

Keynote at the Second International Conference of the Sustainable Consumption Research and Action Initiative (SCORAI) - Transitions Beyond a Consumer Society

University of Maine, Orono (US)

June 17, 2016

Implementing sustainable consumption: the science policy interface

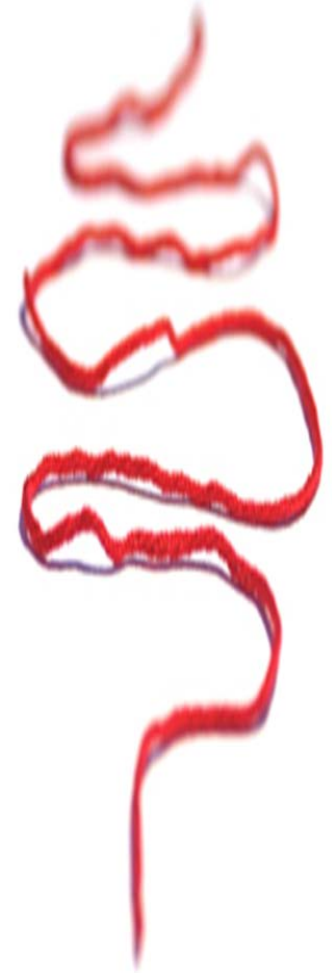
Lucia A. Reisch

Copenhagen Business School, Denmark

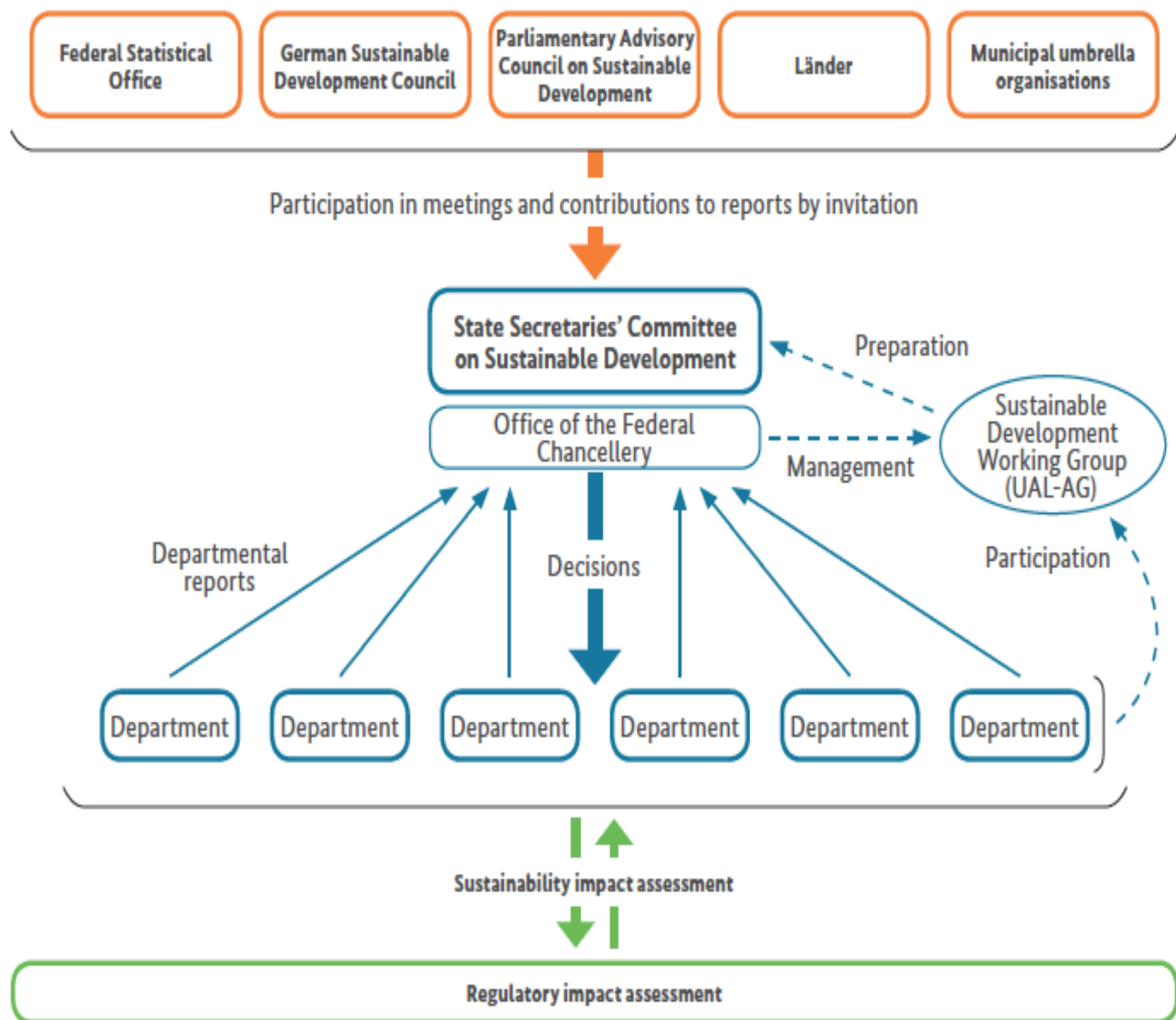
German Council of Sustainable Development, Berlin
National Advisory Council on Consumer Affairs, Berlin
German Bioeconomy Council, Berlin

Guiding questions

- ❖ What does it take to promote the sustainability transformation?
- ❖ How to design a productive science-policy interface?
- ❖ What is the role of research(ers)?



A reliable sustainability governance



Source: National Sustainable Development Strategy: Progress Report 2012. Federal Government, 2012, p.32.

„Green Cabinet“ of State Secretaries



Berlin, May 30th 2016



Parliamentary Advisory Council on Sustainable Development (MPs)



Berlin, June 1st 2016

Council for Sustainable Development



Berlin, May 30th 2016



Institute for Advanced Sustainability Studies e.V.



National Strategy for Sustainable Development (2002; 2016)

Deutsche Nachhaltigkeitsstrategie

Neuaufgabe 2016

Entwurf

Stand: 30. Mai 2016



Nationales Programm für nachhaltigen Konsum

a) Wesentliche Inhalte und politische Prioritäten aus Sicht der Bundesregierung

SDG 12 zielt auf die notwendige Veränderung unserer Lebensstile und unserer Wirtschaftsweise. Nachhaltiger Konsum und nachhaltige Produktion verlangen, heute so zu konsumieren und zu produzieren, dass die Befriedigung der berechtigten Bedürfnisse der derzeitigen und der zukünftigen Generationen unter Beachtung der Belastbarkeitsgrenzen der Erde und der universellen Menschenrechte nicht gefährdet wird. Dazu müssen Wachstum und Wohlstand so weit wie möglich von der Inanspruchnahme natürlicher Ressourcen entkoppelt werden.



Globale Verantwortung

Den Industrieländern kommt eine wichtige Rolle für die weltweite Entwicklung nachhaltiger Konsum- und Produktionsmuster und für die Steigerung der Ressourceneffizienz zu. Sie beeinflussen durch die enge Einbindung ihrer Wirtschaft in globale Wertschöpfungs- und Lieferketten maßgeblich die Produktionsmethoden in Industrie-, Schwellen- und Entwicklungsländern. Hieraus folgt eine besondere Verantwortung der Industriestaaten für die damit verbundenen ökonomischen, ökologischen und sozialen Auswirkungen in diesen Ländern. Auch orientieren sich die Mittelschichten, die sich in Schwellen- und Entwicklungsländern etablieren, häufig am Konsumverhalten in den Industrieländern, so dass letzteren eine Vorbildfunktion für nachhaltigen Konsum zukommt.

Konsum und Produktionsmuster

DasSDG 12 knüpft an den ersten Zehnjahres-Plan an (Unterziele nachhaltigen Bewirtschaften (12.2) richten sich auf die Reduzierung der Verschwendung und den umweltverträglichen Konsum und die Abfallentstehung (12.6)



A supporting global agenda

GOAL 12

Ensure sustainable consumption and production patterns



GOAL 12 TARGETS

12.1

Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries

12.2

By 2030, achieve the sustainable management and efficient use of natural resources

12.3

By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

12.4

By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

12.5

By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

12.6

Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

12.7

Promote public procurement practices that are sustainable, in accordance with national policies and priorities

12.8

By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

12.a

Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

12.b

Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

12.c

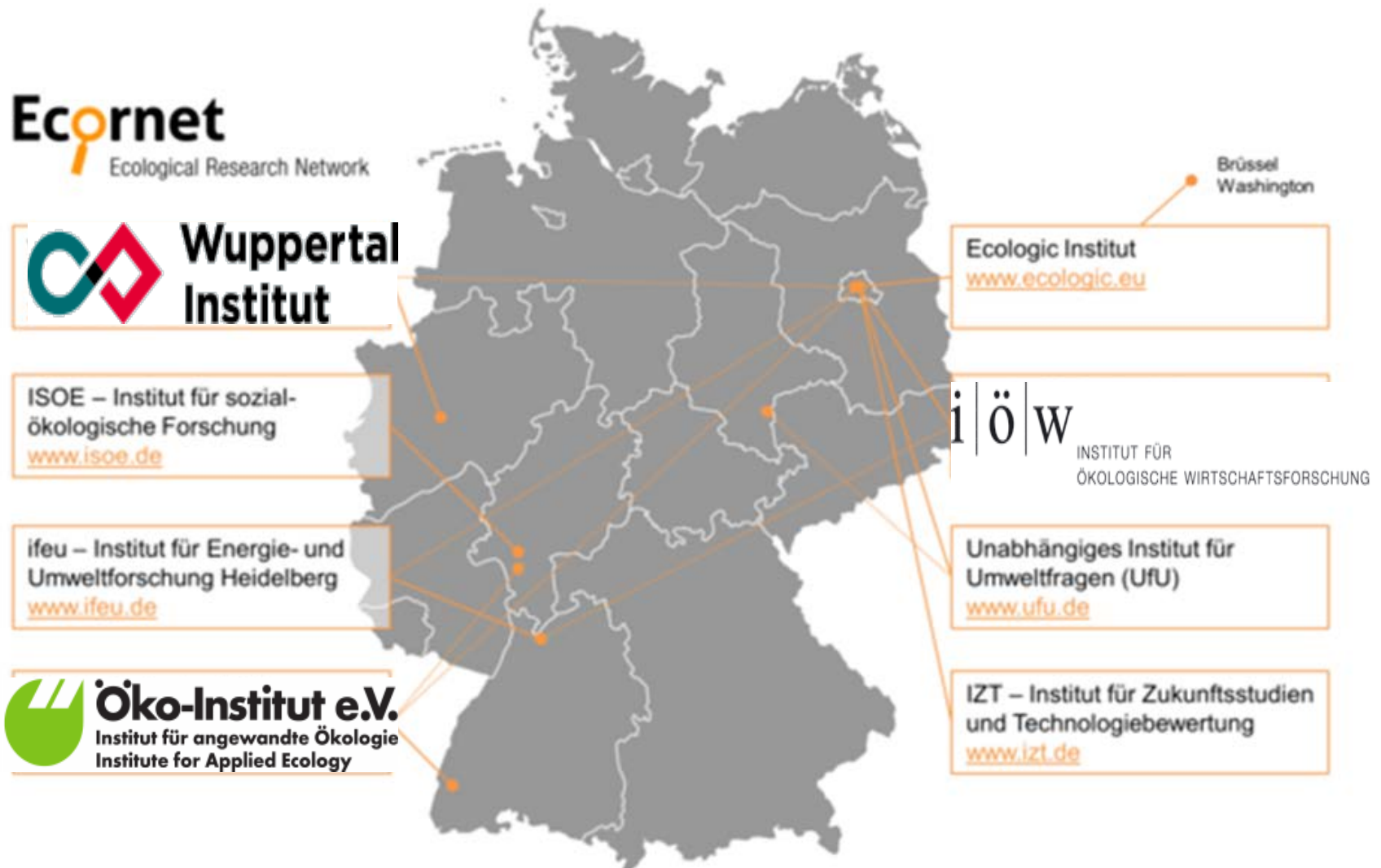
Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities

National Strategy for Sustainable Development (2002; 2016)

	<i>Auswirkungen in Deutschland</i>	
20a-b	Verteilungsgerechtigkeit <i>Ungleichheit innerhalb Deutschland verringern</i>	Gini-Koeffizienten zur Einkommensverteilung Gini-Koeffizienten zur Vermögensverteilung
SDG 11. Städte und Siedlungen inklusiv, sicher, widerstandsfähig und nachhaltig machen		
21	Flächeninanspruchnahme <i>Nachhaltige Flächennutzung</i>	Anstieg der Siedlungs- und Verkehrsfläche
22a	Mobilität <i>Mobilität sichern – Umwelt schonen</i>	Endenergieverbrauch im Güterverkehr
22b		Endenergieverbrauch im Personenverkehr
22c		Bevölkerungsgewichtete durchschnittliche ÖV-Reisezeit von jeder Haltestelle zum nächsten Mittel- / Oberzentrum
23	Wohnen <i>Bezahlbarer Wohnraum für alle</i>	Überlastung durch Wohnkosten
SDG 12. Für nachhaltige Konsum- und Produktionsmuster sorgen		
24a	Nachhaltiger Konsum <i>Konsum umwelt- und sozialverträglich gestalten</i>	Marktanteil von Produkten und Dienstleistungen, die mit glaubwürdigen und anspruchsvollen Umwelt- und Sozialsiegeln ausgezeichnet sind (vorerst: Marktanteil von Produkten mit staatlichen Umweltzeichen)
24b		Energieverbrauch und CO ₂ -Emissionen des Konsums
25	Nachhaltige Produktion <i>Anteil nachhaltiger Produktion stetig erhöhen</i>	Umweltmanagement EMAS
SDG 13. Umgehend Maßnahmen zur Bekämpfung des Klimawandels und seiner Auswirkungen ergreifen		
26a	Klimaschutz <i>Treibhausgase reduzieren</i>	Treibhausgasemissionen
26b	<i>Deutscher Beitrag internationale Klimafinanzierung</i>	Internationale Klimafinanzierung zur Reduktion von Treibhausgasen und zur Anpassung an den Klimawandel

An independent research community

Independent Research Institutes



Actors with a transformative research agenda

WBGU

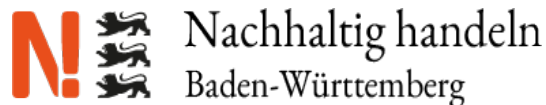
German Advisory Council on
Global Change



SRU



German Advisory Council
on the Environment



Agora
Energiewende

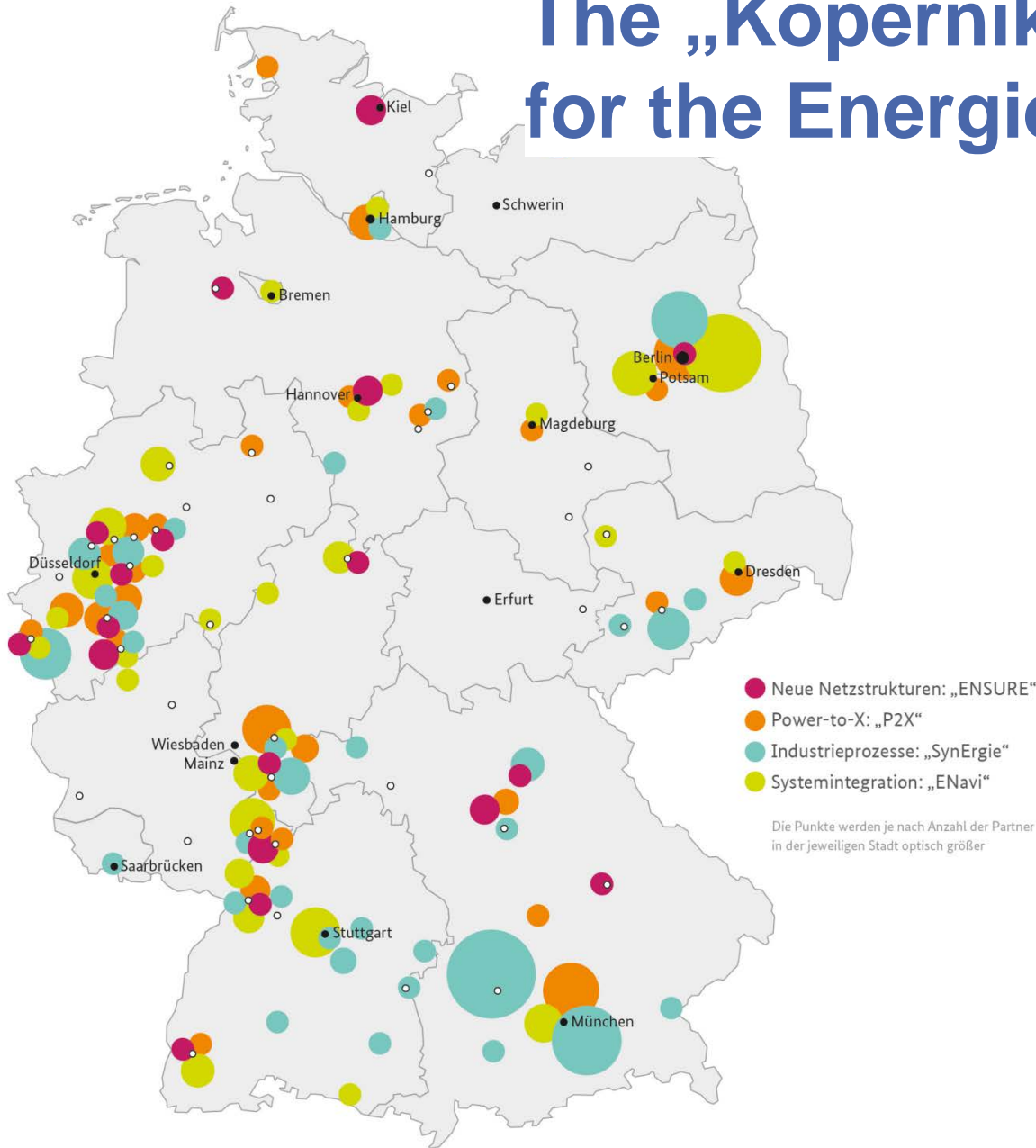


Policy science interface: two worlds

Interests:	theories, methods and concepts vs. solutions
Agendas:	relevant topics? what is new?
language:	technical and disciplinary
Discourse:	peer review vs. hierarchic administration
Time frame:	long term vs. short term
Incentives:	peer reviewed papers vs. political office (votes)
Governance:	expertocracy vs. democracy and administration
Risk:	scientific curiosity vs. risk aversion
Expertise:	academic and issue-driven vs. administrative and fluctuating

Significant reliable long term funding

The „Kopernikus“ Projects for the Energiewende JOL



- ✓ 4 consortia
- ✓ 10 years
- ✓ 230 partners
- ✓ 400 mio Euro

Basic societal mission („Gemeinschaftswerk Energiewende“)

Four key drivers for transformation

1. **Vision:** e.g. sustainable development energy system transformation, German reunification
2. **Crisis:** e.g. the massive eruption of Mount Tambora in Indonesia in 1815, which caused worldwide harvest failures and triggered waves of emigration in subsequent years; numerous chemical problems and accidents in the 1960s to 1980s; threat to the ozone layer; Fukushima nuclear disaster
3. **Knowledge:** e.g. knowledge about demographic shifts, climate change
4. **Technology:** e.g. technological developments in the field of ICT

3/11



Deutschlands Energiewende –

Ein Gemeinschaftswerk
für die Zukunft



Energiewende in a nutshell

- Phasing out nuclear power until 2022
- Complete transformation of the energy system of a highly industrialized country towards renewable energy sources
- Exit and entry: replacing nuclear and fossil fuels with an energy system based on renewables and energy efficiency
- Fighting climate change and phasing out nuclear power: two sides of the same coin
- *Gemeinschaftswerk*: the energy transition will only succeed through a collective effort spanning all levels of politics, business and society
- Challenge: security of supply, competitiveness, sustainability

Proof of concept (more successes than failures)

Energy Transition

The German Energiewende

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open all



the eBook



the energiewende story



the energiewende blog

+++ 03.06.16 French nuclear under pressure - from German renewabl

key findings

glossary

infographics

downloads

about us

1 Why the Energiewende



2 Technology as a key issue



3 Policies for clean energy



4 History of the Energiewende



5 European perspectives



6 International perspectives



7 Questions & Answers



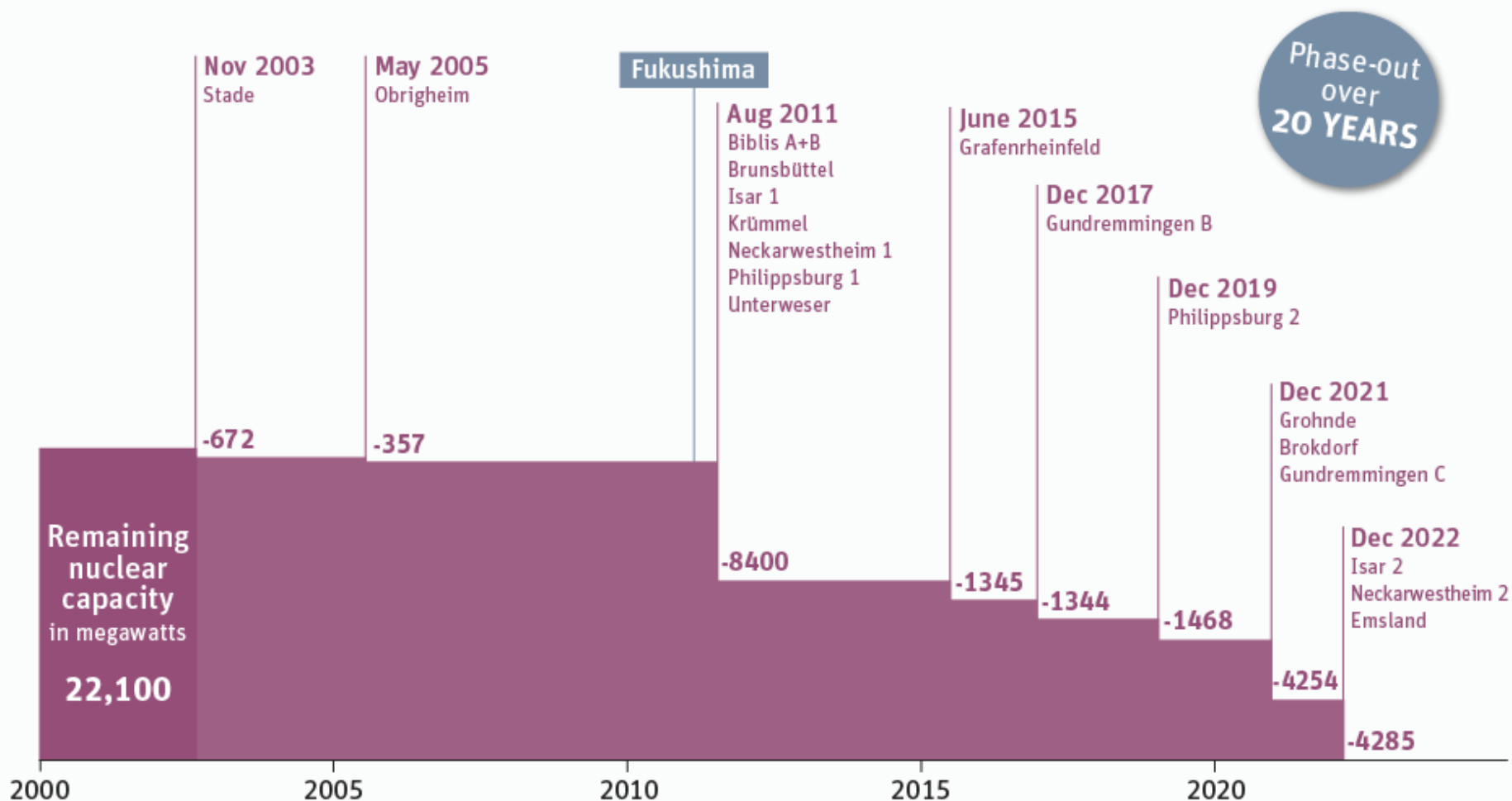
Comments



Germany is gradually shutting down all nuclear power plants

Declining nuclear energy installed capacity in Germany, 2000-2022

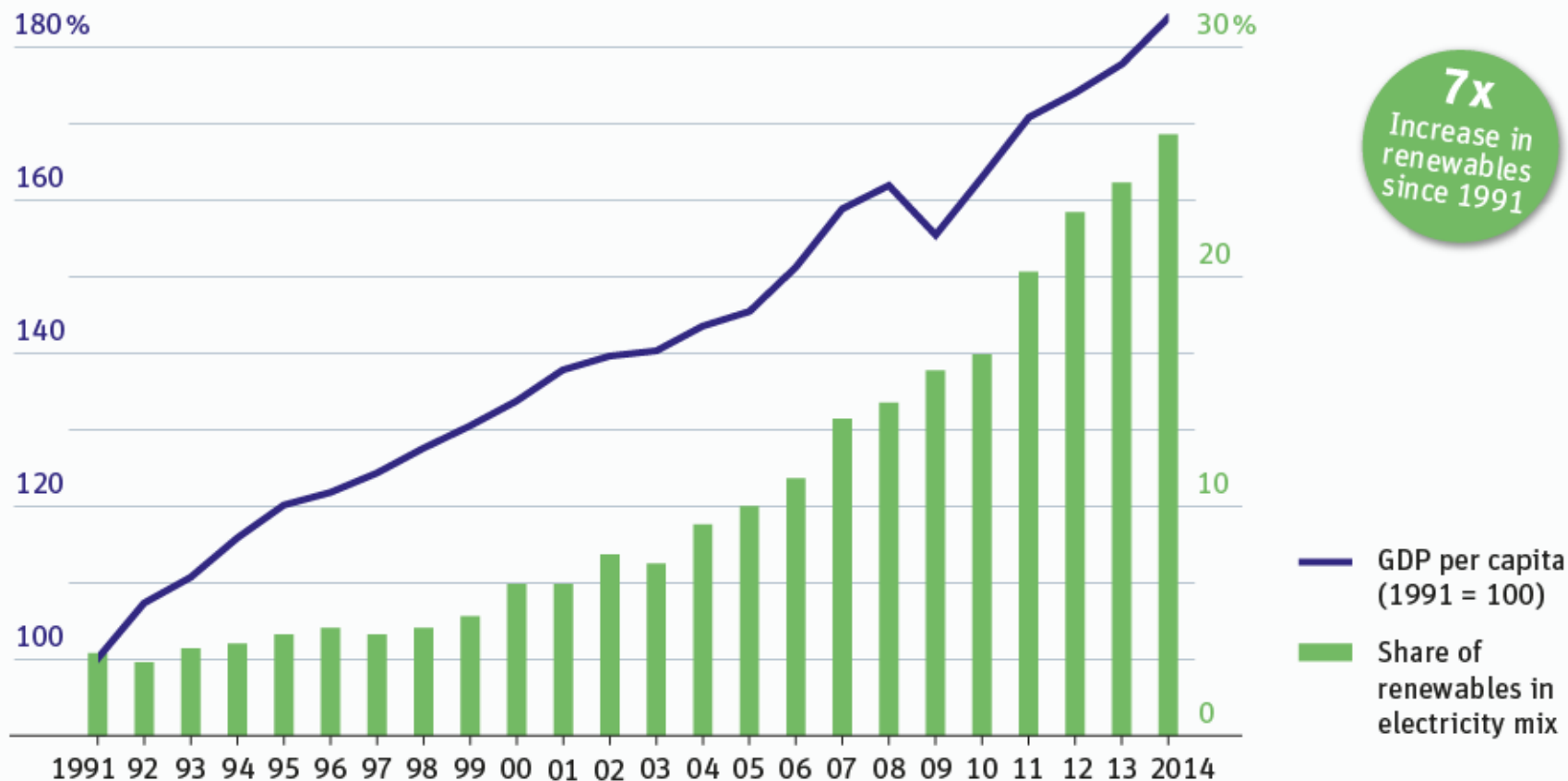
Source: Institute of Applied Ecology, BMJ, own calculations



Renewables do not hurt Germany's economy

Gross Domestic Product and share of renewables in power generation from 1991-2014, Germany

Source: BMWI, AG Energiebilanzen, Destatis



Renewables create more jobs than conventional energy does

Employment in Germany in renewable and conventional energy sectors, 2005-2011

Source: BMU, BMWI



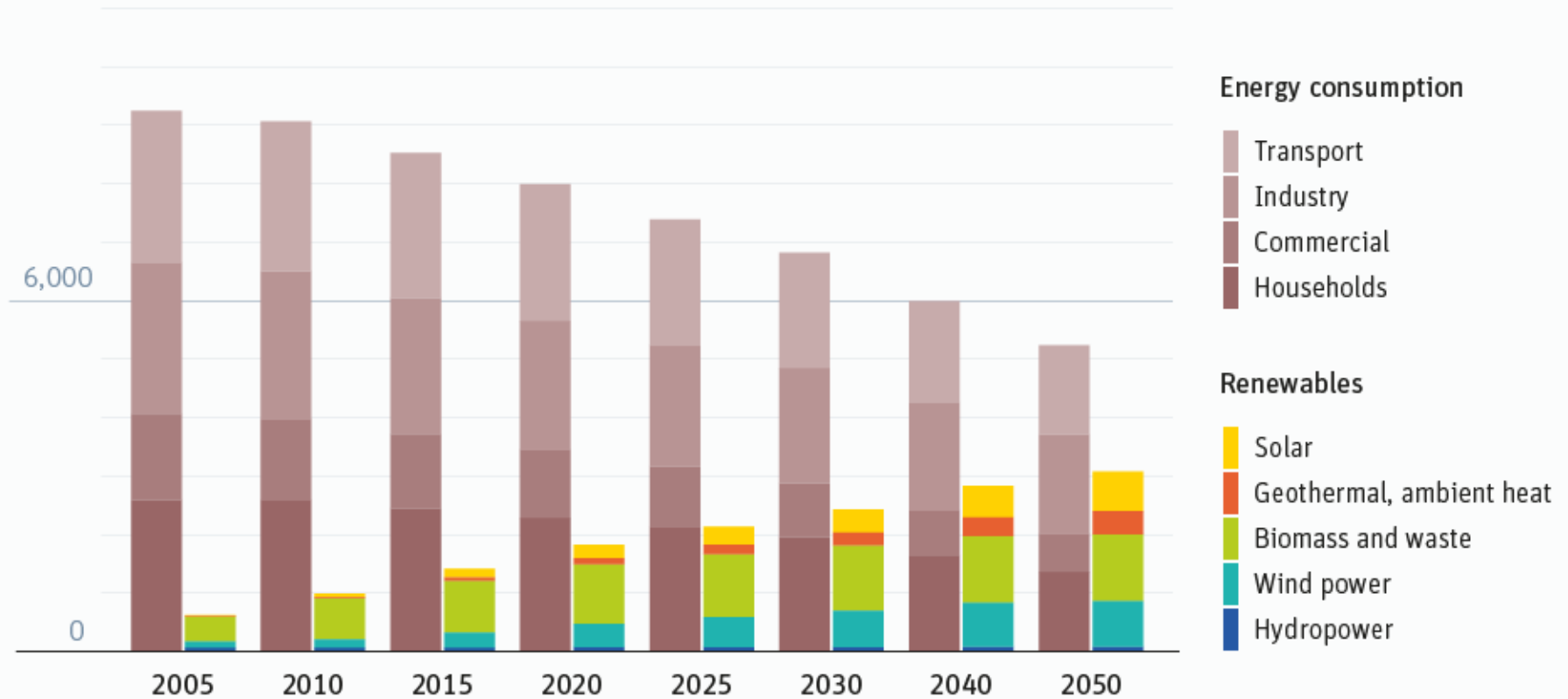
Germany's plan: ramp up renewables, drive down energy consumption

Final energy supply and demand in Germany 2005-2050, scenario

Source: DLR Lead Study, scenario A

12,000

Final energy in petajoules per year



German energy transition is a democratic movement

Ownership of renewables in 2012

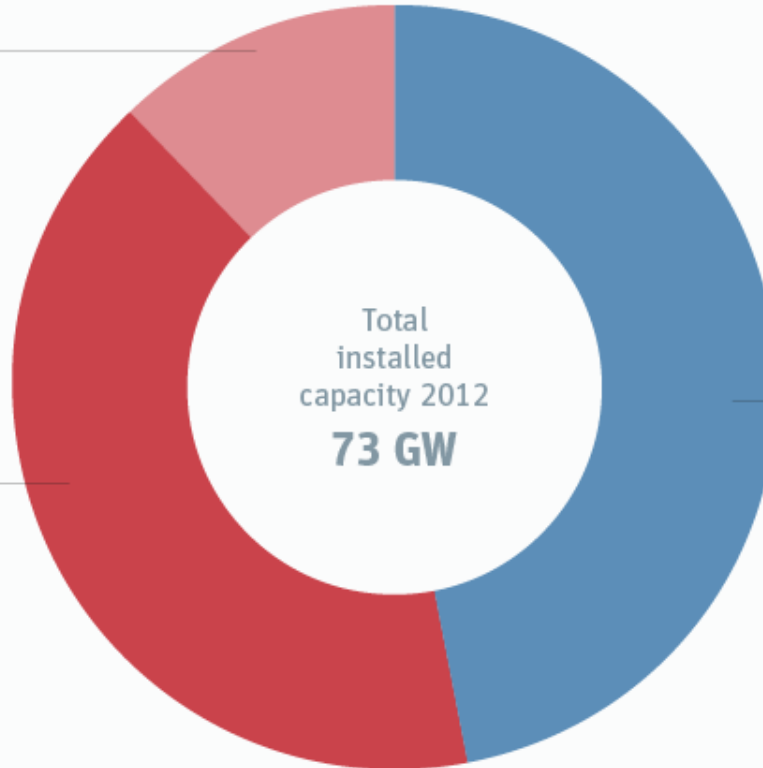
Source: AEE, www.unendlich-viel-energie.de



Energy suppliers
12%

Institutional
and strategic investors
41%

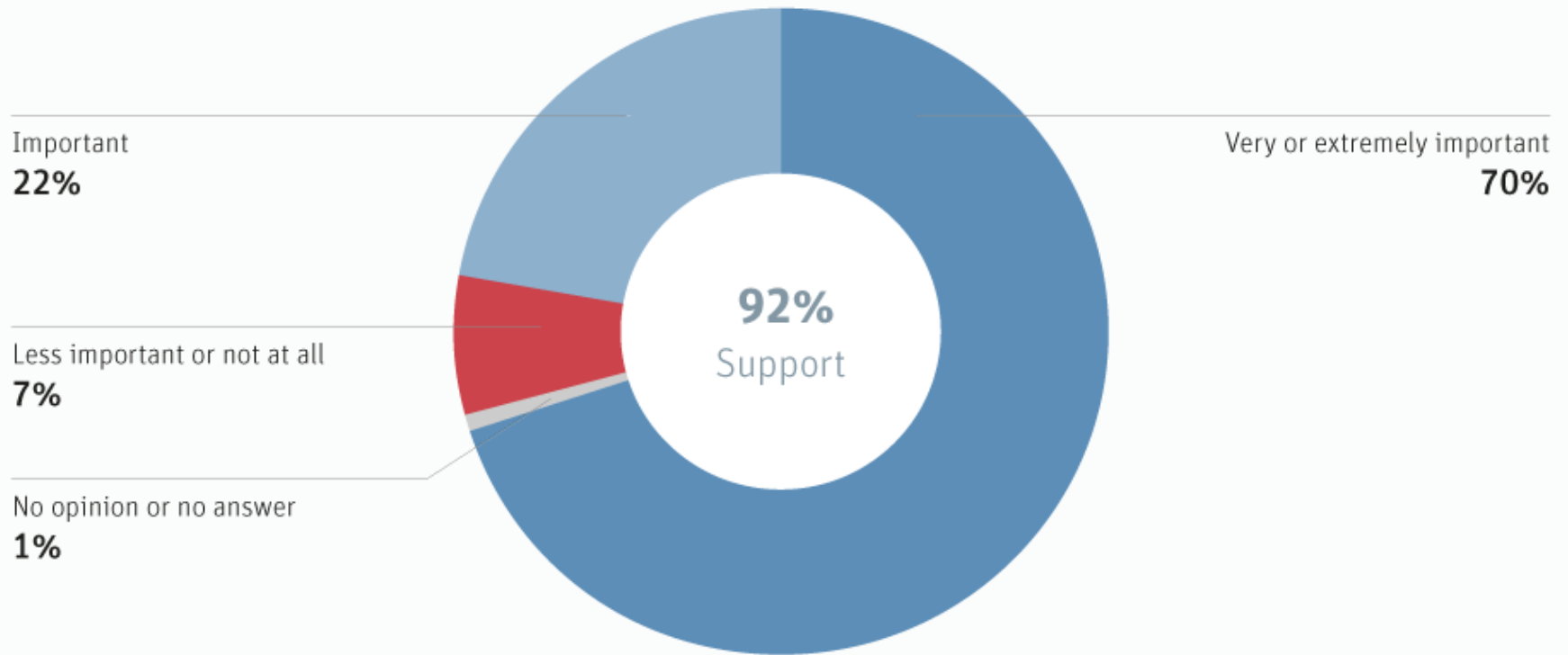
Citizens and coops
47%



92 percent of Germans support further growth of renewables

"The use and growth of renewable energy is ...", survey from October 2014

Source: VZBZ

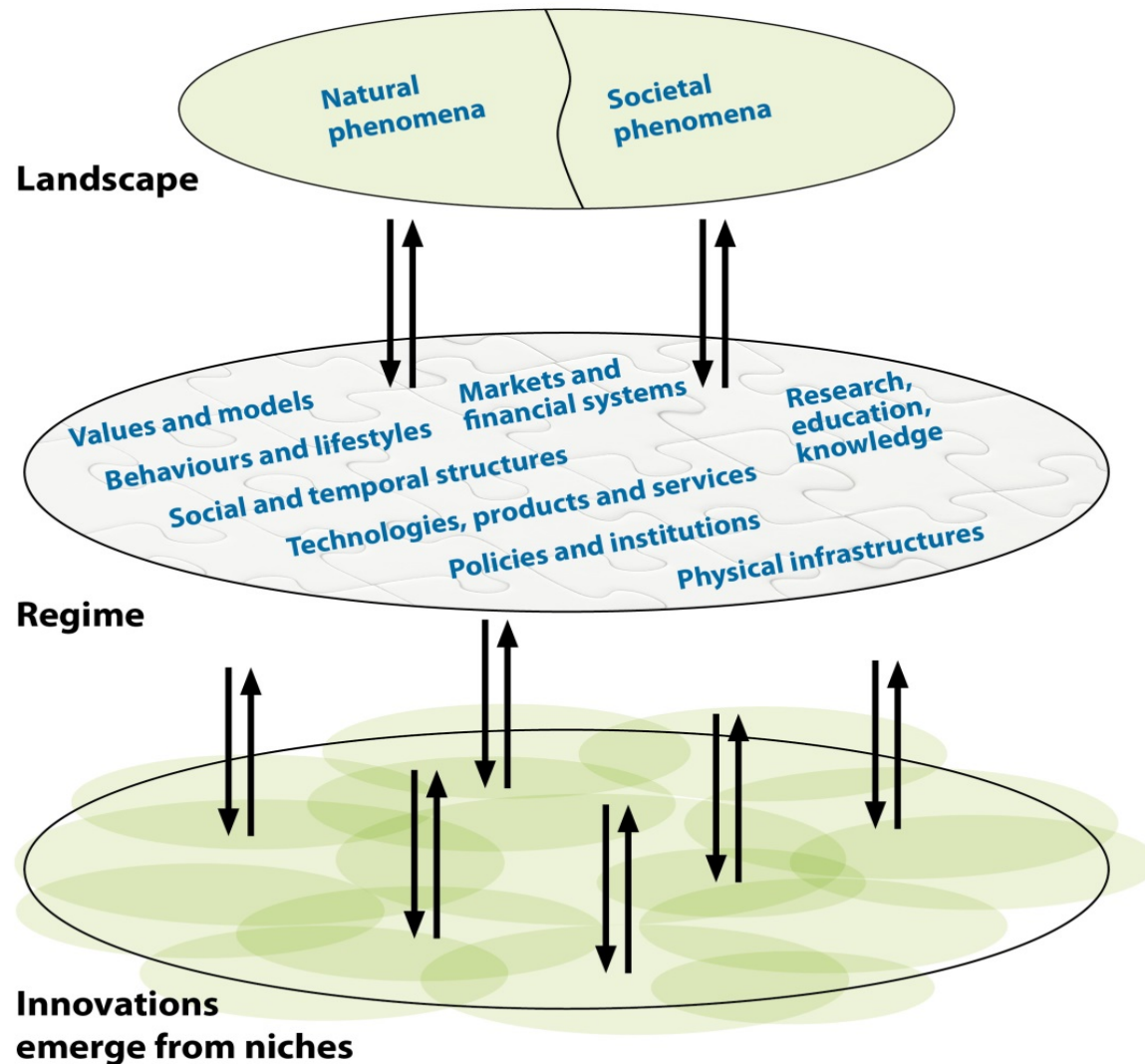


What does it take to promote the sustainability transformation?

Learnings from the recent research project

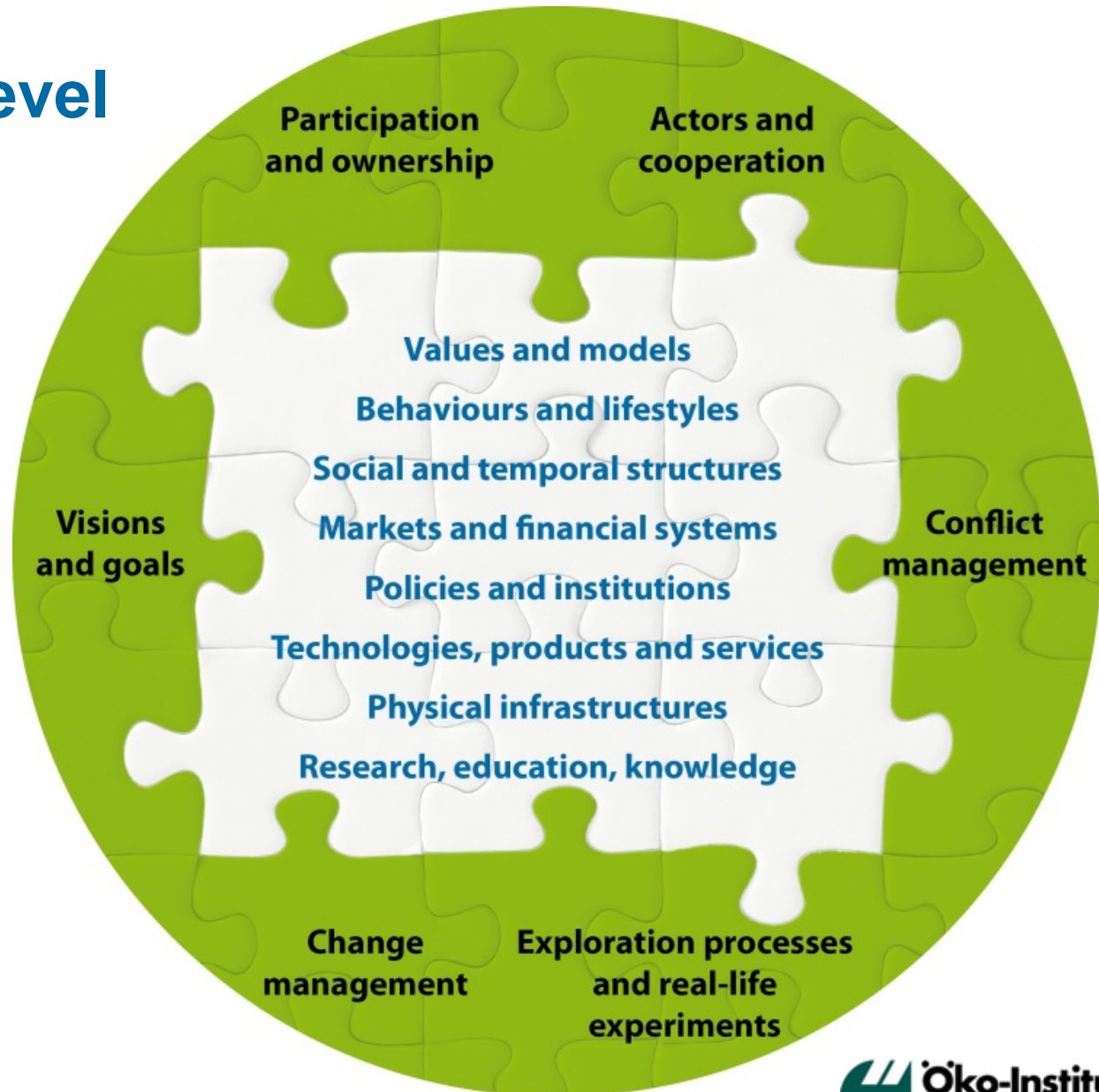


A multi-level perspective (transition management)

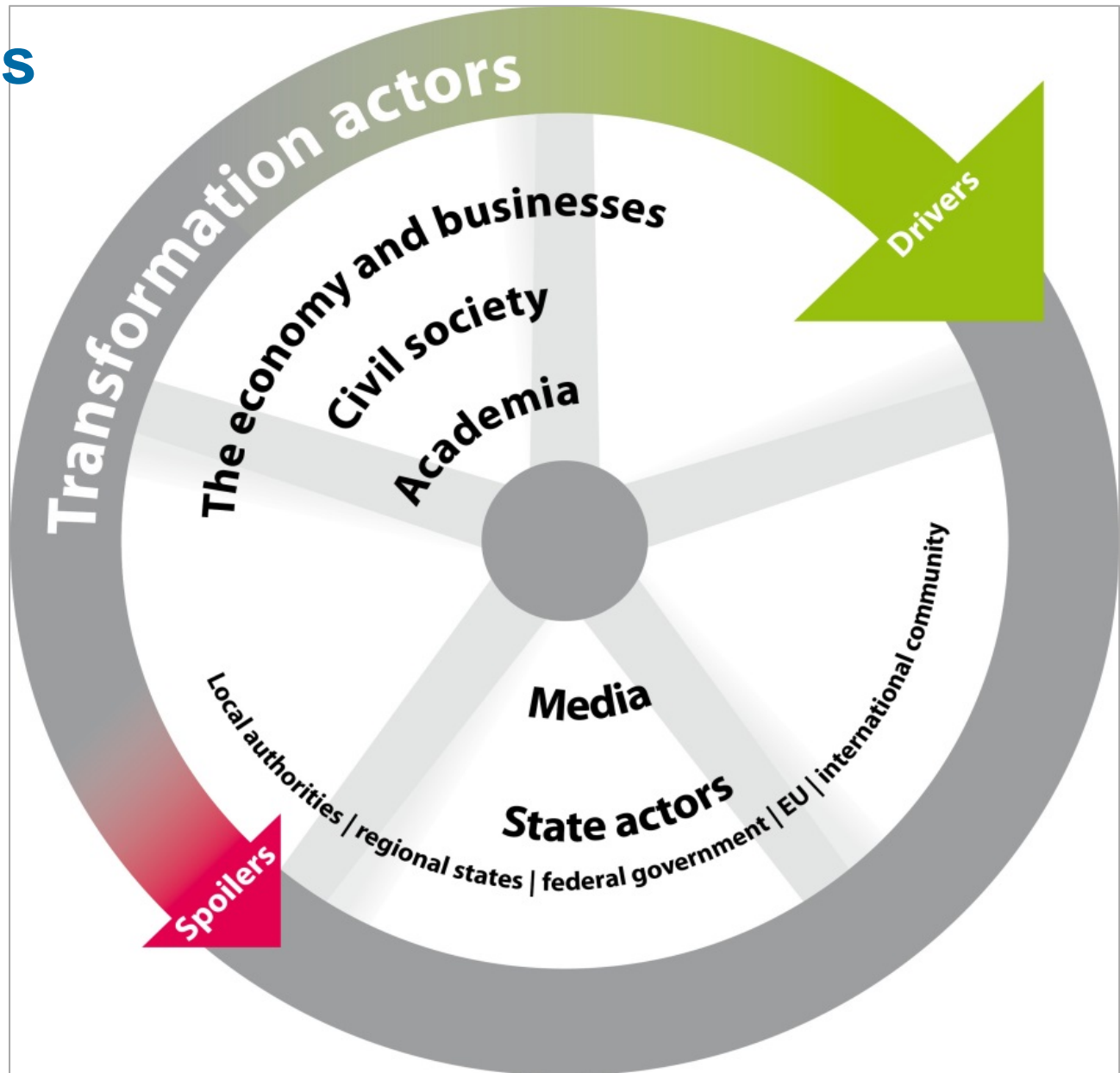


Source: Grießhammer/Brohmman 2015, adapted from Geels 2002

Regime level



The actors



GRIEßHAMMER

Rainer Grießhammer

How transformations and social innovations can succeed

How transformations and social innovations can succeed

Transformation Strategies and Models of Change
for Transition to a Sustainable Society



Nomos

Learnings

- ✓ reliable institutional SD governance
- ✓ sound management and independent monitoring
- ✓ push and back-up by a strong mission
- ✓ mutually enforcing multi-level governance
- ✓ multidisciplined approaches („mode 2“ science)
- ✓ significant and stable funding of research programmes
- ✓ national academies, advisory councils and independent research institutes („honest brokers“)
- ✓ media to push the political agenda
- ✓ promote genuine industry interest („Green Race“)
- ✓ municipalities and cities are crucial incubators and „laboratories“ (city mayors‘ as change agents)

ALL ACTORS: „walking the talk“ for trust and impact

“Look to the stars and keep an eye on the
alleyways”

Wilhelm Raabe