

# Ex post evaluation – Georgia

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**Sector:** Electricity distribution (23040)  
**Programme/Project:** Electricity distribution rehabilitation I (BMZ No. 2002 65 983\*)  
**Implementing agency:** United Energy Distribution Co. (UEDC)



## Ex post evaluation report: 2016

		Project A (Planned)	Project A (Actual)
Investment costs (total)	EUR million	35.8	10.8
Counterpart contribution**	EUR million	10.8	1.8
Funding	EUR million	25.0	9.0
of which BMZ budget funds	EUR million	12.0	9.0

\*) Random sample 2015; \*\*) counterpart contribution only value added tax paid by UEDC data on other own contributions not available owing to owner change

**Summary:** Investments in UEDC distribution grids outside of Tbilisi (electricity meters and various installation materials for high, medium and low-voltage networks) for the benefit of commercially viable operations. In the course of privatisations in the sector, UEDC's fixed assets were sold to the Czech company EnergoPro in July 2007. Since EnergoPro subsequently showed no interest in continued cooperation—mainly due to the loan conditions of the market fund portion—the project was ended prematurely.

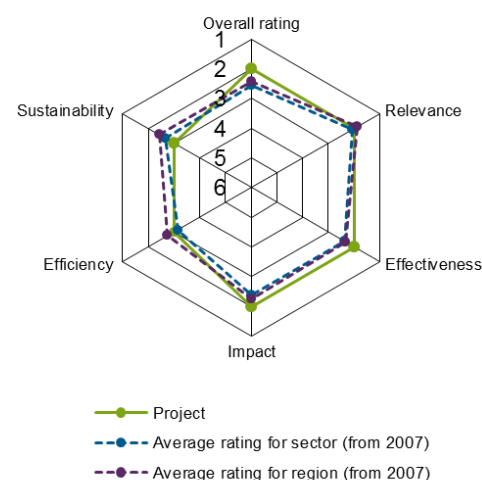
**Objectives:** The goals of the project ("outcome") were (1) to stabilise the operation of electricity distribution and (2) increase distribution efficiency outside of Tbilisi. The ultimate objective ("impact") was to contribute towards a sustainable and efficient electricity supply in Georgia.

**Target group:** Electricity users in the supply area of the then UEDC.

## Overall rating: 2

**Rationale:** Between 2003 and 2007 the supply of electricity was extremely unreliable in the area covered by the then incumbent UEDC which also contributed to political turmoil. Thus, the project ultimately contributed towards the economic and political stability of the country - by virtue of promoting a more efficient provision of electrical energy. This assessment is not significantly compromised by the premature termination of FC financing.

**Highlights:** Various partners engaged in a coordinated and complementary manner during a period of upheaval. This helped to successfully bring about transformation in a sector of political priority.



## Rating according to DAC criteria

### Overall rating: 2 (good)

#### General conditions and classification of the project

In 1996, the vertically integrated state-owned energy holding was split up into individual companies. There was barely any effective control by governmental bodies. Corruption, theft of electricity, non-payments and the illegal appropriation of electricity fees had led to a dramatic liquidity crisis in the sector. The debts of energy companies to each other and to external creditors exceeded EUR 500 million. With a very low collection rate of roughly 35 % nationwide, the funds available were sufficient to cover salaries at best. Consequently this resulted in hugely decreasing performance levels and outages in almost every area of the power supply system.

In June 2004, the new Saakashvili government drew up an action plan for the energy sector, which targeted, in particular, the financial restructuring of the sector, including debt restructuring. Since then, from around 2005 onward, the situation in the Georgian electricity sector has improved substantially and is now stable; avoiding power price increases to end-consumers was given a high political priority. The strategic goals for the energy sector have not essentially changed under the new Margvelashvili government since 2013. Avoiding electricity price hikes has become even more politically sensitive since then.

Outside of Tbilisi, power was distributed by small companies until 2002, which were then merged into the newly established "United Energy Distribution Company" (UEDC) - the executing agency in charge of the evaluated project. This company (and its legal successor later on, see below) supplied extensive parts of Georgia outside of Tbilisi with electricity. Almost all low-voltage plants in the distribution network required modernisation; besides, there was a lack of electricity meters that are vital for transparent billing. The distribution network is now in private hands: owned by Telasi (part of the Russian "Inter RAO-UES" Group) in Tbilisi - and by the Czech company "EnergoPro" outside of the capital. The distribution network of EnergoPro, in particular, is in a relatively poor state of repair. This is caused by the operator's reticent investment activities as well as by low distribution fees as approved by the regulatory authority.

#### Relevance

Based on a reliable and modern equipping of the distribution network throughout extensive parts of Georgia outside of Tbilisi, including electricity meters, the project was focused on being a cornerstone to safeguard a reliable electricity supply. The underlying intervention logic of improving the Georgian power supply's overall efficiency by operating the electricity distribution systems in a better and more efficient way is still valid today. The extremely unreliable supply of electricity between 2003 and 2007 in UEDC's service area had even led to a marked politicisation of those shortcomings. The project approach therefore had the potential to substantially contribute towards the economic and political stability of the country and the new government. Unlike today, German FC was one of the few players involved in financially supporting the Georgian electricity sector at the time of project appraisal (PA). Thanks to structured interaction with institutional reform measures supported by USAID with regard to timing and design, the project was crucially important for the success of the Georgian government's reform agenda. This was emphasised by the interview partners, particularly those of the ministries, during the evaluation mission. With view to the situation in the power sector at that time, the project was part of an overall sector strategy comprising "soft" and investment measures. This process was accompanied by intensive sector dialogue between FC and the government.

#### Relevance rating: 2

#### Effectiveness

The programme's intended outcome was to significantly contribute to sustainable electricity distribution in the regions outside Tbilisi, and especially to raise energy efficiency in the power distribution grid. For that purpose, the following indicators were defined, mainly covering efficiency aspects; their attainment can be summarised as follows:

Indicator	Status PA	Ex post evaluation
(1) Increase in billing efficiency	from 60% to 80%	> 90% (from final inspection, tested for plausibility again)
(2) Increase in collection rate with private customers	from 31% to 70%	> 98% (from final inspection, tested for plausibility again)
(3) Increase in collection rate with business customers	from 65% to 80%	> 98% (from final inspection, tested for plausibility again)
(4) Reduction in peak load of customers	On average by 20%	Data not available

According to indicators 1-3, the first project target was certainly achieved; for indicator 4 and the second programme target, the data situation for UEDC/EnergoPro is not good: all of the data records available publicly and consistently over the period relate to the amount of electricity generated, not to the peak load of the system. Peak load, though, is not a meaningful indicator for energy efficiency in a system that was characterised by power cuts. The evidence shows that the peak load dropped between 2003 and 2009. Taken on their own, it is highly plausible that the rehabilitation of the distribution network, the introduction of electricity meters and the increased collection rate of close to 100% would reduce consumption c.p. However, these efficiency gains are generally offset by growth effects. Measured against the number of "blackouts", the reliability of the national electricity grid has improved overall since 2005. However, with several outages per year it has yet to reach the level of western industrialised countries.

The defined objectives have been achieved, although the project was not continued after the privatisation and the transfer of physical fixed assets to EnergoPro: the new owner had no interest in making further use of the FC loan. From today's perspective, the rapid and comprehensive achievement of the project objectives is due to the unusually positive growth in the sector in the years 2006-08. Back then, the FC loan arrived at a financially opportune moment for the UEDC, freed it from a liquidity trap and enabled it to make the necessary investments in meters. This enabled the project-executing agency to suspend individual electricity connections in the event of non-payment and to improve the reliability of the distribution network. Moreover, the Energy and Finance Ministries, UEDC management, USAID and German FC proceeded in a concerted approach.

**Effectiveness rating: 2**

### Efficiency

The project was carried out in 2006 and 2007 under conditions characterised by insufficient transparency. There are indications that the project was not completely immune to this. It may have led to excessive prices, quality deficits as well as quantity and type discrepancies compared to the supplies tendered. The extent of such practices cannot be determined today without considerable additional effort. Despite of a management agreement between UEDC and an international consultant, that aspect and related risks were clearly not fully recognised and addressed when designing and implementing the project. Some of the Russian meters purchased in 2006/07 had soon to be replaced owing to quality issues. As reported for the final inspection (FI), however, average costs were still appropriate on the whole, meaning that production efficiency can be classified as acceptable.

As regards allocation efficiency, i.e. the relationship between use of funds and the results achieved (especially in terms of efficiency gains in operating the grid and in the sector as a whole), the project can be appraised in a positive light, despite the fact it could not be fully implemented.

**Efficiency rating: 3**

## Impact

The project's impacts affect the entire electricity sector in Georgia, and indirectly the country's water and gas sector, too. The project contributed to establishing the foundations for operating these sectors in a cost-covering way. Stabilising the electricity sector from 2005 onward removed the massive supply bottlenecks outside of Tbilisi, and helped to substantially improve the delicate political situation there. This meant the project contributed to reducing political unrest, strengthening the Saakashvili government after the Rose revolution and to facilitating a moderate economic upswing, which is still continuing today.

According to the impact indicator defined at PA, the project-executing agency should be in a position to (promptly) settle over 40% of its current liabilities for electricity purchasing by the end of the project. To that end, no detailed information has been available since the afore-mentioned privatisation. However, EnergoPro has essentially proven to be a commercially viable enterprise, despite a maintenance and investment policy that requires improvement (see section on "General conditions" and "Sustainability").

**Impact rating: 2**

## Sustainability

The effects described above – particularly the targeted enforceability and social acceptance of paying for electricity along with the associated economic viability of the electricity sector – are in all likelihood sustainable.

Some project equipment had to be replaced early on - due to poor quality (see "Efficiency" section above). At EnergoPro, the successor to UEDC, there is a substantial general backlog in investment and modernisation activities throughout the entire distribution grid. That phenomenon is caused by a combination of regulatory deficits, sluggish investment and maintenance policies as well as the Czech parent company's profit-transfer strategy. It is currently unclear whether the Georgian government and/or the regulatory authority will succeed in making any significant improvements here.

**Sustainability rating: 3**

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

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

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

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

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

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

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

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

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

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