

How cities can foster local action in energy efficiency by utilizing middle actors – insights from a Swiss case study

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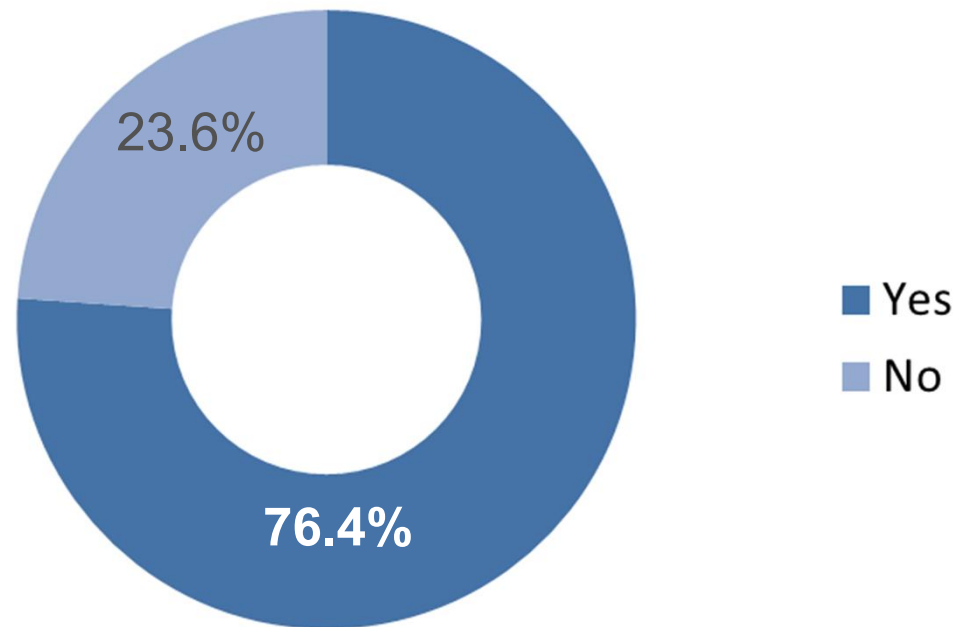
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Should the city of Zürich...

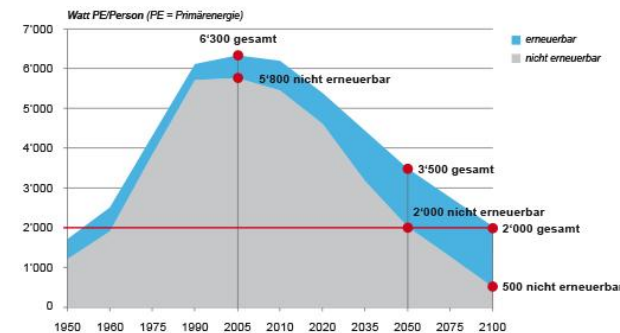
- ...reduce its per-capita energy demand to 2000 Watts?
- ...reduce its per-capita CO₂-emissions to one ton until 2050?
- ...subsidize renewables and energy efficiency?
- ...sell its stakes in nuclear power plants?



Public vote on November 30, 2008

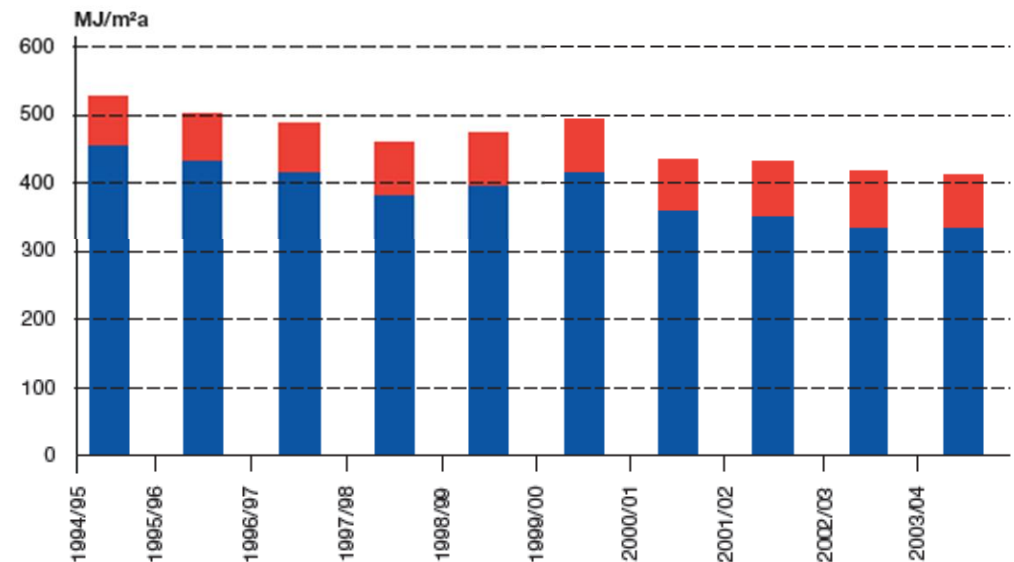
Many Swiss municipalities pursue an active energy policy

- Many of the (larger) Swiss cities have adopted a 2000W goal – either via a public vote or a parliamentary decision
- Cities have a key role in the new Swiss energy strategy 2050
 - i. As role models (e.g., energy-efficient public buildings) and
 - ii. by locally promoting energy efficiency and renewable energy use
- As of 2014, there are 361 municipalities with the EEA label (> 50% of Swiss population)

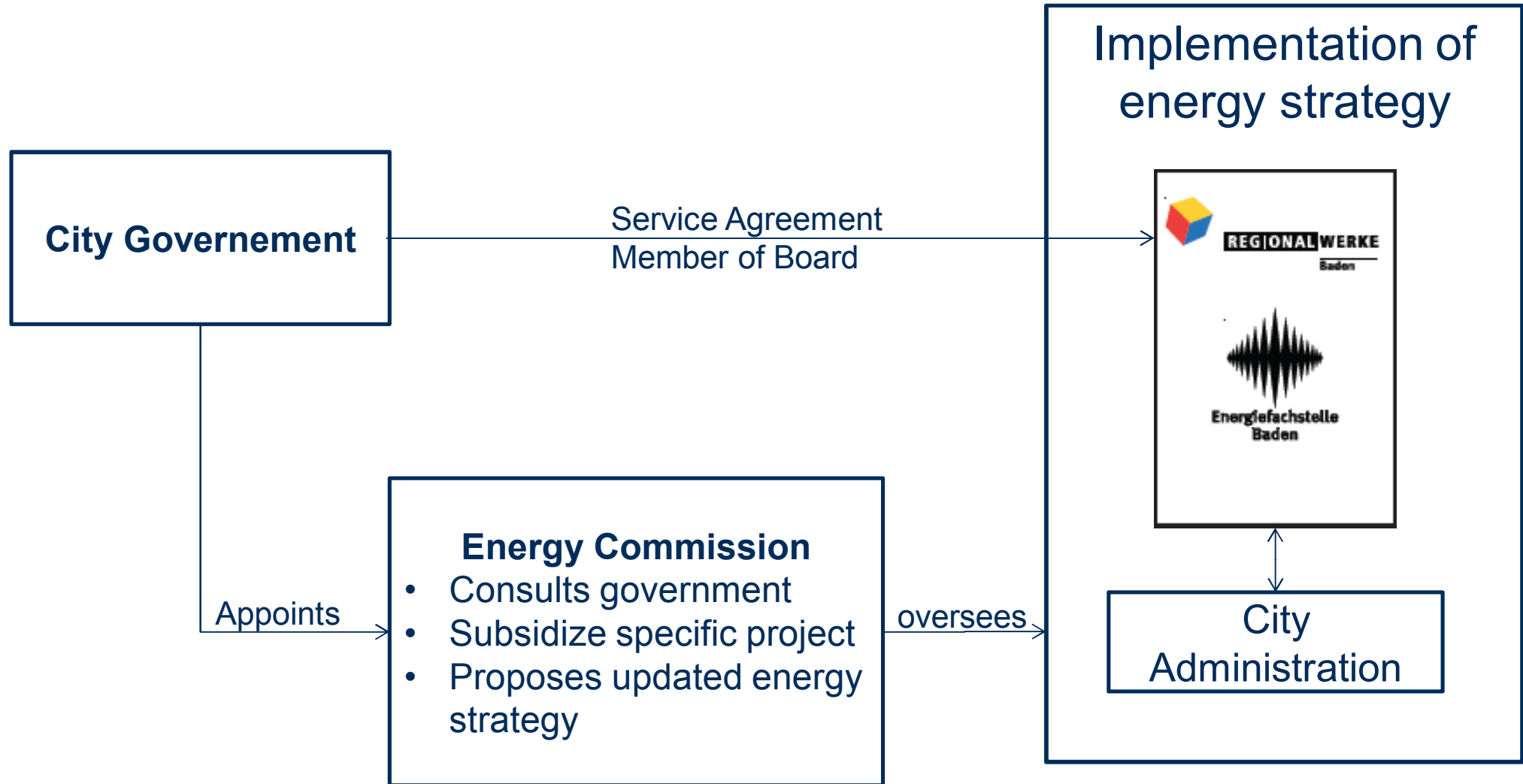


Baden – a small city with an active energy policy

- Population ~18'000
- Jobs ~30'000
- Budget ~170 Mio EUR
- Own utility with ~120 employees
- EEA Gold award since 2006
- First energy strategy: 1993



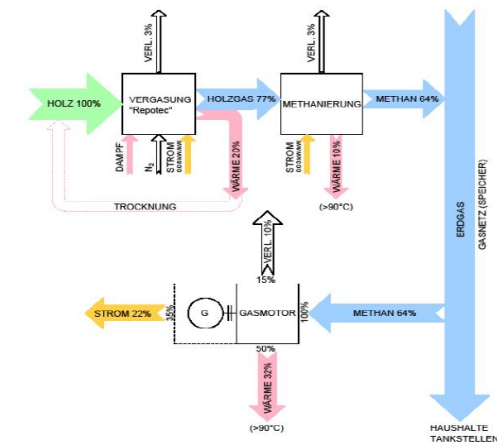
Overview of Badens' current energy strategy - processes



Overview of Badens' current energy strategy – goals 2006-16

- Quantitative goals
 - Heat from renewables +7.5 Mio KWh
 - Electricity from renewables +1.5 Mio KWh
 - Reduce energy demand of public buildings by 10%
- Qualitative goals (selection)
 - Activate residential consumers and businesses via information, subsidies, consulting, etc.
 - Being a role model
 - Being a leading city in energy issues in Switzerland
 - ...

Based on plans for an «Energy Hub» that was never realized



No quantitative goals
beyond the direct
influence of the city and
the utility

Original project Idea

- When it comes to energy policy, cities' maneuvering space is constrained, e.g. in
 - Building renovations
 - Electric appliances
 - Decentralized electricity production
 - Mobility
 - ...
 - These constraints are due to
 - A lack of legal competences
 - Cost considerations
 - Political support
 - Ideas/Know-how
 - Distance to citizens
 - ...
- The city administration alone cannot meet societal energy goals (such as 2000W)

Project design

- **Guiding Question:** « *What are the relevant local actors for supporting the implementation of communal energy goals and how can these actors be characterized?* »
- **Goal:** To provide Swiss cities with a systematic overview of potential middle actors for implementing communal energy policies

Phase	Procedure	Status
I) Identification of potential middle actors	Structured interviews with experts from academia and practice (N ~ 10)	Almost completed
II) Case study Baden	Workshop to identify key actors for Baden, interviews with these (N~7)	Workshop completed
III) Synthesis	«Handbook» for cities on how they can identify potential middle actors for the implementation of local energy policy goals (validation in a workshop with practitioners)	Due until September 2015

First impressions

- Many municipalities already involve and address intermediaries, yet not systematically
- Local actors are diverse and their roles vary depending on the local context
- Need for a functional characterization of actors, e.g. according to
 - Type of influence (information, implementation, ...)
 - Size of potential impact
 - Degree of organization (group of individuals Vs. organization)
 - Core activities and interests
 - Accessibility from the perspective of the administration
 - Impact area (mobility, heat, ...)
 - Potential motivations to be(come) active in energy

Preliminary result: Systematic overview of potential intermediaries for municipal energy policy

Category	Examples	Characteristics / Functions
Formal social groups	<i>Leisure groups (bird watchers, etc.), sports clubs, community groups, non-energy interest groups (consumer trust, cultural protection, etc.),</i>	<ul style="list-style-type: none"> • Close to energy consumers. • Passive in terms of potential/ interest to implement projects.
Registered groups/ NGOs	<i><u>Business associations</u> (incl. local cleantech clusters), <u>home owner associations</u>, local environmental NGOs, charities, <u>energy interest groups</u> (energy co-operatives, etc)</i>	<ul style="list-style-type: none"> • Active in implementing own projects • Potential interest in energy topics
Individuals and organisations as multipliers	<i><u>Large employers</u>, political parties, community leaders, hospitality industry, <u>media</u>, real estate managers, universities, day cares, public schools, <u>trusted persons</u></i>	<ul style="list-style-type: none"> • Transmit information (passively or actively) into network
Real estate owners	<i>Condominium owners, <u>housing real estate owners/investors</u>, <u>housing co-operatives</u></i>	<ul style="list-style-type: none"> • Close to energy consumers • Interest in topic is mainly driven by economic relevance.
Retailers and energy-related business	<i><u>Electricians</u>, installers, household appliance sellers, <u>construction firms</u>, <u>architects and planners</u>, <u>consultants</u></i>	<ul style="list-style-type: none"> • Close to energy consumers • Interest in topic is driven by economic relevance.
Non-political administrations	<i>Church associations, civil community</i>	<ul style="list-style-type: none"> • Often owner of real estate • Available resources • Potential for aligned interests
Non-energy public services	<i>Local departments (social services, employment bureau, etc.), <u>public utilities</u></i>	<ul style="list-style-type: none"> • Potential for aligned interests • Special case: utilities

Next step: Interview with selected actors in Baden

Actor	Key questions/issues
Large employer	<ul style="list-style-type: none">• <i>How do energy-related decision processes look like in an multinational company</i>
Church	<ul style="list-style-type: none">• <i>What role does energy play in your investment decisions?</i>
Artist association	<ul style="list-style-type: none">• <i>What are your links to the energy issue in general?</i>
Local newspaper	<ul style="list-style-type: none">• <i>How can we make energy-related actions or issues relevant to your readers?</i>
Homeowner association	<ul style="list-style-type: none">• <i>What are your motivations to inform and engage your members about/in energy efficiency?</i>
Schools	<ul style="list-style-type: none">• <i>How does your decision process look like concerning out-of-curriculum issues (energy, drug prevention, etc.)?</i>
Tenants' association	<ul style="list-style-type: none">• <i>What are your motivations to inform and engage your members about/in energy efficiency?</i>

Issues to be discussed

- Actor-centered approaches – a first step towards contextualized energy policies?
- Transferability to other national contexts – how would that look in your country?
- In what form may the results of such an analysis be most useful for municipal administrations?