
ENVIRONMENT, CLIMATE AND ENERGY POLICY

GERMANY, EU AND INTERNATIONAL DIMENSION

Christian C. Juckenack
Prof. Dr. rer. nat. Dipl.-Geol.
Erfurt, München

(Professor of Environment, Energy, Resources, FH Erfurt, University of applied Sciences, former State Secretary Ministry of Environment / later: Ministry of Economics, Labour, Germany, later: Senior Consultant on Desertpower for Siemens AG, Renewable Energy Division)

Environment, Resources, Energy, green demands ...

really a NEW perception and challenge ?

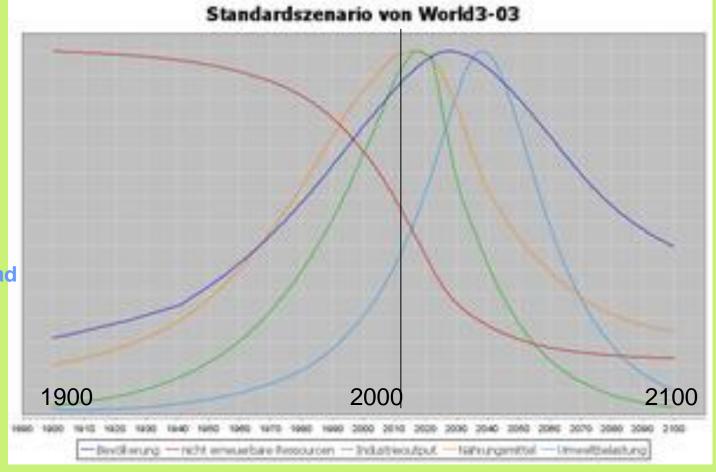
NO!!

"The Limits to Growth" (1972): Prediction of global development

Decline of

- fossil resources

- .. causes "crash" to
 - population
 - food
 - industries
 - environmental load

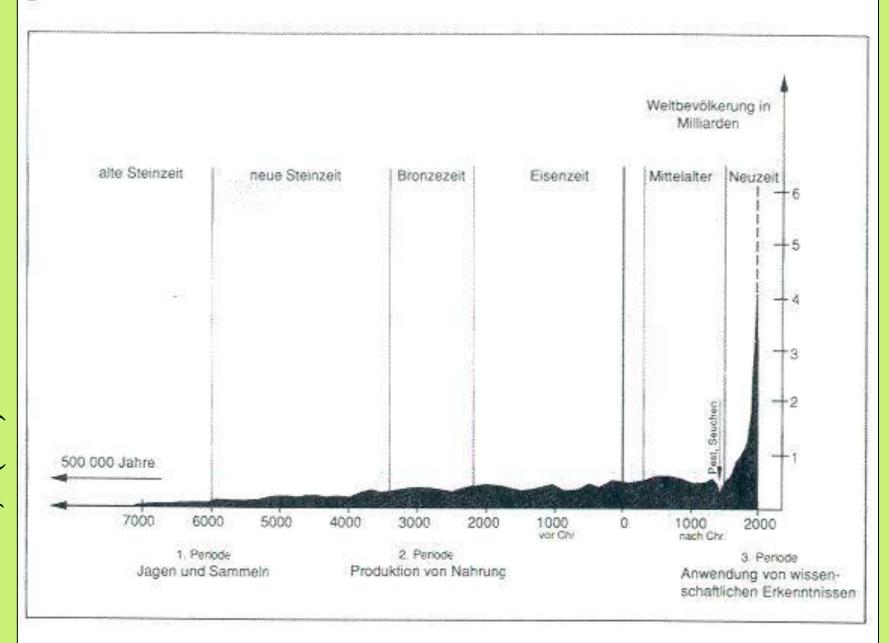


Meadows, L. et al. (1972): The Limits to Growth. – Bericht des Club of Rome zur Lage der Menschheit. Meadows et al (2004): Limits to Growth, The 30-Year Update.

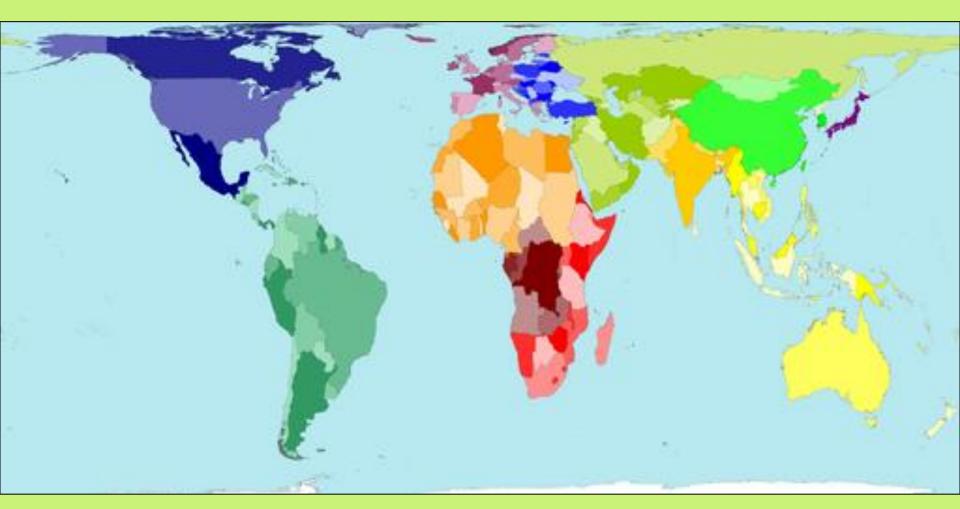
Barney, G. O. et al. (Dep. of Foreign Affairs) (1980/1981): Global 2000 - Bericht an den US Präsidenten

Stressfactor: global population explosion

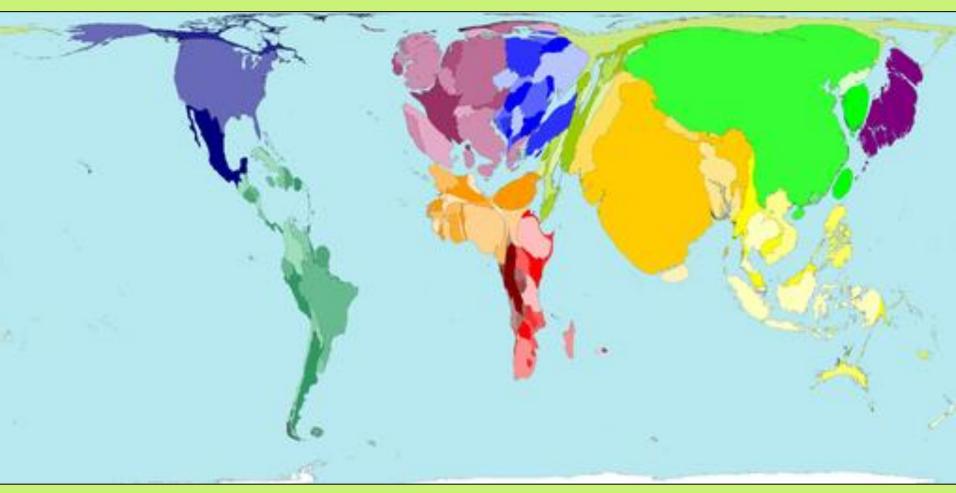
Warum sind die vom Menschen geschaffenen Systeme plötzlich so wichtig geworden"



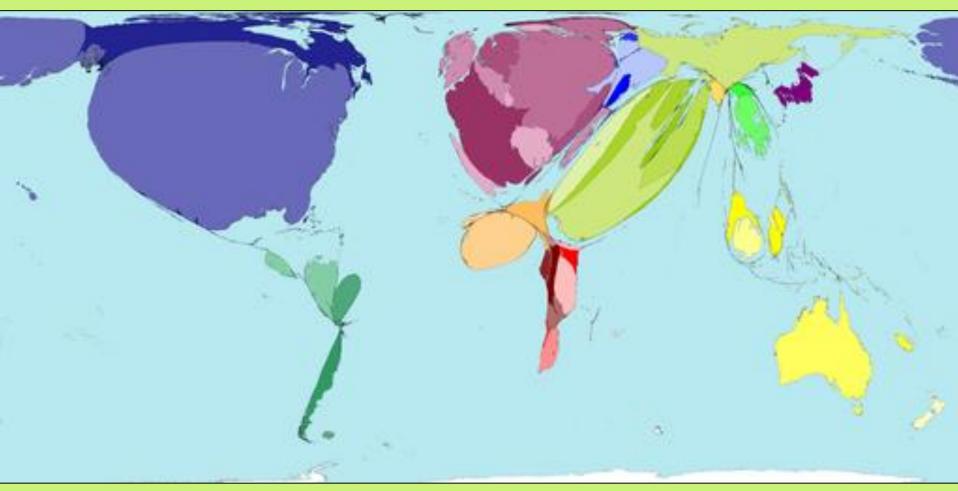




land area (worldmapper.org)



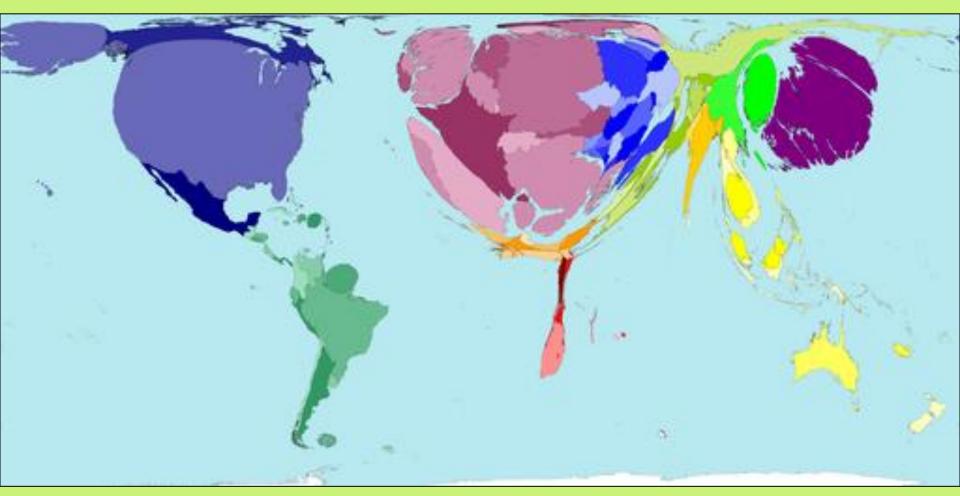
population 2000 (worldmapper.org)



net immigration (worldmapper.org)

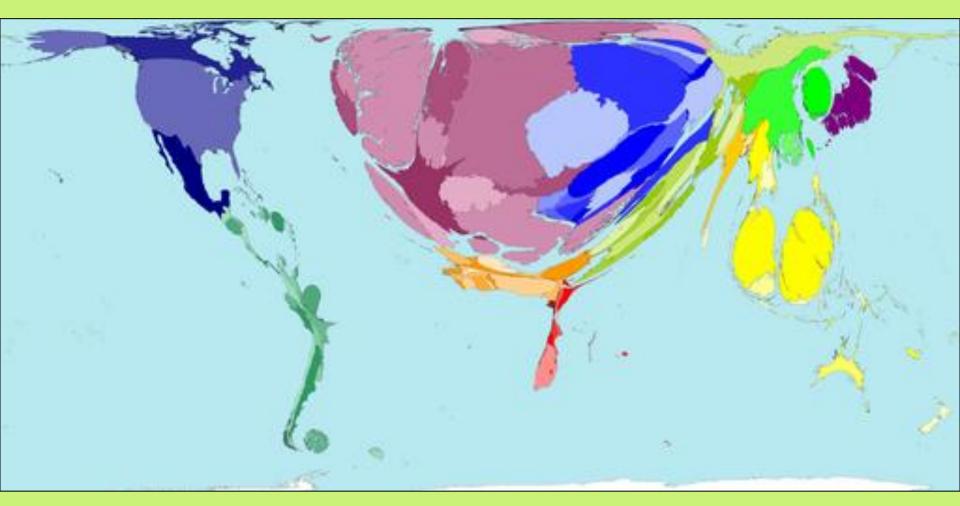


wealth growth 1975-2002 (worldmapper.org)



motorcars (worldmapper.org)





tourism origin (worldmapper.org)

Task: forest loss (green lung)

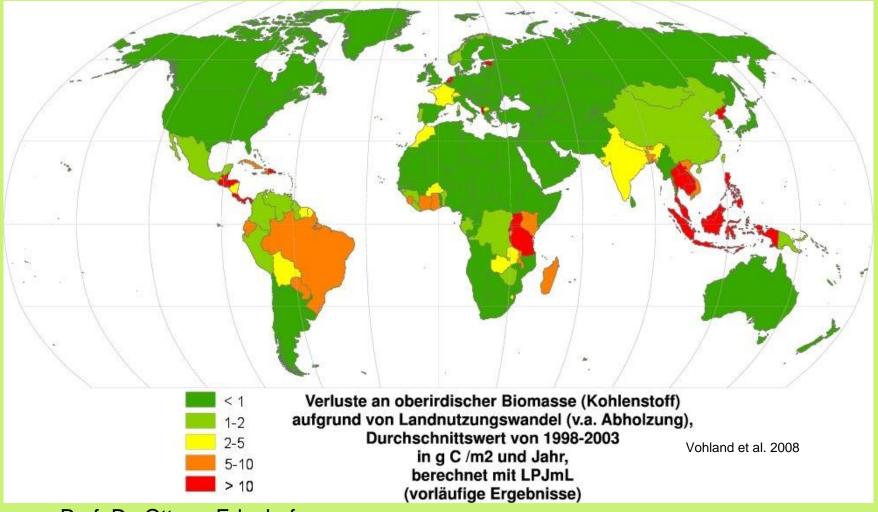


Global forest and biomass loss

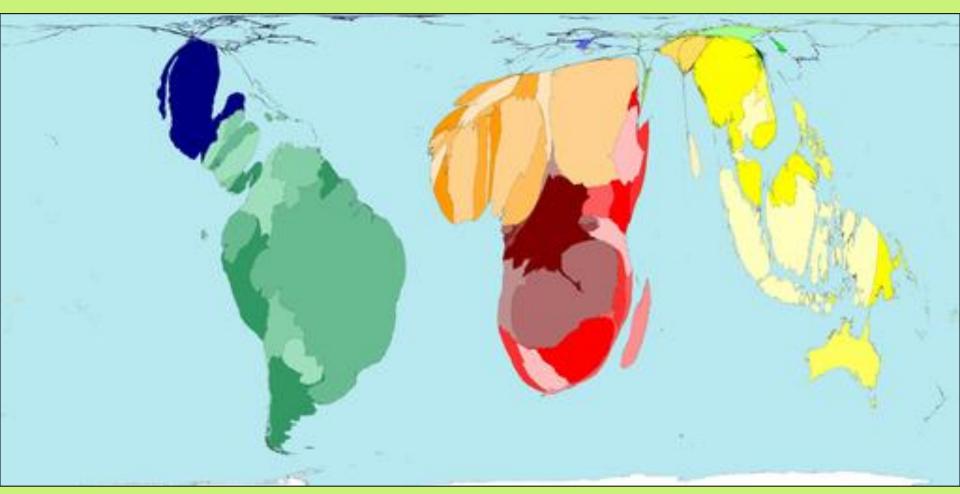


Biomass-loss on surface by deforestation (average 1998-2003 in g C/m2 and year)





Prof. Dr. Ottmar Edenhofer

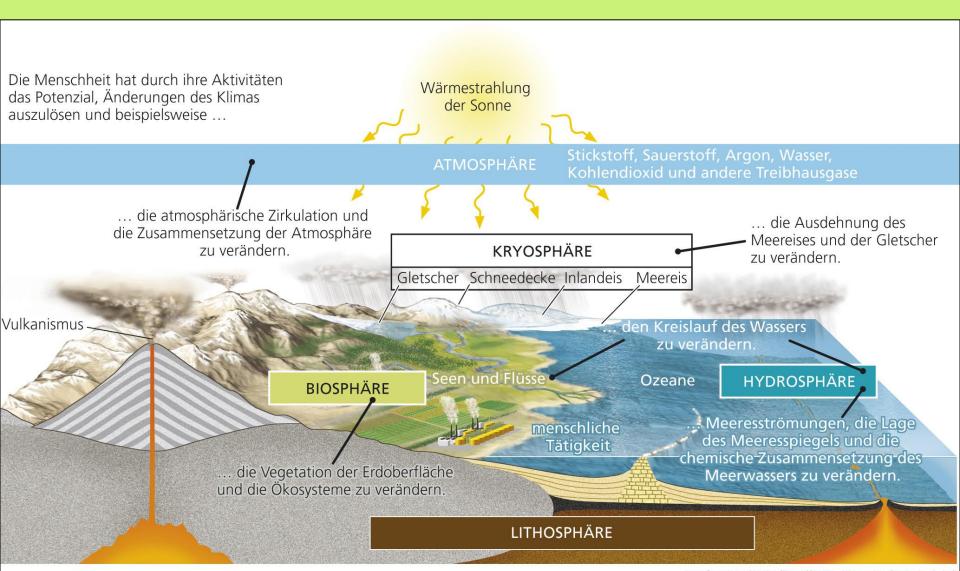


forest loss (worldmapper.org)

-> Environment is more than Climate & Energy

"Green matters" =

- -> Soil, Water, Air, Energy, Resources, Waste, Wastewater ...
- -> Pedo-, Hydro-, Atmo-, Biosphere and their interaction
- Contamination remediation prevention
- Wastematerial and -recycling economy
- Wastewater, Water supply
- Noise, Traffic
- Erosion, Mining, Brownfields
- ...
- Poisoning, allergies, psycosomatic problems, food ...
- ...
- Additional influences:
 demographic change, migration, structural change, megacities, rural exodus,
 shrinking and breathing processes ...



Aus: Grotzinger/Jordan/Press/Siever, Allgemeine Geologie, 5. Aufl.

© Spektrum Akademischer Verlag GmbH 2008





"problem-driven" history: Industrial pollution + high population-density

• Water: WHG -> 1957

• Air: BlmSchG -> 1974

• Soil: BBodSchG -> 1999

Information: UIG -> 1994

Waste Recycling: KrWAbfG -> 1996

Noise: (in BlmSchG) -> 2005

Environmental §§-framework in Germany



Main fields today:

- General Environment Protection
- Waste Economy
- Chemical products law
- Renewable Energy (Climate protection)
- Water protection
- Imission protection
- Nuclear technology security and radiation protection
- Nature protection and landscape care
- other ...

In total: 259 legal rules!!

- -> 165 ordinances
- -> 82 laws
- -> 7 directives
- -> 4 notifications
- -> 1 implementing regulation

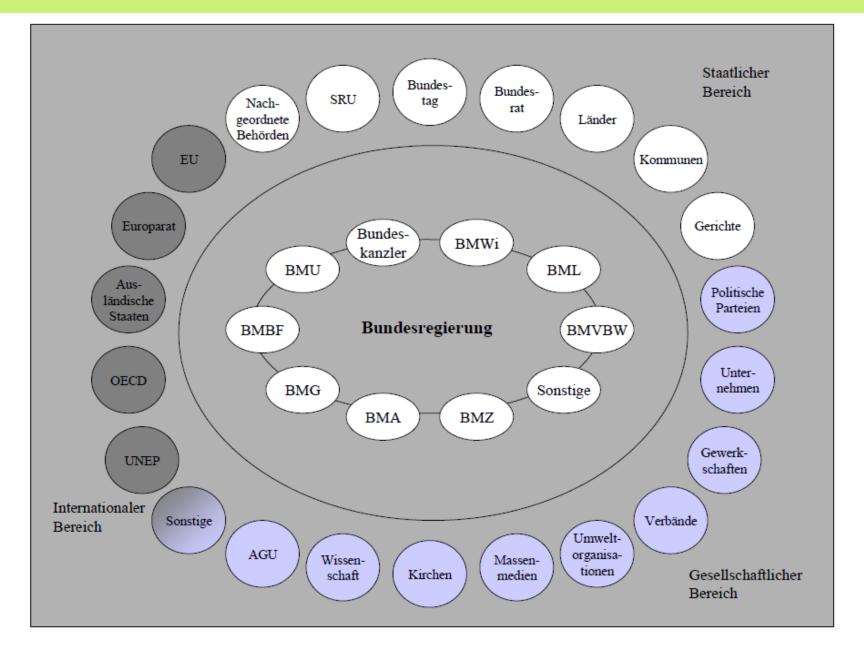


Abb. 3: Staatliche, gesellschaftliche und internationale Akteure der Umweltpolitik (in Anlehnung an: HARTKOPF, G./BOHNE, E. (1983), S. 131)

Environment policy EU





1st Action plan (1974-75)

- -> information, prevention, avoiding, preservation 2nd Action plan (1977-81)
- -> mechanism, continuity, life areas, inland water, oceans, noise, air pollution

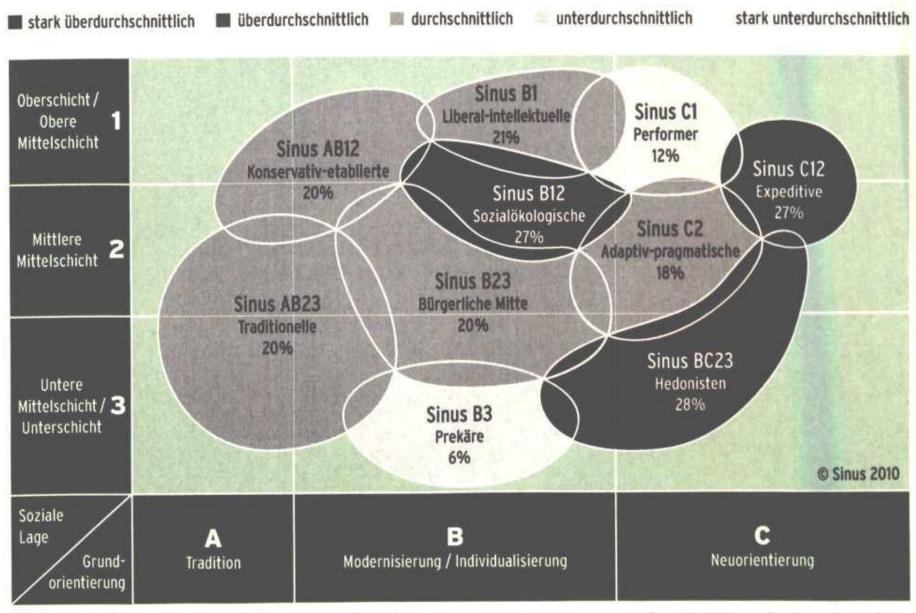
3rd Action plan (1982-86)

- -> natural ressources
- 4th Action plan (1987-1992)
- -> public eco-sensitivity, EU-norms and values 5th Action plan (1992-2000)
- -> sustainable development

6th Action plan (2002-2012)

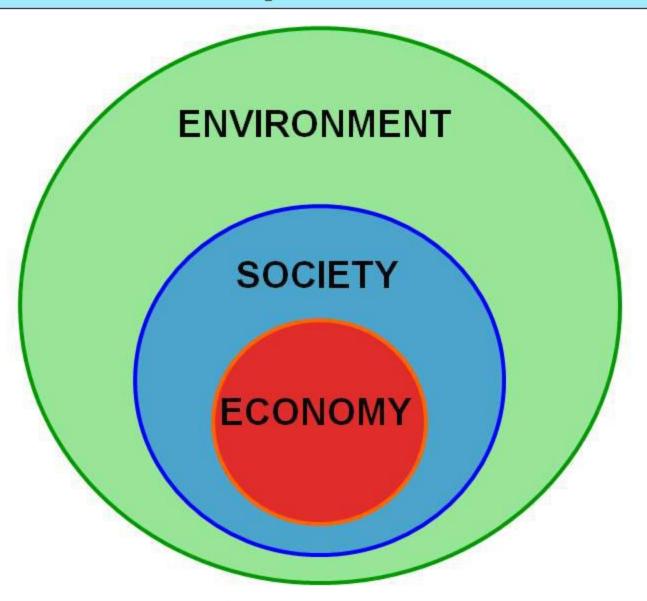
natural resources &waste, environment & health,
 nature & biodiversity, climate change & carbon emission

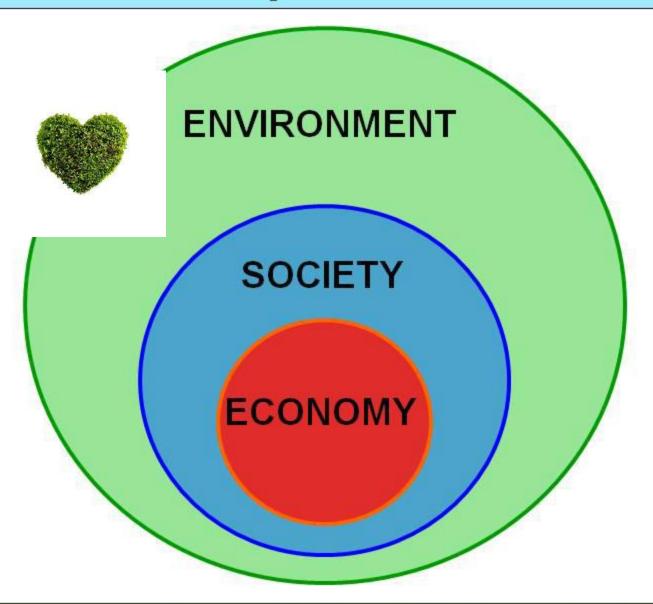
Abbildung 3: Priorität des Aufgabenfelds Umweltschutz (Bevölkerungsdurchschnitt: 20 %)

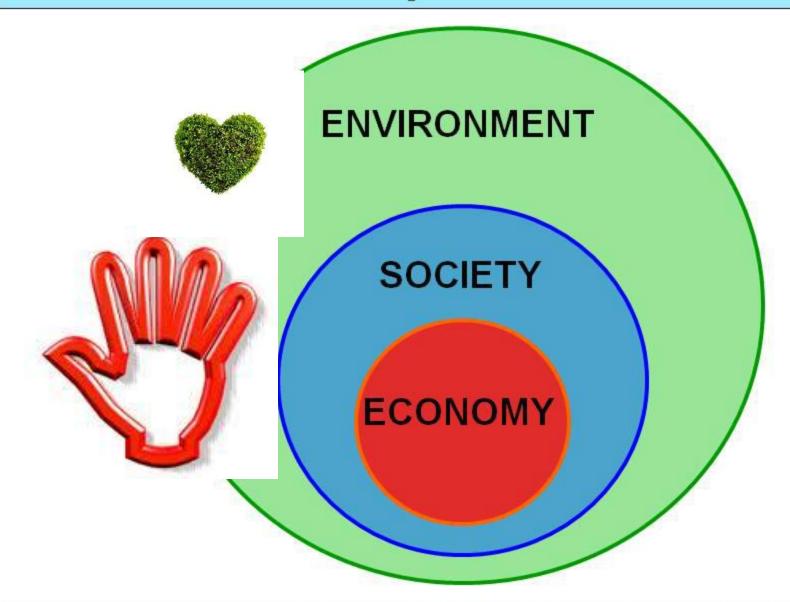


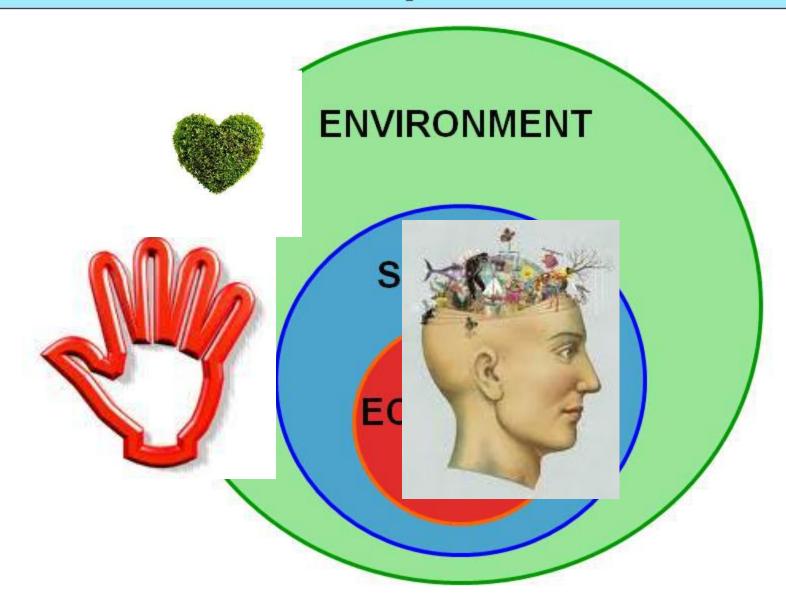
Frage: Was, glauben Sie, ist das wichtigste Problem, dem sich unser Land heute gegenübersieht? Umweltschutz (1. und 2. Nennung bei einer offenen Fragestellung)

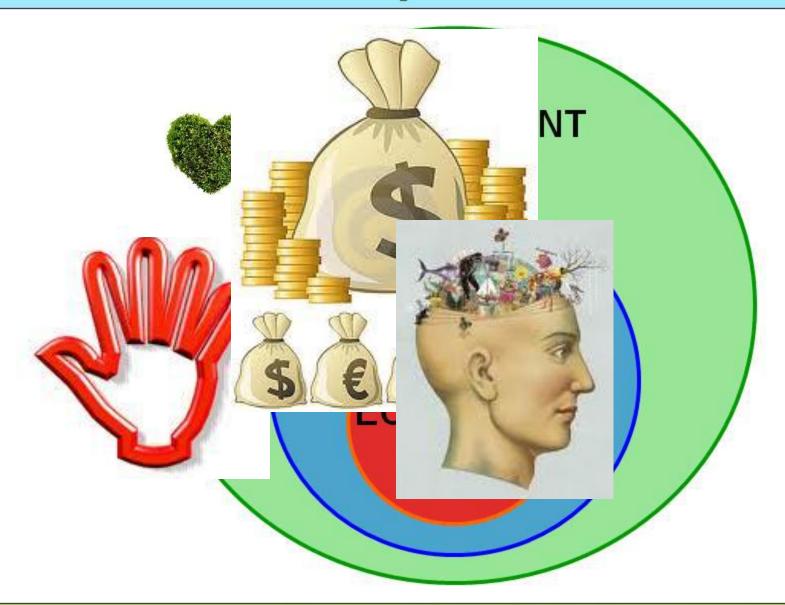
BMU: Umweltbewusstsein in Deutschland 2010













Inform about the basics:

What is environment and how does it work?

Why depends everything from everything?

Change the cognition:

Environment is not arround us→ we are part of it, cells of world's body

Change the cognition:

from environment protection to → Sustainability

Correct the image: :

- -> Environment policy is not the "bad guy" and not the enemy of Economy
 - -> .. it prevents's damages
- -> it saves money (e.g. public health costs)
 - -> it spends money (greentech market)

Correct the image: :

Main Message:

 -> Environment policy is a matter of course in every modern society: Future, Chance, positive Thinking

Environment protection and society in Germany: public awareness, topics and politics

.. we <u>all</u> are environment!?

Environmental Policy concerns

- Problem structure
- Stakeholder (authorities & target groups)
- Strategies
- Systemic action conditions (political-institutional & social-economical & cultural)
- Situative action conditions
- Solutions & Success
- Quality & Stability

Good Environmental Policy

- is future and solution oriented (positive image, positive thinking)
- prevention-policy instead of repairing-policy (prevention of damages, problems, costs)
- profits from know how transfer (international best practise) -> thousands of existing laws and regulations
- integrates all stakeholder (participitation)
- engages the people to share responsibility
- is transparent and well linked to media
- is also used for image promotion
- -... etc.

Some proposals for the programmatic and strategic political work

- 0. Party program with all their fundamental values
- 1. Profile-analysis of a specific political field (e.g. environment) PRESSURE DRIVER BENEFIT & CHANCES ??
- 2. Solutions, tasks WHAT, WHO, WHEN, (WHERE)
- 3. Diskussion and refining of 1. and 2. (working groups, interviews etc.)
- 4. Action plan
- 5. Sensibilisation, Information (public, media)
- 6. Networking (e.g. concerned regional administrations)



Thank you for listening!