

International Forum for Sustainable Asia and the Pacific | 25 July 2017 Yokohama

Long-term Decarbonisation Strategies **How Can We Manage Transformation** **Smoothly?**

**A Case Study from Germany: The Climate Protection Plan
Process of the State of North-Rhine Westphalia**

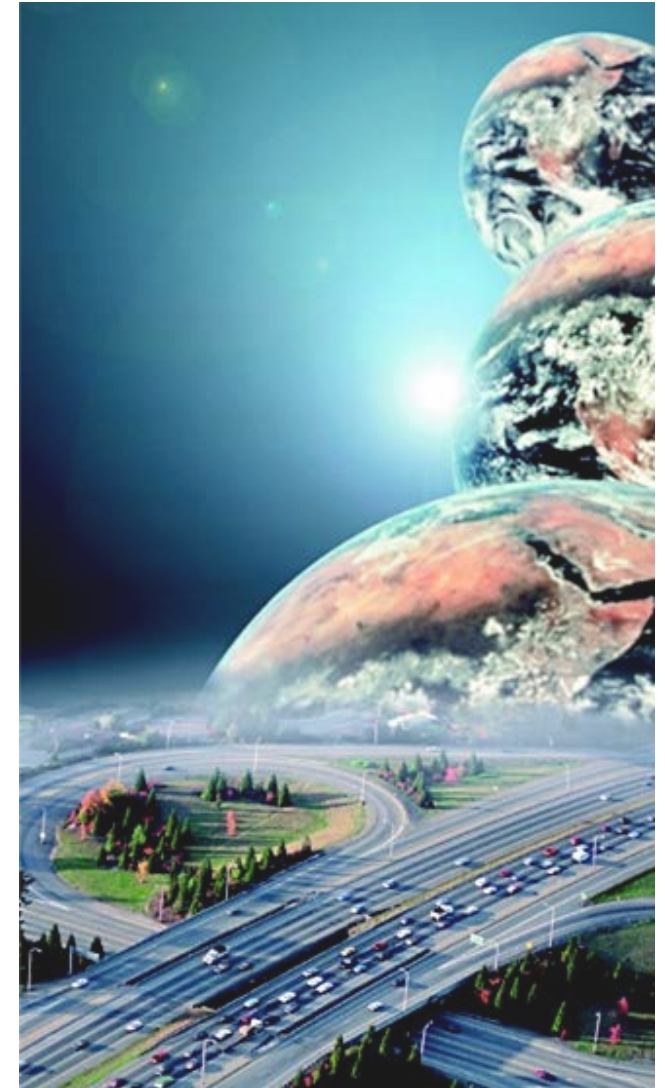
Stefan Lechtenböhmer, Wuppertal Institut

The WI explores and develops models, strategies and instruments to support **transitions towards sustainable development** at local, national and international levels.

Sustainability research at the WI focuses on **resource, climate and energy challenges** in relation to economy and society.

Our research analyses and initiates technological and social innovations that **decouple economic growth from nature use and wealth.**

- **Scientific policy consulting institute (think tank), no university**
- **Independent connecting point between basic science (universities) and policy / business and society**



➤ The Paris Agreement makes it clear:

- Industrialized countries need to achieve emission reductions by 80-95% by 2050 – and have to prepare now!
- Developing countries have to follow soon afterwards
- This will not be the end, further reductions will have to follow

➤ This means:

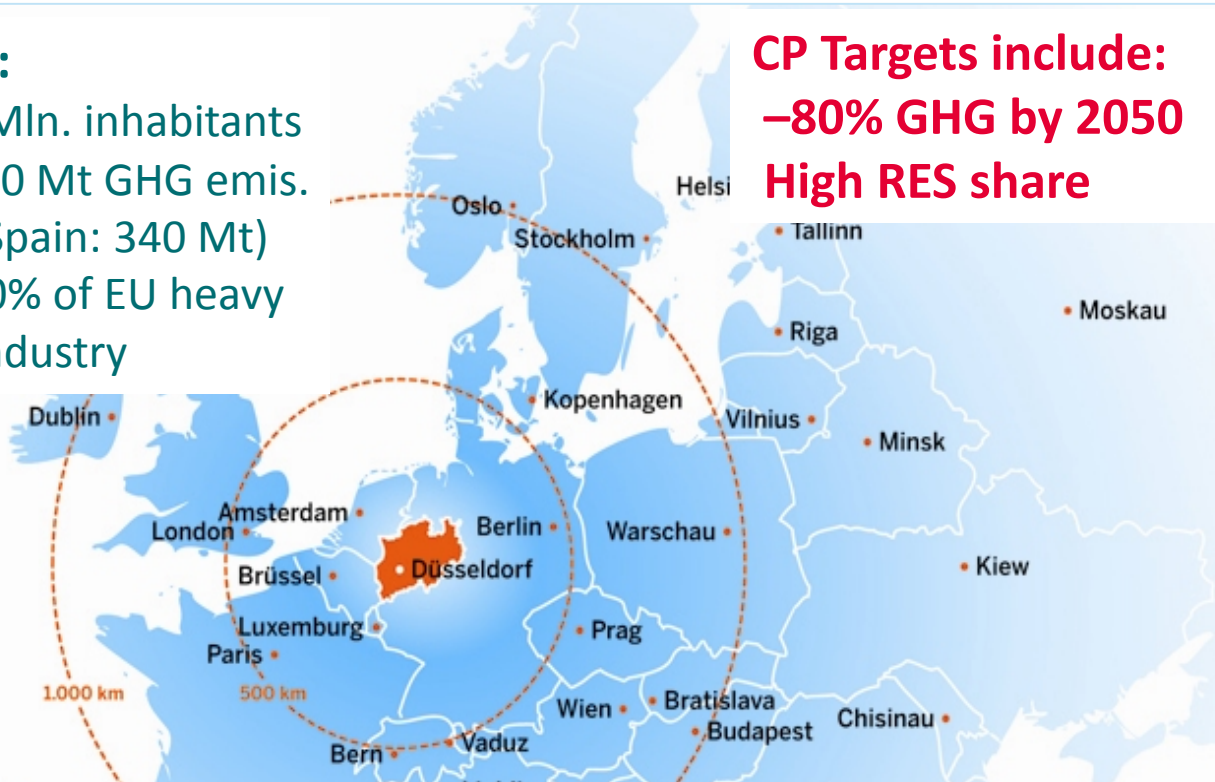
- Deep (fossil) decarbonisation of all parts of the energy system is necessary and needs efficiency plus X
- Investment patterns as well as technology and innovation pathways have to be changed immediately, in all sectors
- **Paris has changed the landscape: Decarbonisation is one of the core future megatrends**

NRW: An example for participatory long term climate policy

NRW:

- 18 Mln. inhabitants
- ~300 Mt GHG emis. (Spain: 340 Mt)
- + 10% of EU heavy industry

CP Targets include:
–80% GHG by 2050
High RES share



State Climate
Protection Law

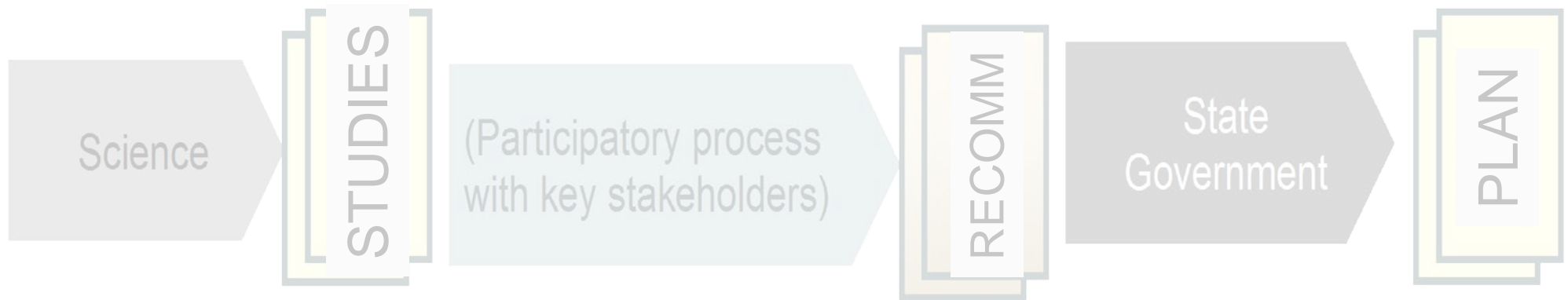


Targets of the participatory process

- Integrate expert know-how
- Maximise transparency
- Maximise acceptance and public engagement
- Create an appropriate implementation culture
- Stimulate new cooperation schemes
- Invite joint approaches

State Climate
Protection Plan

IDEA: Overcome traditional linear approach of science, society, policy integration



AIM: Explore an open iterative process that empowers stakeholders, science & policy to co-create a new position



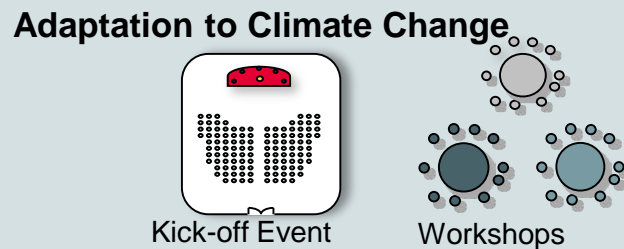
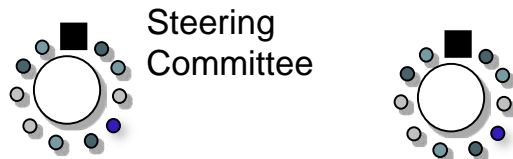
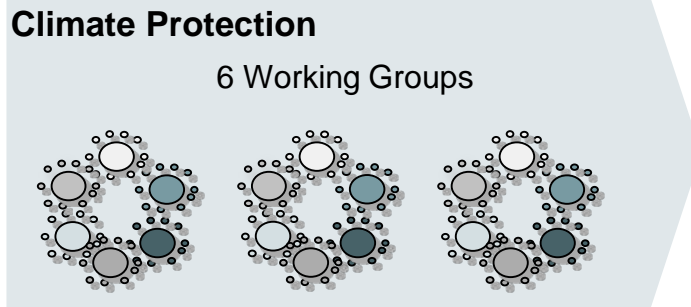
State Climate Protection Plan North-Rhine Westphalia

Structure of the participatory process

2/2012 9/2012

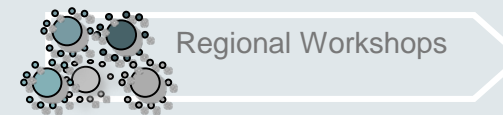
3/2014

Phase 1: Conceptualisation (400 Stakeholders)



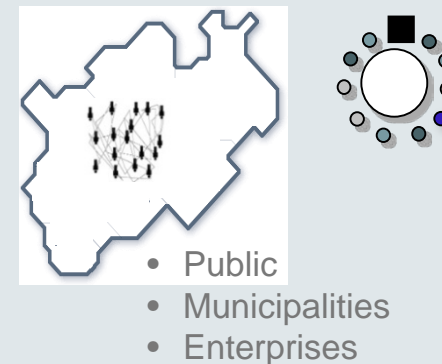
Interim Results

Phase 2: Specification/ Networking (800 St.)



Impact Analysis
of scenarios

Networking Events



Draft Climate Action Plan

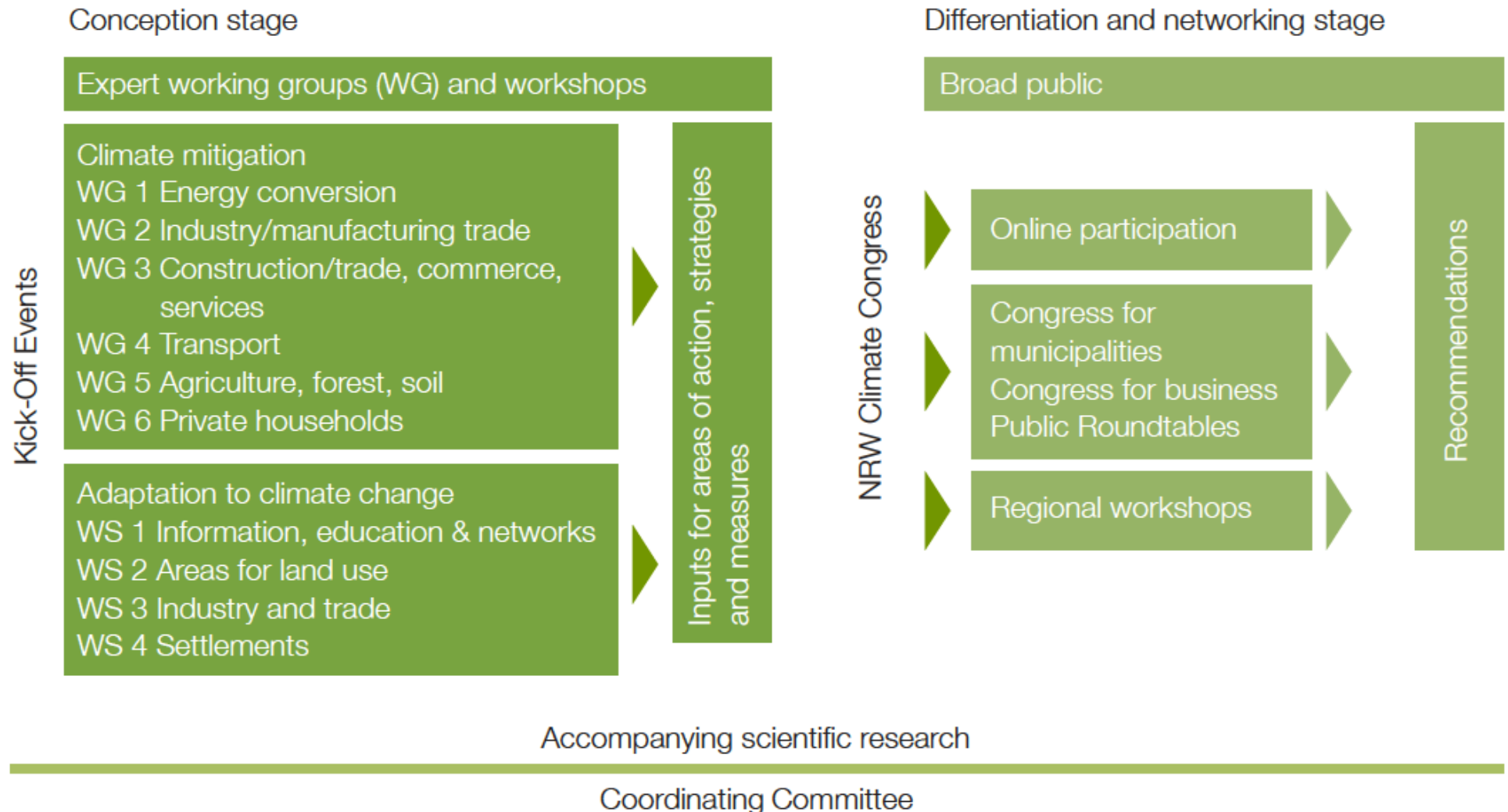
Online
consultation
(1500
replies)



Plan submitted to Parliament

State Climate Protection Plan North-Rhine Westphalia

Structure of the participatory process



State Climate Action Plan North-Rhine Westphalia

Results of the participatory process

Process completed with no dropouts, but no single common vision achieved: 10 scenarios (combined to 3 groups) developed

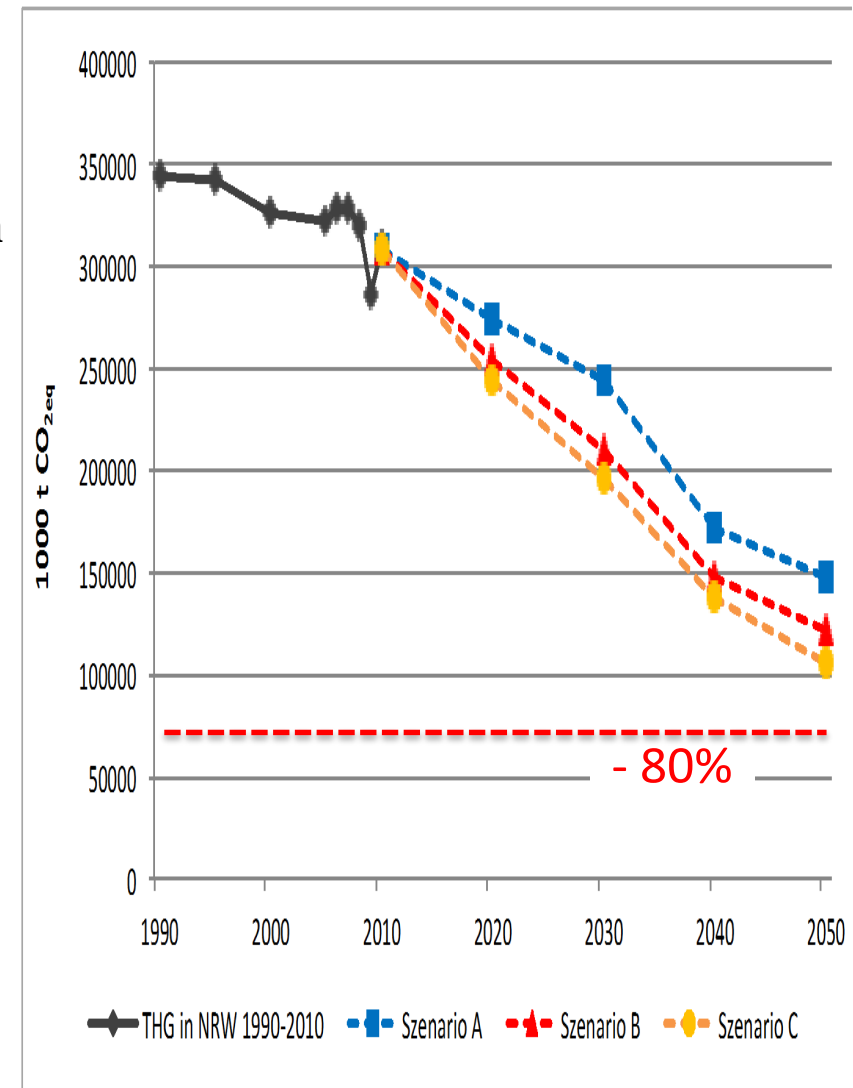
- Not possible (so far) to agree on one single common vision
- Most scenarios did not (yet) achieve the -80% target

Comprehensive (non binding) set of P&M: >400 policies & measures proposed

- With relatively high consensus in working groups
- 158 (mitigation) + 66 (adaptation) measures accepted by the government with a focus on 2020

Broad societal dialogue on transformation established & follow up implemented

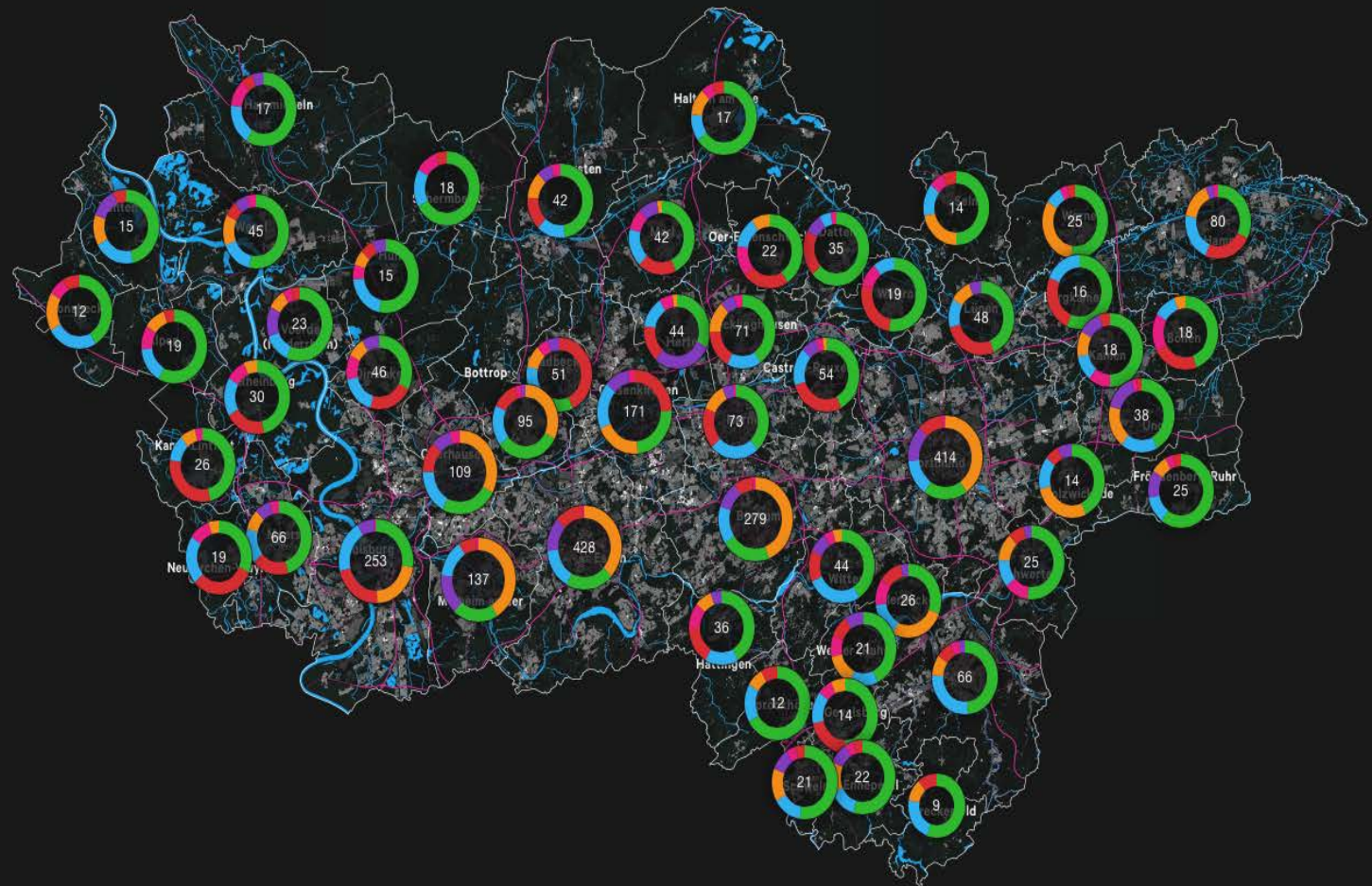
- Trust among groups that did not talk to each others before



- Radstationen
- Tankstellen Elektromobilität
- Erneuerbare Energien
- 50 Solarsiedlungen
- BAFA Biomasse
- BAFA Solarthermie
- Bürgerenergiegenossenschaft
- Erneuerbare Energien
- Geothermiesiedlungen
- Solarkataster
- Städtebau und Stadtplanung
- Gartenstädte und Werksiedlungen
- IdEE Projekte
- InnovationCity Ruhr
- Lokale Agenda 21
- Soziale Stadt
- Stadtumbau West
- Netzwerke und Bildung
- Cluster EnergieForschung.NR
- ef.RUHR
- Fairteller
- Geothermiezentrum
- h2-netzwerk-ruhr
- Konsultationskreis Klima
- LAG21
- Meotec
- Netzwerk Brennstoffzelle und
- Repair Cafés
- Solawi
- Transition Town
- Virtuelles Institut

Energiewende Ruhr

Karte Projekte Partner Rahmenprogramm



Impressum





- **Similar (participative) climate protection plans in most German states and on the national level**
- **The process is of high interest for foreign regions as well**
- **A strong dialogue and process with energy intensive industries as a result**
- **(Hopefully) core part of the future economic modernisation strategy**

Governing long term transitions needs a more intensive collaboration of science, policy and society

New role for **science**

- Mode 2 science, Future Earth, RRI (respons. research&innov.)
- Transformative science
- Co-creation of knowledge
- Trans-disciplinarity
- Improved integration of long term aspects

New role for **citizen and society** (participation)

- Co-creation of relevant knowledge/expert knowledge
- Create and implement joint visions or narratives
- Enable long term oriented governance

New tasks for established **democratic institutions**

- Support and enable new roles for society and science
- Integrate their functions into existing processes of decision making
- Improved integration of long term aspects

Long term transitions as solutions for global challenges

- To stay within planetary boundaries there needs to be a fundamental and long-term transition
- The transition affects the energy system and all related infrastructure (energy, transport, buildings, industry) plus land use systems
- Change needs different, sustainable and stable investment and behavioural patterns
- Long-term reliable policy for the transformation needs societal consensus over the goals of the change
- **Democratic institutions need additional tools for a broader engagement of the public**

TELL ME –
I will forget
SHOW ME –
I will remember
**ENGAGE ME –
I will understand**

Lao TSE

Stefan Lechtenböhmer / stefan.lechtenboehmer@wupperinst.org

Thank you
For your Attention

For further information:
www.wupperinst.org

- <https://www.klimaschutz.nrw.de/english/>
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