

„Developing a CO₂-Management System for Public Authorities“

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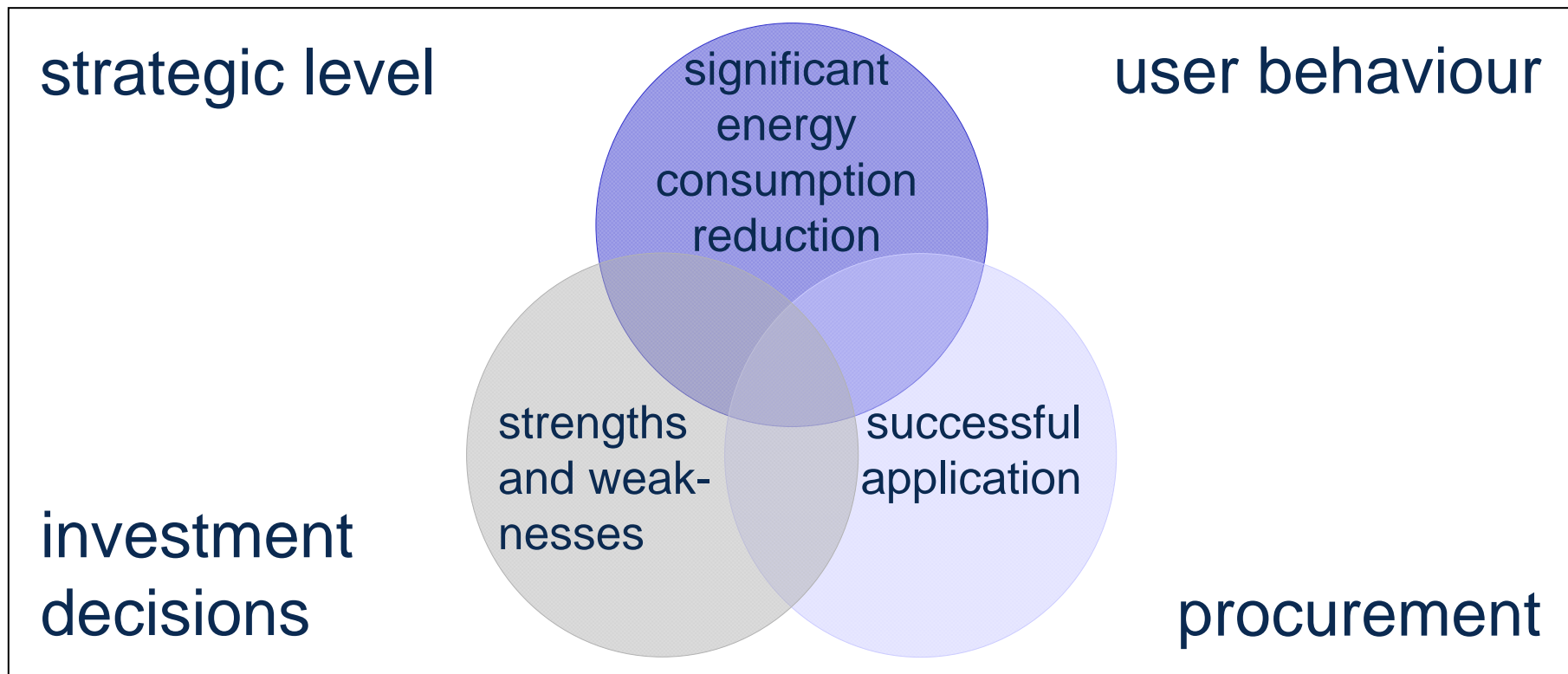
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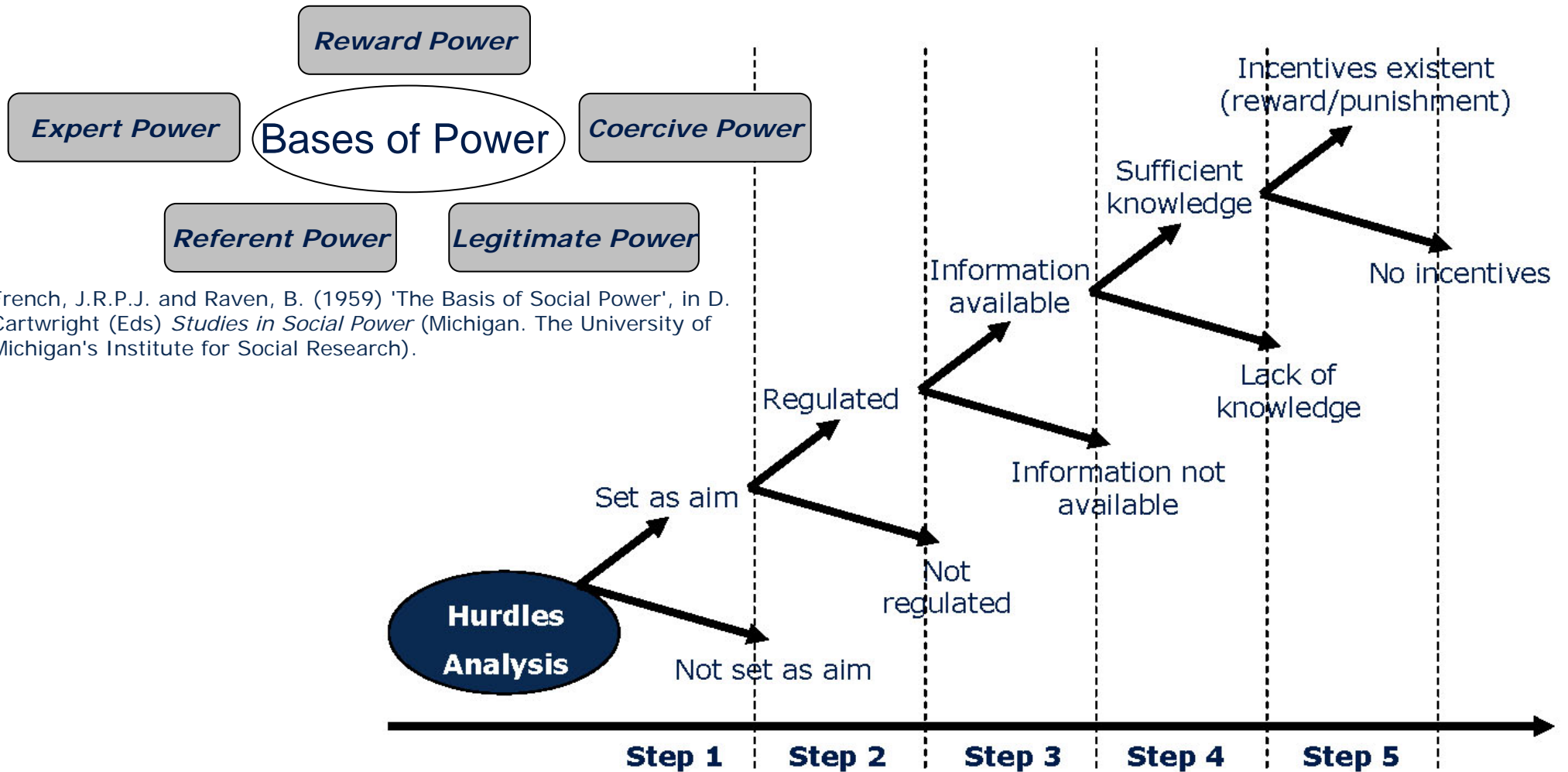
„Which steering instruments are appropriate for energy management and CO₂-management of public authorities?“



Literature Research focussing on:



„Which steering instruments are helpful to overcome hurdles in public authorities?“



French, J.R.P.J. and Raven, B. (1959) 'The Basis of Social Power', in D. Cartwright (Eds) *Studies in Social Power* (Michigan. The University of Michigan's Institute for Social Research).






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Strategic instruments	Instruments with focus on user behaviour	Instruments with focus on procurement	Instruments with focus on investment decisions
Mission statement, strategic objectives, key figures	Energy savings competition 	Procurement guidelines 	Energy guidelines
Contract management	Informational and educational offerings	Product databases	Consideration of environmental follow-up-cost
Budgeting	Certificate Trading	Life-Cycle Costing	Contracting 
Benchmarking	Bonus scheme	Exemplary tender documents	Life-Cycle Costing
Energy consumption controlling 	System of duties	Calculation tools	Intracting
European Energy Award	Bonus-Malus-System	Alliance of procurement	Conservation fond
Municipal energy management		System of duties	Informational and educational offerings
Cost accounting		Informational and educational offerings	Integral planning
Labelling/ Seal of quality			
Agreement on objectives			
Auditing			
Eco-Audit (Eco Management and Audi Scheme)			
Formation/ creation and description of (sustainable) products		Environmental Management and Accounting	slide 8 

Instrument/ adoption for energy saving issues:

- developed for specific reduction of energy consumption of municipalities
- conduce monitoring and minimizing of energy consumption

Strengths:

- it provides the basic information for an effective energy consumption management
- an excellent basis for Benchmarking or Energy-Reports

Weaknesses:

- a sub-optimal solution when different controlling-systems are used simultaneously (e.g. financial controlling, eco-controlling)
- developing an integrated controlling system is very difficult and requires high effort (time)

Example:

- city of Luneburg



Instrument:

- desired behaviour is rewarded with a bonus
- target groups are individuals, teams or whole organisations

Adoption for energy saving issues:

- achieved energy saving, energy saving ideas or energy saving projects are rewarded

Strengths:

- a high publicity effect
- the possibility of creating rankings
- target group and topic can change according to specific objectives of the initiators
- Good starting for new initiatives

Weaknesses:

- only a singular impulse
- Requires some effort of initiators: spreading the information, collecting data, analysing results and preparing the award ceremony is time consuming

Examples:

- schools in Emden, Dessau or Bologna



Instrument:

- contain all relevant regulations with regard to organisation, responsibilities, scheduling and further special features of procurement in general

Adoption for energy saving issues:

- could contain criteria for environmental protection and resource protection (e.g. definition of objectives for environmental procurement, determination of specific procedural methods)

Strengths:

- Beforehand defined regulations for environmentally friendly procurement, responsibilities and desired procedures

Weaknesses:

- criteria of environmental protection often already exist, but are not applied due to insufficient motivation and controlling and legal uncertainty

Examples:

- Federal Ministry of the Interior, Beschaffungsamt



Instrument:

- Contracting authorities carries over contracting-company at least financing, the planning (regularly), implementing and the mentoring of measures

Adoption for energy saving issues:

- Energy-saving contracting
- Energy-saving contracting: the contracting authority gets a contractually guaranteed minimum of economisations that are used for investments
- Energy-saving-contracting is recommendable up to € 100.000 energy costs per building

Strengths:

- The administration benefits from cost-saving because of external financing
- energy-savings are guaranteed
- the contracting-company is rich in know-how and they also get auxiliary service for example courses of instructions

Weaknesses:

- high efforts
- the establishment of a controlling system
- the long-term contracts (ten to twenty years)
- contracting is classified similar to a credit and the administration needs permission

Examples:

- city of Berlin



No aims:

hurdles exist, because energy saving is no aim of the public authority

No rules:

in the public authority doesn't (still) exist no regulation, departmental for energy saving measures

No information:

this hurdle relates to required data that are necessary for decision processes for example energy consumption of a machine.

No knowledge:

employees don't understand the relevance of energy saving projects of new implemented process or products or they don't know possibilities of energy saving

No incentive or sanction system:

employees have no motivation concerning energy saving measures; there are no incentives and also no sanctions

With these steering instruments can overcome following group of hurdles
mission statement, strategic objective and key figures; contract management , agreement on objectives, formation/ creation and description of (sustainable) products	no aim
mission statement, strategic objective and key figures; benchmarking, municipal energy management , labelling, formation/ creation and description of (sustainable) products, informational and educational offerings, product data bases , exemplary tender documents, calculation tools, alliance of procurement	no knowledge
benchmarking, energy consumption controlling, European Energy Award, municipal energy management , cost accounting, auditing, Eco-Audit by EMAS, municipal energy management, informational and educational offerings, product data bases, Life-cycle costing , exemplary tender documents, calculation tools, alliance of procurement, integral planning	no information
European Energy Award, municipal energy management , labelling, Eco-Audit by EMAS, procurement guidelines, energy guidelines, consideration of environmental follow-up-costs , intracting	no rules
contract management, budgeting, benchmarking, municipal energy management , cost accounting, labelling, agreement on objectives, auditing, energy savings competition, certificate trading , bonus scheme, system of duties, bonus-malus-system, , Life-cycle costing, consideration of environmental follow-up-costs, contracting , intracting, conservation fond, integral planning	no incentive and sanction system

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Identification of existent hurdles



choosing of the appropriate instrument(s) for
overcoming hurdles



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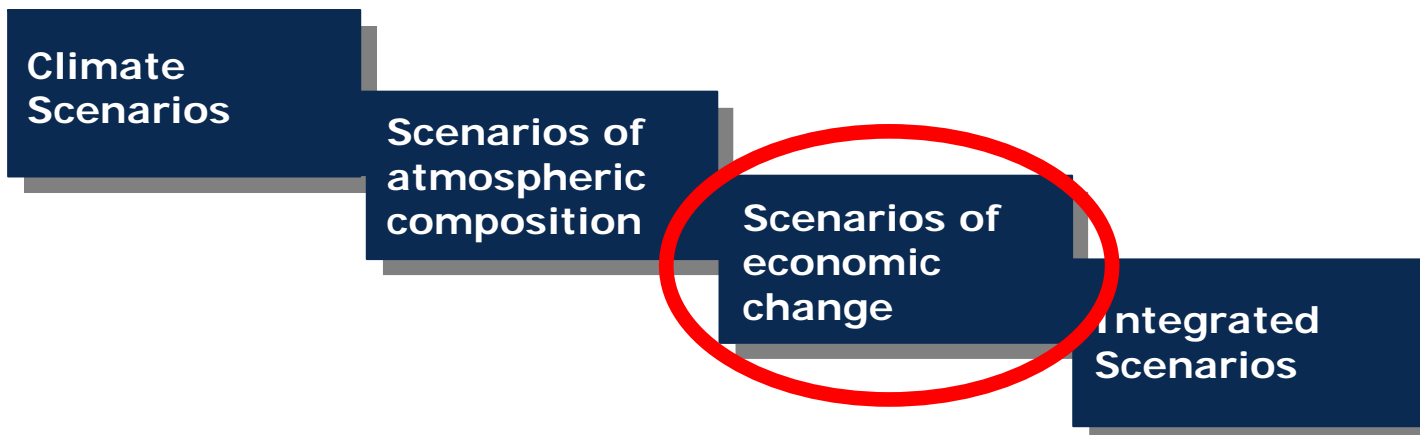
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**REG
KLAM**  Regionales
Klimaanpassungsprogramm
Modellregion Dresden

“Developing and testing of an integrated regional climate adaptation programme for the metropolitan area Dresden”



Thank you for your attention!

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