

SPECIAL STUDY

The EBRD's Sustainable Energy Finance Facilities (SEFFs)

February 2016

EBRD EVALUATION DEPARTMENT



European Bank
for Reconstruction and Development



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Abbreviations

AFD	Agence Française de Développement
E2C2	Energy Efficiency and Climate Change
EU	European Union
EUEEFF	European Union Energy Efficiency Finance Facility
EvD	Evaluation Department
IFC	International Finance Corporation
IFI	International financial institution
KfW	Kreditanstalt für Wiederaufbau
NEFCO	Nordic Environment Finance Corporation
OCE	Office of the Chief Economist
OECD	Organisation for Economic Co-operation and Development
OPA	Operation Self-assessment
OPAVs	Operation Performance Assessment Validations
PFI	Participating Financial Institution
SBS	Small Business Support
SEFF	Sustainable Energy Finance Facility
SEI	Sustainable Energy Initiative
SEMED	Southern and Eastern Mediterranean
SME	Small and Medium Sized Enterprises
TC	Technical Cooperation
TIMS	Transition Impact Monitoring System

Executive summary

Since 2004 the EBRD has helped develop energy efficiency and renewable energy financing markets in its region through Sustainable Energy Finance Facilities (SEFFs). The distinctive element of these facilities is the provision of credit lines through Participating Financial Intermediaries (PFIs) accompanied by grant-financed technical assistance, chiefly to PFIs and sub borrowers, and in many cases incentive payments to the ultimate beneficiaries, mainly small and medium enterprises (SMEs) and households. So far SEFFs have worked with 90 local PFIs to provide credit lines supporting energy efficiency and small-scale renewable energy investments. The €2.4 billion SEFF portfolio includes 27 facilities (original SEFFs and extensions) at various stages of implementation in 20 countries. This Evaluation Department special study evaluates the design, implementation and impacts of the SEFFs from January 2004 to the end of 2013.

While national variations exist in market barriers, policy contexts and resources across the region, the SEFF countries present similarities in terms of energy and sustainability challenges. On the energy supply side, countries have been slow to diversify their energy mix; on the energy demand side, inefficient energy use has been a major challenge. Underinvestment has been a consistent feature despite significant potential for renewables and savings. New political priorities, in particular influenced by the progressive alignment with EU directives on environmental issues, emphasize diversification and efficiency. Four main categories of market barriers have been identified: (i) financial, (ii) technical, (iii) awareness and (iv) legal, which the SEFFs aim to overcome to foster the development of an energy efficiency and renewable energy financing market.

SEFFs have been supported by the EBRD's policy and strategy framework, notably since the 2000 Energy Operations Policy, since 2006 by the Sustainable Energy Initiative (SEI) (now in its third phase), and since 2013 by the Sustainable Resource Initiative. Country Strategies and the 2003 and 2008 Environmental and Social policies add another element to the strategic framework.

Overall SEFFs have been found consistent with the Bank's policies although direct evidence of how these policies have influenced the design of SEFFs has not been made explicit in Board Documents. Available indirect evidence suggests an iterative relationship with policies influencing SEFFs and in turn SEFFs informing further the policies. SEFFs may target either single countries or a region, with Turkey and Bulgaria being the largest beneficiary countries in absolute and relative (SEFF lending as a proportion of net EBRD investment in the country) terms. The general trend is a steady increase of the approved amount per year - from €50 million to around €500 million per year. The total SEI committed amount financed from launch in 2006 to 2013 was €13.4 billion to which SEFFs contributed 18 per cent. This has financed over 62,000 projects up until March 2014.

While the largest number of projects (93 per cent) were in the residential sector, the industrial sector has been the main beneficiary in terms of funds (85 per cent), followed by residential (12 per cent), while the municipal sector has been negligible (2 per cent). The most common transition impact objectives found in SEFFs are the demonstration of new products and financing methods and transfer of skills, with particular cases highlighting the impact on competition, financial intermediation or the sustainable removal of market barriers. Notably the intended contribution of SEFFs is the creation of a market for energy efficiency and renewable energy financing rather than the direct solution of the current needs in the field.

Key Finding

The SEFF tool has been very positive to date in terms of meeting its operational objectives, contributing to intended transition impact, and being valued by the PFIs and project sponsors. This study identifies ways to build on and enhance that success, without suggesting changes that would adversely affect the characteristics of the SEFF that have made it a success. Main findings and recommendations are further summarised below.

Findings on design

- ✓ SEFF objectives were found to be consistent with EBRD sector policies and strategic frameworks. SEFFs have been shaped by the EBRD's policies and strategies and in turn these have been informed by SEFF experience. The use and targeting of incentive payments within SEFFs has followed the EBRD's principles and criteria, contributing in some cases to changing behaviour patterns and lowering the start-up costs for financial intermediaries targeting lending products at small businesses.
- ✓ SEFF objectives were found to be consistent with the needs of the countries. Each SEFF is informed by a market demand study and may be influenced by other factors such as donor priorities. But while SEFF designs have generally been consistent with the barriers identified in those market studies, there are some inconsistencies in the extent to which the logical connections between market barriers and the specific SEFF features chosen are stated in Board documents.
- ✓ The EBRD tracks SEFF objectives against quantitative targets or 'transition impact monitoring benchmarks' set at the design stage. Overall the EBRD has been flexible in setting the targets to local circumstances. However, some benchmarks were based on assumptions of allocation and carbon emission factors that can lead to difficulties in achieving targets if assumptions are shown to be imperfect or market conditions change. There is a tacit intervention logic for SEFFs that is generally understood, but there has been little consistency in how this intervention logic has been translated into relevant performance indicators. As a consequence, the choice of benchmarks has varied widely between SEFFs without

any clearly stated rationale. There has also been a tendency to adopt benchmarks relating to the long-term impact of creating a self-sustaining market for energy efficiency and renewable energy financing, but at present there is no mechanism for continuing to monitor these indicators once a SEFF has finished.

- ✓ Key success factors were identified as the effectiveness of project consultants; simple procedures and fast credit decision making process; commitment of the PFIs; bundling of loan funds with donor-funded TC and (in some cases) incentive payments and 'smart' incentives linked to energy savings or CO2 reductions to deliver higher standards. There is evidence of an evolution in SEFF design based on good practices informed by lessons, but these lessons are not well documented in project or strategic documents.

Findings on implementation

- ✓ At the implementation level, SEFFs were found successful in achieving their financial and technical benchmarks, with TC playing a major role in achieving these results. Based on case studies and previous evaluations, the achievement of quantitative objectives is considered very good, with completed SEFFs achieving almost all of their targets and even exceeding in some cases.
- ✓ Regarding effectiveness of technical cooperation, there is a strong consensus among the main stakeholders that the project consultants were critical to the achievement of SEFF objectives. The main added value of TC was in raising the awareness of environmental, social and safety issues in PFIs, and in exposing them to the opportunities offered by a new market segment. Although the TC provided has been effective and highly valued, some PFIs felt that when the SEFF comes to an end they might lack sufficient capabilities to continue sustainable energy lending without the technical support of the project consultants.
- ✓ Where incentive payments have been used, these were found to be appropriate for overcoming specific types of market barriers and the levels at which incentives were set have been as low as possible while still retaining efficacy. They can focus attention and motivate action where the level of prioritisation given to sustainable energy investments is low even though such investments are cost-effective. Incentives also encourage the use of higher standards or better performing technologies, hence leading to more substantial 'deeper' interventions. There has been a clear trend of increasing "smartness" in incentives to sub-borrowers (i.e. linking to quantitative aspects of project performance), and phasing out PFI incentives in countries where there has been a succession of facilities.
- ✓ The efficiency of SEFF management has been good and EBRD reporting requirements were not found to

be overly burdensome. The management of SEFFs has benefited from over 10 years of learning experience and can be considered as best-practice for an initiative operating in such a wide geographical area. The lack of a uniform monitoring system is an area needing improvement though some should be seen with the launch of a new Management Information System.

Findings on impact

- ✓ In terms of results and transition impacts, evidence suggests that the SEFFs have had a positive impact on investment in energy efficiency and renewable energy. The main impacts appear to be increased awareness of energy efficiency and renewable energy opportunities; transfer of skills to PFIs and sponsors; demonstration effects (particularly in the residential sector); and the use of better technologies than those commonly used on the market. Where it has been a relevant objective, SEFFs have positively influenced the ability of countries to comply with EU requirements on energy policies. The impacts on institutions, laws and policies that promote market function have been successful in countries where there has been a direct policy dialogue component. Although indicators relating to direct energy and CO2 savings are a convenient way to measure the technical achievements of sub-projects, they are of secondary importance to the indicators relating to the creation of a self-sustaining market for investments.
- ✓ Policy dialogue has been an important component of the Bank's work alongside SEFFs, and enhances leverage and long-term impact. There has, however, been a lack of reporting and recognition of the work done except when it is included as a transition impact benchmark. Two examples of some success are BelSEFF, where the process of drafting legal instruments key to the success of the SEFF was accelerated, and KyrSEFF, where a long process of preparatory policy dialogue between EBRD and the government in energy efficiency in buildings preceded a successful launch.
- ✓ Regarding SEFFs' sustainability, few examples exist of continued energy efficiency and renewable energy lending by PFIs beyond or outside of the SEFFs. There has been a clear trend towards a greater focus on long-term sustainability in SEFF design, such as the use of lower and more precisely targeted incentives, inclusion of policy dialogue and efforts to develop the local consultancy sector. Benchmarks relating to long-term sustainability are also becoming more widely used, such as the volume of lending from alternative non IFI sources and the number of local engineering firms receiving training. In this respect, there has been an evolution of the SEFF model towards ensuring that SEFFs leave a legacy of a strengthened project consultancy sector.

Recommendations

The evaluation's recommendations are presented here in summary form. Each is set out in fuller form in Section 4.2 below, on the basis of which such follow-up actions as deemed appropriate may be taken.

Recommendation 1: Formalise the programmatic approach

While the success of the SEFFs led to a clear plan to replicate the SEFF model in the region, there remains a tendency to regard each facility as a stand-alone project. Formalising the SEFFs as a programmatic approach has the potential to improve consistency and efficiency in the design, implementation, monitoring and evaluation of SEFFs. Areas where a programmatic approach could yield benefits include: (a) introduction of regular programme-level evaluation; (b) systematic use of transition impact benchmarks and indicators; (c) adoption of a common structure for project documentation; (d) consistent approach to TC; and (e) coordination of SEFF-wide activities. The potential should be explored to use non-transactional TC funds to support SEFF-wide activities such as the SEFF website, annual conference and success stories dissemination.

Recommendation 2: Make explicit an intervention logic and use consistent and relevant transition impact benchmarks

While all SEFFs have the same long-term objective of stimulating the creation of a self-sustaining market for energy efficiency and renewable energy investments

through broadly similar means, there is a lack of consistency in the indicators used to monitor performance and to link those indicators with transition impacts. A programme-wide intervention logic for SEFFs should be defined that specifies: (a) the outcomes expected from the range of typical SEFF outputs and when subsidies/incentive payments are used clarity on the objectives of these; (b) the connection between these outcomes and the desired impacts; and (c) the assumptions and risks implicit in each of the links in the intervention logic. At least some of the outcome indicators should be capable of aggregation across multiple SEFFs. Now that country strategies have results frameworks, baselines should be established, and targets set, monitored and reported at the country level. Individual SEFFs would then establish their contribution to meeting these targets.

Recommendation 3: Broaden the benefits to the local consulting sector

Consortia of consultants supporting the SEFFs have included local firms and have thereby developed the local consulting sector, although the benefits have tended to be confined to a relatively narrow group of local firms or experts. To develop a fully functioning sustainable energy market, capacity building should be broadened to encompass local firms and experts outside of the project consultants' consortium. Any subsequent phases of a facility should explore more creative uses of TC funds, such as a local consulting firm accessing SEFF TC support to originate and develop SEFF sub-projects.

Introduction

Scope and objectives

This study covers the SEFFs approved by the EBRD since the first such facility was launched in January 2004 until the cut-off date of end 2013. This represents a total of 27 facilities (counting original SEFFs and extensions) in 20 countries. Some of these facilities have now been completed, others are currently under implementation.¹

The special study's two main objectives were (i) to provide an aggregate view of the SEFFs' evolution, range and coverage, in the context of the region's energy markets and legal context and the Bank's strategic and policy framework; and (ii) to extract findings and provide operational recommendations to inform the design of future SEFFs. Rather than providing an overall rating of the SEFFs, which would have required a full evaluation of each facility, the focus has been on identifying insights to enhance the EBRD's learning.

Study approach

The study was conducted in two phases. First, an extensive desk review of all SEFFs to determine their scope, relevance, structure, operational and transition objectives, elements substantiating the Bank's additionality, and other relevant aspects, together with a review of all previous EvD evaluated SEFFs performed to date. Then, an in-depth review was made of selected SEFFs as case studies – BelSEFF, PolSEFF, and KyrSEFF – to cover a range of countries and structures. The in-depth review involved field missions to Belarus, Poland and Kyrgyzstan during which

interviews were conducted with the main stakeholders to obtain first hand quantitative and qualitative information. Surveys of project consultants and PFIs were also conducted to gauge their view on the SEFFs' design, implementation and impacts.

Structure of the report

As a point of departure, section 2 provides an analysis of the market and policy context in which SEFFs have evolved, with particular attention to the EBRD's policy and strategic framework. An aggregated overview of the portfolio of SEFFs is included with particular attention to the geographical spread, sectors covered and evolution. This is complemented with a summary of activities performed by other IFIs in the field of energy efficiency and renewable energy.

The main findings of the study have been structured in section 3 of the report around five broad thematic areas, namely:

- i) Benchmark monitoring and transition results,
- ii) Use and effect of incentive payments (subsidies),
- iii) Role of policy dialogue and (iv) Role of project consultants

Finally section 4 provides an aggregated view of the main findings and recommendations extracted from the previous analysis. These have been grouped into the Organisation for Economic Co-operation and Development-Development Assistance Committee (OECD/ Development Assistance Criteria) evaluation criteria categories of relevance, effectiveness, efficiency, impact and sustainability.



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Market and policy context

Market context and barriers

The EBRD's countries of operations each has its own local features stemming from differences in resource endowments, specific policy contexts and market dynamics at national levels but also present important similarities in terms of energy context and sustainability challenges that have high environmental, economic and social costs. These can be summarized as:

- Pervasive technical inefficiencies related in part to equipment obsolescence;
- Long-standing investment insufficiency;
- Dominance of fossil fuels in the power mix;
- Carbon intensity ranging from 2 to 4X the EU-15 average;
- Little penetration of renewable technologies, despite substantial potential;
- Pricing and regulatory distortions;
- Substantial need and unexploited opportunity for investment at small/medium firm level.

Energy Efficiency and Renewable Energy have only recently received more systematic policy attention: new political priorities that place emphasis on diversification and efficiency have been slowly translated into more practical and detailed approaches. This trend is in particular influenced by the progressive alignment with EU directives on environmental issues, in particular with the EU 20-20-20 package and the new 2030 framework for climate and energy policies.² However, coordinated policy implementation across the various supervisory authorities (national, regional, local) has been challenging and renewable energy and energy efficient technologies have not achieved significant degrees of market penetration to date.

Four categories of impediments (commonly referred to as market barriers in the Board documents) appear:

Financial barriers - due to the absence of adequate pricing to incentivize investments and to attract financial capital.

Technical barriers: On the side of the borrowers, dearth of technical know-how and funds for feasibility studies and audits. On PFIs' side, limited experience in assessing loans applications for energy efficiency and renewable energy projects and their bankability.

Awareness and knowledge barriers - low recognition among stakeholders about the benefits and financial viability of energy efficiency and energy conservation projects.

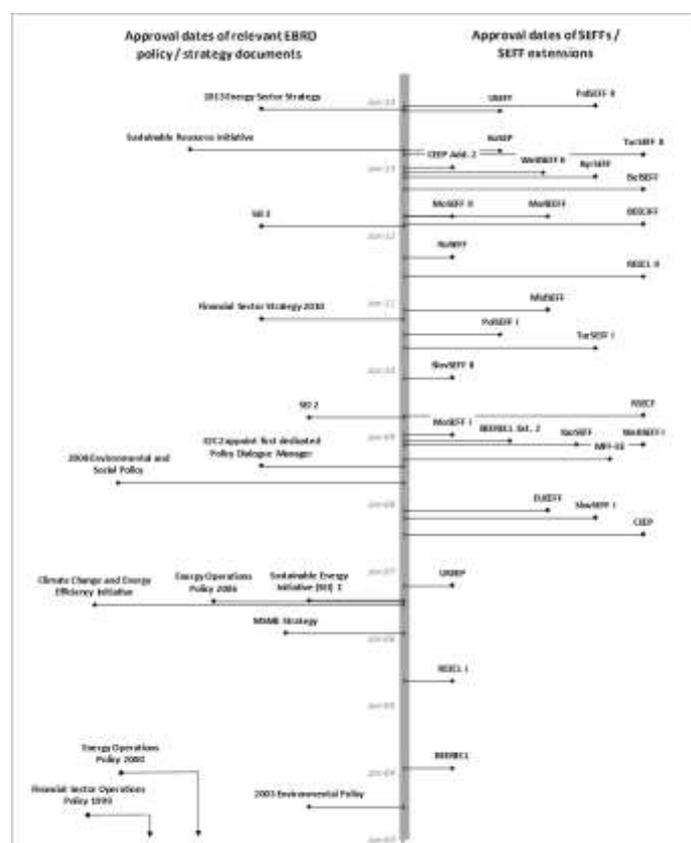
Regulatory and legal barriers.

The financial and technical barriers are addressed in SEFFs though the support of a project consultant and incentive payments to PFIs and sub-borrowers. Legal barriers are mainly addressed by policy dialogue. Since not all SEFFs have a policy dialogue component, this is often not a SEFF activity per se, but is conducted in parallel with, and informed by, the activities of the facility. Similarly, the awareness and knowledge barriers are addressed by workshops organised by a contracted project consultant and, according to the typical SEFF model, by the demonstration effects arising from successful sub-projects.

The EBRD's policy and strategic contexts

The development of SEFFs over the ten years since the start of the first SEFF (BEERECL in January 2004), has taken place alongside an evolution in the EBRD's policy and strategy framework. At the time of the first approval, the EBRD policy framework was defined by the 1999 Financial Sector Operations Policy, the 2000 Energy Operations Policy and the 2003 Environmental Policy. All these have been superseded by new versions. The design of SEFFs has been shaped by the development of these policies but has also influenced their evolution. Figure 1 below depicts the approval process of SEFFs alongside the most important EBRD strategy and policy publications.

Figure 1 Timeline of SEFF approvals



Two successive Energy Operations Policies and three phases of the Sustainable Energy Initiative committed the Bank to the following broad objectives:

- Increase efficiency at all stages in the energy supply chain
- Improve the quality of energy services
- Improve environmental performance
- Reduce carbon emissions
- Use financial intermediaries to reach a wider number of smaller companies and households
- Use grant resources to achieve its objectives
- Deepen policy dialogue
- Improve competitiveness
- Enhance security
- Ensure “smart” use of subsidies and so forth.

In addition to these, the Bank’s country strategies, financial institution operations policies and environmental policies have also contributed to shape SEFFs. Overall, SEFFs have been consistent with, and supported the aims and objectives of the Bank policy and strategy documents. Direct evidence of the role played by these policies in the design and evolution of SEFFs is limited because Board documents typically address the relevant EBRD policy and strategic context only briefly, often just noting consistency of the facility in question with a particular policy document. Available indirect evidence suggests a positive iterative relationship where the policy and strategic context may drive SEFF development to a certain extent, but where the experiences gained from SEFFs in turn inform the further development of policy. A few examples point towards SEFFs as a positive influence in informing the evolution of the Sustainable Energy Initiative (SEI), and the SEI appears to have positively influenced the direction of development of SEFFs, particularly in respect of scale-up, smart subsidies and the increased role of policy dialogue.

The box below summarizes some of the main features of the most relevant policies and strategies.

Relevant SEFF policy and strategic documents

2000 Energy Operations Policy: Two of its four objectives were to increase efficiency in the energy supply chain (including improving the quality of energy services) and to improve environmental performance by meeting climate change objectives and supporting renewable energy.

2006 Energy Operations Policy: Set a formal target to make a minimum of €1 billion of investments in energy efficiency and renewable energy during the period 2006-10. The Policy identified the financing of smaller projects through financial intermediaries as an important approach. Also stated to seek higher volumes of TC funds or co-financing grants to support these activities.

Sustainable Energy Initiative (SEI): Supports the investment targets of the 2006 Energy Operations Policy, but also goes beyond as it covered both demand and supply-side efficiency projects and other carbon emission reduction projects. The SEI, launched at about the same time as the 2006 Energy Operations Policy, set an objective to invest up to €1.5 billion in sustainable

energy projects over the three-year period 2006-08. The SEFF model was included as an important component.

SEI 2: Launched in April 2009, continued the focus on sustainable energy as an instrument to improve competitiveness, enhance energy security and achieve transition to a low carbon economy. Greater attention was put on subsidies to be ‘smart’ and to address the barriers to energy efficiency. Reconfirmed the role of SEFFs in developing the market for energy efficiency through demonstration and impact on awareness. It envisaged a substantial scaling up of SEFFs and a general need for an increase in policy dialogue.

SEI 3: launched in March 2012, combines innovation with consolidation of the achievements under the previous two phases. Set a target of €4.5 to €6.5 billion, with a total project value range of €15 to €25 billion. Recognised the continued development of SEFFs and importance in attracting donor financing, in particular non-TC funding.

Country strategies: EBRD country strategies are an important element of the strategic framework within which SEFFs have been developed. Indeed, the original SEFF model arose from the Country Strategy for Bulgaria, rather than from the sector strategy. Country strategies are discussed in some detail in the Board documents for the first three SEFF, however no detailed discussion was included in the board documents of subsequent SEFFs. Despite this lack of detailed discussion, the review of the country strategies of those countries where SEFFs have been implemented has found these to be consistent with the main SEFF features and in some cases the SEFF approach has in turn been incorporated into updated ones (e.g. Bulgaria, Slovakia). It has to be assumed therefore that the absence of discussion does not indicate that the country strategies play no part in the development of SEFFs, but that this has taken place in a non-explicit way which makes it difficult to determine their precise role.

Environmental and social policy: The changes in the Bank’s environmental and social policy between the 2003 and 2008 versions have not been sufficiently great to have had a discernible impact on the overall design of SEFFs. However, some lessons from the first SEFF, BEERECL, have had an important influence on the Bank’s environmental requirements for renewable energy projects. In response to some potential environmental hazards connected with small hydro-power development that were identified during BEERECL, the Bank introduced environmental and social requirements and procedures for small hydro projects. These were subsequently expanded to encompass wind power projects, and will be expended further to include biomass energy projects. The procedures are not specific to SEFFs, but form an integral part of Bank-wide environmental and social policy with regard to renewable energy development.

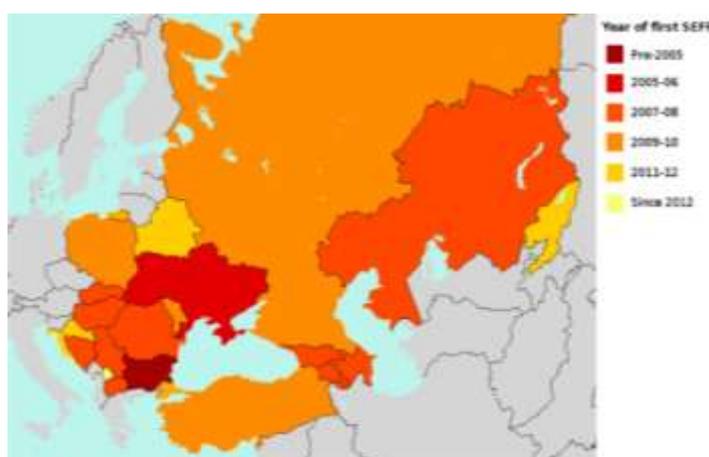
Other sector policy and strategy frameworks: Finally, the 1999 Financial Sector Operations Policy, the 2010 Financial Sector Strategy and the 2006 Micro, Small and Medium-sized Enterprises Strategy have all contributed in defining the EBRD policy context within which SEFFs have evolved and all SEFFs appear to have been fully consistent with these although there, is little evidence of their specific impact in shaping SEFFs.

Key features and lending history

Regional and country distribution

From January 2004 when the first SEFF was signed (i.e. Bulgarian Energy Efficiency and Renewable Energy Credit Line - BEERECL) to December 2013, the EBRD approved 21 SEFF frameworks (27 counting framework extensions) in countries from South-Eastern Europe, Central Europe, the Baltic States, Eastern Europe and the Caucasus and Central and Western Asia.³ The purpose of these SEFFs is not so much to directly solve the vast energy challenges of the EBRD region but to foster the creation of markets for energy efficiency and renewable energy financing.

Figure 2 Geographical distribution by year of approval



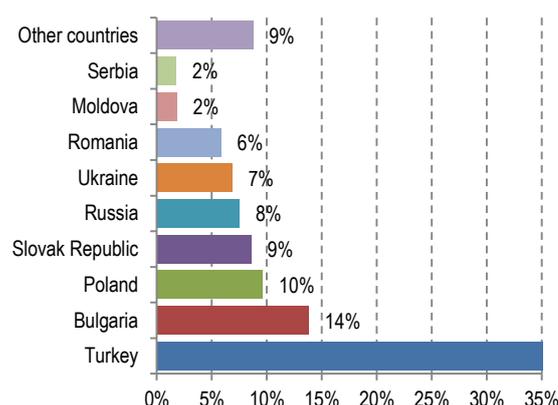
By end of 2013, the SEFF portfolio covered 20 out of EBRD's countries of operations though either single or regional framework facilities, depending on strategic advantages and/or on priorities of donors. The period 2007 and 2008 saw the highest expansion of EBRD support with 10 new countries: Armenia, Georgia, Azerbaijan, Bosnia, Serbia, Macedonia, Slovak Republic, Hungary, Romania and Kazakhstan. Turkey has by far the largest share, followed by Bulgaria, the first country where SEFFs started. Both countries are also the largest beneficiaries in terms of SEFF lending as a proportion of net EBRD investment in the country. At the end of 2013, no SEFF had been financed in the Southern and Eastern Mediterranean (SEMED) region (although MorSEFF and JorSEFF were approved since).

Table 1 Distribution of committed loans amount per region (EBRD regional classification)

Region	Countries*	EBRD Loans (committed € million)	per cent
Turkey ⁴	Turkey	834.2	35
South-eastern Europe	Bosnia and Herzegovina, Bulgaria, Macedonia, Kosovo, Romania, Serbia, Croatia	587.8	24
Central Europe and the Baltic states	Hungary, Poland, Slovak Republic	486.5	20
Eastern Europe and the Caucasus	Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine	286.7	12
Russia	Russia	179.8	7
Central Asia	Kazakhstan, Kyrgyz Republic	36.9	2
Total committed amount		2 412	100

*covered by the study

Figure 3 SEFF country distribution (as per cent of total committed amount)



Loan sectors

SEFF facilities have been designed to provide finance for two priority areas: energy efficiency and small scale renewable energy. Out of the 21 SEFFs, six were specifically designed to target energy efficiency in the industrial, commercial/SME, residential and/or municipal sectors.⁵ All other SEFFs included in their initial design both energy efficiency and renewable energy projects. The three main targeted sectors for SEFFs are: i) industrial and commercial, ii) residential sector and iii) the municipal sector. In contrast with industrial and commercial SEFFs that relied

on corporate investment assessments, the residential SEFFs were designed to process tens of thousands of applications for standardised items that meet minimum energy performance criteria. This required a list of pre-agreed equipment and installers, as well as invoice-based verification services.

By March 2014, over 62,000 sub-projects had been financed of which 93 per cent were residential. Out of these, 93 per cent in turn were for individual family homes or apartment dwellings. In terms of allocation of funds however, the industrial sector has been the main beneficiary with 85 per cent of the total disbursed funds. The residential sector accounts for 12 per cent of the total disbursement while the municipality sector for 2 per cent.

Evolution of the portfolio over the period 2004-2013

Table 2 shows the general trend in the SEFF portfolio of steady increase of the approved amount per year from the first SEFF in 2004 up until end of 2013. The peak in 2010 corresponds to the year of approval of three relatively large SEFFs: TurSEFF (€142 million), PolSEFF (€180 million) and MidSEFF (€577 million). The drop in 2011 may be a delayed consequence of the global economic crisis, taking into account the typical gestation period of SEFFs. The path of rapid growth has become re-established since 2011.

Table 2 Distribution and approved framework amounts of SEFFs by year of board approval

<i>Board approval year</i>	<i>SEFF</i>	<i>EBRD FW amount (million €)</i>
2004	BEERECL	50
2005	REECL	50
2006	BEERECL add 1, UKEEP	150
2007	CEEP, EUUEFF, SlovSEFF, UKEEP ext	288
2008	BEERECL add 2, WebSEFF, KazSEFF, MFF-EE	287
2009	SlovSEFF II, RSECF, MoSEFF,	341
2010	TurSEFF, PolSEFF, MidSEFF	1 042
2011	REECL II, RoSEFF	100
2012	MoSEFF II, BEECIF, MoREEFF, BelSEFF, KyrSEFF	261
2013	PolSEFF II, KoSEP, TurSEFF II, WebSEFF II	564
	Total	3133

Out of the total SEI committed amount financed from 2006 (when the SEI was launched) to 2013 of €13.4 billion, SEFFs contributed an 18 per cent. The share of SEFFs among SEI financing increased over time, with a particularly sharp increase in 2010, following the approval of these three large facilities. This share has been consistent since 2010, at around 20 per cent of SEI financing.

Eligibility criteria

The eligibility criteria for a given facility are defined in detail in the Policy Statement for each SEFF, usually attached as an annex to the Board Document. The rationale for the selection of particular eligibility criteria, and for the levels at which they are set is rarely explored in the Board Documents, however, no evidence was found to suggest that eligibility criteria have been inappropriate to the individual context of a facility, and a large majority of the project consultants surveyed felt that the eligibility criteria for their particular SEFF were appropriate.

Two main categories of eligibility criteria are always defined: (i) those relating to the nature of the sub-borrower; and (ii) those relating to the characteristics of the sub-project.⁶ In addition to these, some SEFFs may also include further criteria that relate to the facility level. The use of these eligibility criteria is analysed in more detail in the following sections.

Participating financial institutions

Up to the end of 2013 the EBRD extended credit lines through SEFFs to 90 local financial institutions, most of them private banks with 56 per cent being international and 36 per cent local banks.⁷ There are a few examples of leasing companies (around 6 PFIs) and micro-finance institutions (MFIs) (4 PFIs). PFIs are recruited based on the assessment of their level of interest and their financial capacity.

- 15 countries of operations have less than 5 PFIs benefiting from SEFF loans; 3 countries had between 6 to 10 PFIs and 2 countries had more than 11 PFIs each
- The average committed amount per PFI was €26 million.
- Most of the PFIs received between €10 million and €49 million; 7 PFIs received between €50 million to €99 million; 8 received more than €100 million.

Activities of other IFIs in environmental lending

A number of IFIs have been active in environmental lending though financial intermediation: the major IFIs, namely International Finance Corporation (IFC), European Investment Bank (EIB), Asian Development Bank (ADB), and other institutions such as the KfW Entwicklungsbank (KfW), Agence Française de Développement (AFD), Nordic Environment Finance Corporation (NEFCO), Green for Growth Fund (GGF), Global Climate Partnership Fund and the European Energy Efficiency Fund (EEEF).

Among all IFIs, EBRD and IFC are by a large margin the most significant providers of sustainable energy lending in terms of volume. They were the first IFIs to start operating green

credit lines and are the most experienced in this area. IFIs such as AFD and NEFCO reported they have been building their products among other based on lessons of EBRD SEFF products. NEFCO has been cooperating with EBRD for the last 25 years, first with public sector projects and in more recent years with private sector projects and EBRD supported them for the selection of PFIs in Russia.

According to a study from the OECD on environmental lending in EU Eastern partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine), credit lines supported by IFIs are the main source of long-term funding for green investments and the EBRD is by a large margin the most significant financier, followed by IFC.

Overall IFIs credit lines differ in various aspects. Some IFIs have limited their operations to specific sub-region while others are operating worldwide (i.e. IFC, KfW, AFD, and Global Climate Partnership Fund). There has been also some segmentation in product offering. Most of them provide financing for energy efficiency and renewable energy projects while others focus only on energy efficiency (i.e. EIB) or on other sector such as agriculture, forestry and transportation sectors (i.e. NEFCO). The corporate, residential and public sectors are usually the typical final beneficiaries but some IFIs have only included the private sector as eligible. In many markets, different IFIs are providing funds and technical assistance to banks, often with different terms and lending practices.



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Benchmarks, monitoring and transition results

The stated aim of SEFFs is not to directly improve the energy efficiency challenges of the EBRD's countries, something beyond the capacities of the Bank or any other single institution; rather it is to foster the creation of a market for energy efficiency / renewable energy financing that if sustained beyond EBRD's involvement can contribute in a significant way to addressing those challenges. SEFFs are intended do this by combining a package of funds, TC, incentives in some cases and policy dialogue, aimed to help remove market barriers that prevent the development of such markets and to kick start the market through specific visible projects. In terms of transition impact this translates into focusing on some particular goals within the Bank's categorization of sources of transition impact, mainly the (i) transfer of skills, (ii) setting a demonstration effect to the market and (iii) promoting the development of institutions, laws and policies that promote markets.

This section summarises evidence of the impacts of SEFFs drawn from the Bank's system for on-going operational monitoring, previous evaluations of SEFFs conducted by EvD, case studies and surveys of PFIs and project consultants currently actively involved in SEFFs.

Monitoring arrangements

On the operational level SEFFs are monitored by the financial institutions and E2C2 teams. In addition, there is a dedicated team in the financial institutions-TC group responsible for the administration and monitoring of the donor grants support (TC and non-TC) and eight coordinators are also assigned to oversee work from each of the respective units.

Monitoring of SEFF frameworks is an ongoing process throughout the life of a facility. As opposed to credit and general project monitoring, transition impact monitoring has mostly been conducted at the framework level rather than the PFI (although with some exceptions such as MIDSEFF). Most SEFFs have at least one TIMS report at the framework level, although some are dated and/or don't cover a majority of PFIs. However, there are some ongoing SEFFs where no TIMS reports exist, either at individual bank level (for even one PFI) or at the framework level.

Monitoring benchmarks overall provide a reasonably good link between inputs, activities and outputs; however, they are not consistently applied, with some benchmarks appearing to indicate one transition objective in some SEFFs and a different one in another. Further, the benchmarks are inconsistent when it comes to their quality, with sometimes unclear baselines or targets whose

selection is unexplained or unclear. Often transition impact benchmarks are more output oriented rather than useful to indicate the sector wide stated outcome of a more self-sustaining market for sustainable energy investments. Setting adequate targets and obtaining relevant baselines appears to be difficult in terms of the energy savings expected. Efforts are often made through a market demand study and based on regularly updated carbon emission factors, to estimate an expected allocation of projects (between renewable energy and energy efficiency, and within these categories, as well as the average size expected of the sub-projects).⁸

However, as the findings indicate, and board documents stipulate, the reality can be substantially different, which makes the target less meaningful as a performance indicator. This is a slightly different experience for extension SEFFs, which have the benefit of the previous experience to recalibrate benchmarks, as was the case for SlovSEFF and PolSEFF facility extensions, and this has resulted in the facility's increased ability to reach these targets. The recent internal audit report on the SEI initiative reflects this mismatch, stating that:

"In the particular case of SEFFs [...] the reported Sustainable Resource Initiative data consists of targets for energy and carbon emissions savings determined by the E2C2 team in advance of any sub-projects being signed, generally on the basis of market studies and the E2C2 team's experience with previous SEFFs. These targets are tracked against the energy and carbon emissions savings estimated by the project consultants for the actual sub-projects financed by the relevant financial institutions, which will often be reviewed by independent verification consultants."⁹

Data from various TC and non-TC administration and accounting calculations, donor funded implementation teams and local financial institutions, is maintained by project team members on various Excel spreadsheets for each SEFF. In addition databases have been developed as part of TC implementation assignments to record the metrics from tens of thousands of SEFF investment projects. These databases are, however, all different and do not integrate with the Bank's systems. Reporting is driven from the spreadsheets and as such is prone to human error when consolidating across facilities. To replace this manual data handling a new internet based management information system is under development to support the management, monitoring and reporting for SEFF facilities which expected to be launched by end 2015. Its main features are noted in the box below.

The SEFF Management Information System

The new management information system has been designed to capture over 1,500 data fields and improve workflow processes. The system will provide an integrated view of SEFFs and become the master system for data gathering and reporting.

The new SEFF system will:

- Allow the migration of over 1 million data items currently stored in Excel spreadsheets and custom-made databases;
- Provide project tracking functionality and maintain sub-project details and metrics (almost 90,000 sub-projects already exist and approximately 15,000 new sub-projects are expected per year);
- Information necessary to calculate, process and reconcile incentive payments (over 80,000 incentive payment calculations completed so far);
- Record and mark projects against Transition Impact monitoring benchmarks and Technical Cooperation results matrices;
- Manage documents and automatically file in the relevant official filing system;
- Provide aggregated reporting on all information related to SEFFs, and;
- Allow linkage of this data to the data maintained in other systems.

The key benefits of the SEFF system are:

- Reduction of operational risk
- Reduction of data capturing and double-keying
- Availability of all data in one place
- Reduction of document handling
- Better monitoring of budgets for TC projects
- Increase of awareness for deadlines
- Faster and more efficient incentive payment process
- Automation of report production
- Consistent use of data and procedures across SEFFs and stakeholders
- Repository of linked documents and history of facility
- Tracking progress against implementation plan and deliverables of SEFF work plans
- Reporting on progress of sub-projects
- Data analysis consolidated across several levels for reporting
- Enhanced project management (common database to be used by consultancy firms and SEFF teams), cost saving and focus on operational delivery

Source: Information provided by FI-TC group

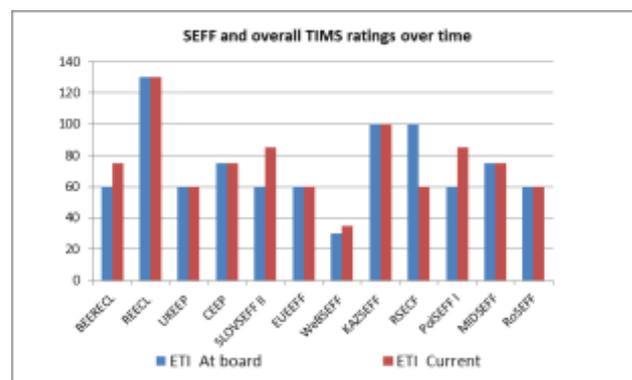
Project consultants have played a major role in monitoring, delivering periodic (usually quarterly) monitoring reports on operational parameters to Bank teams. These reports are particularly useful as they include updates of key operational and transition impact indicators at the framework, facility and the sub-project level. SEFF have to regularly report directly to the donors on the implementation of the Framework as well as providing

updates to the local EU offices and donor reports have also been useful in this respect.

Findings from the monitoring system

Of the 28 SEFFs, 15 came to board with a rating of good expected transition and high risk. Additionally, three facilities were rated excellent, and two satisfactory, on a facility level.¹⁰ According to the TIMS system (where available) today, all SEFFs are rated good or above except for WebSEFF (satisfactory). Most SEFFs are rated in line with or above the expected transition impact level at inception, the only exception being RSECF. Assessed against their transition impact benchmarks, most positive progress has been made in transfer of skills followed by demonstration of new replicable behaviour and activities, with less positive progress relative to impact on institutions and policies that support markets.¹¹ However, this may reflect a lower availability of monitoring information, partly due to outcomes stretching beyond the project cycle, rather than of an absence of positive progress. These three transition sources are described in more detail below.

Figure 4 SEFF and overall TIMS ratings over time



Transfer of skills

In terms of transfer of skills to financial intermediaries, during the review period there have been over 150 individual signings with 90 individual PFIs, of which the majority were banks, increasingly included leasing companies and more recently microfinance institutions. All facility level TIMS except TurSEFF, MidSEFF, PolSEFF II and KyrSEFF refer to a target number of financial intermediaries and these have generally been achieved.¹² Further, almost 77,000 sub loans have been extended, which is explained in TIMS as an indication of the application of the skills transfer to banks. Lastly, where TIMS monitors the number of loan officers trained, the results exceed the targets.

Regarding the number of firms reached through marketing campaigns, SEFF performance far exceeds the targets. In a sample of six SEFFs, over 12,894 firms have been reported in TIMs as having been reached, compared to the benchmark of 2,760.¹³ There are also reports of some effort on the part of the project consultants in some countries to

show causality between marketing events for example and letters of engagement issuance, List of Eligible Materials and Equipment certification and ultimately, sub loans signed. Other benchmarks on awareness that appear in TIMS include setting up a website and case studies. Websites have been a traditionally successful vehicle both for SEFF branding and as a forum for awareness building beyond marketing. In the case of KazSEFF, for example, where notably the facility was not fully utilised, the SEFF was able to raise awareness and made positive progress in spite of the sub project figures, towards development of the market.

Demonstration of new replicable behaviour and activities

Most TIMS report delays in hitting targets on the number of sub-projects, either because of a slow start (cited in REECL, UKEEP), financial crisis (cited in CEEP, RoSEFF, WebSEFF), or the expected allocation mix (cited in TurSEFF, PolSEFF and MidSEFF).¹⁴ The latest management figures show that 57 per cent of the total EBRD approved investment amount has been disbursed to almost 80,000 subjects, for a total EBRD investment of just over €2 billion.¹⁵

Commercial success is often monitored at TIMS level through either a benchmark looking at commercial success of the project or, less typically, comparing the facility funded portfolio performance to overall similar lending portfolio of the PFI.¹⁶ Additionally, regular portfolio reports to the OL as well as EBRD's credit review summaries track the health of the portfolio and financial institution as a whole. Based on a review of all these materials, EvD observes that substantial arrears to SEFF portfolio were reported in only two cases with remaining TIMS reports noting no arrears. Further, a look at the portfolio's comparative performance against similar lending programs such as the Small to Medium Sized Enterprises Financing Facility reinforces the quality of SEFF lending when investment is combined with TC.¹⁷ Finally, there appears to be little difference in this quality whether sub project lending was mainly through List of Eligible Materials and Equipment certification or through full assistance and a Rational Energy Utilization Plan.

Many facilities include a benchmark in relation with the development of a self-sustaining market. A review of the monitoring information indicates that these targets are often waived for facility extensions, or noted as on track. However, EvD observes that all SEFF extensions (TurSEFF 2, MoSEFF 2, REECL 2, SlovSEFF 2, WebSEFF 2, USEFF; and PolSEFF 2) include a target aiming at sustainability of the model and notably, there is some evidence of sustainable energy lending taking off within the PFIs as a direct result of SEFF engagement— for example, in PolSEFF, SlovSEFF and RuSEFF.

Institutions and policies that support markets

Transition related to this area looked at support to adoption of specific standards, regulations or laws via provision of expert advice and feed-back from the market, awareness raising and capacity building of local professionals. In order to see what progress has been in this area, it is necessary to look at a range of available documents for an update on contributions, as no TIMS monitoring has yet been carried on facilities with such TIMS.¹⁸ The review indicates generally positive results in this area. Where SEFFs have included capacity building activities, seeking to broaden market player awareness and improve industry standards, reports indicate positive results. Efforts from project consultants have sought to make sub borrowers aware of the positive financial implications of sustainable energy projects by including financial information in the marketing case studies.

One area where progress has been delayed is in support to carbon market development. The MidSEFF study indicated that its carbon market services component listed companies in the carbon registration process and raised awareness and knowledge but was not yet successful in monetising carbon credits (an original transition impact monitoring benchmark). The PolSEFF 2 component related to carbon market development concentrated less on operationalising this market but more on providing knowledge through a comparative analysis of market based mechanisms, feeding into a plan, with some pilot work envisaged. The carbon market options plan is currently being discussed with stakeholders.

Separately, there have been contributions of policy dialogue activities which are not captured by this institutional transition source. For example, WebSEFF contributed to multiple technical assistance packages to governments which were originated through the SEFF, though were not part of the SEFF operation.

The quarterly institutional performance report and larger reviews of the SEI provide updates on how policy dialogue action contributes to tangible outcomes. However, SEFFs are not treated separately and therefore it is difficult to adequately see their contributions. This is exacerbated by a lack of tracking metrics at a high or program level. To some extent, the nascent TCRS system should help track and capture results in a way which can be aggregated and clearly assessed. A well-articulated short position paper defining the Bank's E2C2 policy dialogue positions/objectives within the SEI framework would assist in demonstrating leadership on this issue, and the signing of action plans with relevant governments could provide the EBRD's policy dialogue work on sustainable energy (including SEFFs) with a strategic foundation in those countries.

Previous studies – need for stronger results frameworks

One issue that emerges repeatedly in evaluated SEFFs is the need for a stronger intervention logic and appropriate indicators to establish credible links between inputs, outputs and outcomes. The integrated and packaged nature of SEFF facilities, often combining financing, TC, and incentives to numerous stakeholders including PFI's, sub-borrowers and consultants, and associated objectives on disbursement, environmental and transition impact, requires an adequate framework that helps discern the role and impacts of each aspect of the projects.

Previous evaluation and case study findings on results frameworks

The evaluation of BEERECL found that indicators and TIMS benchmarks need to be more carefully chosen to ensure that they truly reflect expected results – especially when these relate to impact rather than deliverables or 'outputs'. The implementation of the operation in turn helped the project team gain experience and implement key-performance indicators in subsequent projects.

The evaluation of SLOVSEFF emphasized the need for stronger framing of results specifically in the case of projects involving incentives. "Projects that include the provision of subsidies in the form of incentive payments, administration fees or others, should define a clear logic framework establishing the causal relationship between the subsidies and the project's outputs and outcomes, metrics to establish the desired level of incentives and to measure their impact and attribution and mechanisms to provide for their adjustment over time".

The UKEEP evaluation found that to strengthen the rationale for SEFF facilities there is both a clear need for and potential benefit from documenting better evidence of the ways in which PFIs are developing a sustainable delivery capacity and the resultant impact. This could include, for example, changes to operations and procedures, establishment of new business teams or segments, business plans and evidence of incremental project based lending.

The evaluation of MIDSEFF recommended that objectives and associated benchmark targets should only be specified if the project includes distinct mechanisms whereby the variable in question can be influenced. In the specific case of technology diversification in MIDSEFF, this could have been influenced either by: (i) setting quotas for the maximum number of sub-projects from certain technology types and/or (ii) making technology diversification a specific item in the project consultants' terms of reference.

The PolSEFF case study found that while the majority of the transition impact objectives of the project had been met or exceeded, in particular the benchmarks on transfer of skills, some others were not achieved because they were not appropriately defined at the design stage and needed to be adjusted in the design of PolSEFF2.

The KyrSEFF case study noted that most of the transition impact benchmarks were on track for achievement and overall CO2 emissions per US\$ of investment well in excess of the targeted levels. This could be seen as a positive indicator of the high quality of the sub-projects financed, but also given that other SEFFs achieved comparable figures, it could be interpreted as the benchmark levels having been set too low.

Overall the evaluations conclude that there is a need to strengthen results frameworks for SEFFs in a number of ways:

- Transition impact benchmarks should reflect impact rather than deliverables or 'outputs'.
- Where SEFFs include subsidies, a causal relationship between the subsidies and the project's outputs and outcomes needs to be established.
- Regarding an intended transfer of skills, there is a need for a results framework and monitoring approach that encourages evidence of capacity building to come to the fore.
- Transition impact objectives and associated benchmark targets should only be specified if the project includes distinct mechanisms through which the variable in question can be influenced.

Survey findings

Surveys of project consultants and PFIs included questions to gather first hand qualitative, on the ground views on the adequacy of the transition impact benchmarks and seek suggestions for improvements. Specifically project consultants were asked whether they felt that the monitoring benchmarks were set appropriately both in terms of choice and level. Half of the project consultants – all of whom are under active contracts – responded positively, while the rest felt that some of them were very ambitious and overstated. In particular, specific comments were made in relation to renewable energy targets: some project consultants judged they were difficult to achieve because they sometimes do not reflect the market demand, the banks willingness to invest in this sector and the regulatory context.

Project consultants also made recommendations on how to improve the monitoring of targets. Examples given include: the inclusion of a spreadsheet template with equations to calculate monitoring figures correctly, consistently and in a comparable way with all other facilities; the definition of unified (common) targets across all SEFFs to have a comparative database; the provision of more specific guidance on the calculation of some technical and economic benchmarks.

Use and effect of subsidies

Incentive payments supported by donor funds from various sources have been a common element of SEFFs since the beginning. This section reviews the range, use and main features of incentives incorporated into SEFF operations. Sources include Board documents, project implementation reports, previous evaluations of SEFFs and the results of surveys and case studies undertaken in the course of the study.

Rationale for incentives in SEFFs

The Sustainable Energy Initiative (SEI) prepared following the first two SEFFs regarded incentive payments as a crucial element of the SEFF approach; it considered the availability of grant co-financing “on a significant scale” a critical success factor for the future of SEFFs. To date 14 of 21 SEFFs, (or 19 of 27 if extensions are counted) have incorporated incentive payments. Only 7 of the 21 SEFFs reviewed sought Board approval without the use of any incentive payments. For participating financial institutions it is argued that compensation is needed for higher associated administrative costs or for restrictions on the use of funds provided, or in some cases that incentives would encourage an earlier roll out of the facility. More commonly used than incentive payments to PFIs is the provision of grants to sub-borrowers on completion and verification of a sub-project. The rationale for targeting sub-borrowers is generally presented as encouraging prioritisation of energy efficiency investments. There are no cases to date of incentives to PFIs but not to sub-borrowers.

A review of pre-Board Directors’ Advisors’ Questions regarding SEFF proposals reveals that it was rather the absence of incentive payments that triggered specific inquiries. In response to these, the case for proceeding without incentives was generally made in the context of increasing energy prices providing sufficient incentive (UKEEP, KazSEFF), where energy prices are still well below cost recovery levels (RSECF, BelSEFF), where the local banking sector is already well-engaged (TurSEFF, MidSEFF), or where other incentives already exist, such as introduction of a feed-in-tariff system or the blending of Clean Technology Fund finance (TurSEFF) to provide long-term concessional loans.

Levels of incentive payments

The level of incentive payments is set based on the results of market demand studies carried out prior to the launch of each facility, which are then used by the operation teams with a degree of flexibility based on their market knowledge, experience in previous similar facilities and in

many cases previous experience working with the PFIs. In any case there is inevitably uncertainty at the time of entry into a new market, resulting in test and calibration in successive phases. For local PFIs, incentives in the form of administration and/or performance fees range between 0.5 and 3 per cent of the loan volume and are intended to compensate for the restricted use of proceeds and additional monitoring and reporting requirements. Incentives for sub-borrowers usually take the form of a one-off payment at project completion, normally in the range of 10-35 per cent of the loan amount. Out of the 27 SEFF frameworks 12 include a full grant package of incentives for the benefit of both the sub-borrowers and the PFIs, while other SEFFs have different structures of incentives further described below.

Incentive payments to PFIs

Incentive payments to PFIs are found in 10 facilities almost entirely in South-Central and South-Eastern Europe. This geographical clustering may be an indication that, for PFIs outside this area, the additional liquidity that SEFF funds, provides sufficient incentive for them to participate. In every case where PFI incentives have been used, the main rationale has been that banks need to be compensated either for the additional administrative/reporting costs or for the restricted use of funds. Some early SEFFs provided part of the PFI incentive in the form of an annual administration fee linked to the total loan amount outstanding. However, this model has not been used since late 2007. Generally, PFI incentives are paid as a fixed fraction (most commonly 2-3%) of the total volume of facility loans made. Some facilities pay this on disbursement, while others make either part or all of the incentive payable on successful completion and verification of sub-projects.

Given their stated purpose, there is a strong rationale for reducing PFI incentives where they have already been in use. This is seen in the four country cases with a succession of SEFFs or SEFF extensions. In Bulgaria and Slovakia, PFI incentive payments have been removed completely, while in Romania and Moldova they have been partially removed (for facilities lending for industrial efficiency). PFI incentives were retained in Romania for MFF- energy efficiency and in Moldova for MoREEFF, reflecting the higher transaction costs of working in the targeted sectors (municipal and residential, respectively).

Incentives to sub-borrowers

More commonly used than incentive payments to PFIs has been the provision of a grant to the sub-borrower on completion and verification of a sub-project. The rationale for using sub-borrower incentives is generally presented in SEFF Board documents as encouraging the higher prioritisation of energy efficiency investments. However, the justification for their use is often presented in very general terms, with no detailed analysis as to whether they are the most effective means of overcoming the identified barriers, or whether they represent the most efficient use of grant funds. A typical example can be found in the Board

document for WebSEFF, where a list of barriers is presented followed by the statement that “in order to overcome the various barriers, the credit line will be supported by incentive payments for Sub-borrowers and Participating Banks”.

Sub-borrower incentives have been used in 14 facilities, with levels ranging from 5 per cent of the loan amount (the lowest level paid under SlovSEFF II and WebSEFF II) up to a maximum of 50 per cent (BEECIF) but most commonly in the range of 10-35 per cent. The general consensus among project consultants surveyed was that the level has tended towards the lower end of the range of useful values, a view that was consistent with that expressed by OLs during interviews. In particular, incentive payments were sometimes felt to be too low to be attractive in a local context where much larger grants are available from other sources (such as the EU Structural funds).

Unlike in the case of PFI incentive payments, there does not appear to be a clear decreasing trend in the levels of sub-borrower incentives through time. Incentives decreased between SlovSEFF I and II, and between EU-EEFF in Romania and RoSEFF; however, they remained unchanged across the first and second phases of PolSEFF and MoSEFF. In Bulgaria, sub-borrower incentives for industrial energy efficiency projects actually increased, from 7.5 per cent in BEERECL I, to 15 per cent in EU-EEFF, 10-15 per cent in BEERECL II and 30-50 per cent in BEECIF; in this case the level was set by the Bulgarian government and at a higher level than typical for SEFFs (30-50 per cent vis-à-vis 15-30 per cent).

‘Smart’ incentives

While trends in the level of sub-borrower incentives are not clear, there has been a trend toward increasing ‘smartness’ in design since SEI 2 and SlovSEFF II in early 2009. All of the early SEFFs paid sub-borrower incentives on the basis of a flat percentage of the loan amount. Incentives are now paid according to a stepped scale that links the level of payment to a performance parameter of the sub-project – generally energy savings or CO2 emission reductions. Some project consultants commented on the increased administrative complexity of smarter incentive payments, while others did not see sufficient differentiation between projects involving different scales/depths of investment. A steeply stepped scale with three stages is the most often used system at present, which appears to offer a good balance between precise targeting of grant funds versus administrative simplicity.

Previous studies and case studies - on incentive payments

The study reviewed previous evaluations by EvD and self-evaluations by project teams (OPAs) to capture any insights gained. The main findings regarding incentive payments are summarized here:

Previous evaluation findings on incentive payments

The BEERECL OPAV found that financial incentives were justified in the early period to tackle market distortions and contributed to disbursement of credit lines to a good range of PFIs. However, the envisaged ‘kick-start’ of the market for small scale renewables was not evident. Lending seemed dependent on the grant-funded subsidies and technical assistance provided. Incentive payments continued to be made to sub-borrowers in succeeding programmes beyond the original intended ‘early’ period.

The SlovSEFF evaluation found the inclusion of incentive payments to be instrumental for the successful implementation. It made the facility very attractive to sub-borrowers, with the incentive payments being most frequently identified as an important attraction. The evaluation noted that while incentive payments were compatible with the Bank’s policies, they represented a risk of market distortion that must be carefully managed in SEFF operations. The role of incentives was emphatically not to make unprofitable projects viable, but rather to overcome barriers that prevent financially viable projects from being developed and to incentivize companies and households to prioritise such investments.

Conversely, the UKEEP framework was evaluated successful without use of cash subsidies. EvD found that critical to this seems to be the fully grant funded TC, which was of sufficient value added to support capacity building in PFIs and sub-borrowers with the effect of reducing some of the market resistance to energy efficiency financing and achieving transition through market expansion.

The EvD Special Study on SEI1 compared the relative successes of UKEEP and BEERECL. The UKEEP experience appears to show that Energy Efficiency and Renewable Energy credit lines can function effectively without incentives while it is unclear whether the credit lines could work equally well in Bulgaria without the incentives. Conditions however in Bulgaria and Ukraine were noted to be very different. Ukraine arguably had more untapped ‘low hanging fruit’ than existed in Bulgaria, and Ukraine’s banks may have less access to liquidity through their international owners.

Moreover, the MIDSEFF facility did not include any system of incentive payments, and none of the stakeholders interviewed by EvD during the course of its evaluation indicated that these would have been desirable or necessary. However, in the specific context of Turkey, the impetus to investment in renewable energy was provided by the Feed in Tariff system (launched in the same year as MidSEFF) and probably provided a stronger incentive than could have been achieved by any feasible system of incentive payments provided through the EBRD facility.

The review of previous evaluations was complemented with case studies for three additional SEFFs selected on the basis of different design and market condition parameters. These included one where incentive payments, either to PFIs or sub-borrowers were not present (BelSEFF), one where incentive payments were only available to the sub-borrowers (SMEs) in a highly subsidized EU country context (PolSEFF) and one where incentive payments were available to both PFIs and Sub-borrowers (KyrSEFF) in an ETC country. The main features of these case studies and insights with regards to incentive payments are presented in box 5 below.

Case study findings - incentive payments

BelSEFF - The facility included a €2.5 million grant provided by the Czech official development assistance Trust Fund for TC activities as well as a specific policy dialogue component; it did not include direct incentive payments. The facility is on track toward quantitative benchmarks. The lack of subsidies to sub-borrowers does not appear to have retarded success of the facility, though this was seen at the time of board approval as a significant risk. This may have been the case given the absence in Belarus of any other significant sources of grant funding for sustainable energy.

PolSEFF – The facility included a €28 million grant element funded by the EU Phare programme for TC and investment incentives (10 to 15 per cent of the loan amount). Implementation of PolSEFF 1 has been very successful in terms of funds utilisation and performance. This was so despite an incentive scheme seen as rather low in the context of other sources of grants in Poland (up to 70 per cent from EU structural funds). The main attraction of PolSEFF 1 may instead have been its relatively fast and easy procedures compared to other source of grants. PolSEFF 1 demonstrated that other levels of grants may well be higher than necessary as projects sponsors can still be incentivised to undertake energy efficiency investments with the lower incentive scheme of PolSEFF 1.

One main difference between PolSEFF 1 and 2 is that the incentive payments in PolSEFF 2 will be provided and managed by a national counterpart, the Polish National Fund for Environmental Protection and Water Management (NFOS). In this way PolSEFF 2 represents an example of a strategy for phasing out which involves the transfer of skills to national institutions. However there is still uncertainty on how PolSEFF 2 will evolve and whether PFIs and NFOS will have the capacity to take over the leading role.

KyrSEFF also included €6.8 million of grant funds from the EU Investment Facility for Central Asia (IFCA), for both TC and incentive payments to sub-borrowers and PFIs. The level of incentive payments to sub-borrowers was stepped according to sub-project performance (10-20 per cent for the business sector and 20-35 per cent for the residential sector), while PFIs received a success fee of a flat 3 per cent of the loan amount. As of end 2014, the facility funds were 69 per cent utilised through four PFIs. The use of smart incentive payments and the TC provided have been strongly complementary in helping to motivate and enable sub-borrowers to choose the best performing materials and equipment on the market.

The review of previous evaluated projects and case studies shows a good level of success both in the overall projects ratings and in the transition impact aspects. Specifically, of the seven previous evaluated projects two were found to be *highly successful* (TurSEFF, MIDSEFF), four were

successful (BEERCL, REECL, SLOVSEFF, UKEEP) and only one was rated *partly successful* (KazSEFF). In addition to this, the three case studies, while not comprehensively evaluated, also show a positive level of success and progress towards achieving the intended disbursement and transition impact goals. This was so despite the different structures of incentives (or lack of). In particular, of the two projects rated *highly successful* one included subsidies (TurSEFF – in the form of concessional funds) while the other, MIDSEFF, didn't. Also out of the projects rated *successful* some included incentive payments (BEERCL, REECL, SLOVSEFF) while some didn't (UKEEP).

Varying levels of success with and without incentives provides the basis for some reflections. Where incentives have been used they have contributed, sometimes decisively, to the uptake of the facilities, prioritization of investments and the use of higher quality materials. However, in cases where incentives have not been present outcomes have also been successful and their absence not observably a problem. This is not to conclude that incentives have been irrelevant. It may well be that the design and targeting of these based on market studies and banking teams' experience has been very accurate in incorporating these, but this is something that with the current methodology cannot be determined in a scientific way. Clearly the specific market conditions in place are critical, as is a good understanding of them. Careful consideration on a case by case basis is needed regarding the market conditions that may have justified the use or not of incentives.

If the argument is made that the incorporation and levels of incentive payments in the design of the facilities is based on such an analysis, confidence can be higher that the inclusion of incentives is more than likely appropriate. However, by extension, such an analysis should also be expected to stand upon a clear and credible cause-and-effect argument (a theory of change) for what specific actions are expected to be produced by which specific measures or combination of measures. Yet the current design of the facilities does not provide for means to establish the attribution or causality of the projects' results in relation to the incentives provided. The Board documents for SEFFs that use incentive payments contain very little articulation or analysis of the specific link between the subsidy and the market barriers it is intended to overcome. Inclusion of such analysis would be expected against the third phase of SEI, which advocates “...*the selective and smart use of subsidies to address specific barriers and market failures*”.

Findings from surveys

Surveys of PFIs and project consultants were conducted to obtain first hand qualitative information on the role played by incentive payments amongst other project features. Overall, the consensus is that, where incentive payments have been used, they have been crucial to attracting sub-borrowers to the facility in question. This view does not necessarily run contrary to the observation that several

SEFFs have now been implemented successfully without incentives – as noted earlier, it might be that the targeting of incentives has been very adequate addressing those markets where and in the form required.

Some specific insights from PFIs and PCs responses to the surveys are noted below.

Surveys of project consultants

Project consultants perceive that one of the most important features of SEFFs for attracting the participation of sub-borrowers is the availability of incentive payments, closely followed by the provision of TC. The interest rate and loan tenor are perceived as less important in the decision of sub-borrowers. One of the shortcomings raised though was the lack of competitiveness of the facilities in comparison with other financing options offering higher incentives which inhibited the uptake of loans, and the omission of important sectors or of technologies from the eligibility criteria in the design of the SEFF.

Questions on the level at which the incentive payments were set indicate that a small majority felt the level was somewhat low. To the question whether this level had led to the expected effect of stimulating sustainable energy investments, a small majority responded positively. The reasons given differ depending on the targeted sector or the context, for instance where the SEFF incentive payment is low compared to other programmes such as the EU Structural Funds. Three project consultants specifically mentioned that there is insufficient difference in the

incentive levels for different scales/depths of investment (single-dwelling versus whole-building in the residential sector, single-measure versus comprehensive sub-projects in the SME sector) and this has led to suboptimal project sizes and only partial coverage of the targeted sector. Another one noted that for corporate sub-borrowers the incentive is usually sufficient to take out a loan from a participating bank, however for sub-borrowers from retail sector certain products would require higher contribution to significantly boost their sales (e.g. building construction materials, solar installations, etc.). There is generally low awareness about certain technologies and therefore the level of incentives needs to be viewed from different angles (availability of regulatory framework, support of suppliers).

Surveys with PFIs

According to a majority of the PFIs surveyed, the most important criterion that determines a PFI's decision to participate in a SEFF is the interest rate on the facility funds. Where applicable, the payment of an incentive to PFIs ranked as the second most important decision making criterion, with the availability of TC close behind in third place. The loan tenor was further behind, although almost 80 per cent of PFIs thought this was either an "essential" or a "very important" criterion. In contrast and in agreement with the project consultants, the PFIs believe that the availability of an incentive payment (where applicable) is the strongest reason for sub-borrowers to be attracted to the facility.



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Policy dialogue

Policy dialogue strategic framework

The Sustainable Energy Initiative (SEI) sets out the operational direction for policy dialogue work based on its conceptual framework of the three mutually reinforcing pillars - project financing, TC, and policy dialogue.¹⁹ This model has been reflected in the associated resource management within the E2C2 team since 2008 carried out principally between E2C2 and LTT teams.²⁰ It is important to note that in the case of SEFFs, the close operational-policy nexus means that overarching intended outcomes benefit from and are linked to investment operations, in line with SEI and CRR 4 objectives.

SEI 2 outlined energy transition requirements of the region as a strategic priority and sought to contribute to a broader systemic transformation towards a low carbon economy. Subsequently, policy dialogue work has been increasingly articulated at the level of SEFF operations. SEI3 directions are also reflected in more recent board and TC Com proposals. Of the SEFFs reviewed here, board documents for two thirds refer to policy dialogue; all such cases were approved after 2008.²¹ From discussions with banking, it seems that for those SEFFs where the board documents contain little or no mention of policy dialogue, this is typically because there is less of an operational link between policy dialogue challenges/support from EBRD and the SEFF investment. This is reinforced by the absence of sustainable energy as a significant theme for policy dialogue within the respective country strategies.

Main policy dialogue contributions in SEFFs

As with other SEI related policy dialogue activities, SEFF policy dialogue activities are designed to deliver benefits of enabling investments/EBRD finance through supporting policy/legislative/regulatory changes and creating knowledge, and are often aligned to wider frames of reference such as commitments under the Energy Community Treaty and supporting EU 2020 goals, sector specific EU Directives or regional plans such as the Energy community of south eastern Europe. In this way, activities may be undertaken in parallel to the implementation of a

Previous studies – important and undocumented policy dialogue activities

Previous evaluation work highlights both the importance of policy dialogue as an instrument for market development

SEFF, where the SEFF is seen as a tool to complement or inform an on-going EBRD policy dialogue programme or may be integrated into the SEFF design that is included as a goal to develop the necessary regulatory framework for SEFF investments or expand the market through awareness building.

There are three broad ways in which SEFF transactions may contribute to parallel policy dialogue activities: (i) providing feedback from the market to assist in fine-tuning amendments to the regulatory framework; (ii) providing feedback to the market on key policy and regulatory changes, through awareness-raising activities; and, (iii) as the main tool by which the policy and regulatory changes brought about through the policy dialogue are translated into a market, through increased investment volumes.

The policy dialogue work may be carried out either by a separate consultant e.g. carbon market consultant, or by the SEFF's project consultant. In the case of MidSEFF and PolSEFF II for example it focused on carbon market development, and was assigned to a separate carbon market consultant. More high-level and specifically targeted policy dialogue activities such as those in BelSEFF assigned responsibility to the project consultant. In the second type of intervention, where certain actions are specifically designed to advocate the value of sustainable energy investments such as through marketing/awareness raising and case study dissemination work, policy dialogue is included as part of the market expansion aim of the project consultant (such as in RoSEFF, TurSEFF and PolSEFF I).²²

Some SEFFs have specifically discussed policy dialogue actions and impacts in their transition impact descriptions – some of the more recent SEFFs such as KoSEP even track policy dialogue development through transition impact monitoring benchmarks themselves. As previously noted, at the time of this study EBRD's transition impact monitoring has been incomplete on such facilities, causing difficulties of relying in TIMS at this stage for an assessment of policy dialogue related achievements as not all policy dialogue activities are associated with TIMS benchmarks and furthermore no TIMS monitoring has yet been carried out facilities containing benchmarks related to policy dialogue. Further, it seems that no formal process exists to measure performance of project consultants and some of the consultant reports do not refer to these specific objectives. These matters may be better captured through the new TC team results framework, but they will in any event require deliberate focus.

and the difficulty in capturing specific results. Policy dialogue has on the whole been characterised by insufficient incentives, monitoring, and systems for extracting and sharing insights and learning. EvD's 2010 Special Study on the Bank's Sustainable Energy Initiative (SEI) Phase 1 proposed a paper defining the Bank's E2C2 policy dialogue positions/objectives to demonstrate leadership on this issue, along with signing of action plans with governments to provide a strategic foundation for

EBRD policy dialogue work on sustainable energy (including SEFFs) with those countries.

Previous evaluation findings on policy dialogue

The SEI1 evaluation report noted that the bank has been active in policy dialogue activities to support SEFF products, mainly focused on assisting governments to establish appropriate policy frameworks to promote sustainable energy investments. An important finding was that much of this work is undocumented and therefore difficult to evaluate.

The evaluation of BEERCL reported that separately to the facility investment, the operation team appeared to have achieved good results in the area of policy dialogue and the implementation of environmental and social standards. However this could have been elaborated more comprehensively in the team's operation self-assessment (OPA) and potentially serve as a model for replication in similar frameworks.

The EvD Special Study on SEI1 (Phase1 2010) acknowledged that policy dialogue is important for achieving changes at the national level to promote energy efficiency, renewable energy, and climate change adaptation and that much of this work is which presents a challenge to evaluate. The study noted that policy dialogue is both a process of engagement with governments and civil society and a means to achieve specific regulatory changes which is best measured against actual achievements. Such changes are the "proof" of the effectiveness of the policy dialogue but such data are hard to capture.

The energy efficiency case study in the evaluation of EBRD's experience with policy dialogue in Ukraine found that the signing of the Sustainable Energy Action Plan enabled a long-term and complex engagement with the Ukrainian government aimed at addressing energy efficiency challenges facing the country. Getting agreement between two parties was a good beginning for a practical dialogue platform with the individual ministries and agencies at national and municipal tiers as for assistance and expertise needed to enable investments in this sphere. The EBRD's reputation in the sector enabled it to provide targeted and highly technical support that contributed to building reliable evidence base for further actions.

Case study findings - policy dialogue

BelSEFF US\$ 50 million facility was complemented by a €2.5 million grant for TC and policy dialogue activities, both to be performed by the same project consultant. The policy dialogue elements in the TC assignment were aimed to draft legal documents to help accelerate the development of secondary legislation. The process was found to be successful and highly valued by the government counterparties. A significant amount of policy dialogue that preceded the facility was also considered as an element of success as it was an important driver in securing demand for the facility despite initial concerns by the government counterparties on the capacity for foreign external consultants to understand the local situation. PFIs stressed their belief that the success of the policy dialogue was partly attributable to it being undertaken by the same project consultant as the TC component.

KyrSEFF was built on the foundation of a prolonged period of policy dialogue between EBRD and the Kyrgyz government, commencing in 2008-09 when energy efficiency in buildings was identified as a priority area by E2C2. EBRD engaged with the relevant government bodies to address regulatory gaps, and by 2011-12 a new legislative framework was in place based on a transposition of the EU Energy Performance in Buildings Directive. This prolonged period of targeted policy dialogue provided a solid foundation on which the facility was structured, with KyrSEFF aimed to reinforce the implementation of the legislation as well as providing valuable feedback from the market on any areas where further fine tuning might be required.

Two of the three case studies conducted under this study included policy dialogue actions. Some of these activities predated the launch of the facility and contributed to its design. In addition specific actions were put in place in relation with the development and implementation of regulations as part of the project consultants' work and were included in the terms of reference of the consultants. In both cases the development has been positive and led to specific regulatory changes. The findings from the case studies confirm the important and fruitful development of policy dialogue in some of the most recent projects.

Project consultants

Alongside the credit lines, SEFFs engage technical consultants to raise awareness of the facilities, build lending capacity among PFIs and help prospective sub-borrowers prepare projects. Donor funded technical assistance is provided free of charge to banks and sub-borrowers to support project origination, development and monitoring.²³

Contribution to projects objectives

The inclusion of technical cooperation (TC) through project consultants has proved to be instrumental to the achievement of SEFF objectives. Activities such as conducting energy audits, providing trainings to PFIs, marketing and intelligence gathering, have enabled efficient establishment of the facilities and the generation of project pipelines. This has been even more crucial for SEFFs that do not include the provision of incentives, whereby the value added from the project consultant has been crucial for overcoming market barriers.

Broadly, project consultant scopes have been fairly consistent due to the similarities of SEFF design. However they can vary depending on the targeted sectors and the market context in the country. A good understanding of the market barriers is important. More recent SEFFs have been accompanied with better tailored TC components. EBRD successful experiences in facilities in Ukraine or Kazakhstan show that in countries where domestic energy prices are undergoing substantial adjustment, barriers for sustainable energy investments can be overcome with well-designed TC programmes even without subsidy payments.

A number of lessons have been drawn from TC implementation:

- TC free for beneficiaries has been a main element of SEFFs that has contributed to their success in terms of implementation and adequacy of the energy efficiency measures implemented and represents a distinctive element compared to other International Finance Facility (IFIs) products such as the International Finance Corporation (IFC).
- The performance of the project consultants depends greatly on the project manager and the experts engaged to deliver the services. According to project teams interviewed, a strong project consultant is a critical success factor for SEFFs and is highly reliant on the quality of the individual Project Manager.
- Even though project consultants play an important role in awareness raising, general marketing of the

facility and supporting the PFIs in their marketing activities, lessons from past experience indicated that the best way to originate projects is through PFIs loan officers. Project consultants are more effective in generating sub-projects when marketing/awareness raising efforts are organised in conjunction with PFIs, such as workshops, where key PFI clients are invited.

- The project consultant strong relationships and partnership with PFIs is essential for the success.

Previous study findings

All previous evaluations have highlighted the critical role that the project consultants have played in the success of the facility, providing various insights on the role of the project consultants.

Previous evaluation findings on project consultants

UKEEP OPAV found that critical to the framework's success seems to be the fully grant funded TC, which was of sufficient value added to support capacity building in PFIs and sub-borrowers with the effect of reducing some of the market resistance to energy efficiency financing and achieving transition through market expansion. In particular, the energy audits prepared by consultants helped the EBRD channel loans to appropriate sub-projects and motivate PFIs to approve loans for energy efficiency projects designed by the consultants.

BEERECL OPAV found that the provision of technical expertise/energy audits was vital for the implementation of this programme, however for removing the market obstacles in a sustainable manner, the transfer of related skills to PFIs staff was not clear and should have been planned for and monitored accordingly.

SlovSEFF I & II OE found that the early efforts of the project consultant in marketing, intelligence gathering and providing assistance to the PFIs enabled the very rapid establishment of the facility and the generation of a project pipeline. The web-based monitoring and tracking system developed by the project consultants was also found to have facilitated the streamlined operation and management of the projects.

MIDSEFF OE: EvD found that the quality of the project consultants, including their thorough understanding of the local context, was an important element of success. TC provided to both sponsors and PFIs, coupled with regular communication and a good working relationship, all contributed to increasing the PFIs' comfort in lending to renewable energy projects. The quality of the project consultants and their strong local knowledge proved to be critical to the success.

BelSEFF case study – The quality of the work undertaken by the project consultants and responsiveness to the needs of the government counterparties were highly praised by the policy dialogue Working Group.

The government counterparties noted that the initial demand for cooperation in policy development was relatively weak which, combined with the perception that foreign consultants would lack a deep understanding of the local policy context made the process of initial engagement slow. From the PFIs' perspective, the success of the policy dialogue was partly attributable to the fact that both it and the usual SEFF TC activities were carried out by the same project consultant, hence providing the PFIs with a better insight into developments in the policy arena.

KyrSEFF case study – An innovative aspect was integrating the work of the project consultant with that of the EBRD's Small Business Support (SBS) team and with the Civil Society Engagement initiative. The aim was to foster the creation of a sustainable and commercially viable infrastructure of local expertise and to engage with the local professional community through capacity building of expertise on advanced technologies for energy efficiency in buildings.

Findings from surveys

PFI surveys – PFIs expressed great satisfaction with the communication with both EBRD and the project consultants in terms of quality, frequency and effectiveness. Over 90 per cent reported this working relationship to be either “excellent” or “good”, both the initial communication of the goals, roles and responsibilities of each player, as well as the on-going operational communication. Very positive opinions were expressed on the training provided by the

project consultants, with over 90 per cent rating it “very useful” or “extremely useful”. The most frequently cited element was their greater understanding of the benefits of energy efficiency investments. Other aspects related more to the practicalities on the implementation where project consultants played an active, on the ground, role. Suggestions revolved around increasing the amount of training provided and including more practical/hands-on elements such as site visits and real-life case studies. The PFIs particularly valued occasions where there was a three-way bringing together of themselves with both project consultants and clients.

Surveys with project consultants must obviously be taken with caution with regards to opinions expressed on their own role, however they provide some insights and confirm the positive working relationship with the banking teams and PFIs. In particular, the flexibility and responsiveness of the EBRD was seen as an important factor to the effective implementation. The majority of project consultants (10 out of 14) considered the main added value of their support to sub-borrowers was the provision of free professional independent technical expertise and assistance during the preparation and planning stages, when making decisions and during the verification of quality of completed works. With regard to the PFIs, a significant number (6 out of 13) felt that their main added value derived from their assistance in their exposure to a new market segment and support in developing and selling innovative loan products in sustainable energy.



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Samurlu Wind Power Project, Izmir Province, Turkey, http://www.midseff.com/factsheets_eng/samurlu.jpg

Relevance, effectiveness, efficiency and impact

Relevance

Relevance and responsiveness of SEFFs in relation to the Bank's policies and strategies

All SEFFs reviewed during this evaluation were found to be consistent with EBRD policy and strategic frameworks. Policies and strategies, as well as general shifts in thinking within the Bank, have undoubtedly played a role in shaping the direction of SEFF development, for example:

- An increased focus on policy dialogue (which also saw the appointment of dedicated policy dialogue manager in E2C2) led to a more systematic consideration of policy dialogue in parallel to SEFF designs since 2008.
- The impetus to make subsidies 'smarter', as expressed in SEI 2 and 3, is reflected in the shift towards performance-based incentive payments for sub-borrowers.
- The increasing trend of overall SEFF commitments from 2012, in line with the indicative target for EBRD investment volume under SEI 3, which was 30-50 per cent higher than under SEI 2.

But it is equally true that the policies and strategies are themselves informed by experiences from SEFFs, and may reflect changes in the SEFF portfolio that were already planned. For example:

- An important element of the first SEI was the implementation of the existing pipeline of SEFFs already in development at the time.
- The 2006 Energy Operations Policy identified the need to target smaller energy efficiency / renewable energy projects by working through financial intermediaries supported by TC, with replication of the SEFF model.
- The 2009 Slovakia Country Strategy included the extension of SlovSEFF as an operational priority.

The use and targeting of incentive payments within SEFFs has followed the Bank's principles and criteria for appropriate use of grants. The guidelines outline two particular circumstances relevant to SEFFs where the use of grants is indicated:

- Changing deeply ingrained but economically irrational behaviour patterns, which sub-borrower incentives aim to achieve;

- Lowering the start-up costs for financial intermediaries targeting lending products at small businesses, which is the purpose of incentive payments to PFIs.

Relevance of SEFFs to the needs of countries of operations

The EBRD's long presence in most SEFF countries of operations has provided country-specific experience enabling SEFF objectives and design to be highly relevant to the country context. The SEFF goal to "increase financial intermediation and financing for rational energy utilisation, addressing issues on the cost of energy services and reliability of supply" (as usually defined in Board Documents) is highly relevant to addressing the issues of sustainable energy in those countries. The issues are broadly similar and generally characterised by: dominance of fossil fuels in the energy mix; a large untapped renewable energy potential; carbon intensity above the EU15 average; huge energy saving potential in the industrial and residential sectors; and low electricity prices providing little incentive to invest in energy efficiency.

Market barriers hindering the financing of efficiency / renewable energy in the countries of operations are addressed by specific features of SEFFs:

- The diversity of relatively small energy efficiency opportunities is addressed by working through financial intermediaries.
- Provision of donor-funded TC to PFIs and sub-borrowers overcomes specific technical barriers.
- Awareness and knowledge barriers are addressed by workshops organised by the project consultants and by the demonstration effects arising from successful sub-projects.
- Legal and institutional barriers are addressed through policy dialogue (either directly as a component in the SEFF or indirectly supporting and informing the Bank's ongoing policy dialogue in the country).

The design of each SEFF is informed by a market demand study and may also be influenced by other factors such as donor priorities for that country. SEFF designs have generally been consistent with the main market barriers identified in market studies (e.g. the inclusion of policy dialogue as a significant component of BelSEFF after the market demand study revealed numerous policy gaps in the country). However, there is considerable inconsistency in the extent to which the logical connections between market barriers and the specific SEFF features are stated in the Board documents. While some facilities (e.g. SlovSEFF, KyrSEFF) provide a relatively detailed analysis, for others (e.g. KazSEFF, KoSEP) only a fairly general discussion is provided. There is a strong consensus among project consultants (from survey responses) that SEFF design and implementation have taken the local contexts (policy/regulatory and social/economic) into account well.

Relevance of benchmarks to the SEFF objectives

The EBRD tracks the SEFF objectives against quantitative targets (or "transition impact monitoring benchmarks") set for the SEFF at the design stage, and reflected in the Board documents. Half of the project consultants reported in the survey that overall targets were set appropriately both in terms of choice and level while the rest felt that some of them were very ambitious and overstated, in particular in relation to renewable energy targets, which resulted in the expected CO2 emission reduction from renewable sector investments under met.

Overall EBRD has been flexible in setting the level of targets to local circumstances. However, some benchmarks are set based on assumptions of allocation and carbon emission factors. This can lead to difficulties in achieving targets when these assumptions are shown to be imperfect, or when market conditions change.

There is a tacit intervention logic for SEFFs that is generally understood, but because OCE, TC and donor cofinancing units approach SEFFs on a project-by-project level rather than programatically, there has been little consistency in how this intervention logic has been translated into performance indicators. As a consequence, the choice of benchmarks has varied widely between SEFFs without any clearly stated rationale. The lack of an explicitly spelled out intervention logic describing the logical connection between intended outputs, outcomes and impacts of a SEFF programme makes it difficult to assess the consistency of performance between facilities.

SEFF success factors and integration of lessons

From the findings of the surveys, previous evaluations and field trips for the case studies, there is a strong consensus among stakeholders regarding the main success factors for a SEFF. The EBRD has made significant effort to integrate all these elements into the design of SEFFs:

- Streamlined and functional structure from the perspective of the PFIs and sub-borrowers: The simple procedures and fast credit decision making process have been reported by project consultants and PFIs as the main attraction of SEFF compared to other instruments such as EU Structural Funds.
- PFI commitment, successfully achieved through a combination of the project consultants and EBRD's joint efforts to understand the banks' needs, effective project consultants follow up with the banks' Relationship Managers (RMs) and the good relationship/communication with the PFIs.
- Donor-funded TC: The bundling of loan funds with donor-funded technical assistance and (sometimes) incentive payments is the 'unique selling point' of SEFFs, which allows them to be attractive to sponsors and PFIs even when the

finance they offer is not necessarily cheaper than other available funds.

- The role of project consultants: Proactiveness of project consultants has been a critical element especially for the facilities that do not include incentives. Most of the OLs and other stakeholders interviewed confirmed the importance of the individual project manager. To ensure quality, the EBRD has improved the selection process by including in-depth interviews of project personnel from shortlisted consortia and has linked the project consultant payment to performance.
- Where used, 'smart' incentives to deliver higher standards: The use of a stepped scale of incentive payments linked to either energy savings or CO2 emission reductions appear to offer the best balance between smartness and administrative simplicity.

There is evidence of an evolution in SEFF design based on good practices informed by lessons from the past although these have not been well documented in the Board Documents or other strategic documents. Board Documents are indeed not the most appropriate place to codify the huge volume of tacit knowledge within the Bank on SEFF design and operation. Documenting a comprehensive picture of the learning from past SEFFs would require regular programme-level reviews.

Effectiveness

Achievement of objectives

Based on case studies and previous evaluations, the achievement of SEFF quantitative objectives is very good, with the completed SEFFs achieving almost all of their targets and even exceeded in some cases (PolSEFF I, MidSEFF I), and the on-going SEFFs being on track for achieving them (BelSEFF, KyrSEFF).

Of the 7 previous evaluated SEFFs reviewed, 2 (TurSEFF, MidSEFF) were rated 'highly successful', 3 (BEERECL, REECL and UKEEP) 'successful' and one (KazSEFF) 'partly successful'. In addition to these, the case studies also indicate positive progress towards achieving their quantitative goals. This was so despite a general slow uptake in many SEFFs (the majority of TIMS reports mention a slower than expected start to disbursement suggesting overambitious timings). Considering the case studies and previous evaluations, where energy saving/CO2 emission reduction objectives were not reached (SlovSEFF I, PolSEFF I and UKEEP), this was because the ratio between energy efficiency and renewable energy sub-projects differed from the assumed mix on which basis the targets were set. These cases indicate the difficulty of setting realistic targets where the composition of the portfolio cannot be known in advance. In the case of SlovSEFF and PolSEFF, the more robust knowledge of the market gained during implementation allowed targets to be recalibrated in the second phases of the facilities.

Effectiveness of technical cooperation in achieving SEFF goals

There is a strong consensus among stakeholders regarding the critical role of the TC provided by the project consultants in achieving SEFF objectives, and a clear view that the delivery of outcomes would be reduced if the provision of TC was diminished. According to previous EvD evaluations, the conducting of energy assessments, trainings to PFIs, marketing, and intelligence gathering are cited as the most important services provided by the project consultants. Case studies also indicated that well designed management tools for complex SEFFs (with a high number of sub-projects) were also critical in maximising the effectiveness of TC (SlovSEFF, PolSEFF).

PFIs and sub-borrowers have been the main beneficiaries of TC. The impact of TC on the other parts of a functioning market (such as suppliers of equipment and services) has been more limited, although more recent facilities have introduced implementation models specifically to reach these market players. Survey responses indicated that TC was particularly effective in raising PFIs' awareness of environmental, social and safety issues, and in exposing them to the opportunities offered by a new market segment. Several PFIs interviewed during field visits indicated that site visits to their clients in the presence of the project consultants were highly valued. Although the TC provided has been effective and highly valued, several of the interviewed PFIs felt that when the SEFF comes to an end they might lack sufficient capabilities to continue sustainable energy lending without the technical support. Improving the technical capabilities of PFIs and project consultants may not in itself be sufficient unless a strong local project engineering sector also exists with the appropriate skills and experience in sustainable energy.

Effectiveness of incentive payments in achieving SEFF goals

In the context of SEFFs, incentives are appropriate for overcoming specific types of market barriers:

- They can focus attention and motivate action where the level of prioritisation given to sustainable energy investments is low even though such investments are cost-effective.
- They can encourage the use of higher standards or better performing technologies.

Evidence exists of incentives making a significant difference in the level of prioritisation given to energy efficiency investments. In a number of cases (PolSEFF, MidSEFF, BelSEFF) stakeholders reported that incentives triggered a decision to make investments sooner. From the surveys, project consultants rated the availability of an incentive as the most important factor in attracting sub-borrowers to the facility while PFIs considered it the second most important element after the interest rate. The role of incentives in instigating early decision making in favour of efficiency / renewable energy has helped to build a critical mass needed for producing a demonstration effect.

Determining the effectiveness of incentives is however difficult since an experimental approach is not practical. Once an incentive is given in a SEFF, it is virtually impossible to conclude what the outcome might have been without it. The fact that some SEFFs have been successful without incentives may be evidence that the Bank has been successful at precisely targeting incentives only where needed, but this is difficult to establish.

Where certain types of barriers predominate (e.g. low liquidity among PFIs – meaning that the SEFF loan itself may be sufficient to stimulate lending without the need for additional incentives – or lack of technical capacity among sub-borrowers and/or PFIs) the provision of loan funds coupled with TC may be sufficient. In some cases, other stakeholders may provide a sufficient level of incentive (e.g. in the form of feed-in tariffs in the case of MidSEFF), so the SEFF does not need to provide its own incentive.

Efficiency

The management of SEFFs benefits from over 10 years of learning experience and can be considered as best-practice for an initiative operating in such a wide geographical area. The management has involved a large number of different stakeholders from different units of the EBRD (Fi, E2C2, OCE) and from external entities such as the project consultants. All of them are active in project design and implementation and the division of responsibilities is clearly defined. The approach of using large project consultants' consortium contracts is efficient for EBRD management, compared to smaller individual contracts.

Findings from the survey indicate that EBRD reporting requirements are not overly burdensome. The process has been improved in the later SEFFs by aligning the project consultants reporting requirements more closely with the transition impact monitoring benchmarks. However, several project consultants surveyed identified the lack of a uniform monitoring system as a potential area for improvement. The monitoring system has not been systematic and the rating system has been inconsistent in some cases.

Impacts

Structure and extent of markets

The transition impacts related to market expansion show positive results, particularly in the more recent facilities. With regards to industrial SEFFs, all facilities from PolSEFF onwards have included a list of eligible materials and equipment approach and, based on insights from the case studies, the desire of sponsors to be included on the List of Eligible Materials and Equipment appears to have been a driver for increased competition in the energy efficiency equipment and materials sector (KyrSEFF, PolSEFF). Local suppliers have played a major role in promoting and generalising the list.

In the financial sector, SEFFs promote greater competition by allowing PFIs to offer innovative lending products. There has been a steady growth in the number of PFIs that have participated in SEFFs. The EBRD may sometimes continue to work with the same PFI in a subsequent facility but to ensure that competition is not inhibited, there has always been a systematic phasing out of both PFI incentives and donor-funded TC for PFIs that have participated in the earlier phase of a SEFF or in a previous facility.

Institutions and policies that support markets

The impacts on institutions, laws and policies that promote market function and efficiency have been successful in countries where there has been a direct policy dialogue component. In these cases, the impacts have been to speed up the drafting of legislation and improving the quality of the final product (e.g. BelSEFF). For other cases, the valuable role of SEFF has been to provide knowledge and evidence from the market for the development of legislation (mainly secondary) and instruments for implementation (guidelines, methodologies etc.).

Market-based behaviour patterns, skills and innovation

Most PFIs interviewed reported that their technical capacities to assess sustainable energy loan applications have improved and in most cases they are willing to continue to offer innovative products. This indicates that the transfer of skills to PFIs has been successful, but it is difficult to determine whether this is sufficient in itself to instigate a self-sustaining market. On-going access to assistance in technical analysis and project origination would be required for efficiency / renewable energy lending to be self-sustaining.

From the sub-borrowers' perspective, almost every stakeholder reported that the most important impact of the SEFF had been educating/informing and motivating sub-borrowers to use better quality materials and equipment than they would otherwise have done. Overall, the available evidence suggests that there has been a significant impact in terms of skill transfer or a shift in behaviour patterns.

Results with regard to demonstration effects have been achieved to a certain extent, but according to TIMS this transition impact objective is the least well-performing against its benchmarks. There is some positive evidence from residential SEFFs of a successful demonstration effect because of the high visibility of many residential projects (e.g. SlovSEFF and REECL). For industrial SEFFs, the extent of a demonstration effect is less clear, although the almost universally positive experience of PFIs lending for efficiency / renewable energy under SEFFs has undoubtedly helped to foster a positive view of such lending.

Positive results have been achieved in terms of new standards for business conduct, mostly reflected in improved energy management at the company level, and in the case of MidSEFF also in the form of companies developing Environmental Impact Assessment practices

based on EU standards. Any SEFF that includes small hydro or wind energy projects requires the PFI to ensure that the project sponsor meets the EBRD's more stringent environmental standards rather than national standards.

Policy dialogue

Policy dialogue has been an important component of the SEFFs. The value of including this activity is to enhance leverage and long term impact. Since 2008, some aspect of policy dialogue has been systematically included in SEFFs design, but there is a lack of consistency in the way that policy dialogue activities are benchmarked. For example, in BelSEFF policy dialogue was a significant component of the project consultants' scope but no transition impact benchmark was assigned. Conversely KyrSEFF had transition impact benchmarks relating to policy dialogue even though the project consultant had no specific role in policy dialogue. In general, there has been a lack of reporting and recognition of the work done on policy dialogue, except when it is included as a transition impact benchmark.

Two success stories of SEFF-related policy dialogue are BelSEFF, where the process of drafting legal instruments key to the success of the SEFF was accelerated, and KyrSEFF where a long process of preparatory policy dialogue between EBRD and the government in the area of energy efficiency in buildings preceded the successful launch of the facility. KyrSEFF itself then provided valuable feedback from the market to inform the development of secondary legislation. In general, the EBRD can gain a 'seat at the policy table' only after it has achieved a significant presence in terms of investment volume. Replicating the KyrSEFF model in future facilities may therefore not be straightforward.

Sustainability

There has been a clear trend towards a greater focus on long-term sustainability in SEFF design, such as the use of lower and more precisely targeted incentives, the inclusion of policy dialogue and the efforts to ensure that the local consultancy sector is developed. Benchmarks relating to long-term sustainability are also becoming more widely used, such as the volume of lending from alternative non IFI sources and the number of local engineering firms receiving training. The systematic monitoring of outcomes and of longer-term impacts (demonstration effects, integration of sustainable energy lending into PFIs' standard products) is constrained because of the time-bound nature of individual SEFFs. The possibility for monitoring PFIs' lending behaviour continues until they have repaid their loans to the EBRD, but a more comprehensive assessment of longer-term impacts would require follow-up studies after a period of several years.

Findings from field trips and previous evaluations have provided relatively few examples of continued efficiency / renewable energy lending by PFIs beyond or outside of the SEFF. MidSEFF, PolSEFF and (to a lesser extent) SlovSEFF provide good examples of continuing sustainable energy

lending by PFIs. The most common situation was a reported willingness on the part of PFIs to continue sustainable energy lending, but a feeling that it will be unlikely without the technical assistance and/or subsidies provided by the SEFF. There has been an evolution of the SEFF model in the direction of ensuring that SEFFs leave a legacy of a strengthened project consultancy sector. Earlier SEFFs appeared to be predicated on the assumption that the wider development of local capabilities would arise automatically as a result of the SEFF lending. Several Board

Documents stated that “...the availability of financing for sustainable energy technologies brings additional benefits such as the development of the necessary systemic infrastructure...”. More recent facilities have recognised the need for a more proactive effort to create these capabilities, both by including specific elements to achieve this in the design of the facility, and, amongst other things, by specifying benchmarks relating to the transfer of skills to local engineers and energy service companies.



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Recommendations

Formalise the de facto programmatic approach

Following the success of the first two SEFFs in Bulgaria, there was a clear plan to replicate the SEFF model in other countries. SEFFs became a de facto programme and an important component of the SEI but, although the SEFF tool has been viewed by Banking in programmatic terms, there remains a tendency to continue to regard each facility as a stand-alone project.

With the total committed amount under SEFFs expected to continue its recent growth in coming years, formalising a more programmatic approach across all teams has the potential to improve consistency and efficiency in the design, implementation, monitoring and evaluation of SEFFs. Enhancements to the approach of Banking are already apparent, such as: (i) the shift in 2008 from a 2 to a 4-year planning horizon for SEFF implementation within a country; (ii) the introduction of the management information system during 2015; (iii) the revival later this year of both the ebrdseff.com website and the Annual SEFF Conference (both of which had been halted due to a combination of technical and resourcing reasons).

Recommendation 1

SEFFs should be regarded as an actual rather than a de facto programme. The potential should be explored for using non-transactional TC funds for supporting SEFF-wide activities such as the SEFF website, the annual conference and the dissemination of success stories.

Some specific areas where a more programmatic approach by non-banking teams could yield benefits include: (i) the more systematic use of performance indicators and rational in the setting of baseline data linked to a programme-level intervention logic; (ii) the potential to introduce regular programme-level evaluation, including the assessment of longer-term impacts on the market, periodic reviews of the use of incentive payments, and comprehensive documentation of lessons; (iii) adoption of a common structure for project documentation; (iv) a more consistent approach to TC; (v) coordination of SEFF-wide activities such as dissemination of success stories.

Making explicit an intervention logic and use of consistent and relevant TIMs

All SEFFs aim to achieve the same long-term objective through broadly similar means, namely the creation of a self-sustaining market for efficiency / renewable energy

investments by providing dedicated credit lines coupled with TC and (where appropriate) targeted investment grants. Despite this, there has never been a programme-wide results framework, which has led to a lack of consistency in both the specification of indicators used to monitor performance, and in the linking of those indicators with the desired TIs. Some of the transition impact monitoring benchmarks used do not appear to provide a useful indication of whether the facility in question is on track to produce its intended impacts. For example:

- Almost every SEFF includes benchmarks for the energy saving or CO2 emission reduction per unit of investment but where such benchmarks have not been achieved, this has generally been because the level at which they were set was based on imperfect information, rather than being an indication that the facility is failing to perform.
- Some SEFFs have included benchmarks relating to the creation within PFIs of dedicated units, which is overly prescriptive since it implies that the setting up of a dedicated unit is the only means by which a PFI can integrate energy efficiency into its lending practices.
- Findings from previous evaluations have identified “...a need for a results framework and monitoring approach that encourages evidence of capacity building to come to the fore” and “the need for transition impact benchmarks to reflect impact rather than deliverables or ‘outputs’”.

Recommendation 2

In coordination with ongoing efforts to develop Bank-wide results frameworks, a programme-wide intervention logic for SEFFs should be defined that specifies: (i) the types of outcome that are expected to result from the range of outputs that a SEFFs typically produce; (ii) the logical connection between these outcomes and the desired impacts and specifically when incentive payments or any other type of subsidies are used, a clear articulation of the market imperfections they are to correct and results intended to produce; (iii) the assumptions and risks that are implicit in each of the links in the results chains that make up the intervention logic.

This should form the basis for defining a core set of TIMs for use across SEFFs that are both measurable and relevant. Indicators should only be used where there is a clear relationship between the achievement or otherwise of the target value and the generation of the desired impacts. Unless a strong case can be made that a particular SEFF requires additional performance indicators, it is recommended that all SEFFs use only the standard TIMs (or an appropriate subset of them). Individual SEFFs might differ in the target values set for these indicators based on specific market conditions.

Broaden the benefits to the local consulting sector

Throughout the SEFF programme, the consortia of consultants fulfilling the project consultant function have generally included one or more local firms. This has facilitated the development of the local consulting sector as the local consortium members have generally taken over increasing responsibility for implementation over the lifetime of the facility. While this has produced good results in terms of developing local capabilities, the benefits have tended to be confined to a relatively narrow group of local firms or experts.

An increased attention to the development of local consulting capabilities has been apparent over the lifetime of the SEFF programme. Some earlier SEFFs included an implicit assumption conveyed in the wording used in Board Documents that the necessary local capacity would develop spontaneously as a result of the availability of dedicated loan funds for financing projects.

Conversely, more recent facilities have included a more proactive approach, with both KyrSEFF and Addendum 3 of CEEP including elements in the TC package specifically aimed at ensuring that the enhanced capacities created by SEFFs include the local consultancy sector as well as the PFIs and sub-borrowers. Monitoring benchmarks introduced in CEEP set a target that half of all energy assessments/ Rational Energy Utilisation Plans must be prepared with the “involvement” of local consultants, although it is not specified how deep or broad-based this involvement is required to be.

Recommendation 3

For a fully-functioning energy efficiency market to develop, the building of capabilities should be broadened to encompass local firms and experts outside of the project consultant consortium. It is recommended that the potential is explored for the more creative use of TC funds, whereby any local consulting firm has the possibility to access SEFF TC support for the origination and development of SEFF sub-projects. Such a model would likely be appropriate only in the second and any subsequent phases of a facility, once the PFIs and project consultants had gained sufficient experience and understanding of the market.

Under this model, the role of the project consultants would expand to include coaching external local consultants in the preparation of Rational Energy Utilisation Plans and performing a quality control function. Performance indicators for the project consultants might be expanded to include the number of external local consultant firms it trains/capacitates to a level where they are able to produce Rational Energy Utilisation Plans, while transition impact monitoring benchmarks for the facility would include a benchmark for the volume of plans that are prepared by local firms other than those in the project consultants consortium.



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Management comments

Management would like to thank you EvD for this thorough study that provides an extensive overview and an important source of information for understanding the evolution of Sustainable Energy Finance Facilities (SEFFs) over time, and how they have adapted to EBRD priorities (within Sustainable Energy Initiative (SEI) and Sustainable Resource Initiatives. The main finding of the study is that SEFFs have been very positive to date in terms of meeting their transition objectives.

Management has already interacted with EvD to clarify views and recommendations in the draft version of the study. Management agrees with all three recommendations. The proposed improvements are in line with Management proposed approach and ongoing efforts, for instance on the need for a more programmatic approach and homogeneous choice of benchmark indicators across all SEFFs.

Recommendation 1

SEFFs should be regarded as an actual rather than a de facto programme. The potential should be explored for using non-transactional TC funds for supporting SEFF-wide activities such as the SEFF website, the annual conference and the dissemination of success stories.

Some specific areas where a more programmatic approach by non-banking teams could yield benefits include: (i) the more systematic use of performance indicators and rational in the setting of baseline data linked to a programme-level intervention logic; (ii) the potential to introduce regular programme-level evaluation, including the assessment of longer-term impacts on the market, periodic reviews of the use of incentive payments, and comprehensive documentation of lessons; (iii) adoption of a common structure for project documentation; (iv) a more consistent approach to TC; (v) coordination of SEFF-wide activities such as dissemination of success stories.

Management comment on recommendation 1

Management agrees with this recommendation: Management agrees that SEFFs should be regarded as a programme and that, subject to the availability of TC funds, non-transactional TC be used to support the programme as a whole, introducing a more consistent approach to operations.

Work is underway to develop programmatic SEFF support that goes beyond the scope of current technical cooperation assignments to create the tools for a common SEFF implementation approach.

Recommendation 2

In coordination with ongoing efforts to develop Bank-wide results frameworks, a programme-wide intervention logic for SEFFs should be defined that specifies: (i) the types of outcome that are expected to result from the range of outputs that a SEFFs typically produce; (ii) the logical connection between these outcomes and the desired impacts and specifically when incentive payments or any other type of subsidies are used, a clear articulation of the market imperfections they are to correct and results intended to produce; (iii) the assumptions and risks that are implicit in each of the links in the results chains that make up the intervention logic.

This should form the basis for defining a core set of TIMSs for use across SEFFs that are both measurable and relevant. Indicators should only be used where there is a clear relationship between the achievement or otherwise of the target value and the generation of the desired impacts. Unless a strong case can be made that a particular SEFF requires additional performance indicators, it is recommended that all SEFFs use only the standard TIMSs (or an appropriate subset of them). Individual SEFFs might differ in the target values set for these indicators based on specific market conditions.

Management comment on recommendation 2

Management agrees with this recommendation: Management recognises the need for a consistent approach to setting transition impact monitoring benchmarks for SEFFs and that this will be facilitated by the SEFF programmatic approach discussed above. Under the recently proposed improvements in the transition impact methodology and the results framework for investment projects (Results Framework and Transition Impact Assessment for Investment Projects, presented to the Board in June 2015), Management committed to a more structured and strategic approach to intervention logic of Bank's activities in a given area, (including investments, technical assistance and policy reform dialogue), using country strategy as the main anchor. SEFFs will be included in this approach.

Recommendation 3

For a fully-functioning energy efficiency market to develop, the building of capabilities should be broadened to encompass local firms and experts outside of the project consultant consortium. It is recommended that the potential is explored for the more creative use of TC funds, whereby any local consulting firm has the possibility to access SEFF TC support for the origination and development of SEFF sub-projects. Such a model would likely be appropriate only in the second and any subsequent phases of a facility, once the PFIs and project consultants had gained sufficient experience and understanding of the market.

Under this model, the role of the project consultants would expand to include coaching external local consultants in the preparation of Rational Energy Utilisation Plans and performing a quality control function. Performance indicators for the project consultants might be expanded to include the number of external local consultant firms it trains/capacitates to a level where they are able to produce Rational Energy Utilisation Plans, while transition impact monitoring benchmarks for the facility would include a benchmark for the volume of plans that are prepared by local firms other than those in the project consultants consortium.

Management comment on recommendation 3

Management agrees with this recommendation: Management welcomes the recognition that SEFFs have facilitated the development of the local consulting sector and acknowledges that the benefits have tended to be confined to a relatively narrow group of local firms or experts procured under the EBRD's Procurement Policies and Rules.

Opportunities will be explored for building the capacity of local firms and experts outside the project consultant consortium – for example through e-learning modules, reporting templates and guidelines – thereby developing the local consulting sector and broadening the market of local expertise for subsequent phases. At the same time, confidence in the local consulting sector needs to improve if local financial institutions and their clients are to trust in the impartiality of advice and confidentiality of their information. This may require external local firms and experts to obtain adequate liability insurance, which remains a barrier in many markets.

⁹ Banking operations: Sustainable Resources Initiative. Internal Audit Report (IAR 14/11, March 2015).

¹⁰ REECL, KazSEFF and RuSEFF were initially each rated *excellent with high risk*

WebSEFF and BEECIF were originally rated *satisfactory with high risk* and likewise; additionally, one bank under MFF-EE was originally rated *satisfactory with high risk*.

¹¹ The review here covers framework facilities against the transition benchmark set at board, for those facilities which have TIMs reports at framework level. This included TIMs reports and other available information.

¹² Where information was available at facility level.

¹³ Looking at SEFFs where a TIMS exists at framework level.

Although there was no target specified in one case.

¹⁴ Over 70 per cent where facility level information is available.

¹⁵ Management report with figures from 30 September 2014.

¹⁶ 14 of all framework TIMS reports include this, though not in the case of UKEEP, RuSEFF, REECL, TurSEFF, KyrSEFF, KazSEFF or PolSEFF. Sometimes this is included under a different transition objective e.g. transfer of skills

¹⁷ A review of recent EU donor reports lends some indication that the SEFF product in Romania is performing better than the SME Financing Facility product, though implemented through the same banks.

¹⁸ Management reports, Consultant reports, TCR, previous SEFF evaluations and strategic documents reviewing SEI 2, for example.

¹⁹ The EBRD launched the Sustainable Energy Initiative (SEI) in 2006 reflecting the increasing importance of energy efficiency to the region of operations and the call of the G8 at the 2005 Gleneagles Summit for multi-lateral development banks to scale up their activity to address climate change.

SEI 3 board paper states that the SEI operational model combines the following instruments: (i) project financing of specific energy efficiency or renewable energy investments with clear estimates of energy savings and carbon emission reductions; (ii) technical assistance to support project preparation, project implementation and capacity building; and (iii) policy dialogue to support the development of an enabling environment for sustainability energy.

²⁰ The first dedicated policy dialogue manager was hired by E2C2 in 2008; in 2015, 8 people report to a Senior Manager for policy dialogue within E2C2.

The division of labour between the two departments is fluid, with prioritisation of opportunities depending on relevance to departmental mandate in some cases, origin of policy gap whereby this may spring from sector work making E2C2 the natural partner, funding source availability and strength of relationship network.

²¹ These are BEERECL, MoSEFF, WeBSEFF, KazSEFF, RSECF, TurSEFF, PolSEFF, MidSEFF, RoSEFF, BEECIF, MoREEFF, KyrSEFF, BelSEFF, and KoSEP.

²² These and other discrete efforts affect both the extent to which the Facility can attain its skills transfer T1 objective and of course, the Facility's sustainability.

²³ When the term "free" is used in reference to technical assistance provided, what is meant is that it is free of charge for the beneficiary but of course it should never be forgotten that this is financed by donors.

¹ The identification of the universe of SEFFs is not straightforward as the Bank's databases do not include clear identifiers and SEFFs have gone under different terminologies. The evaluation team coordinated with E2C2 and FI to determine the list of facilities.

² The new 2030 framework for climate and energy policies sets a target of at least 27 per cent for renewable energy and energy savings by 2030.

³ The last SEFF taken into account in this evaluation is USEFF which was approved in December 2013.

⁴ Turkey is one of the two EBRD regions that consist of a single country, the other being Russia.

⁵ Residential Energy Efficiency Credit Line -REECL, Municipal Finance Facility – Energy Efficiency-MFF-EE, European Union Energy Efficiency Finance Facility-EUEEFF, Russia Sustainable Energy and Carbon Finance Facility -RSECF, Bulgaria Energy Efficiency Competitive Industry Financing Facility-BEECIF and Moldovan Residential Energy Efficiency Financing Facility-MoREEFF.

⁶ The sub-borrowers are the ultimate beneficiaries (companies – industries or SME- or household) in contrast with the direct borrowers which are the PFIs.

Sub-projects are defined as all sustainable energy projects financed through the PFIs using SEFF financing.

⁷ International banks are defined as banks with an international network and with branches in different countries. Local banks are defined as banks only operating in the country where they have been established.

⁸ Most SEFF board documents contain reference to the equivalent of a market demand study (though MFF EE Polseff and KoSEP seem to be exceptions).