RESULTS REPORT 2016-2017

IMPROVING ACCESS TO RELIABLE ON-GRID ELECTRICITY SERVICES FOR HOUSEHOLDS AND PRIORITY PUBLIC INSTITUTIONS BELGIAN CONTRIBUTION TO EARP. RWA 12 081 11

CONTENT

1 Acronyms

AfDB	African Development Bank
CDEU	Capacity Development Energy Utility
BTC	Belgian Technical Cooperation, the Belgian development agency
DI	Director of Intervention
DP	Development Partner
EARP	Electricity Access Roll Out Program
EDCL	Energy Development Corporation Limited
EDPRS	Economic Development Poverty Reduction Strategy
EPC	Engineering procurement construction
ESMAP	Energy Sector Management Assistance Program
ETR	End term review
EUCL	Electricity Utility Corporation Limited
EWSA	Energy Water and Sanitation Authority
GMO	Gender Monitoring Office
GOR	Government of Rwanda
HOC	Head of Cooperation
ICP	Indicative Cooperation Program (between Rwanda and Belgium)
ITA	International Technical Assistant
M&E	Monitoring and Evaluation
MD	Managing Director
MTF	Multi-Tier Framework
MTR	Mid-term review
PIM	Project Implementation Manual
PMU	Project Management Unit
RAF	Administrative and Financial Responsible
RAFI	International Financial and administrative Responsible
REF	Rural Electrification Strategy
TFF	Technical and Financial File
WB	World Bank

2 Intervention at a glance

2.1 Intervention form

Intervention title	Improving Access to Reliable On-Grid Electricity Services for Households and Priority Public Institutions Belgian Contribution To EARP
Intervention code	RWA1208111
Location	Eastern Province of Rwanda
Total budget	€ 17,448,252 Belgian contribution : € 17,000,000 Rwandan contribution : € 448,252
Partner Institution	Rwanda Energy Group (REG)
Start date Specific Agreement	14/02/2014
Date intervention start	15/05/2014
Planned end date of execution period	14/05/2018
End date Specific Agreement	13/02/2020
Target groups	Households, Social infrastructure- health facilities, schools and administrative offices
Impact[1]	The energy sector is able to provide sufficient, reliable and affordable energy for all Rwandans
Outcome	The access to reliable on-grid electricity services for households and priority public institutions in rural areas is improved
Outputs	Rural electricity access is increased through national electricity grid extension
	Electricity grid reliability is increased through grid strengthening and harmonized standards
	Electricity grid access affordability is improved through pilot activities in the intervention area
	Local capacity is strengthened within EARP and EUCL
Year covered by the report	2016 and first half of 2017

[1] Impact refers to global objective, Outcome refers to specific objective, output refers to expected result

2.2 Budget execution

	Budget	Expenditure		Balance	Disbursement rate at the end of June 2017
		Previous years	Period covered by the report		
Total	15,238,000	2014: 192,479.54 2015 : 302,866.39.	2016 : 2,693,551.20 2017 : 3,839,008.76 (Cumul end June 2017)	12,357,654.20	19%
Output 1*	13,854,500	2014: 149.17 2015 :41,396	2016 : 2,399,492.15 Q1+Q2 2017 : 407,335	11,047,673.2	20%
Output 2***	1,042,500	2014: 149 2015: 0	2016: 1,752.78 Q1+Q2 2017: 60,130.6	980,616.62	6%
Output 3****	0	2014: 2015 :			0%
Output 4	341,000	2014: 0 2015 :0	2016: 11,636	329,364	3%

*Two lots were swapped between BE1EARP and BE2EARP: Lot 2, to be constructed through the 2-step approach was removed from the budget of BE1EARP, while Lot 6, to be constructed through the EPC approach was integrated in BE1EARP (and combined in one single tender with the 2 other EPC lots of BE1EARP). The related budget was increased from €12,280,000 to €13,854,500. This decision has a major impact on efficiency.

**Except the preparation of harmonized specifications and standards for power network infrastructure, all the activities of this output were displaced to BE2EARP, decreasing the related budget from €1,042,500 to €90,000.

***The steering committee of the project decided to remove this output, similar activities being undertaken by MININFRA, decreasing the budget from €130,000 to €0.

2.3 Self-assessment performance

2.3.1 Relevance

	Performance
Relevance	D

The GoR's large-scale rural electrification strategy has been reoriented in June 2016 (new Rural Electrification Strategy- RES) from a focus on on-grid connections to a more balanced approach toward off-grid systems (mostly stand-alone solar systems) for the poorest households.

A recent World Bank survey (MTF draft report by ESMAP made available in 08/2017) shows that most of the beneficiaries in rural areas only consume power to charge phones and to light their house. They do not need a (very expensive) connection to a grid to satisfy those little needs and off-grid solutions provided by the private sector are sufficient.

According to the new strategy, the national electric grid should primarily serve "high consumption users and drive economic growth". The RES does no longer explicitly assign to EARP the objective of connecting social institutions, schools and health centres. Therefore, the national grid extension strategy should no longer focus onto connecting as many households as possible.

This means that the specific objective of this intervention has become largely irrelevant to achieve the global objective, if we refer to the new RES.

In practice, GoR implements the RES loosely. EDCL did not revise its EARP strategy when GoR adopted the new strategy and EDCL still pushes EARP projects to connect as many households as possible. In that spirit, 2 addenda have been approved to EPC contracts financed by BE1EARP to increase the number of connected households, as this remains one major indicator of the intervention. See additional comment in annex 4.1.

2.3.2 Efficiency

	Performance
Efficiency	C

Too much time and efforts have been devoted to activities that either:

- have lingered abusively (tendering processes for distribution grid extension works and supervision – project has started in May 2014 but contract for grid extension has been signed in October 2016),
- have been cancelled because of lack of relevance (transformer workshop, "soft activities"),
- have faced important challenges during implementation (service contract for the supervision of grid extension works)
- or have been transferred to the second component of BE-EARP (grid strengthening). These challenges have been characterized by loss of time spent on unfruitful discussions and has thus highly affected the project's efficiency, as it means that the objectives will not be achieved on time.

As the formulation of the next phases of BE-EARP took place, much time was spent on discussing the best approaches to do the construction. This was partly due to a rather lightly made commitment in the project document to use the "in-house" approach for the construction of some "simple" lots. The in-house approach sees EDCL do with their own staff the design and the construction of the electric lines.

Contract management in co-management, in a context where BTC does not sign contracts any longer and where the partner is new and not accustomed to traditional BTC co-management approach also creates complications and losses of efficiency.

2.3.3 Effectiveness

	Performance
Effectiveness	A

Effectiveness is the degree to which the outcome (Specific Objective) is achieved. The specific objective is the access to reliable on-grid electricity services for households and priority public institutions in rural areas is improved. Even if some activities have faced difficulties, have been cancelled or transferred (see efficiency), the main activity (extension of grid distribution) contributing directly to the realization of this outcome will be completed within the project's lifespan.

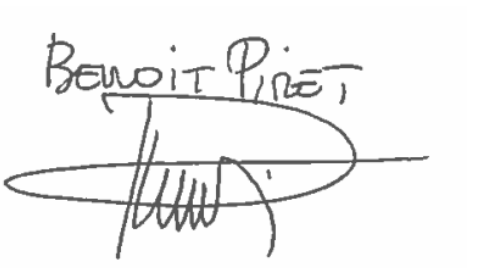
2.3.4 Potential sustainability

	Performance
Potential sustainability	D

Potential sustainability is the degree to which the benefits of the intervention continue to be delivered after its completion.
There is a strong political will to maintain the grid. This should ensure that the benefits continue in the future. At the same time, there are fundamental questions about the financial sustainability of the grid as many users do not buy enough electricity to ensure the financing of its proper operation and maintenance. Without subsidies, EUCL cannot properly operate and maintain the grid.
Affordability is also a big challenge. In the present context, Rwanda has one the most expensive electricity in Africa but still not expensive enough for the utility to sustain its operation. This is a problem for rural households that cannot not afford the cost.

2.4 Conclusions

- The project is facing challenges for implementing all activities described in the TFF. Nevertheless, the main component (extension of grid distribution) will be completed within the project's lifetime and will contribute greatly to the achievement of the outcome.
- The main reasons for the lack of efficiency are the unavailability of key resources (no RAFI since June 2016 until September 2017 and no ITA Power Network until February 2017), the co-management modality (more procedures, etc.) and the change of strategy during implementation.
- Due to the new rural electrification strategy, at institutional level (MININFRA), the specific objective has become, strictly speaking, irrelevant to achieve the global objective.
- The experiences of the BE1-EARP-project will serve the other two components (BE2-EARP and BE3-EARP) for improving their implementation.

National execution official	BTC execution official
Clementine Umugwaneza Due to the particularly difficult context of the intervention since January 2017 and the unavailability of our partners to invest time in anything else than the strict follow-up of the priority activities (implementation of the construction tenders), we have abandoned the idea to obtain their feedback and approval of this report. The report reflects the position of BTC project team and representation. It is highly probable that our partner would not have signed off this report	Benoit Piret 

3 Results Monitoring[2]

3.1 Evolution of the context (This part is similar for all BE-EARP interventions).

3.1.1 General context

In June 2016, the Government of Rwanda adopted a new rural electrification strategy (RES). This strategy emphasises the use of home-solar systems for rural electrification, rather than on-grid electricity. Indeed, such systems are considered better adapted for large-scale rural electrification. Therefore, the new strategy lowers the target for new on-grid connections. The adoption of the new strategy has not had any impact so far on the implementation of EARP (see paragraph on relevance in the previous chapter).

3.1.2 Institutional context

The recent (May 2017) hiring of a new CEO for REG did not change the orientation of the EARP program until now. The new CEO urges to increase collaboration between EDCL and EUCL. This is likely to have an impact on our BE3EARP project (provision of expertise) and on the collaboration between the two BTC projects in REG (EARP with EDCL and CDEU with EUCL).
There is a lack of coordination at ministry and REG levels on off-grid and on-grid. Indeed, there is a risk that households get off-grid connection just before having the grid built close to their home.

3.1.3 Management context: execution modalities

The intervention is mainly in **co-management modality**. This modality, as implemented today, has mainly two major drawbacks:

- **Strong limitation for quick implementation and decision-making process.** For example, public procurement processes are generally taking more than 9 months (in some cases even more than 12 months) between publication and contract signature. The application of the principle of co-management has led to too many and too long discussions on organizational and operational aspects, in particular on bidding documents and on acceptability of deliverables of service tenders, with unreasonable delays as direct consequence.
- **Unclear responsibility concerning contract management**. The partner signs the contract alone while BTC wants to remain involved in the daily management of the contracts. For new partners not accustomed to the traditional co-management approach (when BTC used to sign the contract with the partner), this new situation generates questions of accountability towards their own hierarchy and audit authorities. A number of questions on how to practically implement co-management in this context have not been properly answered at the start-up of the intervention and has created tensions.

3.1.4 Harmo context

The intervention is relatively well harmonized for the following reasons:

- On-grid electrification strategy is based on a study performed by SOFRECO in 2013, dividing Rwanda in different lots to electrify. Consequently, there is no overlap between source of financing for on-grid electrification.
- Coordination between donors exists at Sector Working Group and Technical Working Groups. It does not deal with EARP operational issues though. An EARP steering committee would be a useful innovation but other donors are reluctant to share much information. This is done on an ad-hoc basis and not systematically. For example, BTC suggested joint evaluations of EARP with WB and AfDB. In theory, Head of Cooperations agreed. In practice, implementers resist (“ok, if this is not more work for us!” is the attitude). But doing a joint evaluation IS more work …
- There is a collaboration with another BTC intervention at EUCL, namely the CDEU-project, which aims at strengthening the capacity of the utility. However, this collaboration should be

[2] Impact refers to global objective, Outcome refers to specific objective, output refers to expected result

improved. The Request from the new CEO is an opportunity.

3.2 Performance outcome

3.2.1 Progress of indicators

The following table is taken from the baseline report.

Not yet all target values have been collected. The project is currently collecting the last data regarding consumption levels from SUPREMA, the cash power system, to determine the remaining target values. As the indicators on outcome level are directly depending on the output of the project's activities, no actual values can currently be collected, as these activities (grid extension and capacity building) have not yet been completed.

Outcome: The access to reliable on-grid electricity services for households and priority public institutions in rural areas is improved					
Indicators	Baseline value	Value 2016	Value 2017	Target value 2017	End value
Number of new connections with an activated Cash Power meter at household level	0	n/a		9732	19465
Number of new connections with an activated Cash Power meter at public institution level	0	n/a		137	274
Number of new connections with an activated Cash Power meter at business level	0	n/a		1124	2248
Average consumption per household (kWh/month) for newly connected houses below 15 kWh/month	0	n/a		10	10
Average consumption per household (kWh/month) for newly connected houses above 15 kWh/month	0	n/a			
Number of newly connected households consuming less or equal than 15 kWh/month	0	n/a			
Number of newly connected households consuming more than 15 kWh/month	0	n/a			
Average consumption per public institution (kWh/month) for newly connected buildings	0	n/a			
Average consumption per business(kWh/month) for newly connected buildings	0	n/a			
Number of newly connected households with electric lighting and charging telephones	0	n/a		9220	18440
Number of newly connected households with other electric equipment (other than electric lighting and charging telephones)	0	n/a		3073	6147
Number of three-phase consumers	0	n/a		51	102
Number of outages per month (in average)	0	n/a		8	8
Hours per month of energy not delivered	0	n/a		2	2
% of former interns of the project that are working in the energy sector after completion of the training	n/a	n/a	n/a	80%	80%
% of former interns of the project that indicate they deploy learnings and skills on the job	n/a	n/a	n/a	n/a	70%
% of staff trained that indicate they deploy newly obtained skills and knowledge on the job	n/a	n/a	n/a	n/a	80%
% of staff trained that are showing an increased	n/a	n/a	n/a	n/a	80%

performance per their supervisor					

3.2.2 Analysis of progress made

Because of delays in the implementation, most of the outputs have not yet been delivered. Indeed, the nature of the main activities (building the distribution network), leads to have the outcome at the completion of the project and not during the project lifetime.

3.2.3 Potential Impact

As discussed in the paragraphs on relevance, it is not obvious that connecting rural households to the grid will indeed provide a better access. Evidence shows that poor households connected to the grid do not change their energy behaviour. They keep using electricity mostly for charging their mobile phones and sometimes for lighting. Many people who are on-grid cannot afford the cost of the kWh.

3.3 Performance output 1

Output 1 : Rural electricity access is increased through national electricity grid extension

3.3.1 Progress of indicators

The following table is taken from the baseline report. As the related activities are still taking place, the project did not yet collect information on actual values.

Output 1: Rural electricity is increased through national electricity grid extension					
Indicators	Base line value	Value 2016	Value 2017	Target 2017	End target
Kilometres of MV lines constructed	0	0		222	222
Kilometres of LV lines constructed	0	0		349	498
Number of distribution transformers	0	0		109	155
Number of connections	0	0		9874	19748
Environmental Management Plan (EMP) is developed	0	No		Yes	n/a
Resettlement Action Plan (RAP) is developed	0	No		yes	n/a

3.3.2 Progress of main activities

Progress of main activities [3]	Progress:			
	A	B	C	D
1 Build electricity network extension on targeted areas			X	
2 Supervise the grid extension construction works			X	
3 Develop and implement adequate environmental management plan and resettlement action plan for the network extension activity		X		

[3] A: The activities are ahead of schedule
B The activities are on schedule
C The activities are delayed, corrective measures are required.
D The activities are seriously delayed (more than 6 months). Substantial corrective measures are required.

3.3.3 Analysis of progress made

1. Build electricity network extension on targeted areas

The grid extension activities, carried out by EPC contractors, are currently ongoing. One of the three will be completed in Q1 2018 while the two other will be completed in Q3 2018 and Q4 2018 respectively.
Two lots were swapped between BE1EARP and BE2EARP: Lot 2, to be constructed through the 2-step approach was removed from the budget of BE1EARP, while Lot 6, to be constructed through the EPC approach under BE2EARP was integrated in BE1EARP (and combined in one single tender with the 2 other EPC lots of BE1EARP). The related budget increased from €12,280,000 to €13,854,500. This decision has a major impact on project efficiency.

2. Supervise the grid extension construction works

Under this intervention, the project has signed a contract of supervision with a Spanish consulting company, NIPSA, in August 2015. When the EPC contracts have started, in November 2016, the supervision company refused to come to Rwanda for performing its activities. After negotiation, NIPSA finally accepted to resume work and the resident project manager arrived end of March 2017. Both parties agreed that they should sign an addendum as soon as possible in order to make the situation legally conform and clear. Nevertheless, the involved parties could not find an agreement and in July 2017, the project decided to terminate the contract of NIPSA (end date is 15th August 2017).
BTC-HQ has agreed that the supervision of works will be performed by EDCL if they present a reasonable proposition for ensuring the quality of the works.
For more information on the contract with NIPSA, please refer to the audit conducted in June 2017.
This situation also applies to the lots A, B and C of the project BE2-EARP (but this activity/contract of NIPSA was only financed by the BE1-EARP intervention. As of 18 September 2017, the supervision of the BE1 EPC contracts is ensured by EDCL internal team.

3. Develop and implement adequate environmental management plan and resettlement action plan for the network extension activity

This aspect of the project does not pose any major problem. Some unauthorized felling of trees has happened though. The project is following up with the local authorities.

3.4 Performance output 2

Output 2: Electricity grid reliability is increased through grid strengthening and harmonized standards

3.4.1 Progress of indicators

Results / Indicators	Baseline values		Actual values	Target values	
	2014	2016	2017	2017	2018
I 1.1.2.1 Harmonized technical specifications and standards are developed	0	0	Yes	Yes	N/A

3.4.2 Progress of main activities

Progress of main activities [4]	Progress:			
	A	B	C	D
1. Prepare harmonized technical specifications and standards for the power network infrastructure		x		
2. Upgrade identified installations in targeted areas to strengthen existing grid	Shifted to BE2-EARP			
3. Design and supervise grid strengthening works	Shifted to BE2-EARP			

3.4.3 Analysis of progress made

1. Prepare harmonized technical specifications and standards for the power network infrastructure

The project has received and approved all documents from the consultancy company performing harmonized standards and procedures.

2. Upgrade identified installations in targeted areas to strengthen the existing grid

Activity is shifted to BE2EARP, decreasing the related budget from €1,042,500 to €90,000. Inclusion of an additional EPC lot under output 1 has balanced this budget decrease.

3 Design and supervise grid strengthening works

Same as activity 2.

3.5 Performance Output 3

Output 3: Electricity grid access affordability is improved through pilot activities in the intervention area

3.5.1 Progress of indicators

The goal of this output was to contribute to the dialogue on connection policy at institutional level. The partner has never shown interest in this activity. The activities, as originally formulated, are cancelled.

3.5.2 Progress of main activities

Progress of main activities [5]	Progress:			
	A	B	C	D
1.Perform a baseline survey and socio-economic monitoring of the beneficiaries in the intervention area	Activity cancelled – a survey on project level will be done instead starting in the end of 2017			
2.Test pilot solutions to support connexion affordability for low income customers in the intervention area	Activity cancelled			

[4] A: The activities are ahead of schedule
B The activities are on schedule
C The activities are delayed, corrective measures are required.
D The activities are seriously delayed (more than 6 months). Substantial corrective measures are required.
[5] A: The activities are ahead of schedule
B The activities are on schedule
C The activities are delayed, corrective measures are required.
D The activities are seriously delayed (more than 6 months). Substantial corrective measures are required.

3.5.3 Analysis of the progress

1. Perform a baseline survey and socio-economic monitoring of the beneficiaries in the intervention area

It was decided not to do a specific survey for the intervention area, as World Bank was planning to do an extensive survey at country level on energy access. A draft report of this survey has been circulated in August 2017.

At project level, we decided to do a survey of the households at the moment of their connection to the grid. This will provide baseline information on direct beneficiaries. The survey questionnaire is inspired by the World Bank survey. Results will be compared.

2. Test pilot solutions to support connexion affordability for low income customers in the intervention area

Finding solutions for affordability is outside the scope of EDCL and indeed the steering committee did not show much interest in this activity. The question of affordability of the network and of alternative sources of energy is rather discussed directly at the level of the energy sector working group, with the community of development partners. This discussion is a difficult one, with GoR and DPs having rather different opinions on the best approach. These discussions are still ongoing, particularly on the programme 1 of the rural electrification strategy that is supposed to focus on how to improve access for the poorest households. There is no agreement so far between GoR and DPs on the best approach. In such a context, piloting solutions at project level does not make sense.

3.6 Performance output 4

Output 4: Local capacity is strengthened within EARP and EWSA utility

3.6.1 Progress of indicators

The following table is taken from the baseline report. The project did not yet collect information on actual values.

Related to which activity	Results / Indicators	Baseline values		Target values	
		2014	2016	2017	2018
Train local interns	**I 1.1.4.1** Number of interns that have successfully completed the training	0	0	0	12/12
	I 1.1.4.2 % of interns that are satisfied with the provided training	N/A	N/A	N/A	90%
Support REG by new equipment and staff trained	**I 1.1.4.3** Study on the need for a transformer workshop is realized	0	0	Yes	N/A
	I 1.1.4.4 Number of staff members of REG trained	0	0	5	10
	I 1.1.4.5 % of staff members of REG trained that are satisfied with the provided training	0	0	N/A	90%

3.6.2 Progress of main activities

Progress of main activities [6]	Progress:			
	A	B	C	D
1 Train local interns through industrial attachment to contractors		X		
2. Support EWSA grid maintenance activities through new equipment and staff training			X	

3.6.3 Analysis of progress made

1. Train local interns through industrial attachment to contractors

The interns have been selected and are dispatched between the project and the EPC contractors.

2. Support EWSA grid maintenance activities through new equipment and staff training

Due to the high cost of such a study (based on offers received on a first tender), the project decided to cancel the study. There was also no consensus inside REG about the real need for such a study.

It has been difficult to assess the needs of training of the REG staff and so no action has been taken on this line (see baseline output 4).

3.7 Transversal Themes

3.7.1 Gender

This part is similar for all BE-EARP interventions.

3.7.1.1 According to you and your implementing partner what are the main gender gaps in the areas / outcomes covered by your intervention?

Up to date, the project has not been giving significant consideration to gender due to lack of time and human resources. However, a gender profile on the energy sector is under development through the Study and Expertise Fund (SEF) and in close collaboration with the Gender Monitoring Office (GMO). The study will help the project to better understand the gaps in the energy sector.

3.7.1.2 How does your intervention take gender into account?

Up to date, the project has not been conducting any activities related to gender. Nevertheless, the project has done or is planning to do the following:

- Ensure a gender balance regarding the selection of interns.
- Collect gender sensitive data when connecting new households.
- Perform gender sensitization activities while connecting new households.
- Ask a gender action plan to the contractors performing grid extension.

3.7.1.3 Has your intervention been through a Gender budget scan or through any other method to mainstream gender?

A tentative gender budget scan was conducted in early 2017, as an exercise to help the project team to understand the gender sensitiveness of the intervention. So far, this exercise did not lead to any concrete actions.

[6] A: The activities are ahead of schedule
B The activities are on schedule
C The activities are delayed, corrective measures are required.
D The activities are seriously delayed (more than 6 months). Substantial corrective measures are required.

3.7.1.4 Did your intervention organized any awareness activity for the staff, implementing partner? (Workshops, trainings, etc.)

No such awareness activities have been organized.

3.7.1.5 Do you collaborate or are you in contact with a gender-friendly actor in Rwanda?

The project has contacted the Gender Monitor Office and had few meetings. A collaboration program is supposed to be prepared.

3.7.1.6 What are your challenges to take gender into consideration in your intervention?

The main challenges for the project in general has been the unavailability of sufficient human resources and the different delays and changes in the project, as described in previous chapters of this report. As a consequence, the main focus of the project has been to perform the main activity of the project (to start the grid extension works) and not sufficient attention could be given to transversal themes such as gender related activities.

3.7.1.7 What are your proposals to address those challenges?

Currently the project does not have proposals.

3.7.2 Environment

An adequate environmental management plan for the network extinction activity has been developed. Some unauthorized felling of trees has happened though. The project is following up with the local authorities.

3.8 Risk management

We simplified the template for the risks in order to ease understanding. We only mention the major risks dealt with in the period.

Description of Risk or Issue	Action
Not using the budget in time	One EPC lot is shifted from BE2 to BE1 as the BE1 tender was ready for launching
Inefficient project organization	New proposal for project organization to be discussed when new intervention manager comes on board
Unclear contract management rules	The PIM on contract management procedures will be clarified as soon as the new RAF is on board
No invoice can be paid to the EPC contractors due to the situation with the supervision. Therefore, the EPC contractors suspend the contracts in order to receive any payment	This issue has finally been solved by cancelling the supervision contract and handing over the responsibility of supervision to EDCL
The quality of wooden poles (from NFC) is too low (cracks, etc.) and consequently, the distribution lines will not be sustainable.	Specific letter from BTC to EDCL on this topic
Weak supervision firm (NIPSA)	Termination of the contract
Transfer of responsibility of supervision to EDCL: the unavailability of personnel could lead to low quality of in-house supervision by EDCL and therefore, it is insufficient to ensure good quality of the works.	clear agreement (signed on 12/09) and close follow-up by the BTC project team of the respect of the agreement + acceptance audit at the end of each construction contract
The meters will not be provided on time and there are not enough meters at EARP store. Consequently, the contractors will not be able to connect all the households and the effectiveness of the project will be much less.	We launched an order for additional meters. Due to the delay on the construction, the danger of being late has decreased seriously.

4 Steering and Learning

This part is similar for all BE-EARP interventions.

4.1 Strategic re-orientations

Following the official approval of the RES by the GoR in June 2016, the activities of the project have been re-examined, in order to assess their relevance in the new context. Reallocations have been proposed by EDCL/MININFRA and discussed in a high level meeting on July 8, 2016, in the presence of the chair and co-chair of the steering committee. The strategic re-orientations are the following:

	Activity	Budget (k€)	Proposed Reallocation	Decision and comments
BE1 3.1	Perform baseline survey and socio-economic monitoring of the beneficiaries in the intervention area	30	Financing general awareness campaigns, under programme 1 of RES	Approved Comments: BTC argued that this budget, originally meant to finance consultant services, should better be used to support the design of the programme 1 of the RES. MININFRA and EDCL informed BTC that they already had support of other donors to work on the design (AGI, RMI, …) and that additional funding was not needed. BTC remarked that BTC needs to be well informed of the design of the programme in order to agree on the allocation of parts of the budget of Be1 and Be2 (for a total of more than 300 kEUR) to the financing of the programme. BTC informed that part of this budget might be used to ask an independent consultant to review the design before the decision (would be a small budget) BTC insisted that the design of the programme must consider the existence of the grid to supply poor households who can be connected to the grid for a very reasonable amount (56.000 FRW). Grid affordability must be considered as one component of the programme 1. This request from MININFRA has never been implemented. The awareness campaign took place without requesting funding from the intervention.
BE1 3.2	Test pilot solutions to support connection affordability for low income customers in the intervention area	100	RES Programme 1	Approved *Comments:* Under condition of good information of BTC on the final design and acceptance by the group of DPs The decision to support RES Programme 1 has been repealed later by an email of the co-chair to the chair, after a discussion with the Belgian embassy. Moving to off-grid is considered as a major change to the specific objective and cannot be approved by BTC.

BE1 4.1	Train local interns through industrial attachment to contractors	81	To be kept	Approved *Comments:* The exact modality of doing this must still be described. In the meantime, the modality has been defined.

4.2 Recommendations

No specific recommendations for BE1 EARP

4.3 Lessons Learned

Lessons learned	**Target audience**
The execution modality (co-management) leads to a slow and heavy system and the project should integrate this fact in planning.	Project implementation team
The project is managing three different interventions and the sum of all activities were way above its capacity to implement them all in an effective manner.	Formulation team
Human resources are really the key of success of the interventions. Recruitment should be really in the centre of attention of all involved stakeholders.	All stakeholders.
Technical knowledge within the project implementation is key to ensure the success of the interventions.	All stakeholders

5 Annexes

5.1 Quality criteria

1. RELEVANCE: The degree to which the intervention is in line with local and national policies and priorities as well as with the expectations of the beneficiaries					
In order to calculate the total score for this quality criterion, proceed as follows: 'At least one 'A', no 'C' or 'D' = A; Two times 'B' = B; At least one 'C', no 'D'= C; at least one 'D' = D					
Assessment RELEVANCE: total score		A	B	C	D
					X
1.1 What is the present level of relevance of the intervention?					
	A	Clearly still embedded in national policies and Belgian strategy, responds to aid effectiveness commitments, highly relevant to needs of target group.			
	B	Still fits well in national policies and Belgian strategy (without always being explicit), reasonably compatible with aid effectiveness commitments, relevant to target group's needs.			
	C	Some issues regarding consistency with national policies and Belgian strategy, aid effectiveness or relevance.			
X	D	Contradictions with national policies and Belgian strategy, aid efficiency commitments; relevance to needs is questionable. Major adaptations needed.			
1.2 As presently designed, is the intervention logic still holding true?					
	A	Clear and well-structured intervention logic; feasible and consistent vertical logic of objectives; adequate indicators; Risks and Assumptions clearly identified and managed; exit strategy in place (if applicable).			
X	B	Adequate intervention logic although it might need some improvements regarding hierarchy of objectives, indicators, Risk and Assumptions.			
	C	Problems with intervention logic may affect performance of intervention and capacity to monitor and evaluate progress; improvements necessary.			
	D	Intervention logic is faulty and requires major revision for the intervention to have a chance of success.			

Note: the project is in complete contradiction with the new Rural Electrification Strategy. At the same time, the GoR is not supporting this strategy. So, the intervention is fully in line with the political economy but not with the official policy and strategy. Our partners would therefore anwer A to question 1.1, whereas BTC answers D.

2. EFFICIENCY OF IMPLEMENTATION TO DATE: Degree to which the resources of the intervention (funds, expertise, time, etc.) have been converted into results in an economical way					
In order to calculate the total score for this quality criterion, proceed as follows: 'At least two 'A', no 'C' or 'D' = A; Two times 'B', no 'C' or 'D' = B; at least one 'C', no 'D'= C; at least one 'D' = D					
Assessment EFFICIENCY : total score		A	B	C	D
				X	
2.1 How well are inputs (financial, HR, goods & equipment) managed?					
	A	All inputs are available on time and within budget.			
	B	Most inputs are available in reasonable time and do not require substantial budget adjustments. However there is room for improvement.			
X	C	Availability and usage of inputs face problems, which need to be addressed; otherwise results may be at risk.			
	D	Availability and management of inputs have serious deficiencies, which threaten the achievement of results. Substantial change is needed.			
2.2 How well is the implementation of activities managed?					
	A	Activities implemented on schedule			
	B	Most activities are on schedule. Delays exist, but do not harm the delivery of outputs			
X	C	Activities are delayed. Corrections are necessary to deliver without too much delay.			
	D	Serious delay. Outputs will not be delivered unless major changes in planning.			
2.3 How well are outputs achieved?					
	A	All outputs have been and most likely will be delivered as scheduled with good quality contributing to outcomes as planned.			
	B	Output delivery is and will most likely be according to plan, but there is room for improvement in terms of quality, coverage and timing.			
X	C	Some output are/will be not delivered on time or with good quality. Adjustments are necessary.			
	D	Quality and delivery of outputs has and most likely will have serious deficiencies. Major adjustments are needed to ensure that at least the key outputs are delivered on time.			

3. EFFECTIVENESS TO DATE: Degree to which the outcome (Specific Objective) is achieved as planned at the end of year N					
In order to calculate the total score for this quality criterion, proceed as follows: 'At least one 'A', no 'C' or 'D' = A; Two times 'B' = B; At least one 'C', no 'D'= C; at least one 'D' = D					
Assessment EFFECTIVENESS : total score		A	B	C	D
		X			
3.1 As presently implemented what is the likelihood of the outcome to be achieved?					
	A	Full achievement of the outcome is likely in terms of quality and coverage. Negative effects (if any) have been mitigated.			
X	B	Outcome will be achieved with minor limitations; negative effects (if any) have not caused much harm.			
	C	Outcome will be achieved only partially among others because of negative effects to which management was not able to fully adapt. Corrective measures have to be taken to improve ability to achieve outcome.			
	D	The intervention will not achieve its outcome unless major, fundamental measures are taken.			
3.2 Are activities and outputs adapted (when needed), in order to achieve the outcome?					
X	A	The intervention is successful in adapting its strategies / activities and outputs to changing external conditions in order to achieve the outcome. Risks and assumptions are managed in a proactive manner.			
	B	The intervention is relatively successful in adapting its strategies to changing external conditions in order to achieve its outcome. Risks management is rather passive.			
	C	The intervention has not entirely succeeded in adapting its strategies to changing external conditions in a timely or adequate manner. Risk management has been rather static. An important change in strategies is necessary in order to ensure the intervention can achieve its outcome.			
	D	The intervention has failed to respond to changing external conditions, risks were insufficiently managed. Major changes are needed to attain the outcome.			

4. POTENTIAL SUSTAINABILITY: The degree of likelihood to maintain and reproduce the benefits of an intervention in the long run (beyond the implementation period of the intervention).					
In order to calculate the total score for this quality criterion, proceed as follows: At least 3 'A's, no 'C' or 'D' = A ; Maximum two 'C's, no 'D' = B; At least three 'C's, no 'D' = C ; At least one 'D' = D					
Assessment POTENTIAL SUSTAINABILITY : total score		A	B	C	D
					X
4.1 Financial/economic viability?					
	A	Financial/economic sustainability is potentially very good: costs for services and maintenance are covered or affordable; external factors will not change that.			
	B	Financial/economic sustainability is likely to be good, but problems might arise namely from changing external economic factors.			
X	C	Problems need to be addressed regarding financial sustainability either in terms of institutional or target groups costs or changing economic context.			
	D	Financial/economic sustainability is very questionable unless major changes are made.			
4.2 What is the level of ownership of the intervention by target groups and will it continue after the end of external support?					
X	A	The steering committee and other relevant local structures are strongly involved in all stages of implementation and are committed to continue producing and using results.			
	B	Implementation is based in a good part on the steering committee and other relevant local structures, which are also somewhat involved in decision-making. Likeliness of sustainability is good, but there is room for improvement.			
	C	The intervention uses mainly ad-hoc arrangements and the steering committee and other relevant local structures to ensure sustainability. Continued results are not guaranteed. Corrective measures are needed.			
	D	The intervention depends completely on ad-hoc structures with no prospect of sustainability. Fundamental changes are needed to enable sustainability.			
4.3 What is the level of policy support provided and the degree of interaction between intervention and policy level?					
	A	Policy and institutions have been highly supportive of intervention and will continue to be so.			
	B	Policy and policy enforcing institutions have been generally supportive, or at least have not hindered the intervention, and are likely to continue to be so.			
	C	Intervention sustainability is limited due to lack of policy support. Corrective measures are needed.			
X	D	Policies have been and likely will be in contradiction with the intervention. Fundamental changes needed to make intervention sustainable.			
4.4 How well is the intervention contributing to institutional and management capacity?					
	A	Intervention is embedded in institutional structures and has contributed to improve the institutional and management capacity (even if this is not an explicit goal).			
X	B	Intervention management is well embedded in institutional structures and has somewhat contributed to capacity building. Additional expertise might be required. Improvements in order to guarantee sustainability are possible.			
	C	Intervention relies too much on ad-hoc structures instead of institutions; capacity building has not been sufficient to fully ensure sustainability. Corrective measures are needed.			
	D	Intervention is relying on ad hoc and capacity transfer to existing institutions, which could guarantee sustainability, is unlikely unless fundamental changes are undertaken.			

Note: Connecting so many poor rural households to the grid, EDCL is not securing revenues for EUCL that will have many difficulties operating and maintaining the grid with direct subsidies from the Government of Rwanda. Our partners do not see this situation as a problem as they are confident that the GoR will always find the financial means to support EUCL. This is in contradiction with the official policy of having EDCL and EUCL to be autonomous and financially sound and independent. BTC sees

this contradiction as a problem for the sustainability. Our partners do not share this view.

5.2 Decisions taken by the steering committee

Due to the conflict arising from the choice of in-house approach for the electrification of Lot2, it is removed from the contract of NIP SA	22-June-16
In replacement of Lot2, Lot6 is included in the contract of NIP SA	22-June-16
A grant agreement will be prepared and signed for in-house (Lot2 and MV/LV Lot11) financing by the project	22-June-16
A tender under régie modality will be launched for the supervision of the lots to be implemented through in-house approach	22-June-16
Activities of test pilot solutions to support connection affordability for low income customers in the intervention area is reallocated to RES programme 1.	8-July-16
Training local interns through industrial attachment to contractors it is maintained.	8-July-16
Lot 2 and network strengthening (BE1) will be financed by BE2 and lot 6 (BE2) will be financed by BE1.	21-Oct.-16
The unused money of BE1 will be used to procure the meters through public procurement before the connection start, instead of signing addendums of 20% with all the EPC contractors.	21-Oct.-16
New repartition for construction approaches : EPC for lots 4, 6 and 10 ; In-house for lot 11 and network strengthening ; Two-step for lot 2	21-Oct.-16
A new supervision has to be hired for operations under in-house approach. The scope of NIPSA has to be renegotiated to evolve from network strengthening to lot 2.	21-Oct.-16

Funds from BE1 and BE2 will be reallocated to the voucher system for off-grid systems under two conditions (good information of BTC and acceptance by DPs ; acceptance by the Belgian Embassy).	21-Oct.-16
The re-advertisement of ITA power networks will be done with the new ToRs, the task of support for planning being considered as one of the various tasks of the position instead of being allocated a specific workload.	21-Oct.-16
The principle to harmonize salaries across the organization, eliminating the incoherencies linked to different DP standards is accepted.	21-Oct.-16
The BE-EARP accountant will be promoted to chief accountant, once the internal promotion process will be correctly followed and documented.	21-Oct.-16
Given NIP SA is failing on its duties, engineers of EDCL, EARP and BEEARP will temporarily perform all duties of NIP SA (designs, FAT, material acceptance, approval of invoices and on-site supervision of the works)	6-Feb.-17
The salaries of the national staff within BEEARP is harmonized to eliminate incoherencies linked with different DP standards and/or different staffs	9-Feb.-17
The PSC accepts the principle of the signing of an addendum of 20% (max) budget increase with NCC and STEG due to the updated figures (MV/LV lines km, transformers and connections) after their field surveys	31-March-17
The PSC agrees on the administrative aspects of interns hiring	18-May-17

5.3 Updated Logical framework

Below an overview is given of the changes within the logical framework per activity.

	Activities to reach result 1: Rural electricity access is increased through national electricity grid extension	**Changes**
A 1.1	Build electricity transmission and distribution lines in targeted areas	Activity is increased with lots of BE2
A 1.2	Supervise the grid extension construction works	Activity is increased with lots of BE2
A 1.3	Develop and implement EMP and RAP for network extension activity in compliance with ESMF and RPF	Implemented as planned
	Activities to reach result 2: Electricity grid reliability is increased through existing grid strengthening	**Changes**
A 2.1	Prepare harmonized technical specifications and standards for the power network infrastructures	Implemented as planned
A 2.2	Upgrade identified installations in targeted areas to strengthen the existing grid	Shifted to BE2
A 2.3	Design and supervise grid strengthening works	Shifted to BE2
	Activities to reach result 3: Electricity grid access affordability is improved through pilot activities in the area of intervention	**Changes**
A 3.1	Baseline survey on connection policy affordability in intervention area	Activity is cancelled
A 3.2	Test pilot solutions to support connection affordability for low income customers in the intervention area	Activity is cancelled
	Activities to reach result 4: local capacity is strengthened within EARP and EDCL utility	**Changes**
A 4.1	Train local interns through industrial attachment to contractors	Implemented as planned
A 4.2	Support REG grid maintenance activities through new equipment purchase and staff training	Transformer needs workshop cancelled, modalities for training of REG staff still to be defined

5.4 MoRe Results at a glance

Logical framework's results or indicators modified in last 12 months?	The indicators have been finalised in June 2017
Baseline Report registered on PIT?	Yes
Planning MTR (registration of report)	A MTR took place in November 2016, but the final report was not accepted due to its low quality. A new MTR will take place end 2017 / beginning 2018, jointly with BE2-EARP.
Planning ETR (registration of report)	11/2018 (estimate)
Backstopping missions since 01/01/2012	A backstopping mission was held in September 2016

5.5 “Budget versus current (y – m)” Report

Budget vs Actuals (Year to Month) of RWA1208111

Project Title : **Improving access to reliable and cost effective electricity services for households and priority public institutions**

Budget Version: **F01**
Currency : EUR
Year to month : 30/06/2017
YtM : **Report includes all closed transactions until the end date of the chosen closing**

	Status	Fin Mode	Amount	Start to 2016	Expenses 2017	Total	Balance	% Exec
A THE ACCESS TO RELIABLE ON-GRID ELECTRICITY SERVICES			15.238.000,00	2.412.880,53	**467.465,21**	2.880.345,74	**12.357.654,26**	**19%**
01 Rural electricity access is increased through national			13.854.500,00	2.399.492,15	**407.334,61**	2.806.826,76	**11.047.673,24**	**20%**
01 Build electricity transmission and distribution lines on		COGES	13.147.000,00	2.317.139,39	**407.334,61**	2.724.474,00	10.422.526,00	21%
02 Supervise the grid extension construction works		COGES	702.500,00	77.755,17	**0,00**	77.755,17	624.744,83	11%
03 Develop and implement EMP and RAP for network		COGES	5.000,00	4.597,59	**0,00**	4.597,59	402,41	92%
02 Electricity grid reliability is increased through existing			1.042.500,00	1.752,78	**60.130,60**	61.883,38	**980.616,62**	**6%**
01 Prepare harmonized technical specifications and standards		COGES	0,00	0,00	**0,00**	0,00	0,00	?%
02 Upgrade identified installations in targeted areas to		COGES	870.000,00	1.206,33	**146,37**	1.352,70	868.647,30	0%
03 Design and supervise grid strengthening works		COGES	82.500,00	357,27	**0,00**	357,27	82.142,73	0%
04 Prepare harmonized technical specifications and standards		REGIE	90.000,00	189,18	**59.984,23**	60.173,41	29.826,59	67%
03 Electricity grid access affordability is improved through			0,00	0,00	**0,00**	0,00	**0,00**	**?%**
01 Perform baseline survey in intervention area		COGES	0,00	0,00	**0,00**	0,00	0,00	?%
02 Test pilot solutions to support connexion affordability for		COGES	0,00	0,00	**0,00**	0,00	0,00	?%
04 Local capacity is strengthened within EARP and EWSA			341.000,00	11.635,60	**0,00**	11.635,60	**329.364,40**	**3%**
01 Train local interns through industrial attachment to		COGES	81.000,00	0,00	**0,00**	0,00	81.000,00	0%
02 Support EWSA grid maintenance activities through new		COGES	260.000,00	11.635,60	**0,00**	11.635,60	248.364,40	4%
X CONTINGENCY			45.508,00	0,00	**0,00**	0,00	**45.508,00**	**0%**
01 Contingency			45.508,00	0,00	**0,00**	0,00	**45.508,00**	**0%**
01 Contingency		COGES	0,00	0,00	**0,00**	0,00	0,00	?%
02 Contingency		REGIE	45.508,00	0,00	**0,00**	0,00	45.508,00	0%
Z GENERAL MEANS			1.716.492,00	792.127,26	**183.231,68**	975.358,94	**741.133,06**	**57%**
01 Wages and Salaries			1.366.992,00	660.956,77	**164.974,35**	825.931,12	**541.060,88**	**60%**
		REGIE	1.533.660,00	684.370,85	**194.758,46**	879.129,31	654.530,69	57%
		COGEST	15.466.340,00	2.520.636,94	**455.938,43**	2.976.575,37	12.489.764,63	19%
		TOTAL	17.000.000,00	3.205.007,79	**650.696,89**	3.855.704,68	13.144.295,32	23%

Budget vs Actuals (Year to Month) of RWA1208111

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Budget Version: **F01**
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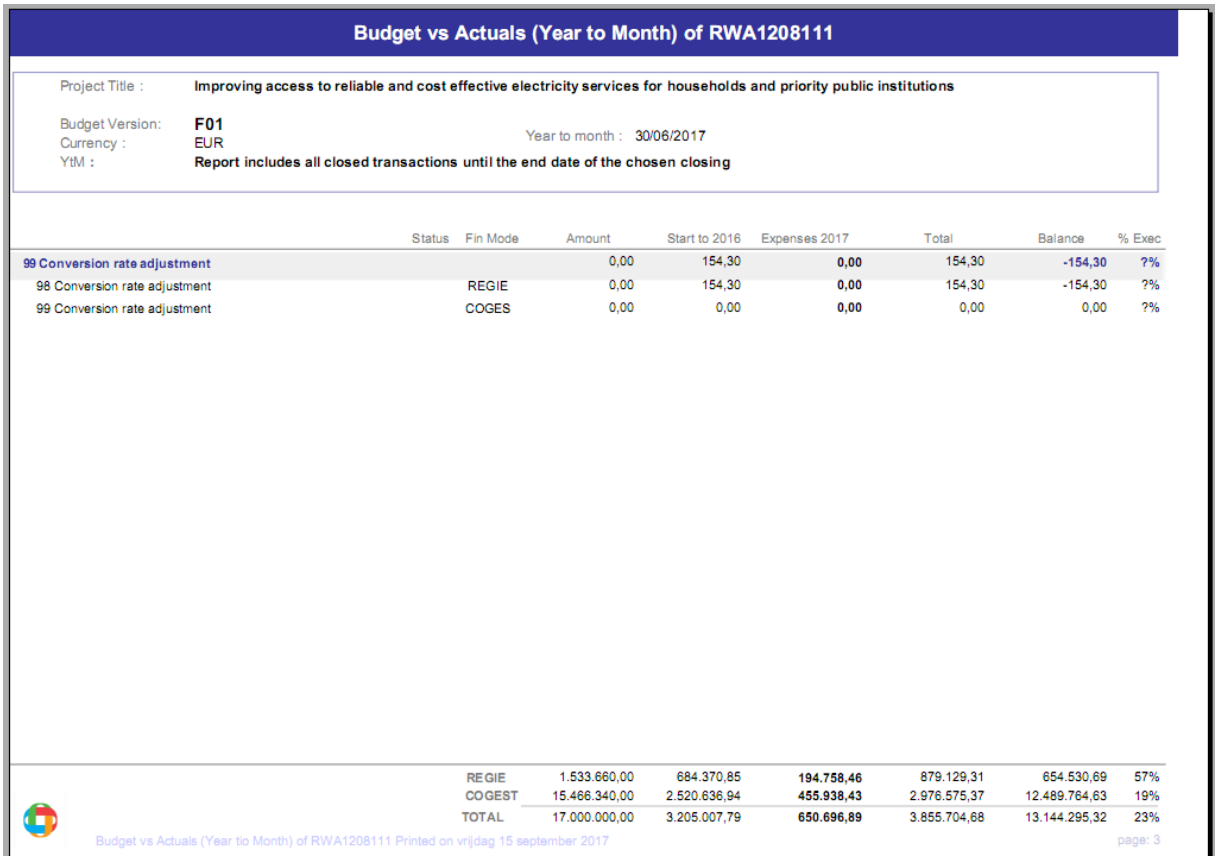
Year to month : 30/06/2017
YtM : **Report includes all closed transactions until the end date of the chosen closing**

	Status	Fin Mode	Amount	Start to 2016	Expenses 2017	Total	Balance	% Exec
01 Project Co-Management		REGIE	655.652,00	367.152,60	**71.971,83**	439.124,43	216.527,57	67%
02 Technical staff		REGIE	0,00	-383,57	**5.684,12**	5.300,55	-5.300,55	?%
03 Administrative ad financial staff		REGIE	0,00	6.595,09	**0,00**	6.595,09	-6.595,09	?%
04 Other support staff		REGIE	0,00	10,56	**0,00**	10,56	-10,56	?%
05 Power Network expert-ITA		REGIE	170.000,00	6.116,60	**38.513,96**	44.630,56	125.369,44	26%
06 Construction Engineer		COGES	63.732,00	22.796,33	**14.323,75**	37.120,08	26.611,92	58%
07 RAFI		REGIE	255.000,00	176.062,48	**631,03**	176.693,51	78.306,49	69%
08 Other Administrative ad financial staff		COGES	187.486,00	63.690,99	**29.105,96**	92.796,95	94.689,05	49%
09 Other support staff		COGES	35.122,00	18.915,69	**4.743,70**	23.659,39	11.462,61	67%
02 General and Statutory contributions			164.500,00	111.215,96	**10.176,33**	121.392,29	**43.107,71**	**74%**
01 Vehicles		REGIE	54.500,00	54.318,67	**0,00**	54.318,67	181,33	100%
02 IT and office equipment		REGIE	10.000,00	9.521,74	**2.824,13**	12.345,87	-2.345,87	123%
03 Operational budget (incl stationery, fuel, communications,		REGIE	96.000,00	43.897,54	**6.647,20**	50.544,74	45.455,26	53%
04 VAT Direct Management		REGIE	0,00	1.449,53	**377,17**	1.826,70	-1.826,70	?%
05 Co-Management		COGES	0,00	1.528,66	**243,46**	1.772,12	-1.772,12	?%
06 Other expenses		REGIE	2.000,00	27,89	**43,79**	71,68	1.928,32	4%
07 Other expenses		COGES	2.000,00	471,93	**40,58**	512,51	1.487,49	26%
03 Audit, monitoring, evaluation			185.000,00	19.800,23	**8.081,00**	27.881,23	**157.118,77**	**15%**
01 M&E		REGIE	60.000,00	8.224,25	**0,00**	8.224,25	51.775,75	14%
02 Capitalization and communication		COGES	30.000,00	541,99	**0,00**	541,99	29.458,01	2%
03 Technical backstopping BTC		REGIE	25.000,00	11.033,99	**1.806,00**	12.839,99	12.160,01	51%
04 Audits		REGIE	70.000,00	0,00	**6.275,00**	6.275,00	63.725,00	9%
		REGIE	1.533.660,00	684.370,85	**194.758,46**	879.129,31	654.530,69	57%
		COGEST	15.466.340,00	2.520.636,94	**455.938,43**	2.976.575,37	12.489.764,63	19%
		TOTAL	17.000.000,00	3.205.007,79	**650.696,89**	3.855.704,68	13.144.295,32	23%



Budget vs Actuals (Year to Month) of RWA1208111

Project Title : **Improving access to reliable and cost effective electricity services for households and priority public institutions**

Budget Version: **F01**
Currency : EUR
Year to month : 30/06/2017
YtM : **Report includes all closed transactions until the end date of the chosen closing**

	Status	Fin Mode	Amount	Start to 2016	Expenses 2017	Total	Balance	% Exec
99 Conversion rate adjustment			0,00	154,30	**0,00**	154,30	**-154,30**	**?%**
98 Conversion rate adjustment		REGIE	0,00	154,30	**0,00**	154,30	-154,30	?%
99 Conversion rate adjustment		COGES	0,00	0,00	**0,00**	0,00	0,00	?%
		REGIE	1.533.660,00	684.370,85	**194.758,46**	879.129,31	654.530,69	57%
		COGEST	15.466.340,00	2.520.636,94	**455.938,43**	2.976.575,37	12.489.764,63	19%
		TOTAL	17.000.000,00	3.205.007,79	**650.696,89**	3.855.704,68	13.144.295,32	23%

Budget vs Actuals (Year tio Month) of RWA1208111 Printed on vrijdag 15 september 2017 page: 3

5.6 Communication resources

No communication resources yet.