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Energy Services for State Properties - German Experiences

In 2002 the pilot project *Contracting Campaign for State Properties* has been initiated, the realization is assigned to the German Energy Agency (dena). An evaluation of this Project was made by the Bremer Energy Institute in 2007. Until 31/12/2006, 48 state properties have been involved in contracting tenders and projects; most of them in energy performance contracting (EPC) projects. Due to the availability of data the evaluation and all following results and remarks refer to the EPC projects.

The evaluated dena projects reveal guaranteed energy cost savings of about 3 million €/a, which corresponds to an average reduction of 29.4 percent compared to the baseline energy costs. Linked to that are reductions of CO₂ emissions of 27.7 percent on average. In a reference case, the payback periods aggregate on average 4.9 years. Therefore all projects are to be evaluated economically. Comparing the discounted present values of contracting and internal procurement shows that contracting performs better by 38 percent on average.

A survey proves that information and experience are widely lacking, especially concerning state properties users. Referring to the respondents, contracting projects would not develop without dena taking the initiative. Dena has worked out the *Guideline for Energy Efficiency Contracting*, which offers a lot of useful information and support.

The self dependent support of contracting by the departments plays a key role in the success of this pilot project and has a clear announcement effect towards the state property users. At first the departments may realize this via improved acquisition of status quo data and modernization potentials in the state properties, which should ideally be linked with the publication of annual energy reports. The adoption of voluntary self-commitment is desirable, leading to a systematic search for modernization potentials in the state properties and in a row to more projects and additional chances for future contracting projects. The setup of one or more tender and expertise center as competent contact and service providers for the state property users and planning departments is recommended.

In order to counteract the information deficit, intensified institution and usage of multiplier structures are proposed, for which planning departments may be helpful. These multiplier structures should more and more assume responsibility for the development of new contracting projects. To reach the goal of an increasing number of contracting projects, a decoupling of project development from dena taking the initiative is essential.

One main reason for the lack of self-commitment of state property users is the absence of an economic incentive. Hence a budget responsibility for the energy costs is essential and will not lead only to a large self-interest in reduction of energy costs, but also in a search for high efficient technical designs and project realizations. Intensive scrutinies of contracting options will accrue from that development.