



Armenia

Gap Analysis

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1. INTRODUCTION

This report is part of the baseline analysis of the E-FIX project. The E-FIX project aims at triggering private finance for sustainable energy projects using innovative financing mechanisms. In the target countries of Central and South Eastern Europe as well as the countries of the Caucasus region there is considerable idle potential for sustainable energy products and services. Both potential energy project developers and financiers face diverse financing barriers. An innovative energy financing mix is needed in order to activate new source of finance and facilitate an increased implementation of sustainable energy projects. Accordingly, the objective of the E-FIX project is to facilitate the take up and intensified usage of innovative energy financing mechanisms in the energy sector.

In order to accurately assess the idle potential of both financing sources and energy project implementation in each of the focus countries the E-FIX experts are conducting a baseline study including Gap Analysis. The present report presents one part of the baseline analysis focusing on the Gaps identified during preparation of financial sector overview for the Armenia.

2. POTENTIAL DEMAND FOR EE/RE FINANCE

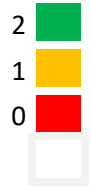
Armenia has a substantial potential for energy efficiency across all sectors of economy, including manufacturing, transport, agriculture etc. Different studies and programs implemented by IFIs demonstrate that the investments in specific EE technologies can secure lucrative returns for the investors. At the same time Armenia has a well-developed financial sector with the moderate competition. The Armenian financial sector is dominated by the banking sector, which made up 92% of total financial sector assets in 2017. The non-banking sector remains highly underdeveloped and includes about 30 non-banking institutions (microfinance and leasing companies). However, there is a strong demand for EE investments in Armenia; the number of the financing products offered by the local banks is very limited in terms of available funding and financing structures. The banks are not interested in developing suitable financial instruments tailored to different EE technologies due to number of challenges, including:

- Scale – the individual projects are considered by the banks as too small to be interesting for the banks
- Asset issue – the banks do not consider the savings as “conventional asset”, which can be used as collateral or they do not include savings in financial modelling
- Lack of alternative financing, including leasing and equity financing – as mentioned above Armenian financing sector is dominated by the banks and there are no equity or quasi equity financing mechanisms in the country. The leverage of Armenian corporate sector is very high and further opportunities for EE financing are very limited because of tough requirements on loan/collateral ratio.

While over the last decade the corporate lending in Armenia has been rising at remarkable rate, the energy efficiency financing has been mainly supported by the donor organizations and there are concerns that funding for EE products– the traditional sources of assistance for EE – may not grow further. Therefore, in order to increase investments in EE there is a need to supplement traditional financing schemes with new innovative financing schemes tailored to specifics of energy efficiency technologies.

The above-mentioned challenges can be met through the introduction of dedicated financing mechanism based on leasing products. Special dedicated leasing products can boost EE financing across all sectors, especially transport and agriculture. The potential niche for E-FIX development in leasing sector is clearly presented in the below matrix.

- > common practice
- > rarely used
- > not used
- > not applicable



Projects in need of financing

Sources of funds

	Improvement in building sector		Financing of energy performance improvements incl. ee equipment				Project preparation and development	R&D projects	Start-ups	Renewable energy production plants	
	Public	Private	Industry	Large companies	SMEs	Public infrastructure				Large/ utility scale	Small-scale
Equity financing	0	0	1	1	1	0	1	1	1	1	1
Financing through local finance institutes	0	1	2	2	2	1	2	2	0	2	2
Financing through intern. finance institutes	0	1	1	2	0	1	1	1	1	1	1
Microfinancing											
Subsidies	0	0	0	0	0	0	0	0	0	0	0
Leasing	0	1	1	1	1	1	0	0	0	2	1
Energy Performance Contracting	0	0	0	0	0	0	0	0	0	0	0
Investment funds	0	0	0	0	0	0	0	0	0	0	0
Green bonds	1	1	1	1	1	1	1	1	1	1	1
Crowdfunding/ Energy Cooperatives	0	0	0	0	0	0	1	1	0	0	0

3. BARRIERS TO EE INVESTMENTS

As it was mentioned above, there is a high potential for EE investments in Armenia. However, the regulatory environment for energy efficiency in Armenia is under developed and does not include any binding or incentive mechanisms for the promotion of EE investments. Also, the EE investments in some sectors (mainly building) are impeded by the relatively low energy prices.

Other barriers, which hinder the investments in EE technologies are listed below:

- Financing barriers (including lack of dedicated credit line, equity, guarantees etc.)
- Technology barriers – Armenian is a small landlocked country with small economy and is not interesting for the international suppliers to open representative office and promote new technologies in the country
- Lack of the governmental support – although Armenian government has stated that EE is a key priority for the development of energy sector, the number of the real actions in terms of the adoption of incentives or binding regulation is very limited

4. PROPOSED E-FIX FINANCING MECHANISM

The financial leasing is the proposed financial energy efficiency financial mechanism, which will be used during the piloting stage. The financing will be implemented by ACBA leasing across the sectors economy with largest potential for EE improvements. The company will capitalize on its experience in RE/EE financing (Green Leasing sub-brand) and will elaborate new model, which will match the size and timing of the payments from the customer with the potential savings from EE equipment/technology.

The Green Leasing sub-brand has been introduced by ACBA Leasing in 2014 and it was aimed at financing of EE/RE projects. As a result of E-Fix activities in Armenia (including interviews and meetings with the stakeholders, market research etc) the Project partners (ACBA Leasing and CCG-AM) have agreed to elaborate innovative leasing model for financing RE/EE in Armenia to meet growing demand for EE/RE technologies and overcome barriers/challenges described in the sections above.

ACBA leasing has organized stakeholder consultations on 6th of December. The stakeholders invited to the meeting represented different sectors of economy, including potential clients, suppliers, services providers etc. The stakeholders presented the following barriers for the deployment of EE technologies:

- Tough collateral requirements
- High interest rate
- Lack of flexible payment schemes
- Long approval process

The financial model based on leasing contract will solve the aforementioned challenges; for example in leasing contract the leased equipment will be used as a collateral without requiring additional collateral from the client.

ACBA leasing will target the segments, which have considerable potential for reducing energy consumption and emissions of greenhouse gases, but are largely underfinanced by the local financial institutions, including:

- Energy (small scale solar PV and solar hot water installations),
- Transport (electric cars),
- Construction (including heavy construction equipment and large trucks),
- Agriculture and manufacturing

The detailed eligibility criteria will be elaborated further based on the results of upcoming meetings with the potential clients and suppliers, but in general the eligibility criteria for EE technologies will be improvement of energy consumption by at least 20% compared to situation before the implementation of the project. For Greenfield projects the eligibility criteria will be -20% compared to country baseline. The project team has

identified significant potential for the investments in off-grid solar PV installations and for this type of the project the eligibility criteria will be the capacity (max 500 kW).

The new financial model will include comments and recommendations received during stakeholder meetings, including: assistance (including technical) to suppliers, payment schemes tailored to energy savings, project finance etc. ACBA Leasing will propose the new model for the existing customer-base and later will disseminate the results to the new customers. It is expected that during the piloting phase 10-15 projects will be financed with the average contract value 100,000-150,000 Euro.

The new leasing credit line will include a number of incentives for potential clients, including:

- Preferential interest rates (-3%) compared to standard financing
- Longer maturity (by 2 and more years depending on the availability of long-term financing)
- Automatic approval for the pre-approved technologies
- Technical assistance for certain technologies.

The leasing of EE equipment will be based on the new evaluation methodology, which in addition to usual evaluation procedures will include evaluation of the energy savings, greenhouse gases emissions and environmental and social impact.

ACBA leasing will elaborate and implement methodology for the monitoring of the results of the projects.



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