

Evaluating EU Cohesion Policy Funding for Energy Efficiency Investments in Public and Residential Buildings Across EU Member States

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Abstract

During the 2007-2013 programming period EU Cohesion Policy allocated approximately 3.4 billion EUR to support energy efficiency interventions in public and residential buildings through the European Regional Development Fund (ERDF) and the Cohesion Fund (CF). At that time, energy efficiency in buildings was a new area of EU Cohesion Policy investment and little to no relevant policy planning and evaluation experience existed among programming authorities. Consequently, ERDF and CF Operational Programmes generally lacked a clearly spelled out intervention design and had a monitoring system that was hardly suited for capturing and reporting the financial outlays for and achievements of the interventions. This posed challenges in terms of availability of data and comparability across programmes. The present paper discusses these challenges and presents the methodological approach used by the authors to partly overcome them in the ex-post evaluation of ERDF/CF investments during the 2007-2013 programming period. The research design combined an extensive review of 48 ERDF and CF Operational Programmes from 13 EU Member States based on desk-research and interviews, and in-depth case studies of six of these programmes. This was complemented by a stakeholder workshop with Managing Authorities, Implementing Bodies, the European Commission and external experts. The use of the in-depth case studies and the stakeholder workshop allowed the evaluation team to address some of the data limitations and actually draw robust and useful conclusions from their cross-programme review. The paper ends with an assessment of the advantages and drawbacks of the research design and provides specific recommendations to policy makers and evaluators for how to improve the monitoring and evaluation of energy efficiency interventions.

1. Introduction

1.1. Context and purpose of the ex-post cross-national evaluation

The EU's regional policy is the main investment policy to support growth, competitiveness and sustainable development in Europe. It is delivered through the European Structural and Investment (ESI) funds, which provide financial and technical support to European countries and regions through so-called Operational Programmes managed by designated Managing Authorities at national or regional level. These Operational Programmes set forth the strategic goals and investment priorities of a particular country or region for a seven-year period, define a range of interventions to be supported over that period in order to work towards these goals and priorities, and set targets to be achieved through the interventions. Two of the ESI funds, the European Regional Development Fund

(ERDF) and the Cohesion Fund (CF), among others also provide support to investments into the energy efficiency of public and residential buildings.

At the close of the programming period 2007-2013, the European Commission's Directorate-General for Regional and Urban Policy (DG REGIO) tasked the authors of this paper with an ex-post cross-national evaluation of the support provided by the ERDF and CF to energy efficiency investments in public and residential buildings¹ over the EU's 2007-2013 programming period (Ramboll Management Consulting and Institute for European Environmental Policy, 2015). In this period 215 ERDF and CF Operational Programmes in 25 EU Member States allocated an estimated EUR 3.4 billion to energy efficiency investments in public and residential buildings (approx. 2% of the total ERDF and CF budget). The amount allocated to these investments varied significantly across programmes, with a 20 percent of the programmes making up more than 80 percent of all funds allocated to energy efficiency investments in public and residential buildings.

Apart from this, **little was known** beforehand **about why national and regional Managing Authorities decided to support energy efficiency investments in public and residential buildings, how they supported these and what have been the achievements of the support so far.** The purpose of the ex-post evaluation was therefore to provide answers to these three questions and derive policy implications as to how the support provided through the ERDF and CF to energy efficiency investments could be improved in the future. For that, the evaluation was to review the extensive documentation produced by Managing Authorities and make a comparative analysis of the available data. The ex-post evaluation itself was conducted between December 2014 and October 2015, undertaken by the authors of this paper and other country and energy efficiency experts.

1.2. Benefits of a cross-national evaluation

The benefits of conducting a cross-national evaluation of support to energy efficiency investments in buildings are multiple. Such an evaluation **sheds some light on the differences** that exist **between countries and regions in their motivations and efforts to support energy efficiency investments in buildings and identify good-practices** of investment support that could be transposed to other countries and regions. Additionally, a comparison of funds invested and results achieved provides insights as to what type of interventions work best.

Making **a cross-national evaluation using the ERDF and CF has significant advantages over a mere comparison of different national programmes**, as the ERDF and CF are based on a common regulatory framework that sets forth guidelines and procedures that all EU countries and regions have to follow in order to receive EU funds. Part of these requirements of the regulatory framework are that a country or region has to conduct an ex-ante assessment of the area's strengths and weaknesses, argue for why government support ought to be provided for a particular type of intervention and describe how the intervention is designed, i.e. who is to be targeted. Furthermore they have to document by whom the intervention is to be delivered and what form it will take (e.g. grants, loans, trainings, etc.). Also, countries need to monitor and report on the achievements of the interventions using indicators with pre-set targets. In principle therefore, the ERDF and CF should provide valuable insights on how motivations and efforts of different EU regions and countries compare.

However, as it turned out there was a **significant variance across programmes in terms of data quality**, especially with regards to the quality of the programme documentation and the

¹ For the purpose of this evaluation residential buildings encompass multifamily apartment houses or individual houses which are primarily used for housing. They can be owner-occupied, from the private rental sector or social housing. Public buildings in turn are those used for public services and include - among others - schools, hospitals and administrative offices

monitoring and reporting practices of the Managing Authorities, in spite of the common regulatory framework. This created a series of **challenges in analysing the available data and in making it comparable across programmes**. To overcome these challenges the **authors chose a mixed-method evaluation design** that combined quantitative data comparisons across programmes with in-depth qualitative insights gained through interviews, case studies and a stakeholder workshop.

The present paper first elaborates on the challenges faced by the authors in conducting the ex-post evaluation of ERDF/CF investments during the 2007-2013 programming period. This is followed by a presentation of the evaluation design used to overcome these challenges. It then discusses the advantages and limitations of the chosen evaluation design in providing valuable insights from a cross-national comparison. The paper ends with specific recommendations to policy makers and evaluators for how to improve both the monitoring and evaluation of energy efficiency interventions.

2. Evaluation challenges

The main difficulty in conducting the evaluation is related to the lack of quality data. Despite the requirements stipulated by the regulatory framework of the ERDF and CF, a large number of Managing Authorities failed to provide an adequate assessment as to why they chose to provide public support to energy efficiency investments in buildings and why they chose a particular intervention design to do so. In addition, the monitoring system put in place by the European Commission and the Managing Authorities failed to capture fund allocations and achievements adequately.

Both the European Commission and the evaluation team were aware of these challenges from the outset. There was little to draw from available planning and reporting documentation and parts of the data could even be misleading if not handled with care. This appeared to reflect the fact that energy efficiency investments were a relatively new type of intervention with little to no institutional knowledge on how to design, monitor or report on them effectively. Further, energy efficiency investments in buildings were not high on the political agenda at the time Operational Programmes were designed for the 2007-2013 programming period.

Next to these data quality challenges, a cross-national comparison appeared to be a difficult exercise precisely due to the regional specificities that the evaluation was set to uncover and that influence the local market for heating and cooling. The different challenges are presented and discussed in turn.

2.1. The reasoning for supporting energy efficiency investments was largely implicit and hardly documented

Investments in the energy efficiency of buildings had already been supported by a small number of ERDF and CF programmes during the 2000-2006 programming period. However, it was only during the 2007-2013 programming period that a larger number of Operational Programmes started supporting them. Consequently there was a general lack of policy experience with this type of interventions among the Managing Authorities and Implementing Bodies, the latter of which often included ministries and agencies in charge of energy and environment matters.

This was reflected by the fact that in a significant number of cases the Operational Programmes did not provide an informed assessment of the potential benefits from energy efficiency investments and of the advantages and drawbacks of different types of possible interventions. Instead, they tended to point out broad benefits not specific to energy efficiency investments in buildings, such as reduced greenhouse emissions, meeting EU targets for increasing energy

efficiency by 20 percent by 2020 and strengthening regional competitiveness. Relatively few programmes provided more specific reasons such as reducing fuel poverty, reducing the costs of energy for public entities, promoting energy saving technology or underlining the exemplary role of the public sector in energy saving efforts. The same holds true for the assessment of why government support is needed in the first place. Only about a fifth of the programmes reviewed identified some kind of market failure that justified the need for government intervention.

2.2. The monitoring and evaluation systems were not designed to adequately capture the financial inputs and the achievements of the interventions

According to the regulatory framework of the ERDF and CF, Operational Programmes needed to assign allocations to one of 86 different expenditure categories called "priority themes" and report on these. As energy efficiency investments were a relatively new area of intervention, the corresponding allocations were lumped together with allocations to energy management and co-generation into the priority theme "energy efficiency, energy management and co-generation". This in turn meant that an Operational Programme's allocation to the priority theme on "energy efficiency, energy management and co-generation" covered the allocations to all three subcategories and did not make it possible to draw a direct conclusion as to the amount allocated specifically to energy efficiency investments in public and residential buildings.

At the other end of the delivery chain, the biggest challenge faced by the evaluation team was the lack of completeness of the data available on achievements and its weak comparability across programmes. This was the result of (i) underdeveloped monitoring and reporting practices in this area of the ERDF and CF expenditure and of (ii) delays in project implementation, which meant that for some Operational Programmes the data on achievements had not yet been reported at the time of the evaluation. The low priority given to energy efficiency investments and the lack of institutionalised knowledge of the actual benefits of energy efficiency investments in buildings and how to capture them made it difficult for Managing Authorities to build suitable indicators with realistic targets.

Further, as the European Commission did not provide particular guidelines on how to measure energy related improvements, the Managing Authorities themselves decided on the measuring and reporting practices to be used. This was exemplified in the reporting differences between some of the Polish and Greek programmes. In Poland reductions in the energy consumption of a building as a result of energy efficiency improvements were measured by comparing the actual levels of energy consumption before the improvements with those one year after the improvements. They thus incorporated effects such as the rebound effect, whereby the reduction in energy costs leads building users to increase their energy consumption, or seasonal effects, whereby a mild winter for example would lead to a particularly pronounced reduction of energy consumption. In Greece on the other hand the measurement was reportedly based on a calculation of the expected energy savings at the time of the investment, which would capture these effects. Such differences in measuring and reporting created systematic differences in the amount of energy savings reported across programmes.

2.3. The local specificities of the cooling/heating market made comparisons even more difficult

Even in the absence of the other challenges mentioned above, the quantitative comparison of achievements across programmes was made difficult by local factors that influence how much can be

achieved by a particular intervention. Some factors were described by a small number of countries and regions in their Operational Programmes, such as the energy consumption of the housing stock, the energy source used for heating or the ownership structure of buildings. Others, such as the climate of a region can be easily obtained from other sources. Finally, some local factors, such as the willingness of private households to take up loans, the existence of a well-developed market for energy efficiency services or national regulations making investments into the energy efficiency of a building more or less attractive will also influence the take up and cost-effectiveness of ERDF and CF support.

2.4. The programmes were changed substantially during the programming period in response to the economic crisis

Two years into the programming period, in May 2009, the EU regulation governing the eligibility for funding under the Cohesion Policy was changed in response to the financial and economic crisis that was hitting Europe. The key changes were to widen the scope of buildings eligible for funding for certain regions in the EU and to increase the total amount that Operational Programmes could allocate to energy efficiency investments in public and residential buildings. The result was a large increase in allocations in some programmes. Other programmes only started supporting public and/or residential buildings from this point onward. Alongside high demand for energy efficiency investment and re-allocation of funds from other, less popular priorities, it resulted in an increase of 45% of the funds allocation to energy efficiency investments in public and residential buildings. However, these changes were not necessarily reflected in the strategies and programmes.

Furthermore, the motivation for these changes did not necessarily relate to the economic, social and environmental benefits of energy efficiency investments. Instead, the increased allocations were reportedly seen by some Managing Authorities as a way to channel funds into activities likely to help boost their ailing economies. Further, as the private sector was reluctant to take up loans in the midst of the recession, the default type of intervention used for the newly introduced measures to support energy efficiency investments were non-repayable grants. This inevitably meant that the link between the intervention on the one hand and its rationale on the other hand was more difficult to discern.

3. Evaluation Design

The evaluation challenges listed in the previous section called for an evaluation design that made it possible to extract the most relevant information from the programme documents (Operational Programme and Annual Implementation Reports), as well as complement and triangulate the incomplete information contained in these. At the same time, the evaluation design needed to allow for enough flexibility to capture the differences in local context across programmes. It also required balancing the need for in-depth analysis of each programme, and resource limitations.

The evaluation design took a simple analytical framework as a starting point, making it possible to capture the variety of approaches found across Operational Programmes. It further combined several data collection phases that went from a broad-based review of national policy and funding, over more comprehensive reviews of a sample of programmes, to a small number of in-depth case studies. These were complemented by a stakeholder workshop. These four data collection phases allowed for triangulation and validation of findings from different data sources and methods.

3.1. Analytical framework

In acknowledgement of the challenges described above, the evaluation design differed from the standard evaluation approach recommended by the Better Regulation Guidelines on evaluation and fitness check (European Commission, 2015). No logic model was developed to describe the intervention from inputs to impacts and guide the evaluation. This would have required that such intervention logic had existed from the outset, with preliminary information suggesting otherwise. Instead, the authors took an inductive approach and used a fairly simple analytical framework built around three main components: (i) the rationales for interventions, (ii) the types of interventions and (iii) their achievements. This is highlighted in the logic model of Figure 1 below.

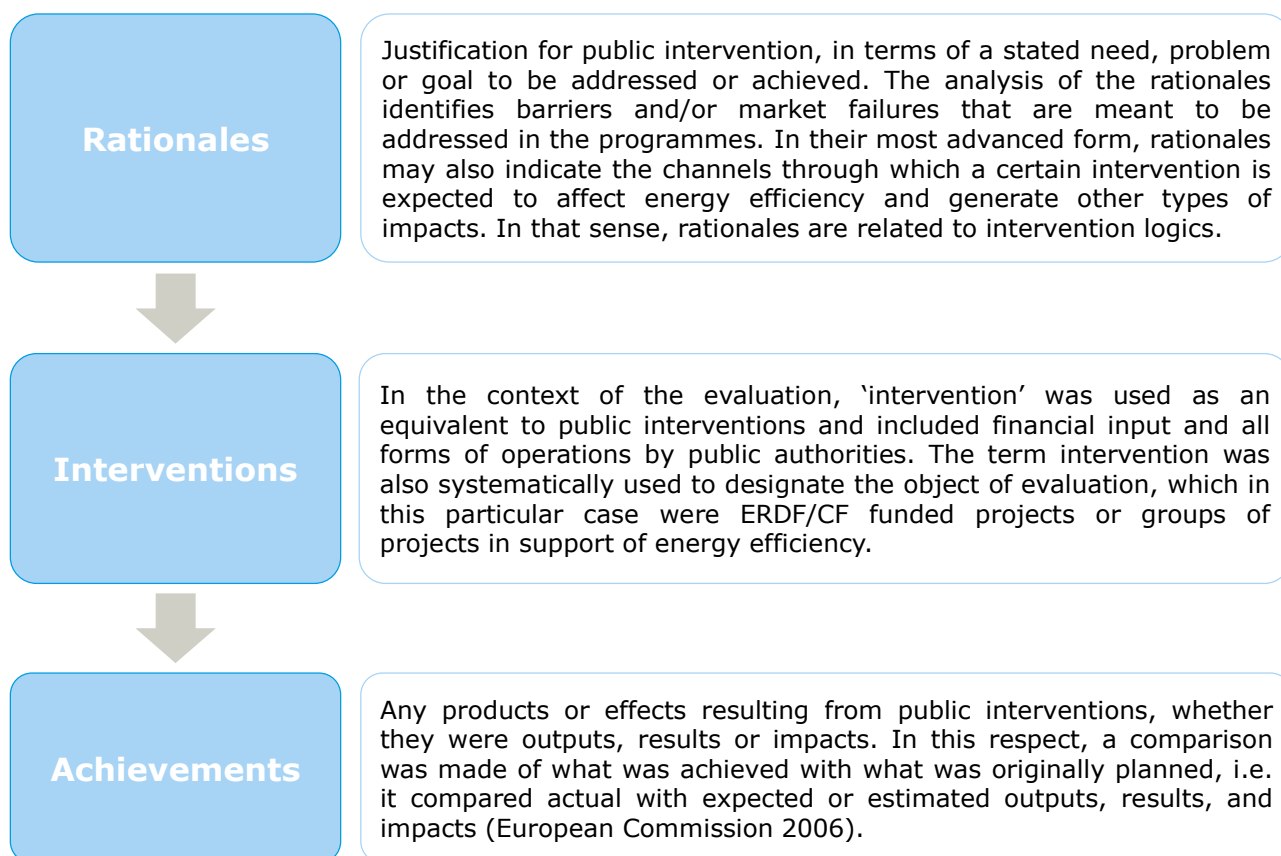


Figure 1. Generic logic model

By keeping the model broad enough, it allowed for flexibility to capture a variety of implicit intervention logics by the Managing Authorities of the Operational Programmes.

3.2. Data collection and analysis

The necessary information on the rationales, interventions and achievements of support to energy efficiency in buildings by Operational Programmes was gathered and analysed in four successive phases.

Phase 1. The first phase generated contextual information and hypotheses on the rationale for, types of interventions, and possible achievements of investments in energy efficiency in buildings. It involved a review of the literature, an analysis of national financing mechanisms for energy efficiency in public and residential buildings in the 27 Member States, and a report on the data available on these investments from Operational Programmes and Annual Implementation Reports of all 215 operational programmes financed by the ERDF and CF.

Phase 2. The second phase analysed a sample of 48 Operational Programmes. These were selected for their high financial allocations to the priority theme “Energy efficiency, co-generation, energy management”. Each of these programmes allocated more than EUR 20 million in 2012 to the priority theme. Together these Operational Programmes made up more than four fifths of the total allocations to this priority theme. The phase involved a systematic review of the Operational Programmes and Annual Implementation Reports by national experts, focused on the rationales and intervention design as outlined in the Operational Programmes and the achievements reported in the Annual Implementation Reports. This was followed by interviews with Managing Authorities and Implementing Bodies in order to clarify unclear aspects and fill remaining gaps.

Phase 3. The third phase analysed six Operational Programmes in depth through case studies, selected for their relatively high allocations to this theme, high project selection rates (i.e. allocation of funds to specific projects) and other particular aspects of interest identified in the previous phases. The selected cases were the Polish Infrastructure and Environment programme, the UK’s London programme, Greece’s Competitiveness and Entrepreneurship programme, Hungary’s Environment and Energy programme, Lithuania’s Promotion of Cohesion programme, and the Slovenia/Italy cross-border programme. Sources of information included monitoring data, literature and programme documentation, as well as structured interviews with various stakeholders.

Phase 4. The fourth and final phase of the evaluation included a stakeholder workshop in Brussels with representatives from the Managing Authorities, Implementing Bodies, experts in energy efficiency policy and investments, members of the European Commission and the evaluation team. During the workshop the evaluation team presented and discussed its preliminary findings with the audience. The intention of the workshop was to allow the evaluation team to test and refine the preliminary findings from the previous three phases.

4. Discussion of the evaluation design

The evaluation design made it possible to address some challenges identified at the inception of the evaluation. In particular, the combination of several data collection methods and sources significantly improved the quality of the data available and provided valuable insights on the local context. In that respect the approach delivered far beyond the author's expectations. Especially the interviews revealed valuable information about the implicit rationales for supporting energy efficiency interventions. At the same time, while certainly proving very helpful, the interviews did not manage to close all information gaps that existed in the programme documentations, due to the limited memory of and access to data by the interviewees to the detailed information needed, or the unavailability of the relevant stakeholders for interview (e.g. no longer working at the same institution). Lastly, the evaluation design could not overcome the discrepancies in monitoring and reporting standards on achievements.

4.1. Findings

Despite significant shortcomings in data availability and data quality, the authors managed to collect a wide range of findings relevant to the investment in energy efficiency in public buildings during the EU's 2007-2013 programming period.

Through the combination of several data sources, including from the monitoring database of the European Commission, the Annual Implementation Reports and the gap-filling interviews of the review phase, sufficient information could be obtained to confidently estimate the allocations to energy efficiency investments in public and/or residential buildings, and information that was not available from the monitoring systems. The authors could estimate that of the 6.1 billion Euro invested under the priority theme "energy efficiency, energy management and co-generation", about 3.4 billion Euro were allocated to energy efficiency in public and residential buildings.

The six case studies complemented the review of 48 Operational Programmes by providing more background information and making it easier to put the findings obtained in the previous two phases into context. In the case of Poland for example, the case study of the Operational Programme on Infrastructure and Environment revealed that the practice in Poland is not to measure the energy reductions of a building directly after the completion of an energetic renovation, but one year later. This meant that the achievements reported in the Annual Implementation Reports would lag one year behind those reported in other countries, where reduction was measured right after completion of the intervention. In the case of Lithuania the case study revealed that the choice of loans over grants was based on the good working relationship with and advice from the European Investment Bank, while in Poland the choice of grants over loans was a result of the low willingness of municipalities to take up loans.

Furthermore, additional interviews and documentation review in the context of the case studies often uncovered a range of rationales that were not stated in the programme documentation and could not have been captured by the shorter gap-filling interviews. These often revealed that the need to support the ailing local economies was one of the real driving forces behind supporting energy efficiency investments in buildings, rather than decreasing the energy bill or reducing CO₂ emissions.

Likewise, the interviews and the stakeholder workshop revealed that many Managing Authorities experimented with energy efficiency interventions during the programme period 2007-2013. Many changes were made on the way, such as whether to use grants, loans or other financial vehicles, what co-financing rate to set, but these changes were not reflected in the programme documentation. At a larger scale the interviews and workshop revealed that the 2007-2013 programming period had been a steep learning process for all stakeholders involved, including the European Commission, the Managing Authorities and Implementing Bodies and the target beneficiaries of the interventions.

Last but not least, the stakeholder workshop allowed the evaluation team to triangulate its preliminary findings. Participants gave good feedback and helped clarify certain issues. In addition, the open and frank discussion helped uncover additional implicit rationales, which were then discussed at length. The workshop also included a discussion of the relationship of ERDF/CF funding to other initiatives at European and national level. These discussions allowed the authors to test and refine the preliminary findings from the previous three phases.

In sum, the inductive and mixed-method approach used in the ex-post evaluation made it possible to draw a differentiated picture as to the rationale for, design of and achievements of the interventions, hence delivering findings beyond initial expectations. The picture that emerged from these findings confirmed the prior expectation that the 2007-2013 programming period had been a learning phase for the majority of Managing Authorities and Implementing Bodies, who had started with little prior knowledge about this type of intervention and had experimented with different intervention designs.

4.2. Limitations

Detailed information was seldom provided in the programme documentation and the research hence depended strongly on the input from Managing Authorities and Implementing Bodies. As the evaluation took place in a new programming period, it was not always possible to find interviewees who had sufficient knowledge of the previous 2007-2013 period, and of those who had, some found it difficult to devote time and attention to assisting with the evaluation. Yet even when it was possible to access to interviewees, there was a risk of “post-rationalisation” for why they had chosen to support energy efficiency investments in buildings in the first place, hence confounding the results.

The mixed-method approach was not able to overcome the challenges associated with the important variation in monitoring and reporting standards found across programmes. Only a limited, indicative picture of achievements across programmes (e.g in terms of energy savings and reductions in greenhouse gas emissions) could be provided, and it was not possible to carry out any useful assessment of how much was achieved in terms of energy and greenhouse emissions reduction, let alone a useful assessment of cost-effectiveness of interventions.

5. Recommendations for Policy-Makers and Evaluators

From the experience of the ex-post evaluation it is possible to derive four recommendations on how energy efficiency investment programmes could better be evaluated in a cross-national context in the future. The first recommendation aims at the harmonisation and improvement of monitoring systems, while the latter three highlight the benefit of qualitative approaches and stakeholder involvement to compensate for incomplete and non-standardised data.

5.1. Harmonise monitoring systems and the measurement of energy consumption of buildings

There is significant scope for harmonisation of monitoring systems. To date, diverse methods were used to capture the achievements and feed into monitoring reports. This made the reported results and impacts difficult to compare. The increased standardisation of reporting brought about through the introduction of common indicators in the new programming period should help tackle part of this problem. The newly adopted *Guidance Document on Monitoring and Evaluation* (European Commission, 2014) may contribute to improvement. The guidance defines the need for impact and implementation evaluations planned at the early stages of the programming period. However, concerted effort by energy policy experts at EU and national level to offer advice to Managing Authorities on appropriate approaches to the monitoring of impacts and achievements could also be beneficial; including, in particular, standardisation of the reporting of emissions reductions. Such effort could focus on the methodological challenges relevant to energy consumption measurements (primary vs. final) and levels of avoided CO₂ emissions depending on energy generation mixes.

Further, now that the local energy markets have developed sufficiently and energy audits have become more widespread, impact evaluations would gain significantly if baselines for the energy consumption of buildings were set, so that achievements can be compared against these baselines.

5.2. Make use of in-depth case studies and stakeholder workshops to uncover the importance of the local context

No matter how well harmonised the monitoring and reporting of energy efficiency achievements is, the ex-post evaluation showed that a comparison across countries and regions will be useless *unless* the local context is adequately taken into consideration. Countries and regions differ in terms of climatic conditions, ownership structure of buildings, regulatory environment, market structure for energy services, etc., which need to be taken into consideration in any cross-national or comparative analysis.

For this, in-depth case studies for contextualised analysis and stakeholder workshops for sound comparison can be a very useful tool as they help reveal important details about the national or regional context.

5.3. Triangulate methods by combining broad-based reviews and case studies

The use of a mixed-method evaluation design makes it possible to overcome most of the existing information deficiencies and draw a comprehensive picture of energy efficiency support to public and residential buildings in Europe. More concretely, the combination of these methods allows qualified and nuanced claims about discernible patterns, taking into account the peculiarities of countries and regions. Had the evaluation been based merely on a broad-based review and analysis of quantitative monitoring data, the findings would quite frankly have been inaccurate in many instances. Instead, the proposed allowed for a careful selection of case studies and a certain degree of generalisation of findings.

5.4. Support bench-learning and use participatory approaches

The evaluation uncovered striking differences in the way that programmes dealt with energy efficiency interventions in buildings. This clearly was attributable to the absence of a shared understanding of what benefits these investments produce and how they could best be materialised. In essence, the incompleteness of the information and the quality of the available data found in a large number of programmes resulted from a lack of informed strategic planning by the Managing Authorities.

In order to improve the effectiveness of energy efficiency investments in public and residential buildings through the ERDF and CF, the Managing Authorities ought to invest more time in planning what they would like to achieve through the interventions and what the best mechanisms are to do so. One approach is to acquire the necessary expertise externally when planning the next Operational Programme. However, the Managing Authorities can learn from experiences in the preceding programming period. To a certain extent they do this already from their own experiences. Yet this learning process can be significantly enhanced if the European Commission actively supports bench-learning between the Managing Authorities across the regions and EU Member States.

A very useful tool in this context is multi-stakeholder workshops, as confirmed in our evaluation. In these settings, Managing Authorities, Implementing Bodies, the European Commission and energy efficiency experts can exchange their views and experiences with designing and implementing their interventions. The presentation by the evaluators of the preliminary findings of the ex-post evaluation and their interpretation of them made it possible to have a lively and engaged discussion that helped Managing Authorities to reflect on their experiences and learn from good practices. At the same time the workshop also helped the European Commission and the

Managing Authorities to develop a mutual understanding of the challenges associated with developing a good intervention strategy for energy efficiency investments and reporting on results.

6. Conclusions

The ex-post evaluation of ERDF/CF support to energy efficiency investments in public and residential buildings during the EU's 2007-2013 programming period highlighted the fact that government support to energy efficiency investments in buildings was still in its infancy in Europe in 2007. A lack of understanding of the benefits resulting from energy efficiency investments in buildings and of the most effective mechanisms for obtaining them, coupled with the absence of guidelines on how to measure such benefits, made it challenging to draw a clear picture across countries.

The mix-method evaluation design applied by the authors of this paper made it possible to overcome challenges and provide a fair account of ERDF and CF investments in energy efficiency between 2007 and 2013. This was achieved by combining quantitative data analysis of available monitoring data with stakeholder consultations. This made it possible to uncover the implicit funding rationales of programming authorities, adequately capture the singularities of data and understand the importance of contextual factors in the various regions.

In order to improve the knowledge to be gained from future evaluations of energy efficiency investment programmes, the authors make a number of recommendations to improve monitoring and evaluation activities. They highlight the importance of harmonisation and standardisation of data but they also insist on the need for qualitative and participatory approaches to collect information on experience and practice. Recommendations regarding evaluation activities dwell on the data collection and triangulation techniques, which can be applied to improve data quality and enhance findings. These techniques include gap-filling interviews, in-depth case studies and stakeholder workshops.

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