

Does learning reduce transaction costs in energy efficiency programmes?

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ABSTRACT

Transaction costs in public policies and programmes are the costs connected to acquiring information, implementation, monitoring and evaluation, controlling and enforcement. For instance, they are the costs of time to apply for a grant, or to conclude a contract with the administrator, they are incurred by different actors. Costs take the form of time, financial costs, and other causes, such as opportunity costs incurred by the market actors and connected to the given policy and programme (Ofei-Mensah and Bennett, 2013; Stavins, 1995).Transaction costs have a negative impact on the implementation and effectiveness of energy efficiency policies (Mundaca et al., 2013) and impede reaching the 2030 energy and climate targets. Transaction costs are of non-negligible levels, but at the same time remain rarely systematically tracked and evaluated. Transaction costs should decrease over time thanks to the effect of learning and the prevalence of initial, fixed costs (Coggan et al., 2010; Michaelowa and Jotzo, 2005). However, we find that the opposite may be true.

We examined the effect of time and learning on the structure and size of transaction costs by using a data set of two programmes in two programming periods (2007-2013 and 2014-2020) – Operational Programme Environment (OP E) and Operational Programme Enterprise and Innovation for Competitiveness (OP EIC). The research was conducted in three stages: desk research, a questionnaire survey among the programme recipients, and a combination of qualitative interviews and a discussion seminar.



We found that despite the continuity of the programmes, the burden of transaction costs in both cases increased significantly (Figure 1).



Effects from "learning-by-doing" in mature and continuous programmes are brought by streamlining of processes, provision of templates, and knowledge transfer. However, we have shown that these gains may be more than overrun by other factors, including changes in costs, information loss in the organizations, and constant changes of the programme's conditions, leading to an overall increase in transaction costs and their burden over time.

The age of the programmes also means that "low-hanging-fruit" projects have been "collected" in the previous periods of the programmes. Smaller and more complicated projects prevail, leading to higher burden of transaction costs in such projects. Differentiation of the administrative procedures in such cases can improve overall effectiveness (and attractiveness) of the programmes. Simplified procedures especially in the initial stages of the projects, and in tendering procedures can decrease the administrative burden significantly, combined with a properly set up control mechanism to maintain the overall quality of the energy efficiency scheme and materiality of energy savings.

Initial, preparatory stages of the programmes including thorough ex-ante evaluation of the policy highly improve the subsequent effectiveness and administrative intensity of the programme. Conversely, the late start of the second programming period has enhanced the instability of the programme, insecurity among applicants, and may have led to lower-quality projects. Therefore, not only continuity in the programmes, but especially coherence – creating a safe and stable environment are more important than the processes themselves.

Due to the character of the programmes, there is little room for intra-organisational learning of the participants. Furthermore, due to increasing turnover among recipients, there is little institutional memory and distribution of information. Therefore, the potential gains from long-running, revolving activities do not materialize in such a way that has been observed in other types of policy instruments (such as EU ETS).

Transaction costs remain an understudied phenomenon, especially the empirical evidence remains scarce. Systemic tracking of transaction costs can be a powerful tool to assess the effectiveness and efficiency of the energy efficiency programmes.

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