent,
experiment,
test

Co-Creation

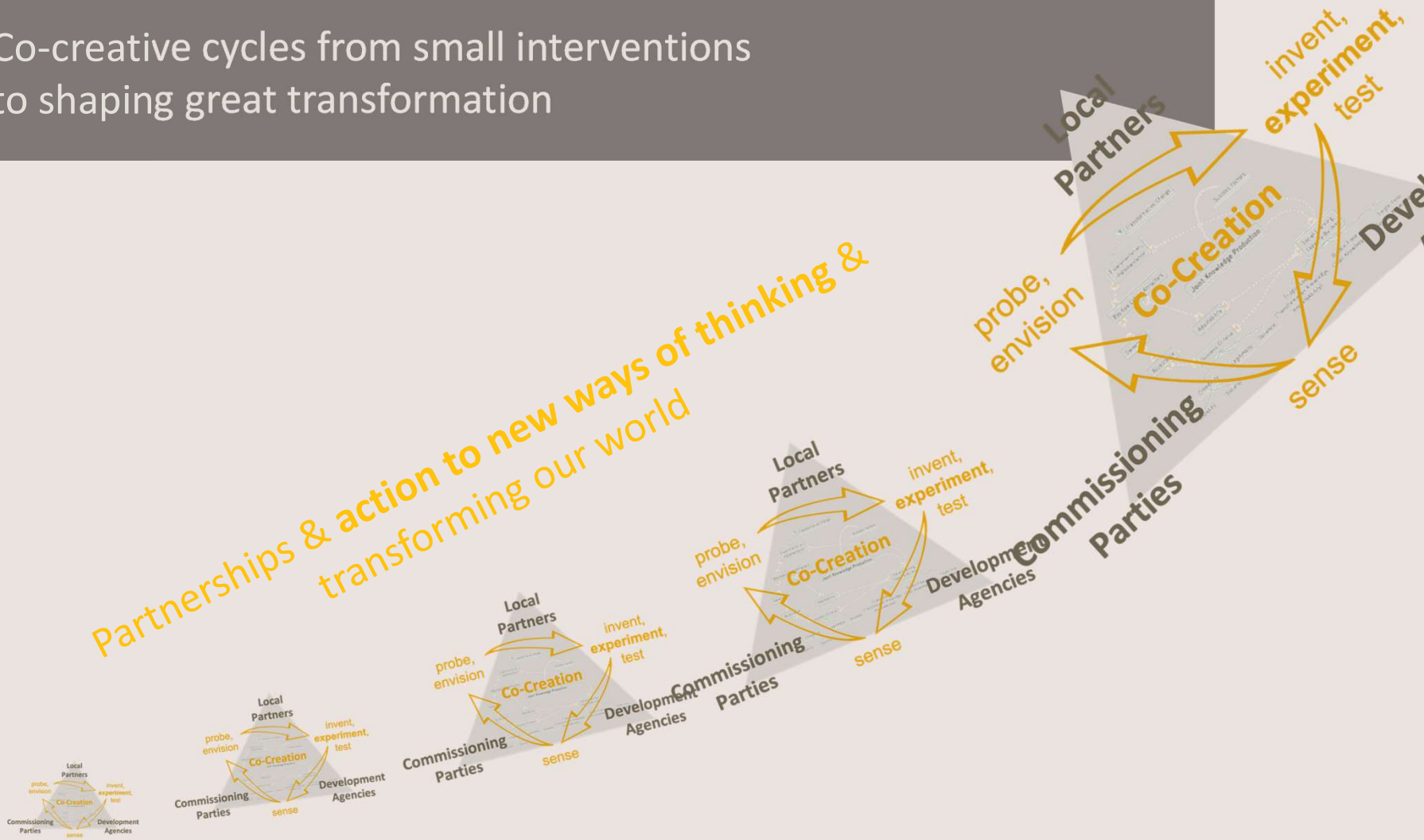
**Commissioning
Parties**

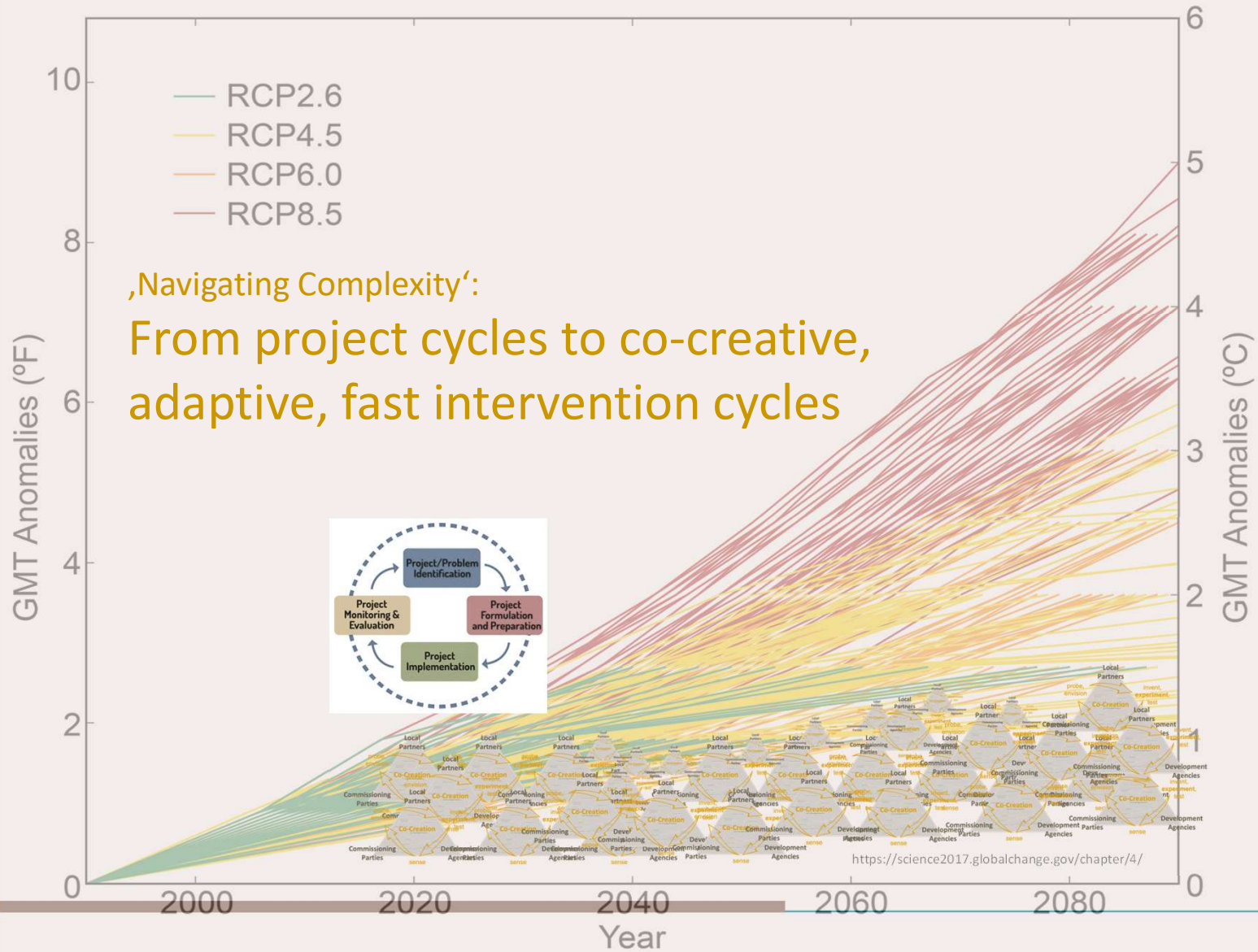
**Development
Agencies**

sense



Co-creative cycles from small interventions to shaping great transformation





,Navigating Complexity':
 From project cycles to co-creative,
 adaptive, fast intervention cycles

A new Management Paradigm

Recent Paradigm

Rationalist, positivist world view

Central power, -account & -(best practice) objective knowledge

Negotiation & competition (mistrust)

Mainstreaming
(linear)

'Knowledge to action'
(rational design)

Preparation & implementation

(Future) impact promise

Quantitative indicators as goals

Funding promise

Hierarchies, rules, regulations

Few delivered **projects**

New Paradigm

Constructivist world view

Reciprocity, perceptions, error & local intersubjective knowledge & values matter

Partnerships & cooperation (trust)

Integrated Approach
(circular, iterative, interactive)

'Action to new ways of thinking'
(co-evolution)

Adaptive management

(Recent) process promise

Co-creative visioning
and sensing

Flexible joint fund allocation

Relationship & self-organization

Many joint **interventions**

...for the VUCA
world



Co-evolving the new management paradigm

New Paradigm

Constructivist world view

Reciprocity, perceptions, error & local intersubjective knowledge & values matter

Partnerships & cooperation (trust)

Integrated Approach
(circular, iterative, interactive)

'Action to new ways of thinking'
(co-evolution)

Adaptive management

(Recent) process promise

Co-creative visioning
and sensing

Flexible joint fund allocation

Relationship & self-organization

Many joint **interventions**

Experimentation / test fields

E.g. test flexible, co-creative, iterative, adaptive, **fast action cycles** without long preparation and focus on design principles.

- Find smart ways of intervening directly and navigating further jointly within the co-creation triangle

E.g. test **cooperative intervention design & commissioning** in which actors can bring in their true strengths in a complementary way (and do not compete for the entire cakes).

- Find smart ways of 'good commissioning governance', being transparent and accountable on the flexible and small scale base above and below

E.g. test **flexible joint fund allocation** for the respective next iterative step to minimize investment / accountability risk and fund locking.

- Find smart, digitally safe, accountable ways of fund allocation to where they are recently needed (or relocation from where they are recently not needed)

E.g. test qualitative and quantitative **M&E as a sensing tool with flexible indicators** as proxies on the way to overall goals

- Milestones and goals are subject to on-going joint sensemaking and potential changes too
- Intervention success is rather bound to a good process (process promise, design principles) that makes tipping points more likely

...

Tools



TRANSFORMATIONAL CHANGE METHODOLOGY

*Assessing the
transformational impacts
of policies and actions*

ICAT SERIES OF
ASSESSMENT GUIDES

Social Network Analysis

Pictures:
Lutkenhaus,
Roel. *Entertainment-Education in the New Media Landscape: Stimulating Creative Engagement in Online Communities for Social and Behavioral Change*. 2020.

Figure 8 Interactions in the Twitter network.

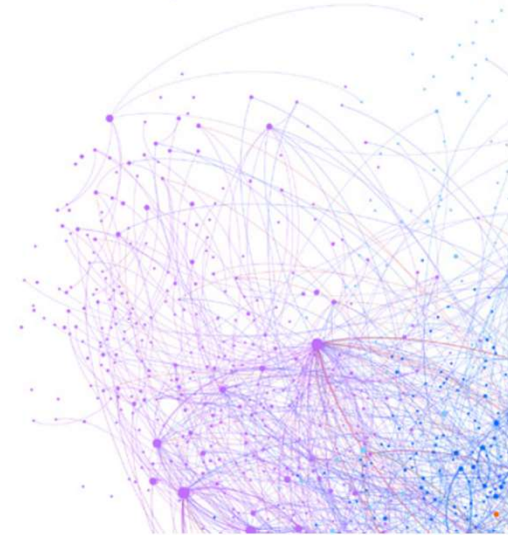


Figure 13 Issues Ntetwork

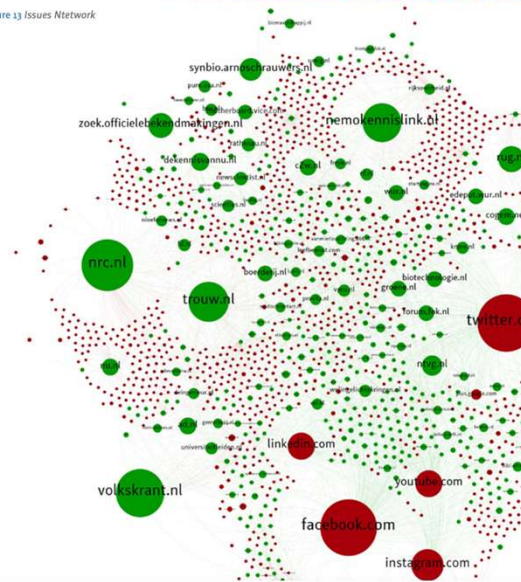
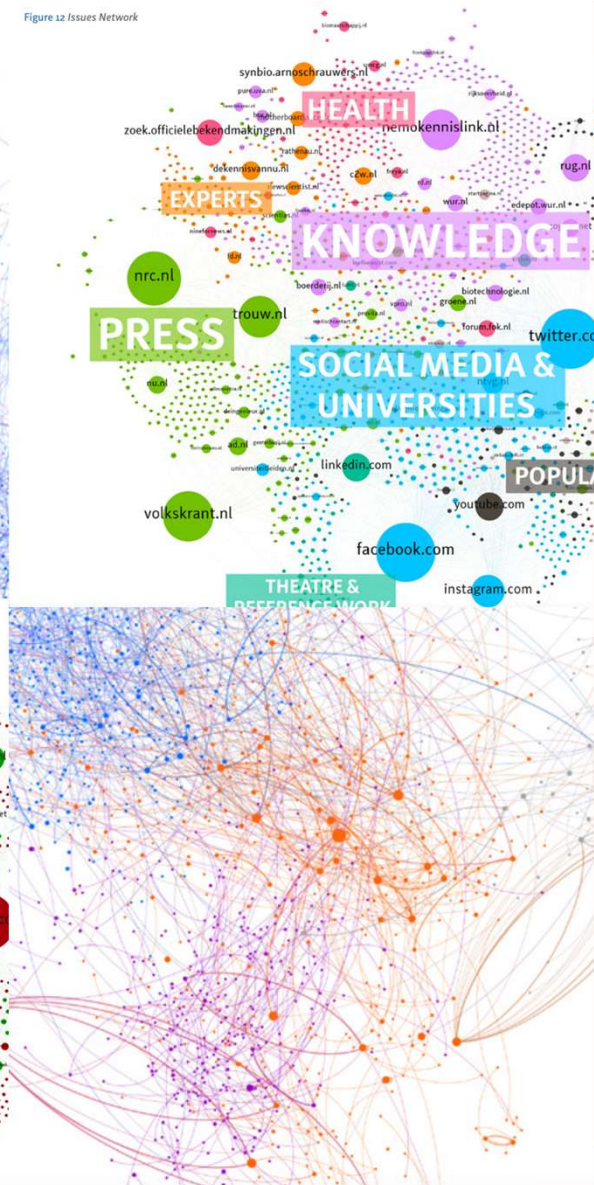


Figure 12 Issues Network



schaft
le
t (GIZ) GmbH

The case for co-production



Next Steps?

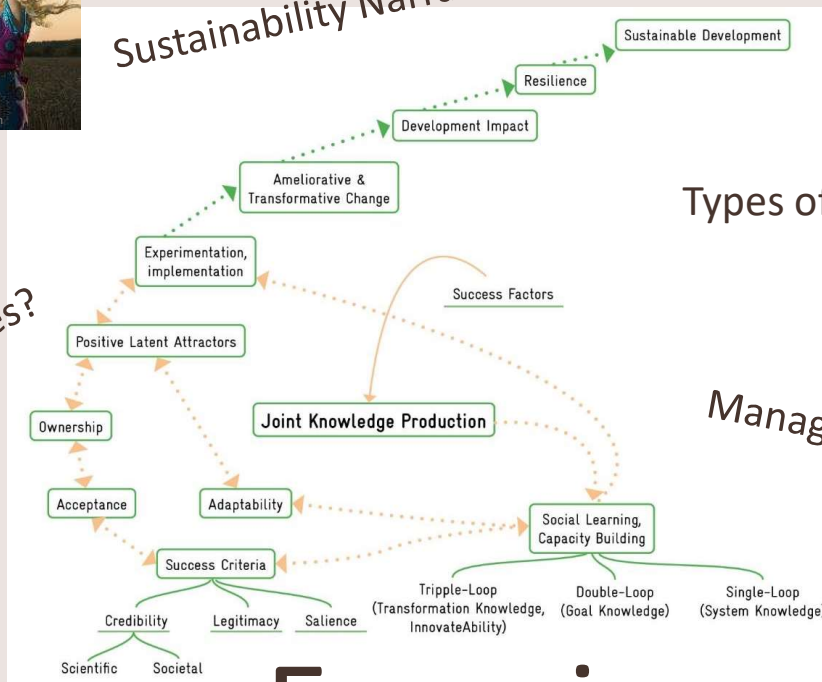
Linking Sustainability Narratives?

Transformative Ambition?

Design Principles?

Types of interventions?

Management paradigms (process)?



Co-creative brave **Experiments!**

Thank You



.schaft
le
t (GIZ) GmbH



Participant Discussion

Advancing Transformational Change

Moderated by Nacibe Chemor, TCLP Lead Facilitator

**Where is guidance and/or
experimentation most
needed to help translate
thinking on
transformational change
into action?**

**What will it take to equip
climate finance programs
and practitioners to
incorporate
transformational change
thinking into their work?**

Upcoming TCLP Programs and Events

- Joint CMM & Clean Energy Interest Group call: *Energy-specific Signals of Transformational Change* on 07 April
- TCLP Spring Virtual Workshop: *Catalyzing Transformational Change*, on 25-27 May



Transformational Change Learning Partnership

- Updates on events and analytical work
- Interest Groups
 - TC Concepts, Methods, and Metrics
 - Clean Energy
 - Just Transition
 - Resilience and Landscapes

Email rsmurthwaite@worldbank.org to join the TCLP or Interest Group mailing list



CIF



CLIMATE INVESTMENT FUNDS

Investing in the future

