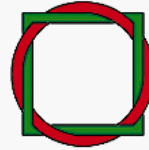


**Wissenschaftszentrum
Nordrhein-Westfalen**

Institut Arbeit
und Technik



Kulturwissenschaftliches
Institut

**Wuppertal Institut für
Klima, Umwelt, Energie
GmbH**



Regional strategies for energy innovation, climate protection and job creation

Dr. rer. pol. Dipl.-Ing.

Dirk Wolters

Rio de Janeiro, 9.11.2001

Wuppertal Institute: Organisational scheme

Prof. Dr. E. U. von Weizsäcker

Science Centre
North Rhine-Westphalia
Institute of Work
and Technology



Institute for Culture
Studies
**Wuppertal Institute for
Climate, Environment and
Energy**

Research
Co-ordination

President's
Office

President

**Administrative
Director**

SERVICES

Central
Secretariat

Communication and
Public Relations

Visualisation
Lab

Internet

Computer
services

Library

RESEARCH WORKING GROUPS

RESEARCH DIVISIONS

ADMINISTRATION

New Models of Wealth
Sustainable Livelihood.
Work and social relationship with nature.
Growth and Globalisation.

Eco-efficiency & Sustainable Enterprises
Sustainable management systems for product chains and sectors.
Knowledge transfer towards a sustainable economy.

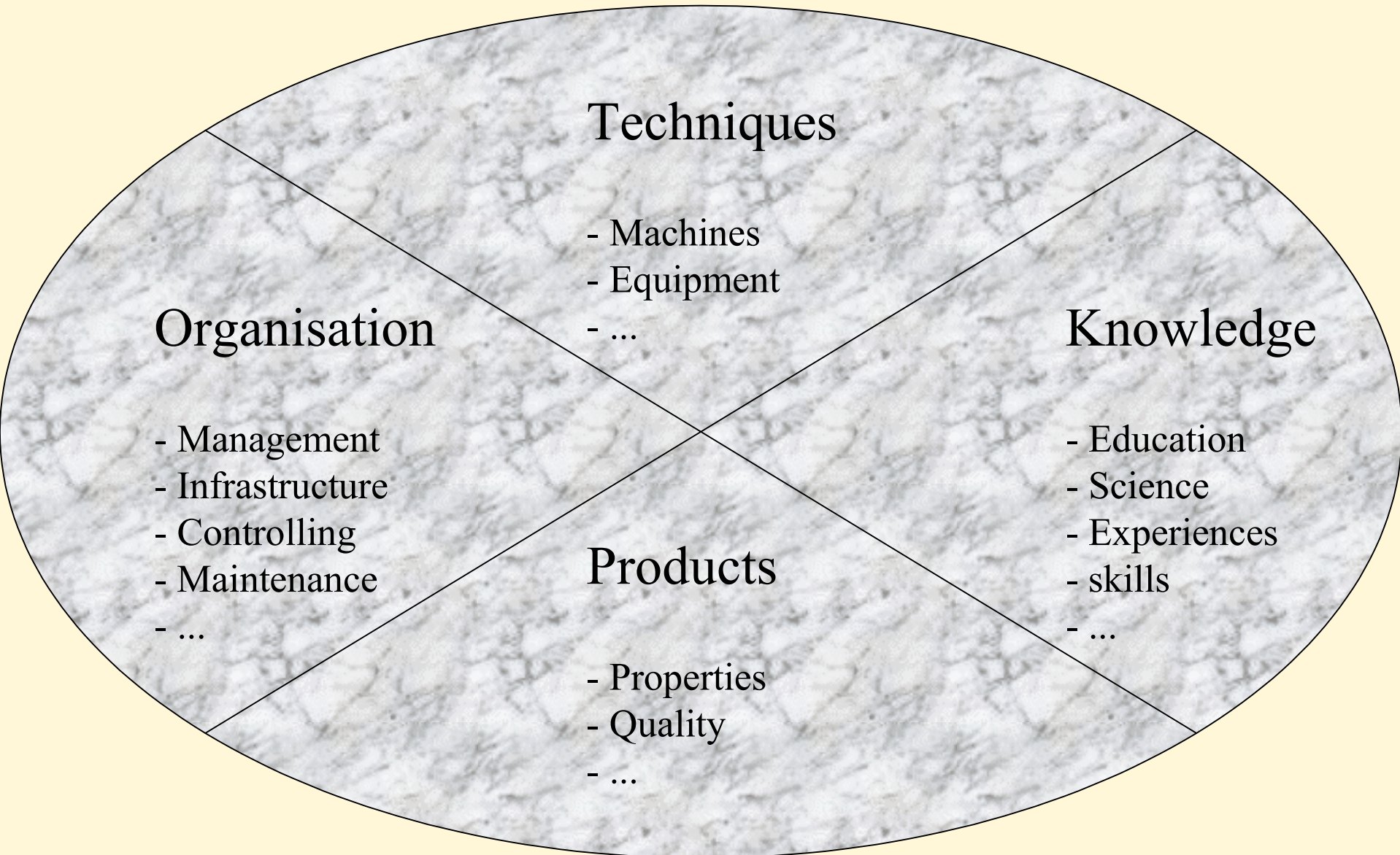
Systems Analysis and Simulation
Integrated modelling for sustainable development.

Climate Policy	Material Flows and Structural Change	Energy	Transport
Climate policy.	Environmental accounting and sustainability analyses.	Energy economics and policies.	Models and criteria for sustainable mobility.
Climate policy strategies for sustainable development.	Material flow analysis and resource management.	Energy in buildings. Municipal policies.	Vehicle and information technologies.
Instruments.	Globalisation and sustainability. Communication and education.	Scenarios and new energy sources. Energy efficiency in the private sector.	Transport development and policy instruments. International co-operation.

Financial Admin.
Project Admin.
Personnel Admin.
Technical Services



Components of technology





The 4 pillars of technological competence

Interaction and networking

Innovation
capability on
the business
level

Legal
framework

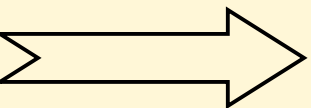
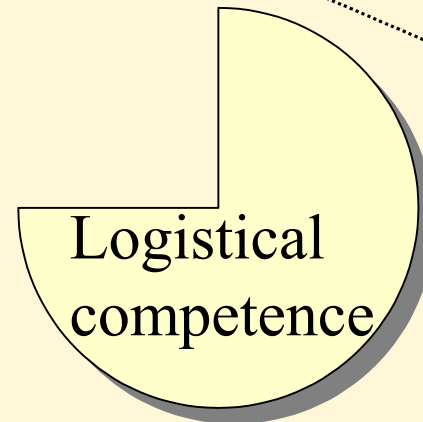
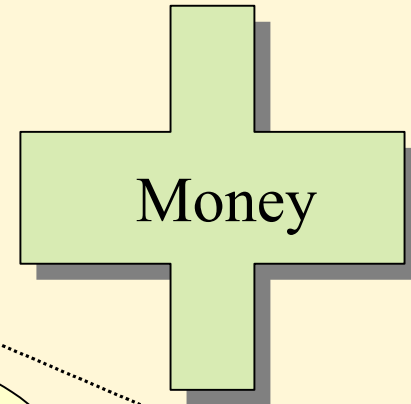
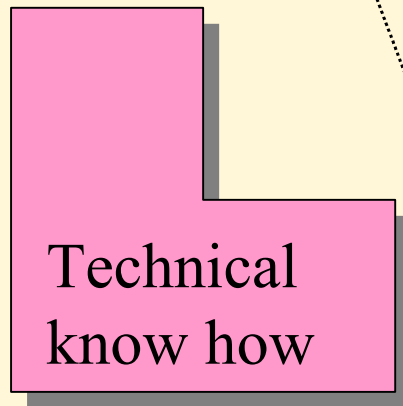
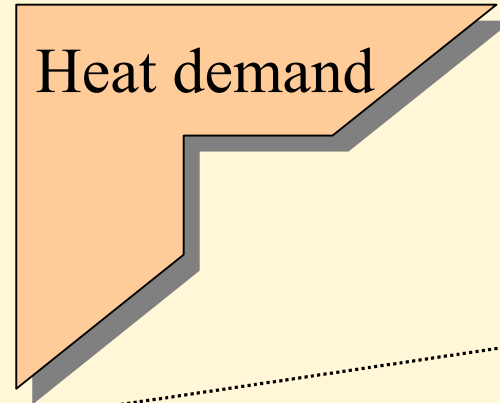
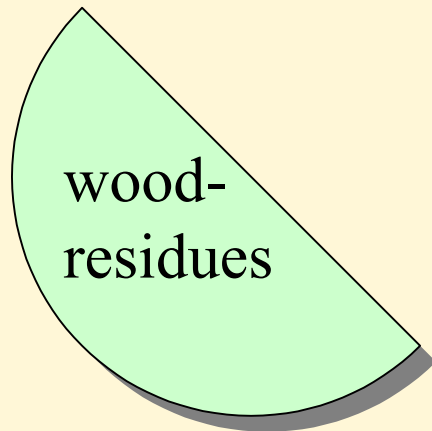
Educational
system

Technology
oriented
institutions

=> Promotion of systems!!!

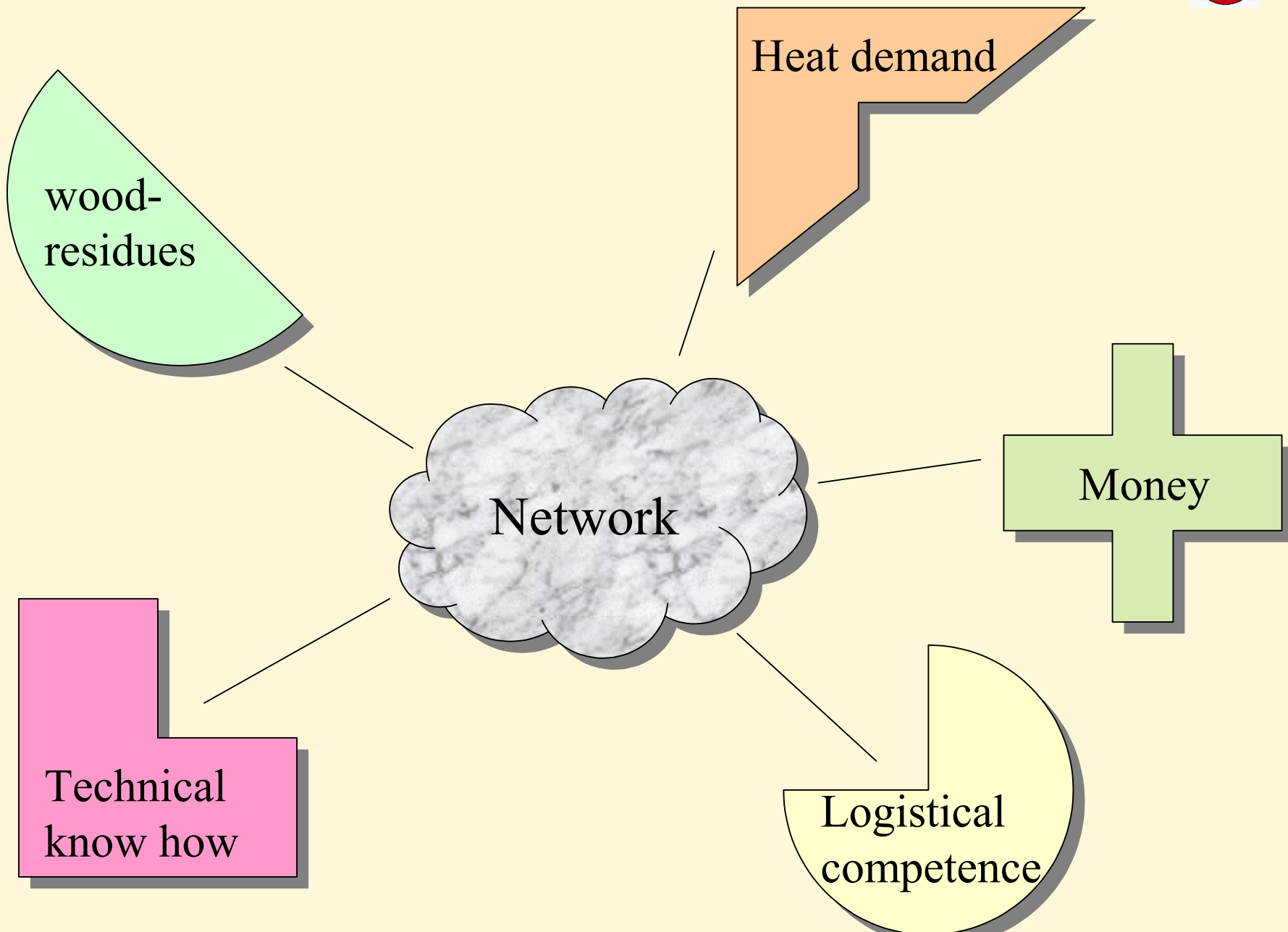


Common form of activities



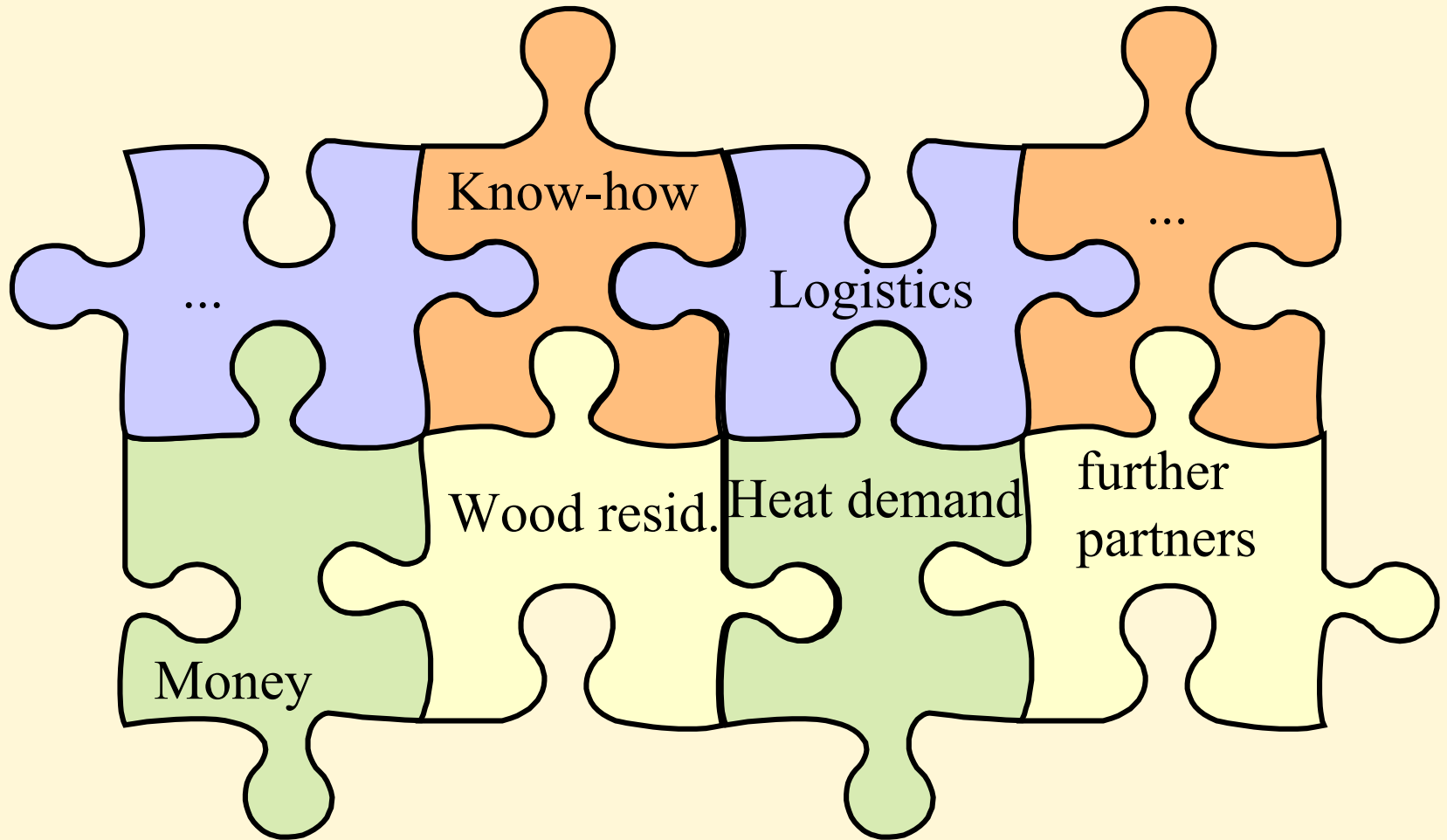
Nothing happens!

Co-ordinated form





New project constellation



=> Added value by using synergies



Energy agencies in Germany

Since 1987 more than 20 energy agencies are founded, during the last years more and more on a regional level.

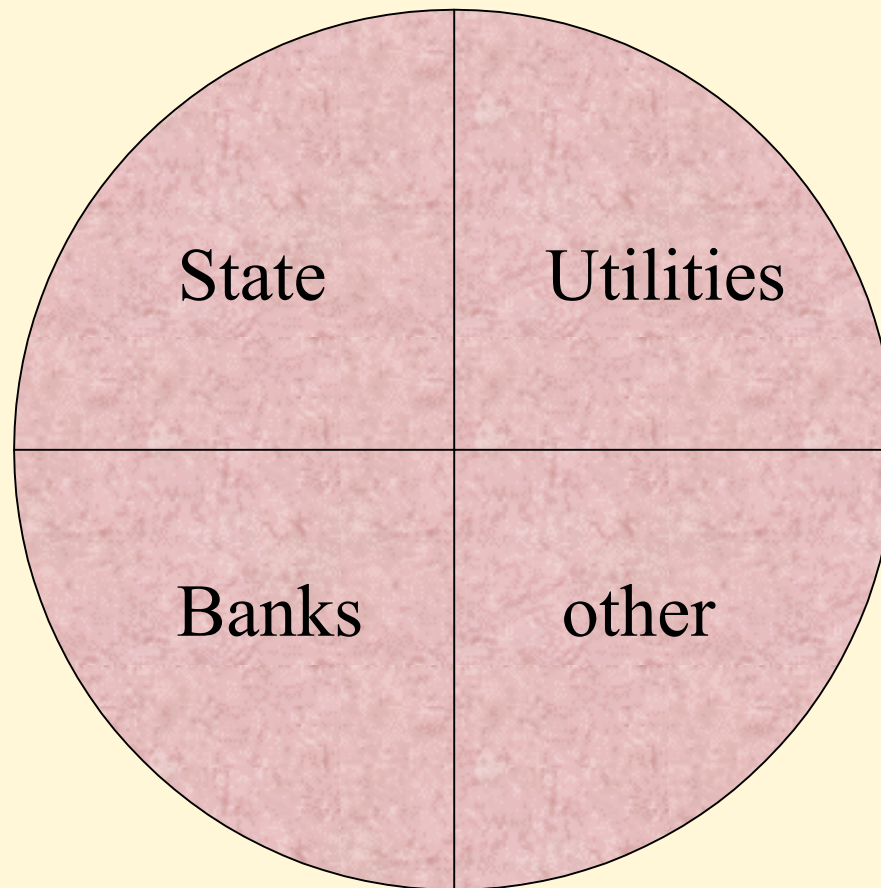
Alltogether appr. 250 jobs are created directly in the agencies.

We know two types of agencies:

- M&I agencies: motivation, information, mediation, networking, qualification, initial advising (mainly independent and cost free)
- C&G agencies: own planning, financing and operation of projects and plants with the purpose of profit

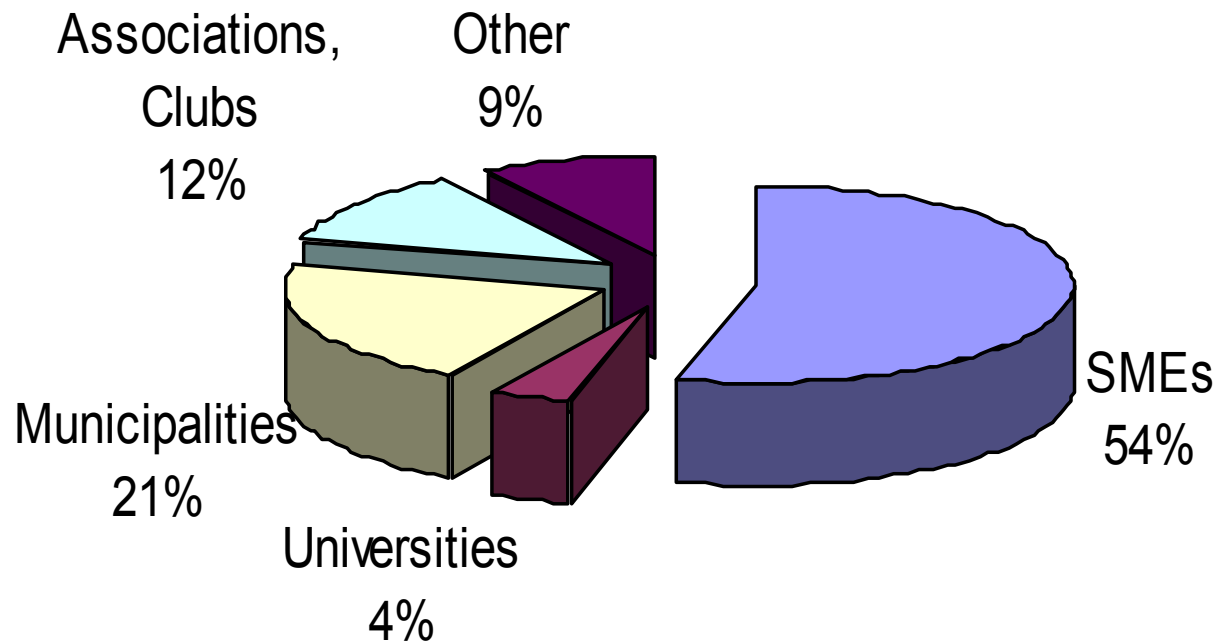


Owner of energy agencies





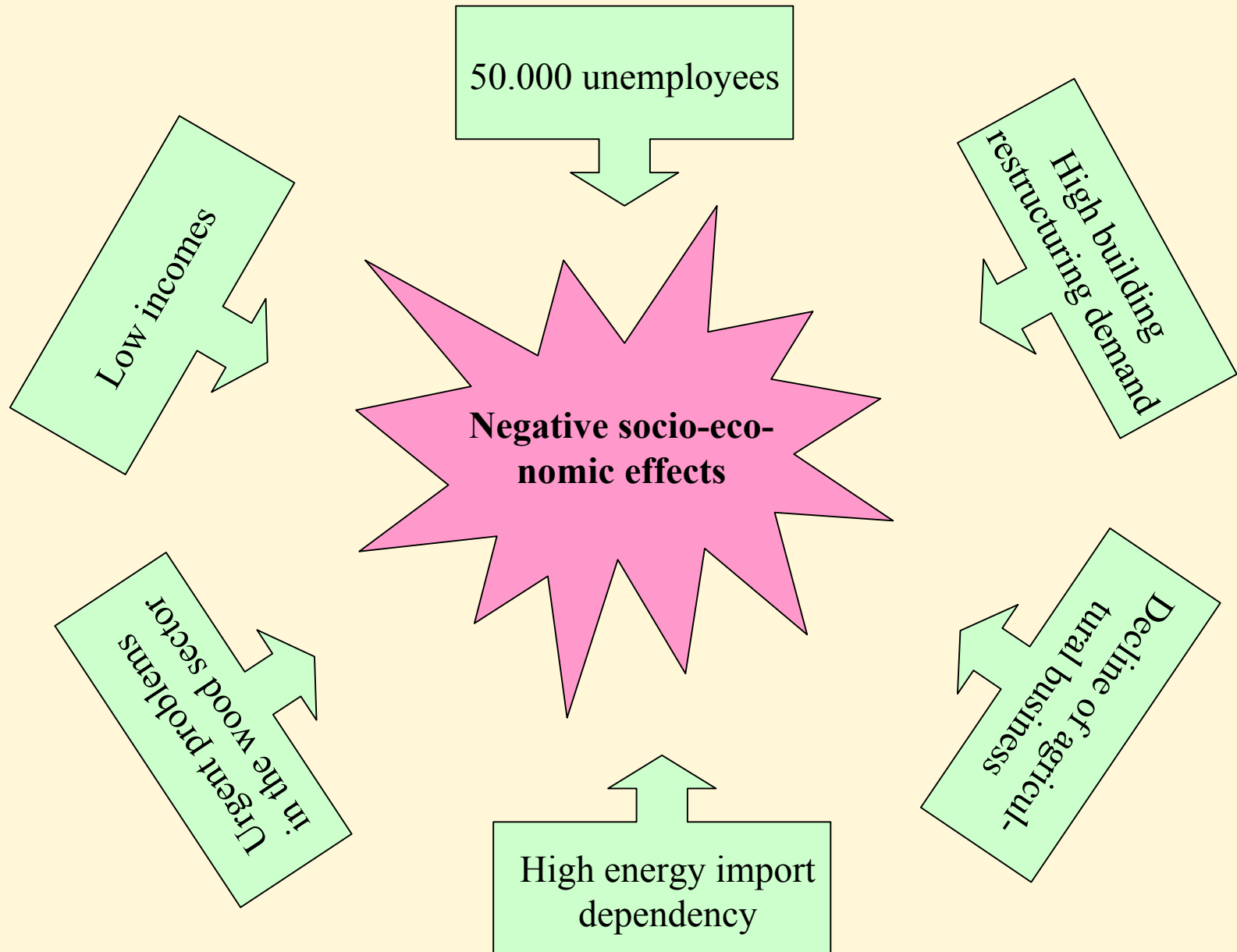
Reached target groups



Remark: in recent times more and more households



Socio-economic aspects of Mittelhessen



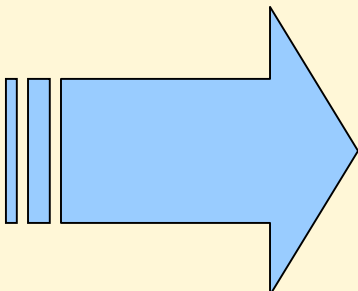
Ecological situation



Increasing consumption
of the environment



Higher emissions



Climate protection measures are necessary!



Some good conditions

Stakeholder have
high interest

Good institutional
basis

Linked to the
economic office

Innovative
enterprises

High energy
resources

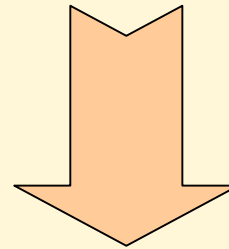
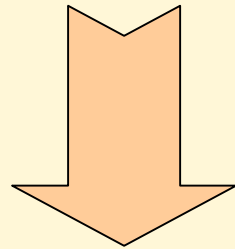


Approaches to solve some problems

**Cogeneration
and biomass**

**Efficiency of
buildings**

**New utility
business fields**



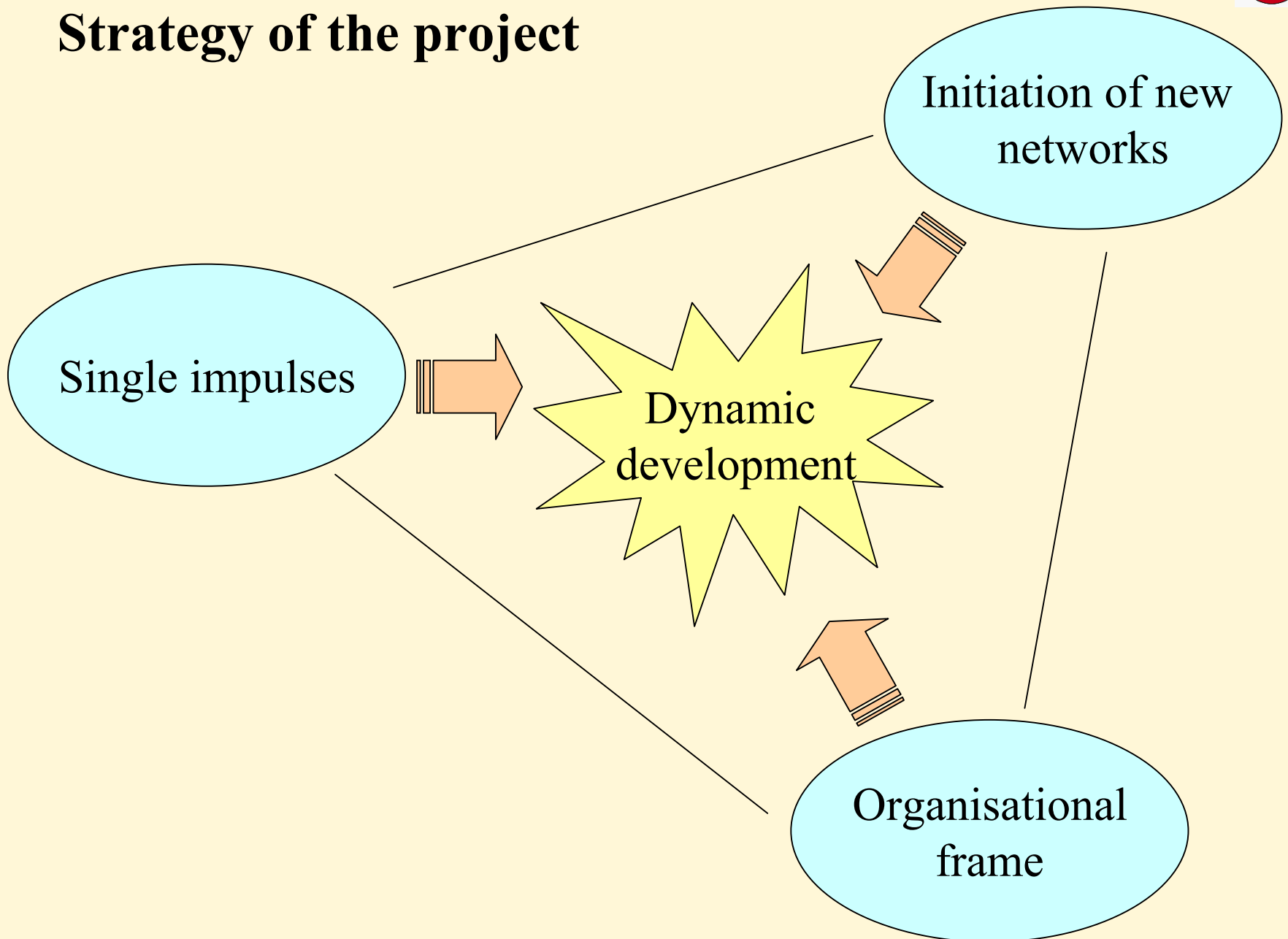
**Climate
protection**

Innovation

Job creation



Strategy of the project



Biomass/cogen activities




Description of techniques


Potential assessment

Showing reference-projects

 Preliminary analysis of possible projects

 Concrete drawing of business logistics

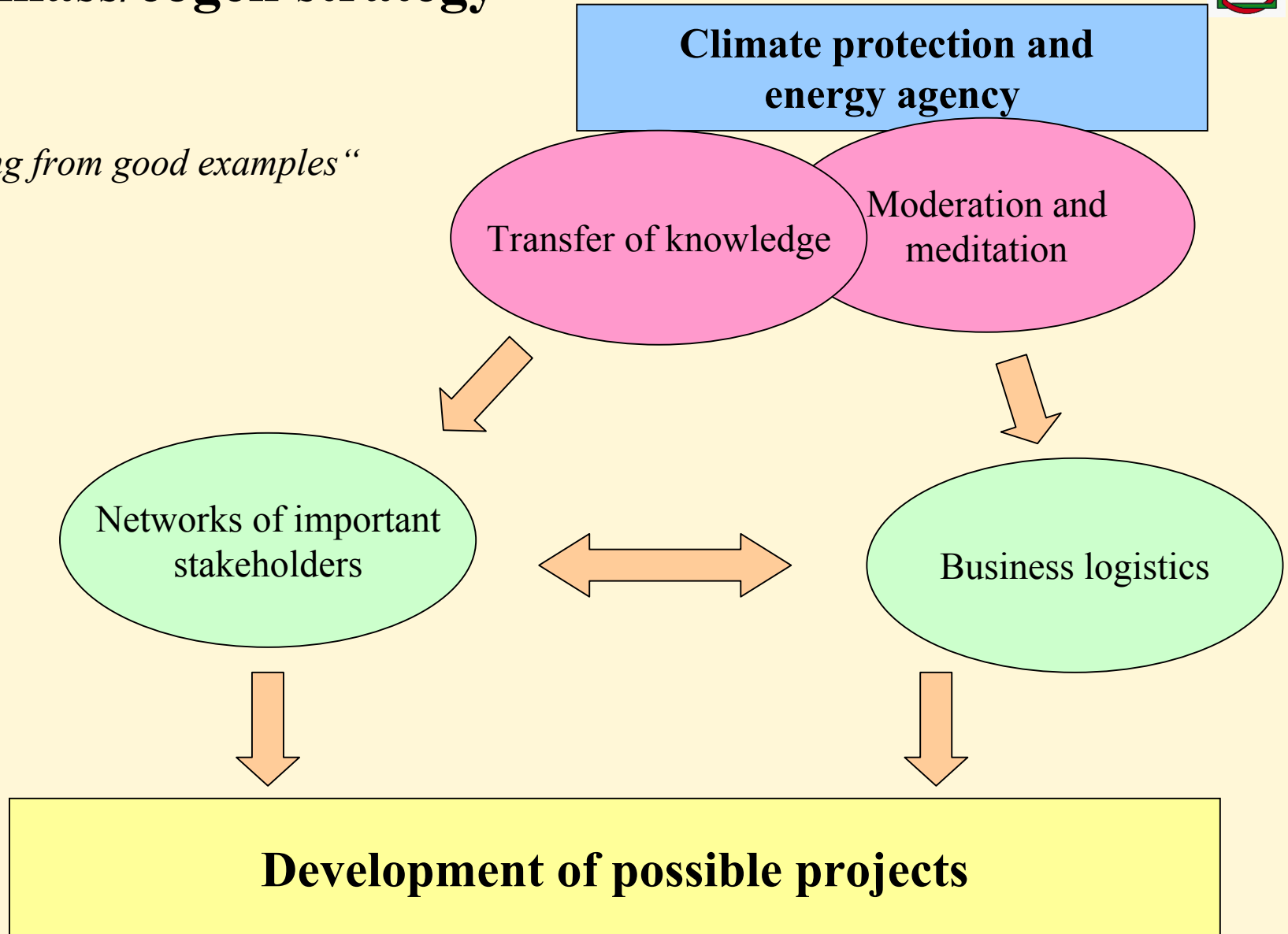
Regional cross sectoral approaches

 Handbook “From theory to practice“

Biomass/cogen strategy



„learning from good examples“





Responsibilities of the regional energy agency

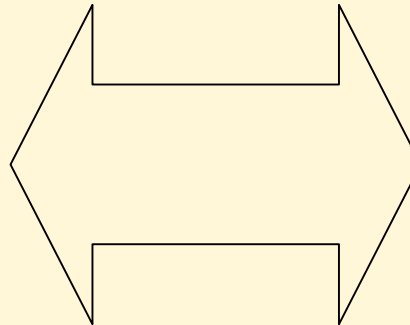
Contents and topics

Heat insulation for old-/new building

Energy conservation in SMEs

Renewable energies

Co- and Trigeneration



day-by-day job

Initial advice

Know how transfer

Co-ordination

Policy advising

Information transfer

Qualification



Measures of the regional government

Time frame

Long term

mid term (ca. 5-10 years)

Short term

Administration offices

Modification of econ.
support system

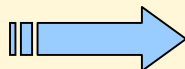
Intracting/Contracting

Climate protection and
energy agency

Support of:
expert groups
management networks
policy advice
...



Maintenance of continuity

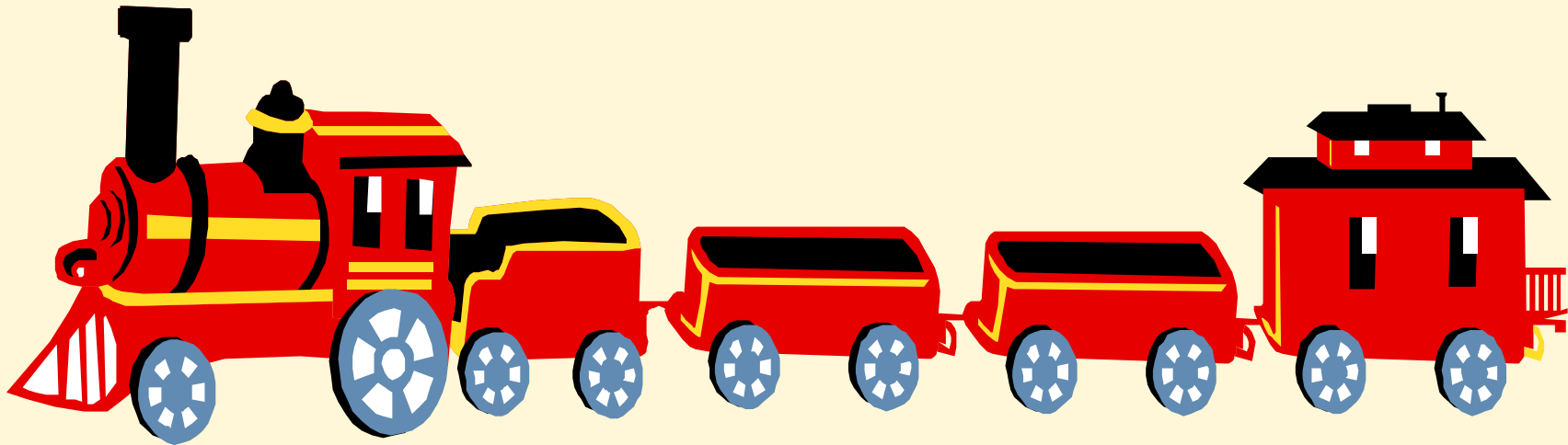


High success potential



Way out: understand problems as a chance

Regional government should (for restricted time) act as locomotive



Regional districts

Communities

Organisations

Single stakeholder

...

a.o.