KfW

Ex post evaluation – Republic of Serbia

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Sector: 24030 (Formal sector financial intermediaries)
Project: Energy Efficiency via the Banking Sector (BMZ nos. 2009 65 806 (RIL)*, 2009 70 244 (CM), 2020 96 857 (PL))
Project-executing agencies: Two Serbian banks

Ex post evaluation report: 2020

All figures in EUR million	Project (Planned)	Project (Actual)
Investment costs (total)	34.5	50.5
Counterpart contribution	0.0	0.0
Funding	34.5	50.5**
of which BMZ budget funds	12.5	28.5

*) Random sample 2018 **) Including a EUR 10 million loan from the EU from the Energy Efficiency Finance Facility in 2007 and refinanced by the Council of Europe Development Bank (CEB).

Summary: The Energy Efficiency via the Banking Sector programme aimed to support the broad-based and long-term establishment of a funding instrument in the Serbian banking sector to promote energy savings among small and medium enterprises (SMEs) and private households. To this end, a EUR 12.0 million reduced-interest loan was issued to two partner financial institutions at KfW's own risk. In addition, an FC promotional loan (PL) to the tune of EUR 22.0 million and a complementary measure (CM) worth EUR 0.5 million were offered to support the partner banks with the introduction and implementation of the new loan product.
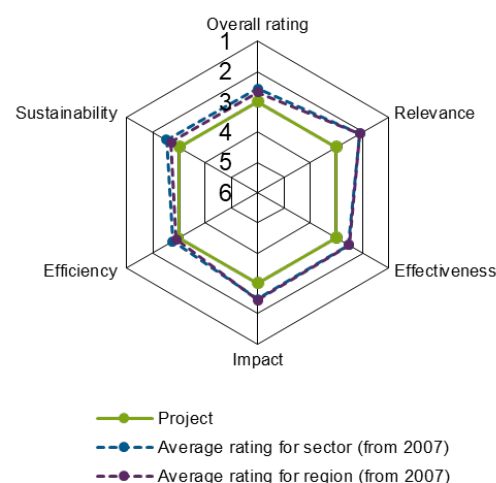
Development objectives: The module objective (outcome) was to ensure the broad-based and long-term establishment of a funding instrument in the Serbian banking sector to promote energy savings among the target group. The overarching developmental objectives (impact) were (1) to help deepen and broaden the Serbian financial system and (2) to help protect the climate by reducing energy consumption.

Target group: The target group was SMEs and private households in Serbia, with the two selected Serbian financial institutions (executing agencies) acting as intermediaries.

Overall rating: 3

Rationale: The module objective indicators were almost achieved. Bank 1 had issues finding lenders for the funds due to the unfavourable interest rate environment – after the loan was concluded, interest rates fell significantly. For this reason, adjustments were made to the conditions for the investment. For instance, funds were used to purchase energy-efficient housing, which would have tended to be financed even without the promotional programme. As a result, there are ways in which the project's additionality is diminished. This was also the first project of its kind for Bank 2, and the bank first had to develop a project pipeline. In this case, too, a relatively large number of similar small loans ("mass market loans") were financed (e.g. for tractors and vehicles). However, the bank has since significantly raised its standards and is currently attempting to finance more innovative activities.

Highlights: Bank 2 is working together with certain professional associations to improve its portfolio quality and organise informative events for businesspeople.

Legend:
— Project
- -•- - Average rating for sector (from 2007)
- -•- - Average rating for region (from 2007)

Rating according to DAC criteria

Overall rating: 3

Ratings:

Relevance	3
Effectiveness	3
Efficiency	3
Impact	3
Sustainability	3

Breakdown of total costs

	(RIL) (Planned)	(RIL) (Actual)	(PL) (Planned)	(PL) (Actual)	(CM) (Planned)	(CM) (Actual)
Investment costs EUR million	12.0	28.0	22.0	22.0	0.5	0.45
Counterpart contribution EUR million	0.0	0.0	0.0	0.0	0.0	0.0
Funding EUR million	12.0	28.0	22.0	22.0	0.5	0.45
of which BMZ budget funds EUR million	12.0	28.0	./.	./.	0.5	0.45

Relevance

At the time of the project appraisal (PA), Serbia's energy intensity was very high compared to the EU, and the energy sector largely depended on fossil fuels. The government did not have a rigorous climate policy or suitable legislation, and energy prices were very low. As a result, there was also no incentive to save electricity. In addition, neither companies nor private households were fully aware of the threat to the climate posed by CO_2 emissions. Energy efficiency (EE) and renewable energy (RE) products were largely unknown by banks, with the exception of a Serbian commercial bank that received promotional support from FC during a previous project. However, there were increased financing needs due to the requirements of export markets and own initiatives of companies, etc., which could not be covered by existing financing programmes.

The results chain was not clearly set out in the PP but was based on the following assumption: rising energy prices would give micro, small and medium-sized enterprises (MSMEs) and private households incentives to invest in modernisation. The FC measure was intended to ensure the financing of EE products via banks so that the increasing demand from MSMEs and private households for this type of finance could be met. For this purpose, FC allocated a reduced-interest loan (RIL) along with a promotional loan (PL) to two selected financial institutions and conducted capacity development measures. The results chain is coherent on the whole. Yet at the time of the PA, there were already indications that the energy prices would not increase significantly due to continuing government subsidies – and that otherwise no real pressure was or would be exerted from the government to save energy.

Boosting EE/RE and energy efficiency was a declared objective of the Serbian government during the programme appraisal, even if little effective action was taken to pursue this goal. As a result, the project was in line both with these goals and the goals of BMZ (including the sectoral strategy paper on sustainable economic development).

Donor coordination efforts were not undertaken during the project, although this would have been sensible in hindsight. From today's perspective, we rate the programme's relevance as satisfactory.

Relevance rating: 3

Effectiveness

The module objective (outcome) was to ensure the broad-based and long-term establishment of a funding instrument in the Serbian banking sector to promote energy savings among small and medium enterprises (SMEs) and private households. The municipalities, which were also specified during the PA, were beneficiaries of the Municipal Energy Efficiency Project (BMZ No. 2010 66 307). This was evaluated in parallel.

Target achievement at the outcome level is summarised in the table below:

Indicator	Status PA, target PA	Ex post evaluation
(1) The partner banks disburse the funds to the ultimate borrowers.	./.; 100% disbursement after 3 years.	Bank 1: December 2016 (start date: December 2012). Bank 2: June 2013 (start date: October 2010). **-> Indicator almost achieved.**
(2) The repayment record for the refinanced EE/RE loans is satisfactory (portfolio at risk (PAR) >90 days in the partner banks' refinanced sub-loan portfolio).	./.; ≤7%.	Bank 1: 2.3% (entire bank). Bank 2: 2.6% (entire bank; green portfolio: <1%). **-> Indicator achieved.**
(3) Reduction in energy consumption/pollutant emissions among ultimate borrowers.[1]	./.; energy savings and/or reductions in GHGs, especially CO_2 reductions of at least 20%.	Bank 1: EE: 71%, CO_2: 78%. Bank 2: EE: 23%, CO_2: 29%. **-> Indicator achieved.**
(4) (NEW): The volume of EE/RE loans increases within the partner bank's portfolio.	./.; ≥0%.	Bank 1: not possible to identify, as EE/RE are not part of the bank's core business, so no data is available. Bank 2: the green portfolio has grown constantly since the PA and reached EUR 119 million in March 2019. **-> Indicator achieved for Bank 2.**

Both banks initially struggled to issue the funds within the scheduled time frame. Bank 1 began by issuing loans to SMEs at a fixed interest rate. This was attractive at the time, as fixed interest rates were rarely available to businesses. Shortly after the agreement was concluded at the end of 2013, however, local interest rates gradually fell.[2] Subsequently, the bank's MSME department was no longer interested in issuing additional EE/RE loans from the FC credit line. After this, around 50 loans were extended to the agricultural sector (energy-efficient tractors, etc.) yet after further discussions, 88% of the funds were used for the acquisition of new apartments, as energy performance certificates had been introduced for buildings shortly before. According to the bank, it had already approved these sub-loans a short time before, and they could still be "credited" to the project – in other words, they would have been financed by the bank regardless.

Bank 2 also had to develop the intended loan segment and consequently diverted most of its financing to standard investments such as energy-efficient tractors (53%) and vehicles (13%). This was due to it being

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[1] The reduction in emissions is defined as the annual average for greenhouse gas (GHG) reduction over the duration of the measure. This is calculated by determining the difference between estimated emissions during the measure and a reference scenario (probable alternative scenario) over the duration of the measure. The GHG tools developed by the consultants, which can be used for the standard measures, include measure-specific assumptions for the relevant parameters (reference scenario, emissions factors, etc.)

[2] The National Bank of Serbia's interest rates fell from 11% to the current 2.5% p.a. between 2013 and 2019.

the first credit line of this kind. The bank learned from these experiences and is currently using its own funds to finance fewer of these standard investments, with more funds flowing to innovative EE invest-ments among selected groups of businesses. To this end, it is working together with certain professional associations, with which it also joins forces to organise informative events for businesspeople.

Overall, we rate the effectiveness as satisfactory.

Effectiveness rating: 3

Efficiency

Bank 1's parent company is listed on the stock market. The consultant helped the bank select the sub-projects it would pursue. There were no plans to change the processes to enable Bank 1 to make these selections independently in the future, nor did the bank want this. The bank is confronted with too many different programmes from different donors. In addition, its SME energy efficiency business is too small to develop its own capacity.

On the other hand, with support from the consultant, Bank 2 was able to develop its own environmental unit with a dedicated engineer. Right from the start of the programme, the bank was intrinsically motivated to make headway with SMEs and EE/RE. This motivation is partially attributable to the involvement of the parent company.

The default rates for these EE/RE loans at the two banks are significantly below the default rates for their overall portfolios, as mentioned in the Effectiveness section. This suggests good and adequate risk analy-sis and indicates that the financial products have been tailored. Both banks' return on equity is around 10% p.a., putting it in the acceptable range. Bank 1's return on total assets was just above the inflation rate in 2018 and slightly below it in 2017, while Bank 2 was below the inflation rate in both years (1.0% below in 2018, 1.5% below in 2017). The averages for the Serbian banking sector in 2018 were 2.2% p.a. for return on total assets and 11.3% p.a. for return on equity.[3] At the moment, Bank 2 is undertaking a strategic transformation, which is currently resulting in higher costs. We assume that its profitability will rebound after this process has been completed.

Bank 1 decided to adopt the 'Esafe tool' to process the applications and determine the CO_2 reductions. We do not think this is the most efficient option, even if the 'Esafe tool' is simple to use. Calculation tools tend to require an extra time investment, both on the part of the customer (who has to submit additional documents) and the loan officer (who has to attend training and input data). In addition, the tools were not harmonised between the donors. Specifically, the EBRD is demanding that another tool be used in its programmes with Bank 1.

Bank 2 also adopted a CO_2 tool developed by the consultant. However, Bank 2 later decided against us-ing the tool on account of it being complicated to use. We regard this as an efficient decision, as the use of this tool consumes significant resources. Instead, Bank 2 assesses its applications using positive lists, which the bank's environmental unit regularly updates, and which is compared with those used at its sister companies. The processing time for the applications is satisfactory at both banks.

As already mentioned in the Effectiveness section, Bank 1 invests mainly in "multi-purpose investments" (new apartments), which the bank would otherwise have financed in any case. The project's additionality is therefore limited. It is generally sensible to concentrate from the start on a small number of investment types. In this case, however, the focus should have been on investments that would yield relatively high CO_2 reductions.

Bank 2 also focused on a small number of investment types, albeit with greater variability in the invest-ments than was the case at Bank 1. Other banks (e.g. larger banks) could have been selected if neces-sary, during the programme design phase. Yet given the intended target group (SMEs), we consider the actual decision made to be reasonable, as both banks have a large customer base in the SME sector. Furthermore, the two banks selected have a strong interest in issuing EE/RE loans. In a comparable

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[3] National Bank of Serbia (2019), p. 3.

project undertaken by German FC in partnership with a large bank, the bank showed very little interest in implementing such efforts.

In view of the lengthy run-up to the project and the comparatively short FC loan term, the funds could not be used on a revolving basis.

The efficiency of the project must be viewed against the backdrop of the EE/RE projects' economic viability depending on donor-subsidised loans due to the government-subsidised energy prices. Overall, we rate the project's efficiency as satisfactory.

Efficiency rating: 3

Impact

No impact indicators were specified at the programme appraisal. The target achievement at the impact level is summarised below:

There is a strong record to support Bank 2's role in protecting the climate, with 20,000MWh/a of energy savings and 12,000t/a of CO_2 reductions. The role played by Bank 1 in this regard is somewhat less substantial, with the bank contributing 5,000MWh/a of energy savings and 2,200t/a of CO_2 reductions (see also the outcome indicator regarding energy savings in the Effectiveness section). It is very likely that this can be attributed to the type of investment (see also Effectiveness section). However, certain caveats must be applied to the CO_2 calculations, since these are only ex ante estimates and no ex post analyses were conducted. Nevertheless, it is obvious that the construction of new apartments prevents fewer CO_2 emissions than dedicated EE measures, such as insulating existing housing.

Over the same period, similar projects also received German financing at three other banks/financial companies in Serbia. At this point, it is no longer possible to determine whether the project under review had a spill-over effect on the Serbian banking sector. Several banks have withdrawn from the EE/RE financing segment. At the time of the ex post evaluation, five banks are the main active parties in this segment. Overall, however, awareness of EE/RE has increased both at the businesses and among consumers, which is attributable both to the programmes financed and to awareness-raising activities on the part of the government.

Bank 2 has made energy efficiency loans for SMEs an integral part of its portfolio, while Bank 1 only offers these loans if they can be refinanced by international donors. As a result, there are no structural impacts from Bank 1's perspective.

Both banks have introduced their own environmental and social management systems. Bank 1 has been able to establish itself as a leader in this space, including within its parent group. It is highly unlikely that there will be significant adverse environmental and social impacts at either bank due to existing safeguard processes.

In summary, we consider the impact to be satisfactory.

Impact rating: 3

Sustainability

Following the implementation of the programme, Bank 1 is familiar with the processes associated with the EE/RE product. Its nationwide network of branches and good customer retention have helped it in this regard. However, in the absence of additional donor funding combined with technical assistance, Bank 1 would not implement any further programmes in the area on its own initiative or with its own resources. The sustainability of these activities is limited.

Bank 2 has continued to offer the EE/RE product, including after complete disbursement of the FC line, and is now using its own funds to this end. The FC support was an important building block here in the bank's pre-existing process of developing its "green segment".

We see low energy and gas prices as a continuing obstacle and risk to the project's sustainability. These remain at the lower end compared with prices in other European countries, including compared with other

countries in the Western Balkans.[4] As a result, the only investments that come into effect are those made for other reasons (e.g. investments that would have been made anyway, such as more efficient facilities or more modern apartments, etc.) that have a very short payback period or are carried out at the company's own initiative. Although the German government conducts regular sectoral dialogue on energy prices, it has not been successful to date.

From today's perspective, on account of the limited sustainability of Bank 1's involvement, we rate the project's sustainability as just about satisfactory.

Sustainability rating: 3

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[4] AERS (2019): pp. 35, 38, 72, 75.

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

Projects (and programmes) 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).