Evaluation Abstract

Protection of the Environment through three multi-sector loans – Lessons from water and sanitation and energy efficiency investments

Between 2000 and 2003, the CEB approved three successive multi-sector loan programmes implemented in northeastern Europe by a small commercial bank founded in 1990. The borrower was presented as a national development bank similar to KfW in Germany, and as a vehicle for implementing programmes funded by the World Bank and other international institutions. The first loan programme (CEB loan € 30.28 million) comprised two components of equal size, one for SME support and one directed to municipal investments. The two successor programmes (CEB loans of € 20 million and € 8.1 million, respectively) replicated the approach, with each component the object of a separate, dedicated loan programme. Notwithstanding the initial intentions, an analysis of the sub-project portfolio revealed an interesting shift during the programmes' implementation towards environmental investments (as opposed to SMEs *per se*), which ultimately came to represent a substantive share of loan use.

The three multi-sector loan programmes thus comprised investments for protection of the environment, including (i) **water and sanitation-related investments** such as the upgrading and expansion of sewage systems in several municipalities – some of which were located in environmentally sensitive areas of the country – as well as smaller water network improvements (e.g. drinking water supply); and (ii) **energy efficiency improvements** of residential buildings, private health establishments and public buildings (mostly health and educational facilities).

The objectives of the evaluation were to (i) assess the results and impact of the sub-projects financed with CEB loan proceeds by gathering data several years after start of operations, so as to analyse realized (rather than expected) outcomes; and (ii) generate lessons learned and recommendations that could be useful for the implementation of future loan programmes. Data gathering from water and sanitation infrastructure operators as well as housing administrations/cooperatives (for energy efficiency) was carried out on a sample of individual sub-projects, by assessing their achievements, rationale and congruence with beneficiaries' needs, using the standard evaluation criteria (relevance, effectiveness, efficiency, impact and sustainability).

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In order to identify factors that affected – positively or negatively – the outcome of the programmes, project implementation and monitoring processes deployed by the main stakeholders were reviewed, including consideration of beneficiary involvement, ownership, and satisfaction with the realized works. Attention was also given to the quality, appropriateness and added value of the sub-projects and their sustainability from a financial, institutional and socio-economic viewpoint. The performance of the CEB and of the borrower/implementing partners was also assessed.

At the same time, the evaluation sought to explore programme-level considerations by shifting the perspective from individual sub-projects to the financing instrument itself and the choice of borrower through which it was applied. The underlying aim was to gain a deeper understanding of the implications thereof for defining the scope and assessing the achievement of the desired social effects.

EVALUATION FINDINGS

WATER AND SANITATION. The water and sanitation investments either complemented existing systems or upgraded them. All were operated without major difficulties and in line with established environmental standards. The sub-projects had high environmental benefits and were, overall, economically viable, while services to residents were provided at reasonable unit costs.

The environmental impact of most of the wastewater projects was very good; in two cases they contributed to measurable improvements in surface water bodies. Broader environmental impacts that would have improved water quality standards in receiving lakes and rivers would have required larger-scale investments and could not realistically have resulted from the relatively modest investments co-financed by CEB. Nevertheless, the generally good operational performance of the established infrastructure ensures an adequate contribution to environmental objectives.

It is interesting to note that in most municipalities the choice of the most suitable sewerage solution hinged upon a housing density indicator (at least 120 inhabitants to be served per kilometre of new sewer line); in some instances the municipalities even considered subsidizing household-level individual solutions rather than investing in more costly public systems. This is a highly suitable approach to mitigating environmental threats at reasonable cost for remotely located dwellings, and the development of such proxy indicators could be encouraged more systematically. The impact of these investments at the household level also has a social dimension in terms of comfort and living standards; but the beneficiary population might be affected negatively if an undue financial burden arises as a result thereof.

From the technical point of view, the investments in **water supply and sanitation** were rated **"satisfactory"** (rating 5 on a six-point scale).

ENERGY EFFICIENCY. According to local stakeholders, the investments for all the evaluated sub-projects were made with the primary objective of reducing heating costs and the secondary objective of improving living comfort. These concerns were also reflected in the established financial arrangements: building/apartment owners who applied to the borrower for loans under the CEB programmes did so on commercial terms, and these final beneficiaries expected both direct financial gains (lower future energy expenditures) and non-financial benefits (aesthetics and comfort) from said investment decisions.

All the evaluated sub-projects were found to have noticeably improved the energy efficiency performance of both public and residential buildings. Notwithstanding the fact that the achieved energy savings varied widely, from a very modest 12% to a substantial 50%-60%, the stated satisfaction of final beneficiaries was strong, since their energy consumption dropped significantly and the aesthetic appearance of buildings improved considerably. The provision of grant funds equivalent to up to 20% of investment costs from national funds also contributed to a positive perception of the investments. The long-term perception, however, will depend on the evolution of energy prices, which are in turn strongly influenced by national energy policies and international developments.

On the other hand, the least satisfactory results lie with the financial performance of investments. Low internal rates of return and rather long payback periods tend to indicate poor performance from an investor perspective. Investments were also often reliant on grant support, most of which was provided from national funds, outside the framework of the CEB loan programme. In the end, project benefits stemmed from a combination of energy savings, improved living conditions for final beneficiaries and general infrastructure renovation resulting from the investments.

From the technical point of view, the investments in **energy efficiency** were rated **"moderately satisfactory"** (rating 4 on a six-point scale).

BROADER INVESTMENT RESULTS. Beyond the sub-project level, the impact of both water and sanitation and energy efficiency investments resides in their broader environmental, social, economic and institutional effects, for example regional ecosystems. In this regard it is important to note that implementation of the three loan programmes covered by this evaluation stretches over one decade, from 2000 (approval of the first loan) to 2009 (closure of the last loan). It therefore coincides with a period not only of rapid economic development in the country but also intense regulatory reforms undertaken in connection with European Union (EU) accession, which became effective in 2004, shortly after closure of the first of the three loans.

Both types of environmental investments were aligned with the very sizeable national needs to meet its obligations stemming from EU requirements and international commitments. In 2005, national investment needs to expand treatment of household sewage water were estimated at almost € 11 billion. Most sewerage-related investments included in the CEB programmes were located in areas of critical ecosystems and were in line with existing priority plans for alignment with EU requirements. However, the CEB-financed programmes did not have an explicit "bias" towards channelling funding to locations of specific environmental concern; in this regard, they stood little chance of fostering substantive environmental improvements on a broader ecosystem scale.

Likewise, improving energy efficiency, particularly for heating of residential buildings, was also crucial for the country to be able to meet its obligations for CO_2 emissions reductions, and the CEB-financed programmes' activities contributed in this direction through noticeable – sometimes even considerable – reductions in heating requirements. However, the focus of the CEB loan programmes was limited to the general objective of lowering energy consumption; no particular prominence was given to alignment with national environmental policy objectives.

In sum, environmental benefits were noted in both sectors of action – water and sanitation and energy efficiency – but the scope of the achieved social effects was somewhat random and dispersed, mostly local effects rather than palpable results on a regional or ecosystem scale. This is in part attributable to the fact that multi-sector programmes generally do not lend themselves to the targeting of a regional, social or environmental priority area.

PROGRAMME-LEVEL CONSIDERATIONS

As mentioned above, the evaluation of these three loan programmes provided an opportunity for reflection on some programme-level challenges associated with intermediated loans in general and multi-sector programmes in particular, *inter alia*, the links between choice of borrower and development objectives, and expectations on social and other outcomes.

CHOICE OF BORROWER AND DEVELOPMENT OUTCOMES (see Recommendation 2). The presentation of the borrower in the loan approval documents emphasized the borrower's mandate of supporting national development. Partnering with an intermediating borrower that fulfils a promotional bank function in the national economy certainly appears to be a suitable consideration for a Multilateral Development Bank such as the CEB. However, the programmes' implementation difficulties and incurred delays point to weaknesses arising from the choice of an intermediation partner with a very low market penetration and small branch network. The size of the CEB loan programmes was considerable, compared to the borrower's small business volume, and the borrower soon ran into difficulty in allocating loan proceeds. The CEB showed great flexibility in adjusting to the obstacles encountered – including the shift, evoked earlier, towards environmental investments (particularly for the last loan) – in order to facilitate use of the loan and disbursement to final beneficiaries. Allocation difficulties were partly attributable to the economic slowdown in the country at the time, as well as a reluctance to undertake investments in anticipation of pending EU accession and expected access to EU structural funds; but it would appear that the borrower's size, market position and portfolio quality were at least as decisive in explaining the disbursement difficulties encountered.

In sum, the choice of borrower would seem to rest on the relative emphasis that is placed on the borrower's development mandate versus the ease of reaching final beneficiaries. One point of view is that supporting the development of the intermediating bank itself is not the cornerstone of the CEB's mandate, and the borrower is seen merely as a vehicle for reaching final beneficiaries. In this case, large partners with a well-developed market penetration might be better placed to market the CEB loan, and could possibly absorb larger loans with less disbursement difficulties. Conversely, if the underpinning reason for engaging with a particular CEB borrower, however large or small, resides in its public support function, then the development potential of that partner should be the subject of the appraisal process and complementary measures (technical assistance) could be contemplated. Such considerations may not have been possible at the time of implementation of the loans but they can now be explicitly addressed using the new financing modalities of the CEB.

PROGRAMME TARGETING: LOCAL OR BROADER LEVEL EFFECTS (see Recommendations 1 & 6). Multi-sector programmes, by their very nature, have limited possibilities to delineate clear objectives for their social or environmental outcomes and/or to target specific final beneficiary groups within the general eligibility criteria defined in the CEB's Loan Policy, unless specific provisions are made for doing so and are subsequently included in the contract with the borrower.

The present loan programmes provide an illustrative case in point. The evaluation confirmed that improvements were achieved by both types of environment-related investments. Moreover, it showed that the CEB-financed programmes were relevant for national policy objectives and commitments to meet EU standards and requirements, although contributing to such alignment was not an explicit objective of said programmes. Consequently, the focus was not on whether the investments were carried out on a sufficiently large scale so as to actually resolve wider environmental concerns. In fact, given the small size and dispersed nature of the investments, the latter contributed only to the localized mitigation of environmental problems.

In this context, a more narrowly-defined loan programme, either for a single sector of action or for a specific target group within the broader eligibility criteria defined in the Loan Policy (e.g. addressing the needs of smaller municipal investment projects), might be a more appropriate means of ensuring a specific focus and alignment with verifiable objectives. Much then hinges on the characteristics of the implementing partner: an intermediary bank with a strong market presence and broad customer base might find it less difficult to reach a sufficient number of final beneficiaries under a single sector of action or within the ambit of a specific target group. As the evaluation case showed, the choice of the implementing partner constituted a determining factor which affected the social and environmental results that could otherwise have been achieved.

PASSING ON THE FINANCIAL ADVANTAGE TO FINAL BENEFICIARIES (see Recommendation 8). It was interesting to note, in all three programmes, a considerable maturity mismatch. This implies that the borrower placed sub-project loans at much shorter tenors than CEB had provided to it. The three loans also did not include conditions for re-use, for similar purposes, of the CEB loan proceeds upon reimbursement by final beneficiaries. It appears, however, that a review of on-lending terms (comparative margins *with* and *without* the CEB loan) as well as of maturity mismatches was not included in the operational monitoring processes. This raises the following questions: (i) the extent to which these margins were reflected in the contractual agreements between the CEB and the borrower, (ii) the extent to which they were implemented by the borrower in the sub-loan agreements, and (iii) the availability of information so as to assess compliance therewith.

Passing on the financial advantage of CEB loan proceeds to final beneficiaries remains a very relevant concern for the CEB and its stakeholders. Clarity on the corporate position on this issue obviously needs to take several factors into account, including: (i) whether the intermediary is a commercial or a public entity (including development or promotional banks); (ii) whether the final beneficiary is a commercial entity (e.g. SME financing or leasing), a social infrastructure entity (most public health and education investments), or a public utility that also generates income for the final beneficiary municipality. Handling this key issue would help provide more clarity on the social value of CEB loans and operations along with enhanced CEB visibility.

MONITORING (see Recommendation 4). Dedicated technical expertise was fielded to cover the programme's two main components – SMEs and financing to public entities. Municipal and public entity investments alone covered five of the CEB's sectors of action (according to the definitions used at the time): health, education, protection of the environment, rural modernisation, disadvantaged urban areas. During implementation, four different Technical Advisors visited the programmes between 2002 and 2007, each focusing on their respective field of expertise. This rotation of responsibilities is in line with a recommendation issued by EVD on the occasion of an earlier evaluation of multi-sector programmes. Another issue of consequence that emerged, and which warrants reflection, is the timing and uptake of technical monitoring missions' recommendations – for example, incorporating new or adjusted monitoring indicators into reporting requirements that have already been agreed upon with the borrower and documented in the Framework Loan Agreement.

Borrower reporting (see Recommendations 3-5-7-8). Once a specific sub-project is declared eligible by the CEB, (i) what are the borrower's obligations to obtain updates on cost changes from final beneficiaries, and (ii) what are the CEB's reporting requirements on such modifications? The possibility of receiving systematic updates on sub-project cost changes in intermediated loan programmes appears highly unrealistic and, even if this were to be done, the information would be difficult to process under current circumstances. The CEB could even consider whether setting an upper limit for CEB's share of costs (usually capped at 50%) is worth retaining at the sub-project level, if this cannot easily be monitored and controlled. Some of these considerations have been integrated in the CEB's recently-revised Loan Policy, which confers a certain degree of flexibility in determining whether the CEB's share of financing and/or monitoring modalities should be applied on a sub-project basis or on the basis of a portfolio of sub-projects.

On the other hand, it might be worthwhile to reflect on the need for CEB to receive updated information in cases where final beneficiaries immediately reimburse the loan proceeds to the CEB borrower before – or without – carrying out the planned investment, as occurred in these programmes.

Social effects indicators (see Recommendations 3-5-7). In the absence of suitable indicators by which the assumed contribution of the programmes to social cohesion could be determined, monitoring was based on the usual head-count approach – number of residents or population of the municipality, depending on the nature of the sub-project. However, this method results in vastly exaggerated numbers (compared to those really concerned by the investments) which are reported by CEB as "social effects" of such programmes. More importantly still, the number of persons concerned by an investment is *not* a suitable measure of its results. A reporting format based on number of users provides indications on the outcome (i.e. direct consequence of using the infrastructure) rather than on social impact ("social cohesion"). In other words, these indicators actually reflect, for public infrastructure, at best, the *intensity of use* (if data on the effective use of the created capacity is available) or the *potential use* (if reference is made to the number of beds / classrooms established / refurbished, as this gives no indication whether this created capacity is in actual use). In the case of SME finance, the established monitoring framework is based on self-declarations by the SMEs on employment figures from before and after use of the loan proceeds. The limited value of such reporting has been raised in a number of previous evaluation reports, since individual sub-project borrowers are in fact reporting so-called social effects (employment effects) that cannot always be reasonably attributed to the loan.

Recourse to improved and more aligned monitoring indicators would enable the collection of better evidence on the social effects of all CEB operations, and not just those for which more in-depth evaluations (including sustainability concerns) are carried out.

The programme-level considerations discussed above undoubtedly had some bearing on the overall performance of the programmes, and a qualitative assessment of how, and to what extent, the standard evaluation criteria were affected was carried out.

From the point of view of **programme-level considerations,** the assigned rating was **"moderately satisfactory"** (rating 4 on a six-point scale).

CONCLUSION AND RECOMMENDATIONS

The **overall rating of the programmes** is based on calculation of a simple arithmetic mean across the five standard evaluation criteria. In view of the "satisfactory" (water and sanitation sector), "moderately satisfactory" (energy efficiency), and "moderately satisfactory" (programme-level considerations) performances, the **overall programmes' rating** was **"moderately satisfactory"** (rating 4 on a six-point scale).

The specific case of the three loan programmes provided a particularly clear illustration of issues pertaining to the social outcomes of many intermediated loans in general and of multi-sector loans in particular, which warrant further reflection. The following recommendations were issued:

Recommendation 1: Reflect on opportunities to enhance the level of environmental outcomes, such as through explicit alignment with existing national programmes (e.g. Thermo-Modernisation Fund) or orienting investments towards priority geographic areas of environmental concern. Similar opportunities for alignment in the other sectors covered by such multi-sector loan programmes should be identified and exploited.

Recommendation 2: Reflect on the criteria for borrower selection, notably with regard to the size, market position and mandate of intermediation partners, with a view to implementing programmes that are focussed on specific social or environmental objectives (and where applicable, in specific operational niches). This could support clearer corporate positioning of the CEB.

Recommendation 3: Draw on sector-expert knowledge to (i) define performance indicators that are apposite to the specific investment and to its intended outcomes; (ii) replace the existing indicators used to monitor the number of beneficiaries by ones that better correspond to their actual number. This applies to the environmental investments of the present programmes, but also to the other social sectors which they included.

Recommendation 4: Ensure that mechanisms are put in place so that recommendations made by technical monitoring missions concerning the performance assessment of a programme can be incorporated into reporting arrangements.

Recommendation 5: Reflect on the purpose of multi-sector programmes, on how they should generate tangible social outcomes, and on the methods through which the CEB intends to ascertain the success of multi-sector programmes at completion, including the rating metrics.

Recommendation 6: Reflect on the opportunity of developing sector strategies for larger CEB member countries in order to identify specific niches for CEB interventions that could be financed through larger-scale operations.

Recommendation 7: Reflect on the potential benefit for the CEB of generating relevant information on the social effects across its operations, for example on the climate change-related effects that were so important in the present programmes. This would enable the CEB to respond to requests about corporate results on such environmental policy concerns. The present database systems do not enable the Bank to address such aspects.

Recommendation 8: Ensure that borrowers actually implement the clause in the Framework Loan Agreement whereby they are expected to inform final beneficiaries about their participation in a CEB loan programme and that they might be contacted for the purpose of an evaluation. Any exceptions to this clause should be explicitly presented and explained at the time of project approval.