Ex post evaluation – BCIE

›››

Sector: 2403000 Formal sector financial intermediaries
Project: SMEs – Credit Line for Environmental Loans via BCIE (BMZ No.: 2008 66 335)* and EU LAIF complementary measure (delegated cooperation, BMZ No.: 2020 60 325)
Implementing agency: Banco Centroamericano de Integracion Economica - BCIE

Ex post evaluation report: 2019

(EUR million)	Project A (Planned)	Project A (Actual)	Project B (Planned)	Project B (Actual)
Investment costs (total)	33.33	33.63	2.85	3.18
Counterpart contribution**	3.33	3.63	0.00	0.33
Funding	30.00	30.00	2.85	2.85
of which BMZ budget funds	30.00	30.00	0.00	0.00

*) Random sample 2013
**) Counterpart contribution USD 4,478,161.53; counterpart contribution for complementary measure USD 407,152.89; Exchange rate 6 March 2018: EUR 1 = USD 1.23

Summary: The environmental loan programme included a development loan to the Central American Bank for Economic Integration (BCIE) for the USD equivalent of EUR 30 million. From May 2011, the BCIE loan programme enabled financial intermediaries (FI) in the BCIE founding states (Honduras, El Salvador, Costa Rica, Guatemala, Nicaragua) to refinance loans to small and medium-sized enterprises (SMEs) for environmental investments in energy efficiency (component 1), renewable energy (component 2) and environmentally friendly production processes (component 3) on a long-term basis and at favourable interest rates. From 12/2011 the FC measure was supported by an EU delegated cooperation (Latin America Investment Facility, LAIF) amounting to EUR 2.85 million. The use of the delegated funds was complementary to the investment component and was used by the BCIE to support the FIs in the introduction and implementation of the environmental loan programme, to finance feasibility studies or energy audits at SME level and for general promotion of the loan programme.

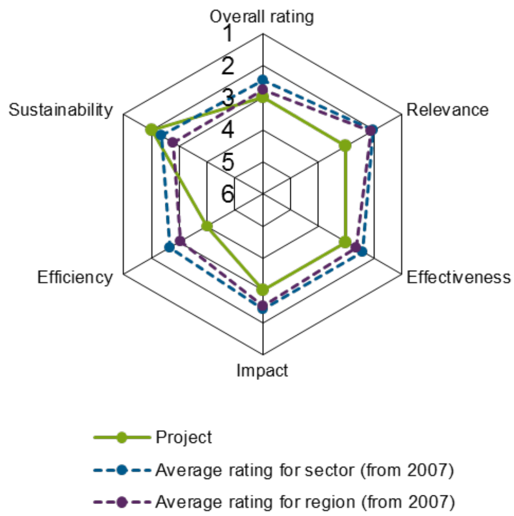
Objectives: The overarching developmental objective (impact) of the environmental loan programme was to make a contribution to climate change mitigation and environmental protection in Central America. The programme objective (outcome) was to create needs-driven, efficient and sustainable access for SMEs to finance environmental investments (for the purposes of the EPE, adequate use of this access is added to the project objectives).

Target group: The target group consisted of SMEs from the private sector in the target region and the staff working there.

Overall rating: 3

Rationale: The project recognises the lack of long-term financing for environmental investments as a constraint, but initially underestimated the need for prior development of this niche market at both SME and FI level. The EU-financed complementary measure that was subsequently pledged contributed significantly to the successful implementation of the environmental loan programme. The objectives of the environmental loan programme at impact and outcome level are being achieved, but not a single project of component 3 has been financed. The efficiency of the project measured by the relationship between impacts achieved and costs varies depending on the sector and energy matrix of the country. The replacement of old vehicles in the transport sector accounts for around 50 % of total investment; however, the relevance and developmental impact in the transport sector show weaknesses, as this type of investment could also be financed on the market prior to the environmental loan programme and the replaced vehicles were not taken out of operation.

Highlights: The interest of the participating FIs in environmental investments as a new business sector has also developed positively with the help of the environmental loan programme.



Rating according to DAC criteria

Overall rating: 3

Ratings:

Relevance	3
Effectiveness	3
Efficiency	4
Impact	3
Sustainability	2

Relevance

The environmental situation in countries in Central America continues to be dire. The rising volume of traffic is making the already bad air pollution even worse (primarily in larger cities), consumption of fossil-based energy (with the corresponding greenhouse gas emissions) is high and the inadequate waste disposal and sewage treatment continue to pose enormous challenges. At the time of the programme appraisal, significant potential for environmental investments[1] was correctly identified at the level of small and medium-sized enterprises (SMEs) that showed strong interest in this type of investment due to possible business savings and productivity increases.

The lack of long-term financing for environmental investments was rightly identified as a key development constraint, in addition to the prohibitively high collateral requirements imposed by banks on SME loans. Environmental financing is relatively new in Central America overall, but it is becoming increasingly important.

The impact chain of the environmental loan programme involves creating incentives for financial intermediaries (FIs) to expand or diversify the range of financial products (financial sector deepening) through subsidised and long-term refinancing. As the FIs participating in the programme assumed the default risk of their borrowers, they were free to determine the conditions for final lending based on their operational costs and risk assessment. Terms and redemption free periods depend on the purpose of the sub-loans.

The programme proposal (PP) also correctly identified the importance of advisory services for the FIs involved (e.g. capacity building) and SMEs (e.g. energy audits). Implementation was initially the responsibility of the Central American Bank for Economic Integration (BCIE) and, at FC's request, was much more effective from December 2010 via a “Fondo de Asistencia Tecnica” (FAT) financed from EU-LAIF funds and managed by the BCIE. The FAT was used to support the participating FIs in the introduction and implementation of the environmental loan programme, to finance feasibility studies and energy audits at SME level and to generally promote the environmental loan programme of the BCIE as the “Iniciativa MIPYMES Verdes”. Together with the FAT, the structure of the environmental loan programme was well suited to promoting lending to SMEs for environmental investments through FIs.

The demand for subsidised environmental loans concentrated, as already assumed in the PP, on energy efficiency measures (prioritising the transport sector which was allocated about 50 % of the programme funds). However, the relevance of the projects in the transport sector is limited because no requirements were specified regarding the decommissioning of the replaced vehicles, and the new investments therefore did not necessarily bring about lower emissions. In the second phase of the environmental loan programme, to which funds had already been committed, an appropriate response was to limit the vehicle loans that could be refinanced to a maximum of 25 % of the programme funds.

For the second project component which involves financing small-scale renewable energy (RE) projects, the relevance remains high as the investments directly reduce emissions. The third component, environmentally friendly production processes, has not yet been addressed, contrary to programme require-

[1] The term “environmental investments” is used across the board for investments in energy efficiency (component 1), renewable energy (component 2) and environmentally friendly production processes (component 3).

ments. Ultimately, the SMEs' motivation for making these kinds of investments was overestimated when the project was designed; the respective legal requirements or financial incentives were insufficient. Still, the plan is to implement this third component in the follow-up project

The project is coherently integrated into the strategies of the BCIE and the target partner countries (e.g. "SICA emprende"[2]) and also meets the objectives of the Federal Ministry for Economic Cooperation and Development (BMZ), which has defined sustainable economic development as a priority area of regional development cooperation (DC) with Central America. The focus of the environmental loan programme on environmental protection and climate change mitigation is also consistent with the general priorities of German DC. In particular, there are synergies with GIZ's[3] 4E programme: GIZ also cooperates with the BCIE, supports the establishment of a network of energy and environmental consultants, establishes contacts with interested SMEs and advises Central American governments on the introduction of laws to promote renewable energy, energy efficiency and corporate environmental protection.

From today's perspective, the relevance of the project is high. The evaluation confirmed the weakness of the structure of the FIs in terms of environmental lending and the resulting lack of access by SMEs to long-term loans as a barrier to environmental investment. However, over the course of the programme, it was also shown that merely providing long-term financing is not enough to promote this type of investment in the SMEs in the target countries. The barrier to the necessary technical assistance at the level of the FIs and SMEs has been identified and eliminated over time. The barrier represented by the high collateral requirements of FIs for loans to SMEs has not been addressed in the programme assessed here and thus persists.

Relevance rating: 3

Effectiveness

The programme objective (outcome) was to create needs-driven, efficient and sustainable access for SMEs to finance environmental investments. For the purposes of the ex post evaluation, the appropriate use of this access was added to the objectives.

Target achievement at outcome level can be summarised as follows:

Indicator	Status PA, target PA	Ex post evaluation
(1) In each target country, at least one financial intermediary participates in the programme and provides financing for environmental investments.	-	Achieved. Guatemala: 2 El Salvador: 4 Honduras: 4 Nicaragua: 3 Costa Rica: 5
(2) The rate of non-performing loans of unregulated FIs ("cartera en riesgo") never exceeds 8 %; the rate of non-performing loans of regulated FIs and banks ("cartera en mora") never exceeds 5 %.	Cartera en riesgo: <8 % Cartera en mora: <5 %	Achieved.
(3) The programme funds will be drawn down within 5 years for the refinancing of SME loans.	0	Achieved. Total FC drawdowns EUR 30.0 million

[2] The Sistema de la Integración Centroamericana (SICA) designed a strategy to promote SMEs and entrepreneurship in Central America called "SICA Emprende".

[3] GIZ's 4E programme aims to strengthen general conditions and institutional capacities in Central American countries to promote investment in renewable energy and energy efficiency.

		BCIE counterpart contribution: USD 4.48 million.

The objective at outcome level and the two indicators have been achieved. However, they relate exclusively to the establishment of the loan programme or to granting loans to SMEs with a solid financial standing. The actual use of the loan programme by SMEs and the productive impact of the supported environmental investments are not captured directly by the defined objective and indicators. No corresponding indicator was added for the second phase of the environmental loan programme either. For the purpose of the evaluation, therefore, an additional indicator related to the use of the programme funds is included.

No component 3 investments were financed under the programme. According to BCIE, efforts under the environmental loan programme focused on components 1 and 2 because there was insufficient demand from SMEs for component 3. From the evaluators' point of view, this was mainly due to the lack of demand from SMEs as a result of insufficient legal requirements or financial incentives for this type of investment. The BCIE will target component 3 investments in the second phase of the programme. Also in components 1 and 2, the technical complexity of and lack of knowledge about environmental investments posed a challenge both for the ultimate borrowers and for the participating FIs (e.g. evaluation of risks, collateral, etc.). This certainly also contributed to the low number of investment projects financed in more innovative market niches and to the clear focus on standard investments (vehicles and production equipment with established technologies).

The EU financial contribution to the FAT made a significant contribution to achieving the objectives at outcome level. On the one hand, the advertising measures financed by the FAT under the environmental loan programme have accelerated the outflow of funds. On the other hand, the FAT-financed energy audits and feasibility studies for SMEs as well as training for FIs helped to reduce the technical and financial risk of these investments for SMEs and to make them predictable for FIs.

The target group consisted of SMEs from the private sector in the target region and the staff working there. The BCIE definition, namely that all firms with fewer than 100 permanent employees are considered SMEs, was adopted for this purpose. If this definition is used as a basis, the target group has been reached. One of the supported (and visited) companies is in fact part of a large group. However, since its subsidiaries are managed as legally independent companies, it formally qualified as an SME within the meaning of the BCIE and received financing. Although there were no indications of other target group digressions in the evaluation, the aim in the follow-up phase should be to try and change the definition of SMEs. The participating FIs should pay more attention to ensuring that only SMEs in the strictest sense are supported, in line with the project objectives.

Despite the reservations outlined above, the effectiveness of the measure can be assessed as adequate since the indicators were achieved.

Effectiveness rating: 3

Efficiency

The duration of the project was extended by a total of 19 months from the original plan of 30 months. The BCIE used its existing structures and country offices for the systematic implementation of the environmental loan programme. The established cooperation with the FIs was also efficient. At the beginning, however, the SMEs had trouble identifying suitable environmental investments. After the synergies between the FAT pledged in December 2010 and the environmental loan programme had a chance to develop, implementation efficiency was satisfactory. The intended impacts of the programme occurred much later than expected.

The relationship between the impacts achieved and costs used (allocation efficiency) per investment varies both between and within the individual sectors. In the case of energy efficiency measures in companies (e.g. replacing production systems), energy savings depend to a considerable extent on what happens to the old systems. The new systems are often used to increase capacity. While the random sample in the transport sector reveals high savings calculated ex ante for fuel consumption, it ignores the fact that the old vehicles were not scrapped at all – relevant legal requirements were also lacking in this case. Since 50 % of the total funds were accounted for by the transport sector and this share of the portfolio tends to be offset by very low environmental impacts, this has a significant negative effect on allocation efficiency.

The BCIE's long-term and favourable refinancing funds should primarily act as an incentive for FIs to develop a new business sector and to provide loans for environmental investments by SMEs. From the evaluators' point of view, there are therefore clear windfall effects in the transport sector, since the FIs involved had already offered similar vehicle loans in the past, and were now simply able to refinance them much more cheaply through the environmental loan programme without having to pass on this financial advantage to the ultimate borrowers.

Efficiency rating: 4

Impact

The overarching developmental objective (impact) of the environmental loan programme was to make a contribution to climate change mitigation and environmental protection in Central America. The achievement of the objective at impact level can be summarised as follows:

Indicator	Status PA, target PA	Ex post evaluation
(1) Contributions to reducing greenhouse gas emissions and negative environmental impacts caused by companies or to using resources more efficiently.	-	Achieved.

Since this is an open loan programme without requirements for the distribution of the loan funds in the three planned investment components, no target value for the reduction of greenhouse gas emissions was set ex ante in the PP. The BCIE estimate assumes annual savings of around 60,000 t CO_2[4]. Since nothing was invested under component 3, no reduction in the environmental impacts caused by companies (wastewater, solid waste, etc.) can be identified. Due to the focus on SME investments, only photovoltaic systems (12 % of programme funds) and small hydropower plants (24 %) were funded during the second programme component. Given the different composition of the power plant parks for electricity generation in the individual countries, the substitution effects of the subsidised RE projects and thus also the emission reductions achieved differ considerably.

The mission notes that the ex ante calculations of the BCIE 's CO_2 savings are too high, especially for energy efficiency (transport, industry). In all the cases assessed, the BCIE calculations are based on the assumption that the old machines and vehicles will be decommissioned, which does not happen in practice. In the case of the projects visited, new models with lower fuel consumption were purchased, but the replaced vehicles were generally resold and are therefore still in use. The emission savings reported by the BCIE for the transport projects of the evaluated programme must therefore be significantly lower. The follow-up project should adequately factor in the fate or use of replaced vehicles – and also machines – when calculating the emission savings achieved.

In addition, CO_2 emission reduction factors were set relatively high in some cases. Overall, it can be assumed that the positive climate impacts of the programme will be lower than specified by the BCIE. The still pending assessment of the greenhouse gas emissions achieved on the basis of the projects examined in more detail during the evaluation will likely yield a lower value.

In addition, the problem of partially prohibitive collateral requirements in lending to SMEs persists. It is therefore to be welcomed that the EU financial contribution will also be made available for guarantees in the second phase of the programme, to which funds have already been committed. Increased demand for

[4] This would be equivalent to approx. 0.1% of the annual total CO_2 emissions of the 5 countries that founded BCIE.

environmental loans from SMEs can be expected in the follow-up phase due to the modified project concept, the improving regulatory framework and the efforts of the BCIE.

Nevertheless, it should be noted that the environmental loan programme has made an important contribution to positioning the issue of climate change mitigation and environmental protection among FIs and SMEs in the region and has thus played a significant role in developing a market for future environmental investments by SMEs in the target countries. In addition, three participating FIs have established an environmental and social management system in accordance with international standards with the support of the FAT.

The environmental loan programme is also generating positive impacts beyond these environmental and climate impacts – strengthening the economic performance and competitiveness of the financed SMEs and safeguarding jobs ultimately contributes to the developmental objective of alleviating poverty. In addition, the environmental loan programme evaluated here could make a significant contribution to raising awareness at FI and SME level of the need for and efficiency of environmental investments. At the level of the BCIE and the FIs involved, structures were created for granting other environmental loans. The interest of the participating FIs in environmental investments as a new business sector has developed positively (e.g. establishment of their own departments to grant “green” loans), also due to the activities of the BCIE under the scope of the environmental loan programme.

Impact rating: 3

Sustainability

The sustainability of the programme in terms of lasting positive impacts and changes relates both to the continued existence of the environmental loan programme at the BCIE and to the stability and expanded product range of the selected FIs as well as the long-term use of the co-financed investments of the SMEs.

The sustainability of the environmental loan programme will be ensured by continuing and expanding BCIE's environmental business. The second phase of the FC-refinanced loan programme, to which funds have already been committed, and the EU's provision of another financial contribution for capacity building and guarantees suggest that the programme will be continued in the long term and underscore the BCIE's efforts to promote environmental investments by SMEs in the long term.

From today's perspective, subsidised and long-term refinancing of SME loans for environmental protection and climate change mitigation is still necessary for FIs, especially for the component 3 investments. The BCIE has chosen financially sound and well-positioned FIs to implement the environmental loan programme. The FIs visited all confirmed that they would continue to promote environmental investments if refinancing conditions allowed. Two of the FIs visited, for example, created new front-office departments to distribute the “green” loans and have shown strong growth in their green loan portfolio. One positive aspect is also that three of the participating FIs have established an environmental and social management system in accordance with international standards with the support of the FAT.

Based on the rigorous risk analysis of the FIs, it can be assumed that only SMEs with a good financial standing that will continue to exist on the market in the future were supported. The SMEs visited as part of the random sample confirmed this expectation. The mission assumes that the sustainable operation of the investments will be guaranteed in the SMEs visited. The operation and maintenance of the funded investments were of good quality.

The specialised events, energy audits and feasibility studies financed by the FAT increased the awareness of SMEs and FIs of the need for and profitability of certain environmental investments. Together with GIZ, the BCIE has set up a network of around 45 regional consultants to implement the FAT, who identify new environmental investments at SME level. The activities of other donors and development banks in the areas of renewable energy, energy efficiency and environmental investments are also having a positive impact on the sustainability of the environmental loan programme.

Sustainability rating: 2

Notes on the methods used to evaluate project success (project rating)

Projects are evaluated on a six-point scale, the criteria being **relevance, effectiveness, efficiency** and **overarching developmental impact**. The ratings are also used to arrive at a **final assessment** of a project's overall developmental efficacy. The scale is as follows:

Level 1	Very good result that clearly exceeds expectations
Level 2	Good result, fully in line with expectations and without any significant shortcomings
Level 3	Satisfactory result – project falls short of expectations but the positive results dominate
Level 4	Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results
Level 5	Clearly inadequate result – despite some positive partial results, the negative results clearly dominate
Level 6	The project has no impact or the situation has actually deteriorated

Rating levels 1-3 denote a positive assessment or successful project while rating levels 4-6 denote a negative assessment.

Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The **overall rating** on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a "successful" project while rating levels 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (level 3).