

FINAL REPORT



February 2020

FCG International Ltd

***End of Project
Evaluation of
Concessional Credit
Scheme Projects:
Rural Electrification
Project II (ESSE-
FN-2008) in
Honduras***

Acronyms and Abbreviations

ABB Oy	ASEA Brown Boveri
BCIE	Banco Centroamericano de Integración Económica (CABEI)
CABEI	Central American Bank for Economic Integration (BCIE)
CCS	Concessional Credit Scheme
CIF	Climate Investment Funds
CNE	Comisión Nacional de Energía (National Energy Commission)
EEH	Empresa de Energía Honduras (Honduras Energy Company)
ENEE	Empresa Nacional de Energía Eléctrica (National Electrical Energy Company)
ESIA	Environmental and Social Impact Assessment
ESMAP	Energy Sector Management Assistance Program
FCCI	Finnish Concessional Credit Instrument
FOSODE	Fondo Social de Desarrollo Eléctrico (Social Fund for Electric Development)
GoH	Government of Honduras
GWh	Gigawatt hour
HDI	Human Development Index
HDX	Humanitarian Data Exchange
INE	National Statistics Institute
KSP	Knowledge Sharing Program
KV	Kilovolt
KWh	Kilowatt hour
LGIE	Ley General de la Industria Eléctrica (Electricity Industry Act)
M&O	Maintenance and Operation
MACCIH	Support Mission Against Corruption and Impunity in Honduras
MDG	Millennium Development Goal
MFA	Ministry for Foreign Affairs Finland
MOF	Ministry of Finance Honduras
MPI	Multidimensional Poverty Index
NGO	Non-Governmental Organization
NSEP	National Social Electrification Program
OES	Office for Social Electrification
PCU	Program Coordination Unit
PAHO	Pan American Health Organization
PIF	Public Sector Investment Facility
PLANES	National Program of Rural and Social Electrification
REPH	Rural Electrification Project in Honduras
SCF	Strategic Climate Fund
SDGs	United Nations Sustainable Development Goals
SEA	Strategic Environmental Assessment
SEMEH	Honduran Service for Electric Measuring
SERNA	Ministry of National Resources and Environment
SIAFI	Integrated Financial Administration System
SIEPAS	Central American Electric Interconnection System
SIN	Sistema Interconectado Nacional (National Interconnected System)
SREP	Scaling Up Renewable Energy Program
UNAH	Universidad Autónoma de Honduras (Autonomous University of Honduras)
UNFPA	United Nations Population Fund

Table of Contents

Acronyms and Abbreviations	2
1. EXECUTIVE SUMMARY.....	6
Introduction.....	6
Key findings and conclusions.....	6
Recommendations and lessons learnt	7
2. INTRODUCTION.....	7
2.1 About this consultancy.....	7
2.2 Project background	7
2.3 Evaluation objectives & audience.....	10
2.4 Evaluation approach & methodology.....	10
3. CONTEXT.....	12
3.1 Sectoral context.....	12
3.2 Project’s context.....	13
4 KEY FINDINGS	14
4.1 Relevance.....	14
4.2 Efficiency.....	17
4.3 Effectiveness.....	20
4.4 Impact	25
4.5 Sustainability	30
4.6 Coordination, Complementarity, Coherence & Aid Effectiveness.....	31
4.7 Other.....	34
5 CONCLUSIONS.....	36
6 RECOMMENDATIONS & LESSONS LEARNT.....	37
ANNEXES	40

Annex 1: Terms of Reference

Annex 2: Field visits of the evaluation team

Annex 3: Persons - Institutions consulted

Annex 4: Project Analysis - PNES ESSE FN 2008 (MS EXCEL)

Annex 5: Project Quality

Annex 6: Documents consulted

Annex 7: Workplan

Annex 8: Presentation of evaluation findings and recommendations

Index of Figures

Figure 1. Project timeline

Figure 2. Flow of funds

Figure 3. Current governance structure of the power sector in Honduras

Figure 4. Project alignment with the Plan of the nation 2010-2022

Figure 5. Project alignment with the Strategic Plan 2018-2022

Figure 6. The four benefits of using participatory methods in all the project cycle

Index of Maps

- Map 1. Electrified areas and Human Development Index
- Map 2. Overlay of electrified areas and municipalities voting the National Party
- Map 3. Example of two electrified hamlets falling on one 'community'
- Map 4. Example of 2 electrified communities split in 13 electrified areas
- Map 5. Protected areas, the power grid and electrified polygons
- Map 6. Aerial picture of El Coyolar water catchment

Index of Tables

- Table 1. Sources of funding
- Table 2. Tools for quantitative analysis
- Table 3. Results from the national elections 2009 & their weight in electrified municipalities
- Table 4. Estimated costs when optimising electrification tiers
- Table 5. Comparative data on electrified communities
- Table 6. Distribution of material
- Table 7. Unused material at the end of the Project
- Table 8. Impact of electricity on revenue distributing and generating activities in visited villages
- Table 9. Programs and projects with potential synergies
- Table 10. Potential stakeholders that the Project could have involved

Acknowledgments

The evaluation team wishes to thank the willingness of the institutions and people with whom it has interviewed by phone or met in person, both to provide information and actively participate in field visits.

Our special recognition to the residents of the communities visited who offered their time, answered all questions, were interested in the work carried out, thanked the visit of the evaluation team and expressed their gratitude to the support received by Finland to make access to electricity a reality. We also would like to thank FOSODE and ENEE, who provided all the required data.

Without them, this work would not have been possible.

1. EXECUTIVE SUMMARY

Introduction

The Rural Electrification Project II, also known as ESSE-FN-2008, was part of the National Social Electrification Programme of the Government of Honduras. The overall objective of the Project was to extend the electricity grid to rural and peri-urban areas with the aim of reducing poverty. The project has been financed partly by national funds from Honduras and external funding provided by Finland¹.

This evaluation is expected to enable the MFA to assess:

1. Whether the Project was implemented in an appropriate and efficient way;
2. How well it achieved the targets and goals laid out in the Project plan;
3. How sustainable the outcomes of the Project are, including any long-term development impacts;
4. To provide the MFA with a set of lessons learned that can be used in further developing the PIF funding instrument.

The evaluation was conducted between October 14th 2019 January 10th 2020, utilising a combination of quantitative and qualitative approaches. A final workshop was held on February 12th 2020.

Key findings and conclusions

This evaluation organises key findings in seven areas:

From the point of view of its **relevance**, the project was highly relevant because it improved the living conditions of the recipient communities and it was directed to the population below the poverty line (Finding #1). The selection of the communities was carried out by ENEE from a list of those that had an approved pre-feasibility study, but without due consultation of community members (Finding #2). The project did not prioritise people living in extreme poverty (Finding #3) and there was some degree of political interference in the selection of communities (Finding #4).

In terms of **efficiency**, monitoring and evaluation were made difficult by the lack of a clear hierarchy of objectives and measurable indicators with baseline values (Finding #1), which opened the possibility of interpreting the term 'community' in a way that distorted results (Finding #2). Its sole focus on power grid extension or the fact that the cost-benefit criteria was not the most relevant when selecting communities, resulted in a cost of electrification per dwelling that was quite high (Finding #3).

With regard to its **effectiveness**, the Project electrified an estimated 27,055 dwellings instead of the 45,365 dwellings forecast in the original proposal from 2008 (Finding #1). Lack of clear indicators for correct monitoring in the financial agreement, made it difficult for CABEL to notice that the Project was falling short in its original objective (Finding #2). This resulted in the project finalising with USD 8 million in uninstalled material left, which ENEE is applying to uses not necessarily aligned with social electrification (Finding #3). There was also an asymmetrical power relationship between the contractor and the local installers, and also between the local installers and the electrified community (Finding #4), which together with the lack of clear indicators, allowed the local contractor to obtain a 65% margin for overheads on the budgeted USD 6 million for labour (Finding #5). FOSODE had difficulty in supervising the installations because of the lack of a dedicated budget (Finding #6). Because of all this, the Project could well learn from the approaches applied by other donors to avoid all these situations that affected effectiveness (Finding #7).

Concerning its **impact**, the project achieved its overall objective of improving the quality of life of the beneficiary population and supporting the delivery of public services such as education and health (Finding #1). It had a positive impact in terms of human rights, gender equality and the reduction of inequalities (Finding #2). It had the unintended positive impact of increasing the number of families that migrated from other areas where there was no electricity (Finding #3). However, villagers lacked information on many aspects related to the Project and the service provided, which had the unexpected negative impact of leaving them at the mercy of unscrupulous individuals and organisations (Finding #4). It did not incentivise those productive activities with the potential of bringing new revenues to the community (Finding #5). Its social and economic impact would have been far larger if it had focused on households consuming less than 30 kWh a month, which only represented 25% of the total electrified population (Finding #6). Around 3% of the electrified dwellings fall in protected areas and although it performed relatively well in regard to its environmental impact, there is room for improvement (Finding #7).

From the point of view of its **sustainability**, although the Project did not make the situation of ENEE worse, it did not help to improve it either (Finding #1). ENEE's supervision guaranteed that the Project followed the required

¹ The loan was provided by Nordea with an interest subsidy from the Government, plus an additional grant component.
FCG International Ltd 6 February 2020

technical requirements (Finding #2). EEH is having problems in fulfilling its contractual obligations, which affects the technical sustainability of the service (Finding #3). Supply is not always reliable because of the overloading of the grid in some sections, lack of maintenance and as a result of its radial topology (Finding #4). Many of the indoor installations were technically incorrect, which made them unreliable, hazardous and less energy efficient (though they were not part of the original project) (Finding #5).

In regard to **coordination**, with the creation of the Secretariat of Energy, the Honduran Government aims to increase coordination and avoid a situation in which there is duplicity of efforts and lack of knowledge regarding which communities are being electrified by other stakeholders (Finding #1). From the perspective of its potential for **complementarity**, the project did not take into account other programmes relevant to the project with the potential of creating synergies (Finding #2). In terms of its **coherence & aid effectiveness**, the project had a mixed impact on ENEE's debt sustainability (Finding #3).

Finally, in the analysis of the effect the project had in Honduras, Finland and the relationships between both countries (**Other**): Only 27.97% of the material was supplied by a Finnish company. The rest was supplied either locally or from the USA. No Finnish firm was involved in the direct management of the project (Finding #1). It did not contribute significantly to broader cooperation and bilateral relations between both countries (Finding #2). In CABEL's opinion, transparency should be increased (Finding #3). It had a mixed contribution to Honduran national development plans (Finding #4). And last, but not least, it was not fully aligned with Finland's development policy and the Sustainable Development Goals (SDG).

Recommendations and lessons learnt

The evaluation team recommends the following:

1. Clearly define indicators during the project planning and appraisal, and quantify both baseline and targeted values.
2. Prepare a clear hierarchy of objectives.
3. Design projects that are both financially and institutionally sustainable.
4. Ask the counterpart to provide a clear protocol for choosing the communities to be electrified.
5. Set up an implementation unit working within the institution receiving the funds (i.e. CABEL) but operating independently from it. This unit would work in conjunction with the counterpart (FOSODE/ENEE) in the implementation of the project.
6. Allocate some funding for the counterpart to finance travelling and accommodation.
7. Increase the participation of communities by involving them right from the beginning.
8. Ensure compliance with regulations and request EEH to comply with the maintenance of the systems.
9. Do not implement projects in isolation but as part of a larger effort to electrify rural areas.
10. Design projects that involve more Finnish companies and that put the emphasis on those areas in which Finland is a global leader.

2. INTRODUCTION

2.1 About this consultancy

FCG International Ltd (FCG) was appointed by the Ministry for Foreign Affairs of Finland (MFA) for the end of project (in fact, ex-post) evaluation of a Concessional Credit Scheme in Honduras called the Rural Electrification Project II ESSE-FN-2008 (the Project). The contract falls under the Framework Agreement for Assessment, Monitoring and Evaluation of Public Sector Investment Facility (PIF) and Concessional Credit Projects.

2.2 Project background

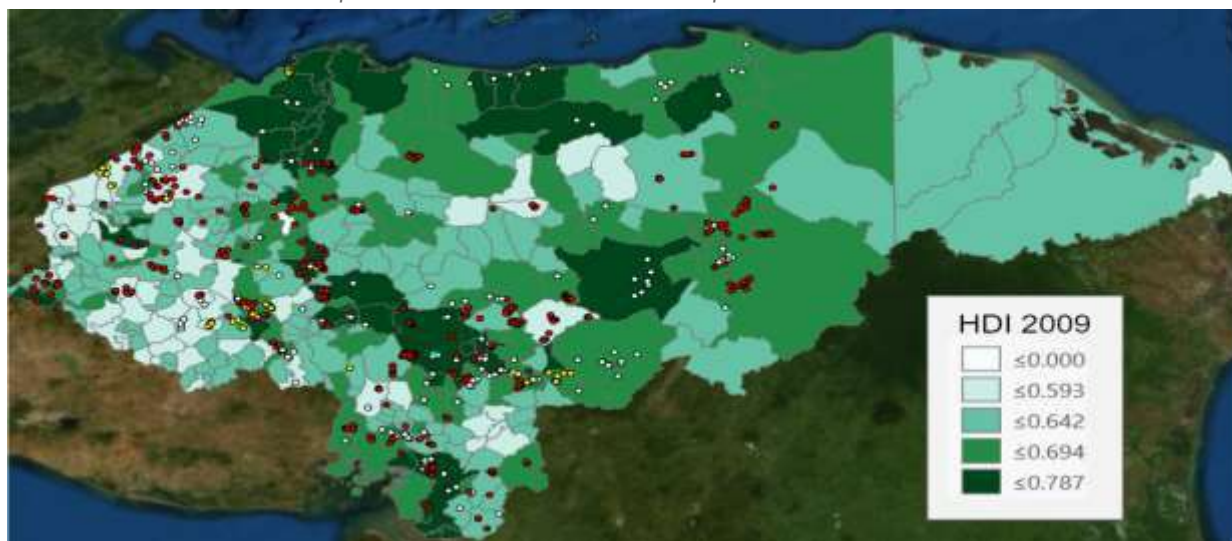
The Rural Electrification Project II, also known as ESSE-FN-2008 (the Project), was part of the National Social Electrification Programme of the Government of Honduras. The overall objective of the Project was to extend the electricity grid to rural and peri-urban areas with the aim of reducing poverty. The project has been financed partly by national funds and external funding provided by Finland. As it can be appreciated in Table 1, the total amount contributed was USD 38,004,295.

Table 1. Sources of funding

Electrification of Communities	Loan	Grant	ENEE	TOTAL
Equipment	\$ 16,365,529	\$ 5,956,476		\$ 22,322,005
Wooden poles	\$ 5,668,690			\$ 5,668,690
Labour	\$ 6,046,310			\$ 6,046,310
Export credit insurance premium	\$ 967,290			\$ 967,290
				\$ 35,004,295
Backoffice				
Executing Unit			\$ 630,600	\$ 630,600
Logistics			\$ 2,369,400	\$ 2,369,400
TOTAL	\$ 29,047,819	\$ 5,956,476	\$ 3,000,000	\$ 38,004,295

The Project was implemented in 16 departments of the country: Choluteca, Colón, Comayagua, Copán, Paraíso, Francisco Morazán, Intibucá, La Paz, Lempira, Ocotepeque, Olancho, Santa Barbara, Valle, Yoro, Cortés and Atlántida. As shown in Map 1, the electrified communities are distributed in areas with different HDIs.

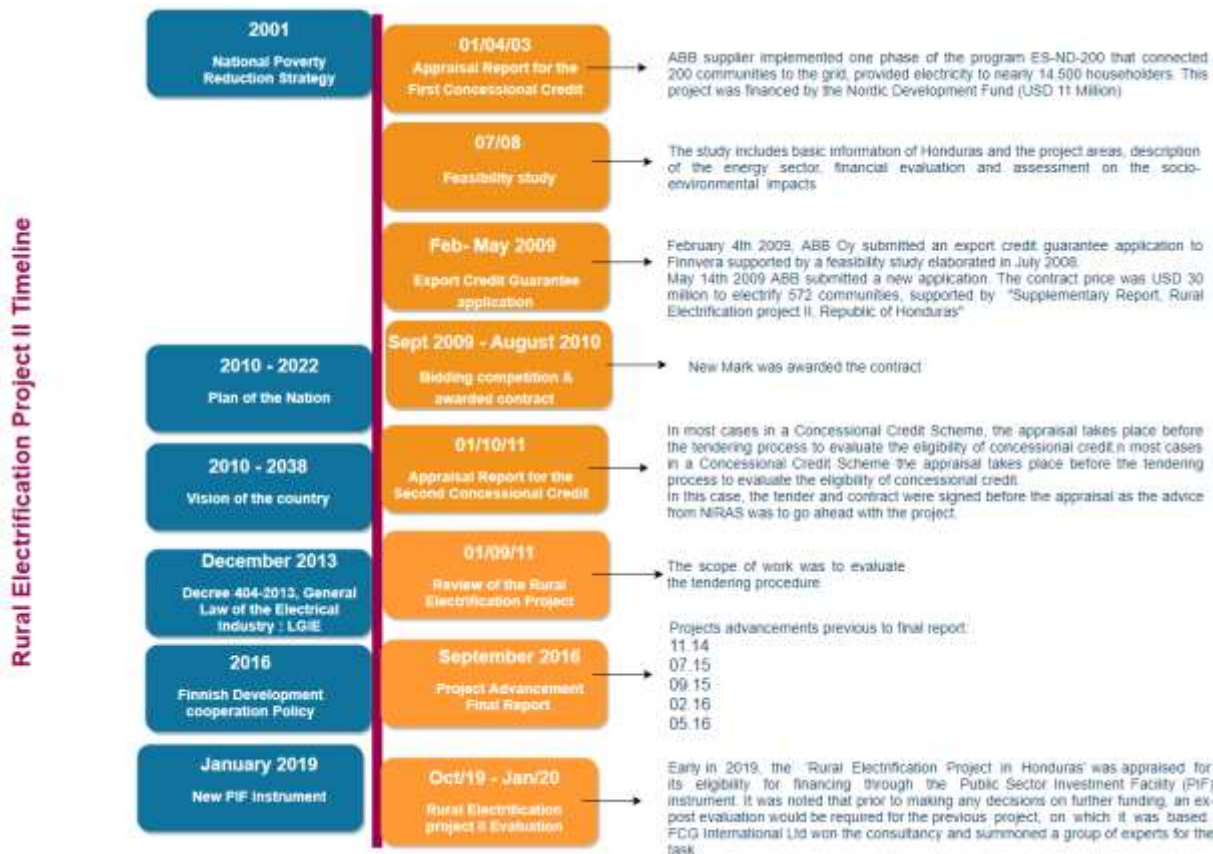
Map 1. Electrified areas and Human Development Index



The shades of green demonstrate the different HDI ratings across the country. The dots are communities electrified. Red signifies those with the least consumption of electricity (typically linked to their poverty level)

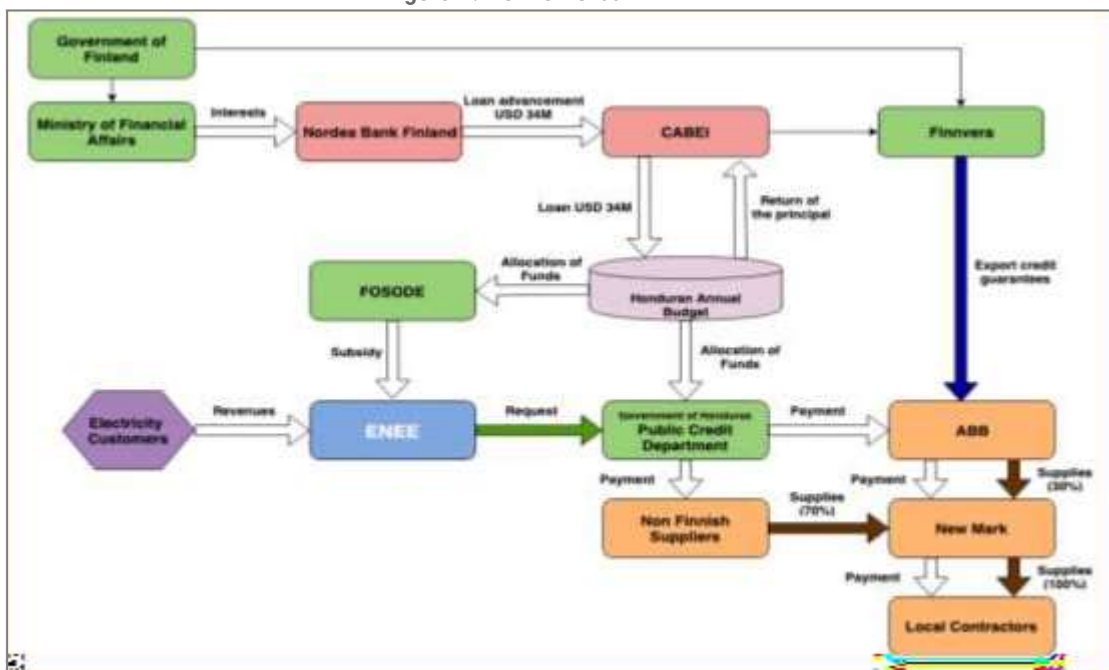
The project has been implemented in several phases.

Figure 1. Project timeline



The institution responsible for the implementation was ENEE (Empresa Nacional de Energía Eléctrica / National Electrical Energy Company), the state-owned company responsible for the transmission and distribution of electricity. The loan was granted under the earlier MFA's Concessional Credit scheme (CCS), with the funding provided by Nordea Bank of Finland (NBF) through the Central American Bank for Economic Integration (CABEI/BCIE) as an intermediary institution. Concessional credit requires a minimum of equipment to be supplied by Finnish companies. In this case, the supplier was ABB Finland, who obtained the required export credit guarantees from Finnvera. The rest of the equipment came mostly from the USA because of the need of technical compatibility with the Honduras electric system. ABB Finland, in consortium with the Honduran company New Mark, who were responsible for the execution.

Figure 2. Flow of funds



2.3 Evaluation objectives & audience

This evaluation is expected to enable the MFA to assess:

1. Whether the Project was implemented in an appropriate and efficient way;
2. How well it achieved the targets and goals laid out in the Project plan;
3. How sustainable the outcomes of the Project are, including any long-term development impacts;
4. While also providing MFA with a set of learnt lessons that can be used in further developing the PIF funding instrument.

2.4 Evaluation approach & methodology

This evaluation combines qualitative and quantitative methodologies.

Qualitative methodology

Phase I: Desk review in the home offices of the experts. The team revised approximately 70 documents sent by FCG. Some interviews were also conducted in Finland by FCG. In this phase the Inception Report was prepared and submitted.

Phase II: Field work in Honduras from the 11th-27th November 2019. Upon the arrival in Honduras of the two international members of the evaluation team, the first team meetings were held in order to refine the work methodology and prepare the first meetings with ENEE and the Social Fund for Electric Development (FOSODE). The team held meetings with the institutions responsible for the project and other institutional stakeholders.

The evaluation team received more documentation from CABEL and from the German Cooperation agency (GIZ). ENEE and FOSODE shared maps, with the location of electrified communities (via GIS). The evaluation team reviewed the materials and exchanged information and data with ENEE and FOSODE. Some data collected in the visits to the communities revealed small geolocation errors. This allowed the team to pass on the corrections to ENEE, and they were very useful for both the mission and the institution.

The team conducted semi-structured interviews at national and local levels. The evaluation team visited 14 communities in six departments of the country between 13th and 20th November (see Annex 2). Technical supervisors of ENEE accompanied the team on the visits, which assisted the evaluation team to understand the work carried out in detail, the difficulties encountered, the solutions and decisions that the ENEE was taking throughout the life of the project. Semi-structured interviews were conducted with community-based organisations or Trusts (Patronatos) and 60 residents of 14 communities, distributed across six Departments (provinces).

Once the visits to the communities were completed, the evaluation team continued with the review of materials provided by ENEE and corrected any errors encountered.

In the week of 21st -27th November, team also met with other stakeholders beyond ENEE and FOSODE (see Annex 3), including i) development cooperation agencies: IDB, GIZ, Embassy of Japan-JICA; ii) other institutions of the national level Energy Secretariat (SEN), iii) university and independent consultants.

The evaluation team made contact, repeatedly and upon arrival in the country, with New Mark (the company that was responsible for the field level implementation of the project), however the management did not agree to meet with the mission or provide any information. When FCG checked with ABB, they were surprised to discover that New Mark had closed their project operations, and do not have any of the people previously involved in the projects employed anymore.

Phase III: The experts returned to their home bases, and from 2nd December, they worked on the analysis of the field information, review of documentation, writing and delivery of the draft of the final report to the MFA for comments and observations.

Quantitative methodology

The quantitative methodology was based in the combination of the four sources of data shown in Table 2 and related tools for compiling and analysing it:

Table 2. Tools for quantitative analysis

<ul style="list-style-type: none"> • ARCGIS Pro for the compilation and analysis of geospatial data. The main sources of geospatial data were the <i>Sistema Nacional de Información Territorial (SINIT)</i> and ENEE. 																							
<ul style="list-style-type: none"> • MS Excel for the compilation and analysis of numerical data. The main sources of numerical data were the <i>Instituto Nacional de Estadística (INE)</i> and ENEE. 																							
<ul style="list-style-type: none"> • Mendeley, a reference management tool for the compilation and analysis of reports, documents, laws and other written material. The team used the tool for sharing documents and the annotations made on them. 	<table border="1"> <thead> <tr> <th colspan="2">Relevant Material</th> </tr> <tr> <th colspan="2">Type & number of documents in Mendeley folder</th> </tr> </thead> <tbody> <tr> <td>ABB Oy</td> <td>9</td> </tr> <tr> <td>Concessional Credit</td> <td>15</td> </tr> <tr> <td>Electricity</td> <td>4</td> </tr> <tr> <td>Evaluation</td> <td>8</td> </tr> <tr> <td>Legal frames</td> <td>20</td> </tr> <tr> <td>PIF</td> <td>13</td> </tr> <tr> <td>Programs & projects</td> <td>7</td> </tr> <tr> <td>Rural Electrification</td> <td>2</td> </tr> <tr> <td>Total</td> <td>78</td> </tr> </tbody> </table>	Relevant Material		Type & number of documents in Mendeley folder		ABB Oy	9	Concessional Credit	15	Electricity	4	Evaluation	8	Legal frames	20	PIF	13	Programs & projects	7	Rural Electrification	2	Total	78
Relevant Material																							
Type & number of documents in Mendeley folder																							
ABB Oy	9																						
Concessional Credit	15																						
Electricity	4																						
Evaluation	8																						
Legal frames	20																						
PIF	13																						
Programs & projects	7																						
Rural Electrification	2																						
Total	78																						
<ul style="list-style-type: none"> • Airtable, a password protected relational database accessible online, for the compilation and analyses of stakeholders, contacts, programs & projects, etc. Special care was put into compiling data in a systematic way so that it can be handled over to the MFA for use in future evaluations. 	<table border="1"> <thead> <tr> <th colspan="2">Airtable Data</th> </tr> </thead> <tbody> <tr> <td>Contacts</td> <td>57</td> </tr> <tr> <td>Places</td> <td>23</td> </tr> <tr> <td>Stakeholders</td> <td>82</td> </tr> <tr> <td>Programs & Projects</td> <td>45</td> </tr> <tr> <td>Evaluation Criteria</td> <td>57</td> </tr> <tr> <td>Relevant Material</td> <td>78+</td> </tr> </tbody> </table>	Airtable Data		Contacts	57	Places	23	Stakeholders	82	Programs & Projects	45	Evaluation Criteria	57	Relevant Material	78+								
Airtable Data																							
Contacts	57																						
Places	23																						
Stakeholders	82																						
Programs & Projects	45																						
Evaluation Criteria	57																						
Relevant Material	78+																						

This effort of compiling and analysing data helped ENEE to normalise and correct their own data. For example, ENEE had the geospatial location of the 763 electrified communities in a combination of four different formats, which the evaluators normalised to a single one. In addition, around 5% of the locations were incorrect. By following a combination of visual and geospatial analysis, the evaluators were able to identify all the incorrect locations and request from ENEE the correct ones.

There was a continuous exporting and importing of information between the tools in order to make the analysis of both statistical and geospatial data possible. For example, a PDF file with the original list of communities to electrify was exported to MS Excel using text recognition tools and then the names of the municipalities interpreted geospatially to project them into a map.

Special emphasis was put on disaggregating data to allow for an analysis of possibly marginalised and disadvantaged groups. For example, the evaluators requested ENEE to provide data from over 24,000 customers located in the areas electrified by the Project. Data included monthly electricity consumption and the level of arrears, which allowed for the identification of the main pockets of extreme poverty².

The evaluation team provided instructions to anonymise data before it was delivered to them. For example, it requested ENEE to replace the geospatial location of the 24,000 customers by the unique number of the electrified cluster in which they are located.

The use of statistical and geospatial correlations allowed for a deeper analysis of data. For example, the average electricity consumption of each electrified cluster was matched with the Human Development Index (HDI) of the municipality to see if there was a correlation between both figures.

Many times, triangulation was used to validate results. For example, New Mark's overheads were calculated using three different sources of data and then triangulated.

² Extreme poverty is defined as people living with less than USD 1.90 a day. A family falling under this category will typically consume less than 30 kWh a month and have difficulty in paying the electricity bill.

3. CONTEXT

3.1 Sectoral context

When considering the electricity sector in Honduras, three historical moments can be identified. The first, the creation of the National Electrical Power Company in 1957; the second, the reform through the Decree 158-94, called the Electrical Subsector Framework Law (LMSSE); and finally, the General Electrical Industry Law (LGIE) published under decree 404-2013.

At each of these moments, actors in the electricity sector have been established, mainly focused on the origin of the assets. The analysis of these three stages with their respective emerging actors allows us to understand the transition from a process of generation, transmission and distribution of energy owned by the State, to the full opening up to participation of the private sector in these activities.

The responsibility for the processes of rural electrification has remained with the State, and the public sector as the main actor. Below we continue with an evaluation of the historical process, based on the structure of the sector, ownership over the assets and, finally, the responsibilities of the actors in the process.

ENEE: 1957-1993.

For 40 years, the Honduran electricity market was vertically integrated. The State owned both the generation, and the transmission and distribution. Clearly, within this structure ENEE (a company owned by the State of Honduras) was the main organisation responsible for complying with the investment process. This included generating plants, transmission lines, substations, distribution systems and, of course, the electrification of the country.

Much of the electrification process was achieved with the start-up of the Francisco Morazán Hydroelectric Project (El Cajón) in 1985. It is estimated that the construction of El Cajón was the basis for increasing electrification levels by 25% in 1980 to 55 % in 1990.

First Reform, Legal Framework for the Electrical Subsector (LMSSE), 1994-2013.

With this decree, the ENEE ceased to be a vertically constituted company, and become instead a sole buyer. This model opened the doors for the private sector to invest in generation via a legal framework that allowed private investment in distribution and transmission.

Within this framework, the Social Fund for Electricity Development (FOSODE) was created under Article 62. The LMSSE stated that the government should:

"Create a SOCIAL FUND for ELECTRICAL DEVELOPMENT that will be administered by the National Electrical Energy Company (ENEE) and will be used to finance studies and electrification works that are of social interest ...".

Currently, FOSODE continues to handle the country's rural electrification process. In other words, it is ENEE, through FOSODE, who is still in charge of the sector.

From the Second Reform to the Present.

The General Electrical Industry Law (LGIE) includes a spirit of establishing a competitive market. It maintains the possibility of private investment in the generation, transmission and distribution, still leaving the ENEE as the owner of the assets for distribution and transmission, and maintaining the generating plants built between 1957 and 1985.

While it is true that ENEE has maintained ownership of the assets for transmission and distribution, the operation of these has been placed in the hands of two trusts managed by private banks. A trust for the operation, expansion and maintenance of the transmission system; and another for the distribution system.

Since mid-2016, the Honduran Energy Company (EEH) has operated via the distribution trust, taking responsibility for the operation and maintenance of the system, along with the billing for electric energy. The LGIE establishes the recreation of FOSODE in Article 24, and stipulates the government should:

"Create a SOCIAL FUND for ELECTRICAL DEVELOPMENT that will be administered by the National Electrical Energy Company (ENEE) and will be used to finance studies and electrification works that are of social interest. The FUND will be financed with the contributions of the distribution companies, equal to one percent (1%) of sales to end users...".

Like the 1994 reform, the responsibility lies with FOSODE, an institution that depends directly on ENEE. In this way, the responsibility for electrification remains within the public sector.

The only difference between the reform of 1994 and the current situation is the fact that EEH is responsible for

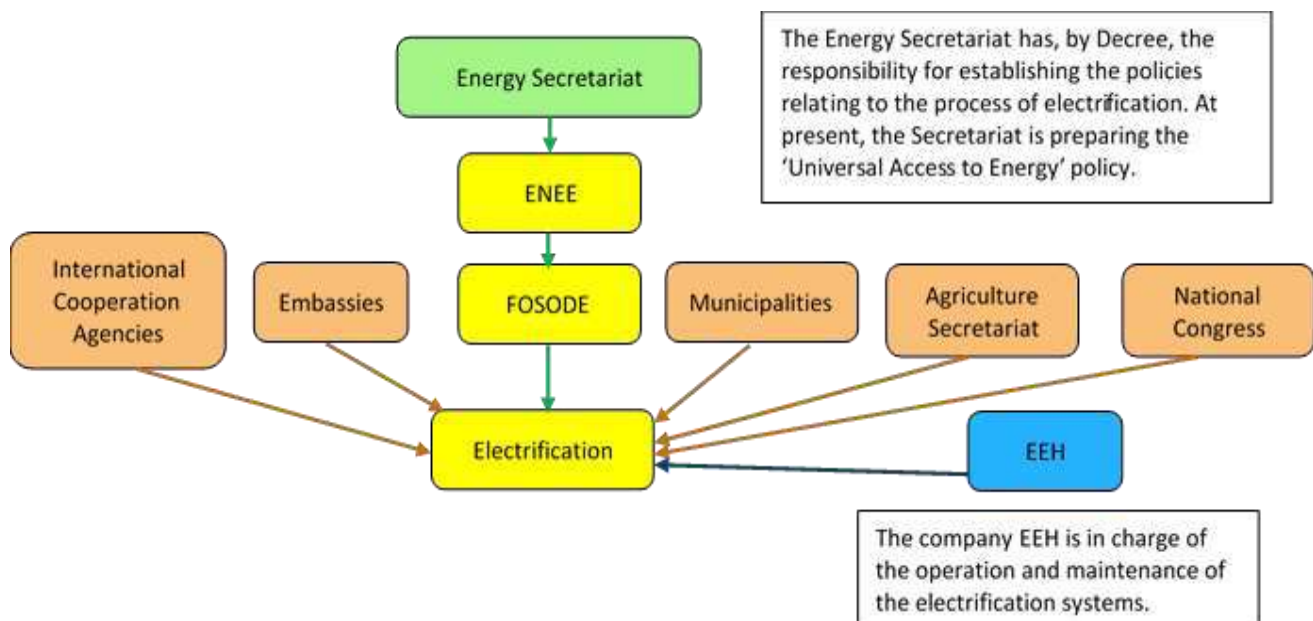
the operation and maintenance of the electrification systems. As mentioned in previous paragraphs, this company is in charge of the correct operation of the electrification systems in Honduras.

The Immediate Future

In a series of aspects, there is a lack of clarity in the immediate future. For example, in a meeting with FOSODE it was mentioned that responsibility for electrification may stay with ENEE in the future, or it may pass to the Ministry of Energy (SEN).

It is important to note that although legally FOSODE is responsible for electrification, some institutions such as municipal mayors, international development cooperation agencies, embassies and other secretariats have decided to implement electrification projects without coordination with FOSODE.

Figure 3. Current governance structure of the power sector in Honduras



It is evident that the process of electrification has been achieved by a number of actors who have not been involved with the legal authority of that process. As a result of this lack of coordination, the country has progressed in a disorderly fashion on the issue of electrification. Evidence of this is the lack of transparency on the actual data regarding the status of electrification in the country.

Status of Electrification

According to ENEE data, as of September 2019, the country's level of electrification was 82.4%. This indicates that 1.6 million Hondurans lack this service, the lowest coverage in the Central American region. In urban areas, the electrification rate is 90.62%, and 68% in rural areas. With this data and with the data on the rural population it is possible to deduce that almost 40% of rural inhabitants do not have electricity, or in absolute terms, more than one million rural inhabitants.

3.2 Project's context

ENE E had the responsibility for the implementation of the evaluated project. For this purpose, the institution created an Implementation Unit with staff of the institution. This unit was made up of a team leader, five engineers specialised in energy (whose task was to work throughout the area of implementation of the project), plus a support and administrative logistics team: a secretary, four drivers and a janitor. ENE E provided, as a counterpart contribution in addition to the technical team, the necessary working spaces for the project and the vehicles.

The project aimed for the electrification of 744 rural and peri-urban communities. By project completion, this figure was exceeded. 763 communities were electrified as of June 2017, which represents 102.69% of the project target. However, from the point of view of electrified homes, the data is different. As analysed in Finding # 2 Effectiveness, the project electrified approximately 27,055 homes, instead of the 45,365 homes planned for in the original 2008 proposal.

It took a long time from the initiation of the project until the realization. The contract (between ENEE - ABB Finland & New Mark) was signed, autumn 2010. The project started up autumn 2013. By the time of the arrival of the funds and the start of the project, of the 744 initially selected communities, 56 were already electrified. This forced ENEE to look for substitute communities. In order to have a definitive list of communities, ENEE took the time to review the lists and ensure the electrification status in each of the communities (see Annex 4 for the final list of electrified communities). Following this process, ENEE concluded that 56 communities had already been electrified by different institutions or organizations, mainly organised by mayors and NGOs. This demonstrates the lack of communication and coordination between stakeholders. ENEE began the electrification of the 688 that were still not electrified, while analysing other requests that were arriving. These were finally incorporated into the project.

In order to access electrification, communities had to comply with a series of requirements: a) submit a project design that included the number of homes in the community to be electrified; and b) the dwellings must be owned or have been inhabited for a long period by the same family. In the case of those homes whose occupants did not have a property title, ENEE relied on the information provided by the organisations present in each community, mainly from the community-based organisations.

The electrification was carried out in its entirety through a tender awarded to New Mark. In the contract, it was established that the electrification would be carried out by means of turnkey contracts, that is, in which the contractor assumed all the expenses of the complete electrification such as purchase and transport of materials from Tegucigalpa to the community to be electrified, implementation of the complete works, including provision of skilled and unskilled labour.

New Mark subcontracted local companies for the implementation of the works, generally companies with presence in the Departments (Provinces) where the works would be carried out. These contractors, due to the low prices that New Mark paid for their work, informed the communities that they had to provide free labour if they wanted the electrification to take place. The residents, given their interest and need for energy, accepted these conditions. In almost no cases were they informed that this work should be paid rather than voluntary. In those cases when they were informed, it was by ENEE and not by the sub-contractor. Using this modality, the Contractor carried out the work in 688 communities.

At the end of the electrification of the 688 communities, ENEE still had materials to continue electrifying communities. However, since these materials were not complete, the shared investment modality was agreed with 75 communities. Shared investment involves contributions from the community, in the purchase of missing materials, as well as input of labour.

By the time of the evaluation mission, ENEE still had materials in its warehouses.

4 KEY FINDINGS

4.1 Relevance

4.1.1. Finding #1

The project was highly relevant because it improved the living conditions of the recipient communities and it was directed to the population below the poverty line.

The rural populations that benefitted from the Project in general are located in remote locations and are difficult to access. In the 14 communities visited during the mission, the evaluation team was able to verify the satisfaction of the residents of having electricity. They are poor communities. The evaluation team was able to observe in the communities visited that most of the households are below the poverty line. Electricity contributes significantly to improve their quality of life. The homes have three or four light bulbs and, in some cases, a television. In general, household finances do not stretch to a refrigerator or an electric stove, or other home appliances such as video, stereo, microwave, etc.

According to data from the National Statistics Institute of Honduras from 2017, 38.8% of the population in rural

areas are living in households with a per capita income of one dollar or less per day. 60.9% of the country's population lives below the poverty line³.

There are multiple benefits from electrification. It has a direct impact on i) health and education (children can do their homework at night if they need to, and households stop burning kerosene to light the house, which reduces internal pollution and respiratory problems); ii) the home economy (it is cheaper to light with four light bulbs than with candles); iii) the quality of life of women (with electricity, corn mills can be installed in small businesses in the communities which reduces the workload for women who had to manually grind a significant amount of daily grain); iv) communication and security (the mobile phone can be charged, if available, and maintain communication with family members living away from home; and also warn of risks). All the previous examples are a sample of the relevance of the project.

4.1.2. Finding #2

The selection of the communities was carried out by the ENEE from a list of those that had an approved pre-feasibility study. ENEE did not consult community members.

ENEE is expanding the electrification network in the country with different funds and in many cases the selection of communities is based on direct requests submitted by different actors. At the time when the procedures for requesting cooperation support for an electrification project were initiated, ENEE presented a list of communities to be electrified that had already made a request.

In some cases, information on the existence of funds to gain access to an electrification project came from neighbouring communities that were already being electrified. This included projects of ENEE or by a project financed with international cooperation funds, mainly from Japan.

Once the Rural Electrification Project II (ESSE-FN-2008) was approved, those communities that had already submitted a request to the ENEE were informed that they would be electrified.

When the project was approved, some communities learned through teachers, members of community organizations (Patronatos), community organizations from nearby communities, or mayors, that there was a Nordic-funded project aimed at electrifying rural communities. At that time, they submitted their request.

4.1.3. Finding #3

The project reached poor population groups, but did not specifically target people living in extreme poverty

According to the proposal prepared by FOSODE in 2008, the Project aimed at targeting “comunidades rurales y urbano marginales”, which could be translated as poverty-stricken rural and peri-urban communities. With 52.6% of the Honduran population living in poverty (less than USD 5.5 a day)⁴, most families without electricity are expected to fall within this category. However, 17.2% of the population in Honduras lives in extreme poverty (less than USD 1.90 a day). They are the most vulnerable amongst the vulnerable. To them, the project is more relevant than for the remaining 35.4% of the population below the poverty line⁵.

The Human Development Index (HDI) measures the overall achievement of a region in terms of health of people, their level of education attainment and their standard of living. Since electricity can have a positive impact on the three variables, a potential approach that targets the most vulnerable could be the prioritising of communities located in municipalities with a HDI below average.

To test the validity of this approach, the evaluation team analysed if there was a correlation between the HDI of the electrified municipalities and the monthly consumption in kWh. Data was compared for 23,407 customers from 56 of the municipalities for which the evaluators possessed relevant statistical data on monthly consumptions⁶. The result is the existence of a positive correlation that decreases monthly consumption with the decrease in the HDI of the municipality. This correlation can be appreciated in the yellow straight line that appears in Chart 1, which decreases, showing that the two variables are dependent.

³ National Statistics Institute (Instituto Nacional de Estadística, INE). LV Encuesta Permanente de Hogares de Propósitos Múltiples, Junio 2017

⁴ <https://www.worldbank.org/en/country/honduras/overview>

⁵ See Finding #5 of Impact for an explanation.

⁶ Calculations are available on the tab *HDI Calculations* from the “Project Analysis” spreadsheet.

Chart 1. Comparison between average customer consumption and HDI

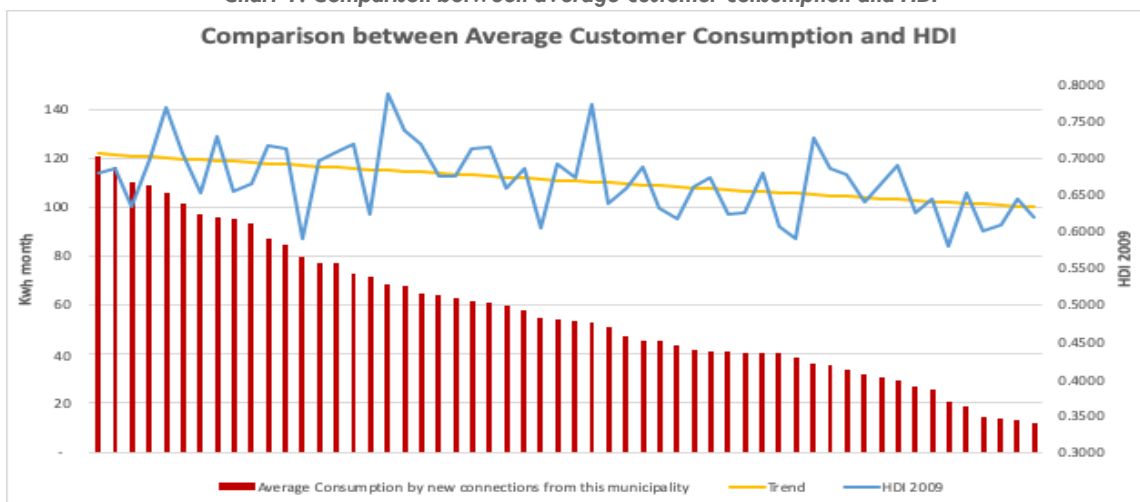


Chart 2. HDI Distribution of the electrified areas

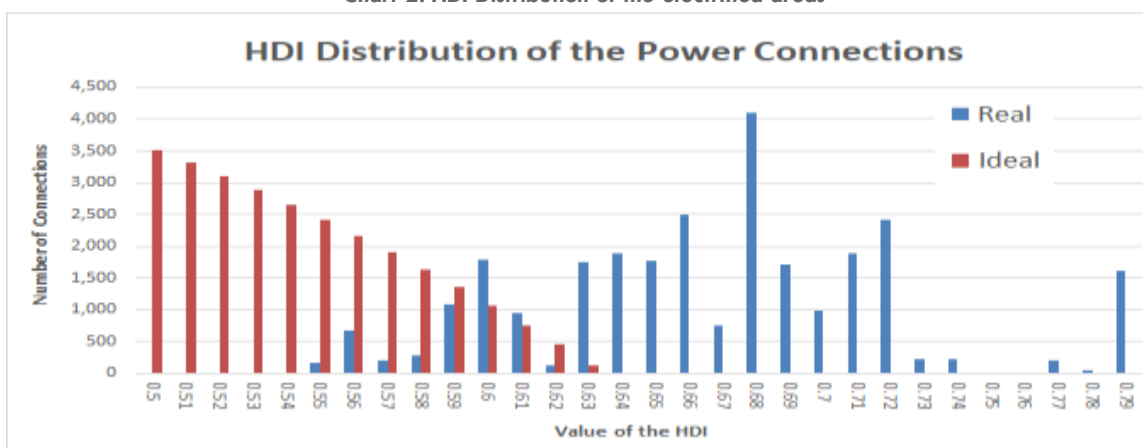


Chart 2 shows what would have been a more ideal distribution of the power connections (in red) as compared to the observed distribution.

4.1.4. Finding #4

There was some degree of political interference in the selection of communities to be electrified.

Theoretically, the prioritization of areas to electrify within the FOSODE database is based on two criteria: (1) cost-benefit, and (2) the capacity of the primary line to supply the extra demand. In practice, this selection is subject to some degree of political interference, with the tendency to prioritise areas from communities that vote the ruling party. This political interference is known by the name of ‘electrovoto’⁶.

Hence, when in 2012 the Government announced that 528 communities from the original list were to be replaced, the request became very suspicious because of the following reasons:

1. When the original list of 744 communities was submitted in 2008, the ruling president was from the Liberal Party.
2. The year after that, the country experienced what some define as a coup d’état and others as a constitutional crisis, which caused the removal of President Zelaya.
3. General Elections were held on November 28th, 2009. Porfirio Lobo Sosa, from the National Party, became the interim president.
4. Decree 214-2012 in its Art 2 page A57, states that “Considering that some of the communities selected for electrification in the original list are already electrified, the Office of the President has the authority of selecting the new communities to be electrified”, giving to the president the power to take a decision that ideally should be free from political interference.
5. The previous decree was published on February 13th, 2013, eight months before the General Elections of November 2013 during which current president, Juan Orlando Hernández, from the National Party,

was elected.

This sequence of events required a deeper analysis to see if there is a correlation between:

1. A preference on the original list of 744 communities to vote Liberals.
2. A preference from the modified list to vote Nationals.

Table 3. Results from the national elections 2009 & their weight in electrified municipalities

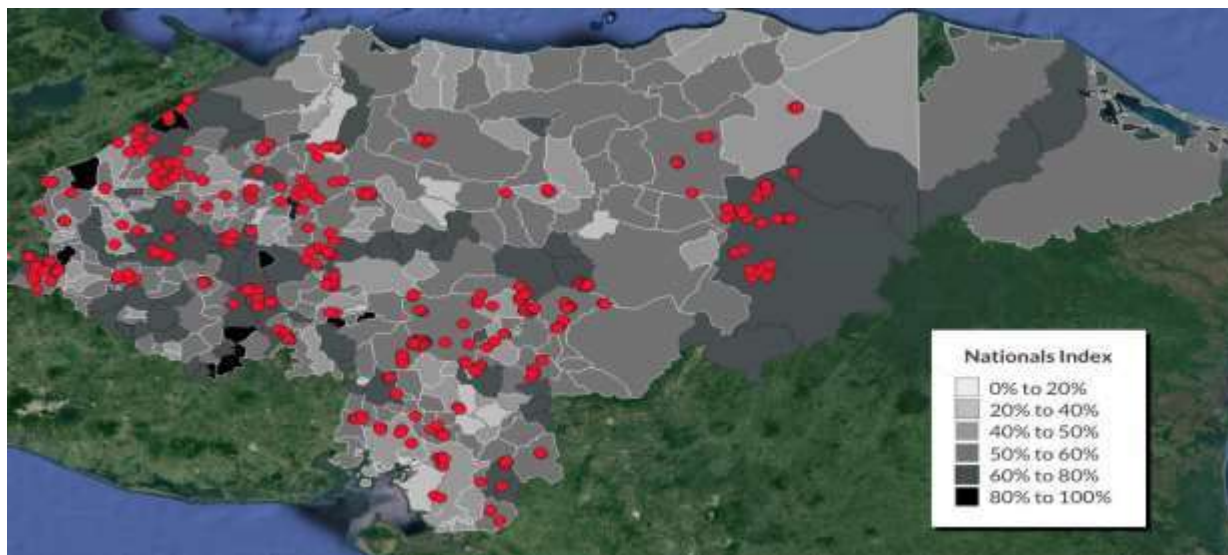
	Original list 2008	Modified List 2012	Added Replacements 2012	Country Average
Vote Nationals	54.5%	56.4%	56.2%	53.9%
Vote Liberals	35.9%	35.0%	35.2%	32.8%

Table 3 shows a certain correlation, since the weight of the vote for the National Party in the modified list (56.4%) is higher than in the original list (54.5%), and also higher than the country average (53.9%). The weight of the Liberal Party vote in the original list (35.9%) is higher than the country average and lower than the weight in the modified list (35.0%).

The difference is significant enough to deduce that there is some degree of influence from the ruling party on the selection of communities to be electrified, but not large enough to conclude that this is the most significant factor.

Map 2 shows this correlation visually. As it can be appreciated, the degree of ‘electro-voto’ is not significant⁷. However, it should be noted that data of the electoral results was available for provinces, not municipalities. Therefore, it can happen that the electrification of a village within one province that voted Liberals went to a municipality that voted Nationals.

Map 2. Overlay of electrified areas and municipalities voting the National Party



4.2 Efficiency

4.2.1. Finding #1

Monitoring and evaluation were made difficult by the lack of a clear hierarchy of objectives and measurable indicators with baseline values.

⁷ ‘Electro-’ as the prefix for anything that is related or caused by electricity and ‘-voto’ meaning vote or ballot in Spanish

The [MFA's Evaluation Manual 2013](#) states that programme planning provides a sound basis for evaluation when:

1. Objectives are clearly defined at different levels (overall objectives, programme purpose, results);
2. The objectives describe what will change (not what activities will be implemented);
3. Indicators and target values are defined for all objectives;
4. Baseline information, including disaggregated data, is available at the outset or has been produced during the inception phases of implementation; and
5. A regular, indicator-based monitoring and reporting system is in place producing systematic information of the achievement of the objectives against the set indicators⁸.

The manual was produced two years after the project appraisal of 2011. The existing manual at that time was the 2007 [Evaluation Guidelines of the Ministry of Foreign Affairs](#). This previous set of guidelines were not so explicit as the ones from 2013, when requiring the use of indicators. However, the word appears a total of 15 times. Specifically, on page 6 the guidelines say:

Monitoring benefits from:

- Good baseline information; and
- Clear benchmarks and a clearly defined set of indicators.

Evaluation benefits from comprehensive reporting on how the indicators have developed during the implementation. The choice of indicators depends on the quality and size of the development intervention. The choice is made during the formulation of the intervention.

In spite of all this, there Project had no clear indicators, even less a clear hierarchy of objectives.

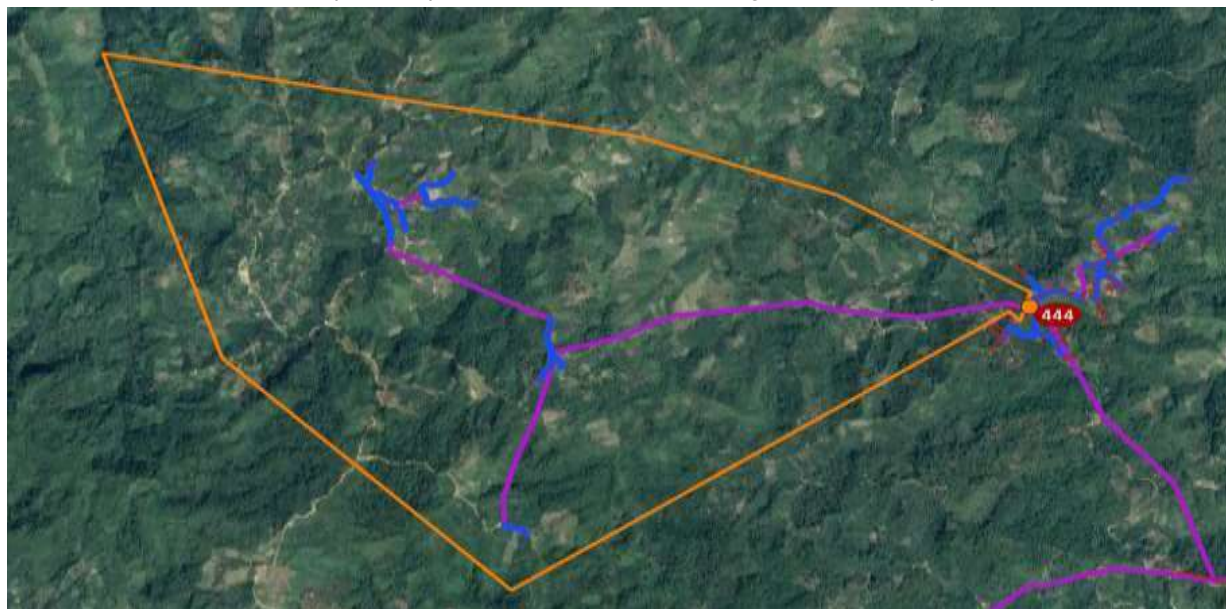
4.2.2. Finding #2

The definition of 'communities' by the project was arbitrary and distorted the results.

The lack of clear indicators opened the possibility of reinterpreting ambiguous concepts such as that of a community. In principle the term it could be understood as a synonym of village or hamlet. However, for the project a community is a point of connection to a primary power line. This allowed the combination of two hamlets in one community; or more often it did the exact opposite: the artificial splitting of one hamlet in several 'communities'.

For example, as shown in Map 3, connection point #444 combines in one 'community' the hamlets of El Mirador and Fuente Divina, located in the municipality of San Isidro, department of Intibucá.

Map 3. Example of two electrified hamlets falling on one 'community'



⁸ Ministry of Foreign Affairs of Finland. (2013). [Evaluation Manual](#). p.31

On the other hand, as shown in Map 4, the hamlets of Los Carrizales and Las Cabas, located in the municipality of Catacamas, in Olancho, were artificially split in 13 ‘communities’.

Map 4. Example of two electrified communities split in 13 electrified areas



To neutralise this arbitrary distribution, the evaluators grouped the 763 ‘communities’ in 301 clusters⁹. Without clustering connection points, it would have not been possible to properly estimate the efficiency of the installation. For example, connection point #557 in Los Carrizales required a total investment of USD 78,941 because of its 7.5 km of primary line (medium tension), to electrify only two dwellings. This investment for just two dwellings would be highly inefficient if it was not because it allowed the electrification of 141 dwellings through 13 connection points (aka. ‘communities’) at an average cost per electrified dwelling of USD 2,621.

For the distribution in clusters, the evaluators identified the geospatial placement of each connection point and traced a polygon around each cluster of points supplied by the same primary power line (orange lines in the previous images).

4.2.3. Finding #3

The cost of electrification per dwelling would have been lower if the Project had used a combination of power grid extension, isolated mini-grids and stand-alone systems.

There are five tiers of rural electrification, namely tier 1 (solar lanterns), tier 2 (stand-alone systems), tier 3 (isolated mini grids), tier 4 (isolated grids) and tier 5 (main power grid)¹⁰. A total of 38 of the clusters would have been better electrified with tier 3 (mini grids) and 121 of them with tier 4 (stand-alone systems) instead of electrifying all of them with grid extensions¹¹.

Calculations were performed taking the average consumptions from 24,281 customers located in the electrified clusters or nearby. It is based on an algorithm that considers a combination of the following:

- Number of households to electrify,
- Existing and future growth rate in the number of connections,
- Monthly power consumption per customer,
- Original distance from the electrified cluster to the power grid (distance factor) and
- Proximity between the dwellings to be electrified (clustering factor)

⁹ The list of 301 clusters is available on tab *Electrified Clusters* from the “Project Analysis” Spreadsheet.

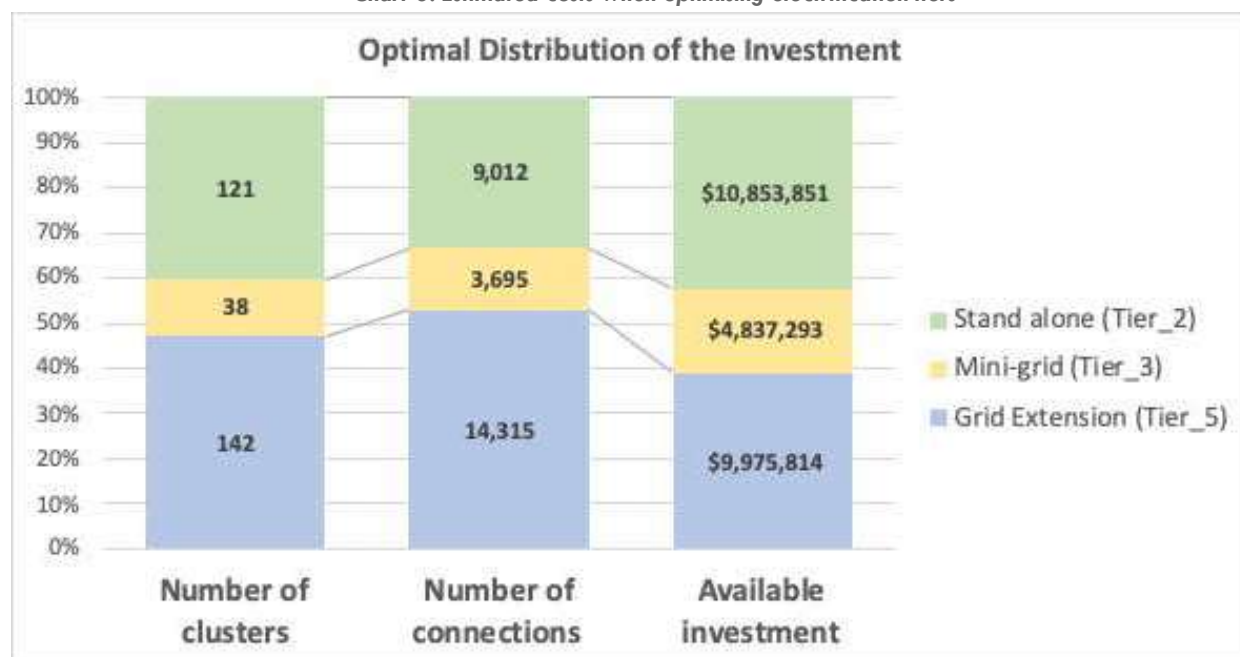
¹⁰ See Bhatia 2015 ‘[Beyond Connections: Energy Access Redefined](#)’ World Bank

¹¹ Calculations are available in tab *Electrified Clusters* from the “Project Analysis” spreadsheet.

Table 4. Estimated costs when optimising electrification tiers

	Grid Extension (Tier_5)	Mini-grid (Tier_3)	Stand alone (Tier_2)	
Number of clusters	142	38	121	301
Number of connections	14,315	3,695	9,012	27,022
Available investment	\$ 9,975,814	\$ 4,837,293	\$ 10,853,851	\$ 25,666,958
Investment per connection	\$ 697	\$ 1,309	\$ 1,204	\$ 950
Average monthly consumption (kWh)	111	46	27	74
Average distance factor	0.244	1.641	2.065	1.042
Average clustering factor	8.135	1.586	0.760	4.780
Investment in USD per monthly kWh made available	\$ 6	\$ 29	\$ 45	
Estimated investment of optimal solution		\$ 25	\$ 35	

Chart 3. Estimated costs when optimising electrification tiers



As observed in Table 4, the distribution of the electrified clusters in three tiers would have rendered an optimal investment per connection of USD 697 for tier 5 (Grid extension) leaving enough funds available to utilise the other two modalities, considering that providing electricity through a mini-grid would have required an investment of USD 25 per kWh month to be made available, instead of the USD 29 the Project finally invested. Providing that same kWh using a stand-alone system would have required USD 35 per kWh a month instead of the USD 45 the Project invested. Chart 3 shows this optimal distribution of investment.

The *Secretariat of Energy* (SEN) and the IDB recently launched a call for the creation of a least-cost electrification plan. The plan will prepare a map with the optimal solution to electrify each area. They are about to make public the list of shortlisted companies and invite them to bid for this contract.

4.3 Effectiveness

4.3.1. Finding #1

The Project electrified an estimated 27,055 dwellings instead of the 45,365 dwellings forecast in the original proposal from 2008.

In the original proposal, the project was expected to electrify 45,365 dwellings distributed in 744 areas. After

the modifications of the plan in 2012, the project electrified 27 055 dwellings, compared to the original 45 365 (of which total number, the turnkey contractor implemented 24 699 and FOSODE itself implemented 2 356), as shown in Table 5. It electrified dwellings in 763 communities, which is 2.6% above the original plan. However, as it was shown in [Finding #2](#) of Efficiency, this figure is not a representative indicator of success because the division of electrified dwellings into ‘communities’ was quite arbitrary.

Table 5. Comparative data on electrified communities

	Original list 2008	Modified List 2012	Electrified by Contractor	Electrified by FOSODE
Dwellings to electrify	45,365	27,055	24,699	2,356
Communities	744	763	688	75
Average dwellings per community	61	35	36	182

As it can be appreciated in Table 5, there is a certain manipulation of the size of each community, with the new communities added to the list in replacement being less than half the size of those from the original list. This prompted CABEL to perceive that the project was achieving the objective in the number of communities to electrified, as shown in Chart 4, which appeared in CABEL’s report number 33.

Chart 4. Screenshot from CABEL’s final monitoring report



A better indicator of effectiveness would have been the number of new connections attained by the project. This would have showed to CABEL that by the time the contractor claimed all the funds the Project had achieved only 59.6% of the original target. Instead of realising that, CABEL considered in its final monitoring report that since the number of ‘communities’ finally electrified was 763 over the original 744, the Project surpassed the original target by 2.69%.¹²

4.3.2. Finding #2

Lack of clear indicators for correct monitoring in the financial agreement made it difficult for CABEL to monitor performance and caused the project to fall short of its objectives.

The Project had the original objective of electrifying 45,365 dwellings. Funds were allocated according to this number of dwellings. The contractor finally electrified 24,699 dwellings, falling short by 45.5% of the original target (as shown above in Table 5).

The distortion of the concept ‘community’ as explain in [Finding #2](#) from Efficiency becomes quite obvious when the average number of dwellings are compared. In the original list each ‘community’ had on average 61 dwellings, while the ones from the modified list have an average of 35.

¹² BCIE. (2017). INFORME No. 33 AVANCE DEL PRESTAMO No. 2038. pp.6

The lack of clear indicators allowed this to go unnoticed by CABEL, making it difficult for them to fulfil point 1 from *Article VIII. Monitoring and Reporting*, which says that “The responsibility to monitor that Honduras fulfils the Scope and Objectives of the Project as set out in Article I of this Agreement lies with CABEL”. It seems that without the definition of clear indicators in Article I, CABEL was not able to properly monitor the Project performance.

4.3.3. Finding #3

The contractor finalised installation with a total of USD 8 million in uninstalled material. ENEE is applying this material to other uses.

Falling short on the number of dwellings to electrify resulted in USD 8 million in unused materials. The contractor was involved in the provision of electricity to 688 ‘communities’, with 216 of them from the original list presented in 2008 and the remaining 472 from the list prepared by Presidency in 2012. Communities from the original list used around USD 7 million in material and the replacement ones used around USD 11.5 million. Added to those the USD 1.4 million used in direct installations performed by FOSODE and considering that the Project had almost USD 28 million in material, this results in a total of USD 8 million in unused material.

Table 6. Distribution of material

	Turnkey		Directly by FOSODE	TOTAL
	Contractual	Replacement		
Number Electrified Dwellings	11,063	13,636	2,356	27,055
Number of electrified 'communities'	216	472	75	763
Average dwellings per community	51	29	31	35
Materials	\$7,026,162	\$11,557,681	\$1,400,543	\$19,984,387
				Total materials
				\$27,990,695
				Remaining materials
				\$8,006,308

This unused material was distributed as follows:

Table 7. Unused material at the end of the Project

Material (Equipment and Poles)	Installations	Remaining Material	Other	TOTAL
	Installed	\$ 19,821,356		
Left Tegucigalpa's warehouse		\$ 1,551,930		
Left San Pedro Sula's warehouse		\$ 1,029,963		
Left Ceiba's warehouse		\$ 657,398		
Left ENEE's warehouse		\$ 4,767,017		
Vehicles			\$ 163,031	
TOTAL	\$ 19,821,356	\$ 8,006,308	\$ 163,031	\$ 27,990,695

Between March 2017 and July 2019 FOSODE has used USD 669,000 of that material in the electrification of 52 communities¹³. The rest of the material is being used by ENEE either to electrify other communities or maintain the existing grid.

The use of this modality without due supervision opens the opportunity for material to be used in electrification projects without the required social component and in projects not aimed at the electrification of new communities.

¹³ See tab *FOSODE Projects (FN)* from “Project Analysis” spreadsheet for the list of projects and contributions

It also opens the opportunity for individuals to profit personally because of the lack of external supervision. Therefore, to avoid this situation and make sure that all material has been applied for a purpose conducive with the project that financed it, there should be no leftover material at the end of a project.

4.3.4. Finding #4

There was an asymmetrical power relationship between the contractor and the local installers, and also between the local installers and the electrified community.

The Finnish contractor was ABB Oy. Its local counterpart was New Mark Representaciones, S. de R.L de C.V. ABB Oy is a subsidiary of the ABB Group, a Swiss-Swedish Fortune 500 multinational corporation with 147,000 employees, EUR 25 billion in revenues and operations in more than 100 countries. In Finland, ABB operates in approximately 20 locations. The Power Grids division (Grid Integration) working with this project under evaluation operates from Vaasa, Finland.

New Mark Representaciones, S. de R.L de C.V. (New Mark) was established in 1974 for representing national and international firms. The company is owned by Schucry Kafie, a very influential Honduran businessman. Mr Kafie also owns Luz y Fuerza de San Lorenzo S.A. de CV., “Lufussa”¹⁴, an Independent Power Producer (IPP) with an installed capacity of 390 MW¹⁵. He made most of his fortune by selling power to ENEE at a price considerably higher than the generation cost. He is the brother of the Honorary Consul of Finland, Mr Luis Kafie, who is also involved in the management of the business.

New Mark is not an engineering company specialized in the power sector, but a firm involved in many industries. Hence, it subcontracted local installers, who were requested to provide a guarantee and supply their service through a company. Installers saw in this project an opportunity to prosper in a country where it is very difficult to access a business opportunity of this calibre without proper political influence.

The population from the electrified communities either are below poverty line or in extreme poverty, often illiterate¹⁶ or have only completed primary school. They were very eager to receive electricity.

This created an asymmetrical power relationship in which villagers worked for free, local contractors worked just to cover costs, while New Mark obtained a considerable surplus. It is unknown what the profit of ABB was, as this fell outside of the purpose of the evaluation.



4.3.5. Finding #5

The lack of clear indicators together with this asymmetrical power relationship allowed New Mark to obtain a 65% margin for overheads on the USD 6 million budgeted for labour.

Lack of clear indicators allowed New Mark to claim the USD 6,046,311 even after falling short by 45.5% in the number of electrified dwellings. On the other hand, the asymmetrical power relationship allowed New Mark to first launch a call for specialised firms to bid for the entire installation. Interested firms offered very competitive prices, hoping to be awarded the entire contract. With this information, New Mark opted for sub-contracting directly to the local installers. This formula allowed New Mark to:

- Employ local installers at very low prices. Based on information gathered during the field visits, it is

¹⁴ <https://schucrykafie.com/empresas-y-negocios>

¹⁵ <http://lufussa.com/es/nosotros/>

¹⁶ According to the INE 18.8% of the rural population in Honduras is illiterate. Source: <https://hondudiario.com/2016/05/03/tasa-de-analfabetismo-en-honduras-es-de-12-1-segun-cifras-del-ine/>

estimated that this price averaged around USD 80 for each electrified house.

- Subcontract local installers as legal entities (instead of employing them as self-employed individuals) and request them to provide a warranty. This allowed New Mark to transfer most of the risk to the local installers, while paying them a rate equivalent to an employee.
- Make local installers responsible for the collection and transport of the material from the warehouses to the villages.
- Whenever local installers contributed with unpaid unskilled labour, request from local installers a signed certificate signed by the villagers stating that their contributions were voluntary.

This resulted in an estimated 65% margin on the USD 6,046,311 for labour, which is almost USD 4 million. This figure has been estimated following three different approaches:

1. FOSODE engineers estimated the margin to be between 50% and 80%.
2. A local installer was asked approximately how much would cost to make an installation for 100 houses that were not far from the power line and the answer was 200,000 lp. From this, it is estimated the cost to be around USD 80 per household, which gives a 67% margin.
3. When installation costs are estimated at the price at which FOSODE can carry out those same works, labour costs are 60% lower¹⁷.

To cover their costs, local installers had no other option than:

- Pressure local villagers to contribute with unpaid unskilled labour and provide free accommodation and food for the installation team. Local villagers were requested to perform hazardous work such as transporting power poles, making holes and standing up the poles, without the required equipment, without being remunerated and without being covered by any insurance. This is in contrast with clause 21 of the contract between the ENEE and New Mark, which states that New Mark had to abide to the labour legislation in Honduras.
- Offer villagers the option of doing the internal wiring of the house in exchange for an estimated 2,000 lp for material (EUR 73) and an equivalent amount for labour.

4.3.6. Finding #6

FOSODE had a limited budget to perform their duties of supervising the contractor.

In comparison to this large surplus for the contractor, ENEE had to supervise the installation with a very limited budget.

ENEE's supervision of the installation was the main contribution of the Government of Honduras as the Project's counterpart. According to the investment plan published by the Government of Honduras in its official journal "La Gaceta" number 33,045 on February 7th 2013, Annex J, ENEE was going to contribute with USD 630,600 through an implementing unit and USD 2,369,400 through the logistics, adding a total of USD 3,000,000.

According to FOSODE's numbers, ENEE's contributions to the project add up to USD 2,933,795¹⁸. This amount was calculated as a percentage of approximately 9.79% added on top of each contribution from the Government of Finland. Lack of a budget allocated by the Project for travelling and accommodation made ENEE's supervision challenging and difficult.

As an example, during the present evaluation ENEE assigned an engineer to accompany the evaluation team. His presence was very much appreciated because he provided very valuable insights. However, at the end of the day he had to return to Tegucigalpa, and he was not able to come to all the field visits because of lack of budget for accommodation. If this was the situation when having to visit only 14 communities, it would have to be far more challenging for ENEE to supervise installations in 111 different municipalities countrywide over three years.

4.3.7. Finding #7

The project could learn from the approaches taken by other donors.

Other donors are implementing their programs and projects following approaches that avoid many of the mistakes that considerably reduced the Project's efficiency and effectiveness. The following are a few examples:

¹⁷ Figured and calculations are available in tab General from MS Excel spreadsheet "Project Analysis".

¹⁸ Addition of Column AK from tab Electrified Areas in "Project Analysis" spreadsheet. The total addition appears in General F21.

- Embassy of Japan. Since 1989, the Japanese Embassies has implemented more than 500 projects, of which 110 were electrification projects, via the program Assistance for community Projects (Asistencia para Proyectos Comunitarios, APC). The electrification is not always of whole communities, but also of villages and very remote settlements. Using this modality, the decision of what to connect depends on the requests made directly by local governments to the Embassy. The Embassy provides the funding. The municipal government presents the project design and quotations for the materials needed to carry out the works. The project doesn't pay for unskilled labour, but rather it is a community contribution. The municipality is responsible for the implementation of the project. For its part, the Embassy technical team carries out visits to the projects and accompanies the implementation until it is finalised and handed over to the community.
- **GiZ and their EnDev program.** The Project could learn from EnDev in two areas:
 - EnDev did not focus on a single technological solution but instead it optimised impact by providing a range of different solutions such as mini-grids, stand-alone systems, improved cookstoves, and others. If the Project had implemented that same approach it would have avoided the high electrification cost mentioned in [Finding #3](#) from Efficiency.
 - The program also involved many different stakeholders such as NGOs, associations, communities, academia, and private sector. Such synergies, among other things, allowed the implementation of livelihood programs that improved income, thus increasing the economic sustainability of the rural electrification projects.
- **CABEL and their project management units.** CABEL was asked what in their opinion the ideal modality would be. They replied that the one that works best is having a project management unit made of individuals employed directly by CABEL implementing the project. This modality would have avoided a situation such as the contractor invoicing for all the labour even after the project fell short in its objectives.
- The **Inter-American Development Bank.** The IADB has been involved in at least 29 programs related to rural development, electrification, renewable energy & energy efficiency.
- The **Scaling Up Renewable Energy Program.** SREP is a multi-stakeholder initiative implemented in different stages. By 2015, it had to be reformulated to be better adapted to the given circumstances.

4.4 Impact

4.4.1. Finding #1

The project achieved its overall objective of improving the quality of life of the beneficiary population and supported the delivery of public services such as education and health.

In the opinion of the residents in the 14 communities visited by the evaluation team, the electrification has made a positive contribution to improving their living conditions. This should be understood as a small but highly significant progress, since in a large number of cases these are very poor communities. So much so that the evaluation team was able to observe that, in some communities that were electrified, there were families who had not been able to connect their homes to electricity due to lack of financial means to do so. The costs of connecting the home to the network were not included in the project.

The benefits of electrification also contribute to the improvement of the economy of electrified communities. This is most visible in those communities located a short distance from the main road and easily accessible. In the cases of more remote communities and with access often by roads in poor condition, economic activities are very few. These are limited usually to a small grocery store that has a refrigerator and that can bring perishable products such as meats to the community. In addition, mills have been installed, facilitating the work of grinding grain, an activity carried out by women.

The impact in terms of education and health is very positive. All electrified communities that have a school or health centre now have centres with access to energy. This facilitates better service provision and allows longer operating hours if necessary.

The health centres, despite their limitations in terms of equipment, are better able to serve the population and provide a better service, which probably leads to disease reduction. However, to be able to confirm this type of impact, it would be necessary (on the part of the institutions) to carry out specific impact studies.

4.4.2. Finding #2

The project had a positive impact in terms of human rights, gender equality and the reduction of inequalities.

The project did not discriminate against women. All homes in a community theoretically have access to energy. However, as already mentioned, due to lack of financial resources, not all homes have been able to connect to the network. In the field visits carried out by the evaluation team, it was found that the homes with the greatest financial difficulties were female-headed households with young children in their care (and an absence of men).

With regard to human rights, although the evaluation team cannot claim that their rights have been violated, there are indications to assume that indigenous communities were not sufficiently taken into account at the time of electrification. The same modality of community selection, based on projects submitted by the communities themselves, leads to the conclusion that the most isolated communities probably did not have enough information to present a project. Many of these are indigenous communities.

The price of energy and the scarce resources of the population of the communities means it is not possible in most cases to buy and use an electric cooker (which would have significantly increased the impact of the electrification on the time, health and drudgery of women). For this reason, the population continues to cook, in general, with firewood, although the number of improved cooking stoves that significantly reduce wood consumption has increased.

4.4.3. Finding #3

The project had the unintended positive impact of increasing the number of families that migrated from other areas where there is no electricity.

With the arrival of energy, there was an increase in many communities of in-migration of families from other zones without electricity.

As a result of the increase in population, the number of small businesses (grocery stores) increased. This reduced the need for families to travel to large commercial centres, as they can now buy meat, chicken and other basic products in the municipal headquarters. For small grocery stores, and in some examples, small clothing stores, the increase in sales allows them to buy products at cheaper prices in larger cities (for example, from Tegucigalpa) which they can then sell in their communities. This has led to a general improvement in the life in rural communities.

4.4.4. Finding #4

Villagers lacked information on many aspects related to the Project and the service provided. This had the unexpected negative impact of leaving them at the mercy of unscrupulous individuals and organisations.

This lack of information expressed in many ways, such as:

- The moment the funds were approved or even during the previous project, politicians or individuals who claimed to have political influence started visiting some of the villages. In some places, they requested funding contributions and the payment of fees to finance surveys and technical studies of doubtful use. For example, the evaluation team was told that in El Chaparral, a member of parliament (Doña Gladis) requested 60,000 lp (USD 2,300) in exchange for assistance to receive electricity.
- Once the village was already selected for electrification, some of the companies subcontracted by New Mark to install the equipment threatened villagers that if they did not offer unskilled labour and housing and food for free, they would not receive electricity.
- Once electricity is installed, electricity users receive a first bill for 500 lp (approximately 19 USD) to pay for the installation of the meter. This amount is to be reimbursed if the user decides to cancel their account, subject to keeping the receipt as a proof of payment. Villagers neither knew this, nor what it was that they were paying for with this first bill.

4.4.5. Finding #5

The Project did not incentivise productive activities with the potential of bringing new revenues to the community.

Electricity does not represent an end in itself: it is an input factor to a large set of activities ('uses') that can improve welfare, increase productivity or generate income. The complex interactions and synergies between

multiple development factors, including other infrastructure investments next to electricity and enabling political, socio-economic and cultural conditions, pose major methodological challenges to isolating and quantifying the impact of electrification. Indeed, it is increasingly recognised that certain “complementary” inputs or services – such as business development services (BDS) or access to finance – can increase the chances that access to electricity leads to significant income generation and poverty alleviation¹⁹.

The Project was not an exception. This is why it is necessary to draw a distinction between:

1. Productive activities that cause a redistribution of revenues within the community. They do not improve economic sustainability but may increase the ability to pay of some individuals in detriment of others.
2. Productive activities capable of generating net-revenues for the community. They increase community revenues or decrease expenses, and therefore the ability to pay for the service of some community members without having a negative impact on the ability to pay of others.

There is no a clear difference in impact between both types, but in general it could be said that examples of the first type are:

- *Pulperías*: small family run grocery stores. Electricity helps in the refrigeration and freezing of products, especially meat. They mostly sell to other villagers at prices higher than the cost of buying the products in town.
- *Chupaderos*: the equivalent of a pub or place where to consume alcohol. Electricity helps to keep beer cold. Clients are also mostly locals.

Examples of the second type of productive activities are:

- *Corn mills*: They allow families to mill their corn. Before electricity, they are typically powered by either diesel or hydro. They require an estimated investment of around 20,000 lps (760 USD). Income generated by the mill helps the owner cover the cost of electricity but does not provide extra income. They have the potential to bring net revenues to the community if after the harvest in July or December villagers mill their corn to prepare products for their sale in the nearby market. During the rest of the year, milling is mostly for self-consumption.
- *Masonry ovens*: They do not require electricity to work, but having electrical power encourages the construction of new dwellings, which in turn it encourages the local productions of bricks. The activity has the potential to bring in net revenues if producers start commercialising the bricks outside the community.
- *Carpenter’s workshops*: Electricity is needed for the power tools. Like masonry, it is mostly encouraged by the construction of new dwellings, but can potentially bring net revenues if products are sold outside the community.

Table 8. Impact of electricity on revenue distributing and generating activities in visited villages

Village name	Type	Electrified dwellings	Revenue distribution		Net revenue generation	
			Before	After	Before	After
Caragual	Rural	300	4	≈25	≈2	≈4
Barrio Purán 3	Peri-urban	15	0	3 pulperías	0	4 corn mills 1 masonry oven 1 carpenter’s workshop
Wachipilin	Rural		2	4 pulperías	0	1 corn mill
El Carrizalón	Rural	160	2	6 pulperías	1	5 corn mills
Pepinales	Rural	100	2	7 pulperías	0	≈3
Las Botijas	Rural	400	2	18 pulperías	0	≈4

¹⁹ Attigah, B., & Mayer-Tasch, L. (2013). [The Impact of Electricity Access on Economic Development: A Literature Review](#). Productive Use of Energy - PRODUCE, 26.

Picture 1. Pulpería from indigenous community in Copan



Picture 2. Corn mill



As it can be appreciated from the table 9, most of the productive activities the Project generated in the visited villagers were of the first type and therefore, electricity is not expected to have improved much the net revenues of the villagers.

4.4.6. Finding #6

The largest social and economic impact is with households consuming less than 30 kWh a month.

FOSODE's original proposal mentions on page 6 that families spend around USD 189.59 a year in alternative sources of lighting. This figure is quite high, and it should be taken with caution.

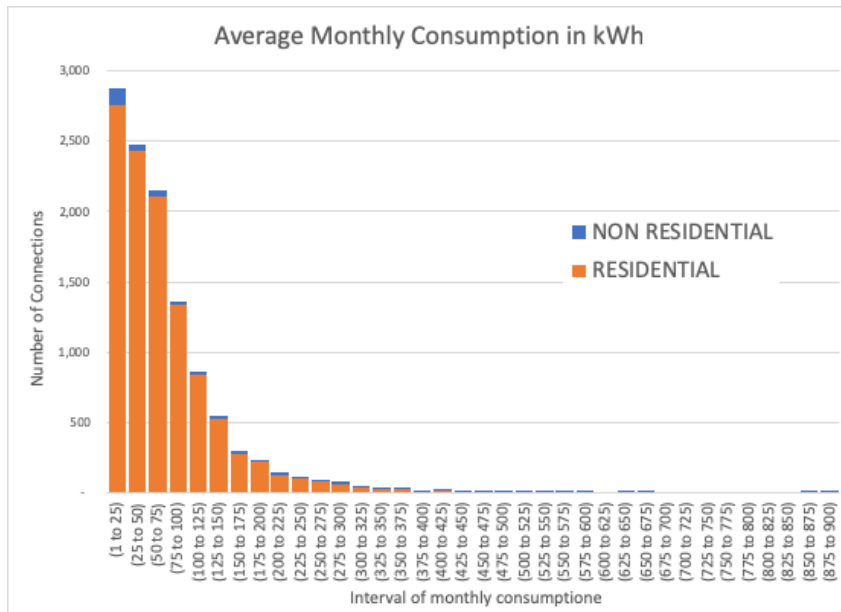
Studies from countries where kerosene is not subsidised, like in Honduras, and with a similar GDP per capita, show that the monthly cost per household in alternative sources of lighting to be between USD 4.5 and 9 a month. This figure is consistent with the data provided during the field visits considering that: Families using kerosene would require around one gallon a month, which costs around 110 lp (USD 4.5) in a Honduran rural village. Those using candles would typically use one candle a day at the monthly cost of 150 lp (USD 6). Those using flashlights would typically require around 220 lp (USD 9) in dry cells.

At current electricity prices, a Honduran family using electricity only to power four lights and a mobile phone would consume less than 25 kWh a month and pay a 55 lp service charge and another 55 lp in electricity consumption²⁰. This adds a total of 110 lp a month, equivalent to the cost of using kerosene and less than the cost of using candles or flashlights. It provides a far better and healthier lighting and more hours of service than these alternative sources. This is the group for which the social and economic impact of the Project is largest.

As shown in Chart 5, an analysis of 11,075 households electrified by the Project shows that 25% of the residential customers would fall within this first category.

²⁰ This figure of 55 lp in electricity consumption a month is based on an average consumption of 13 kWh a month (which is the average for people consuming less than 25 kWh a month) at the cost of 3.8678 lp per kWh.

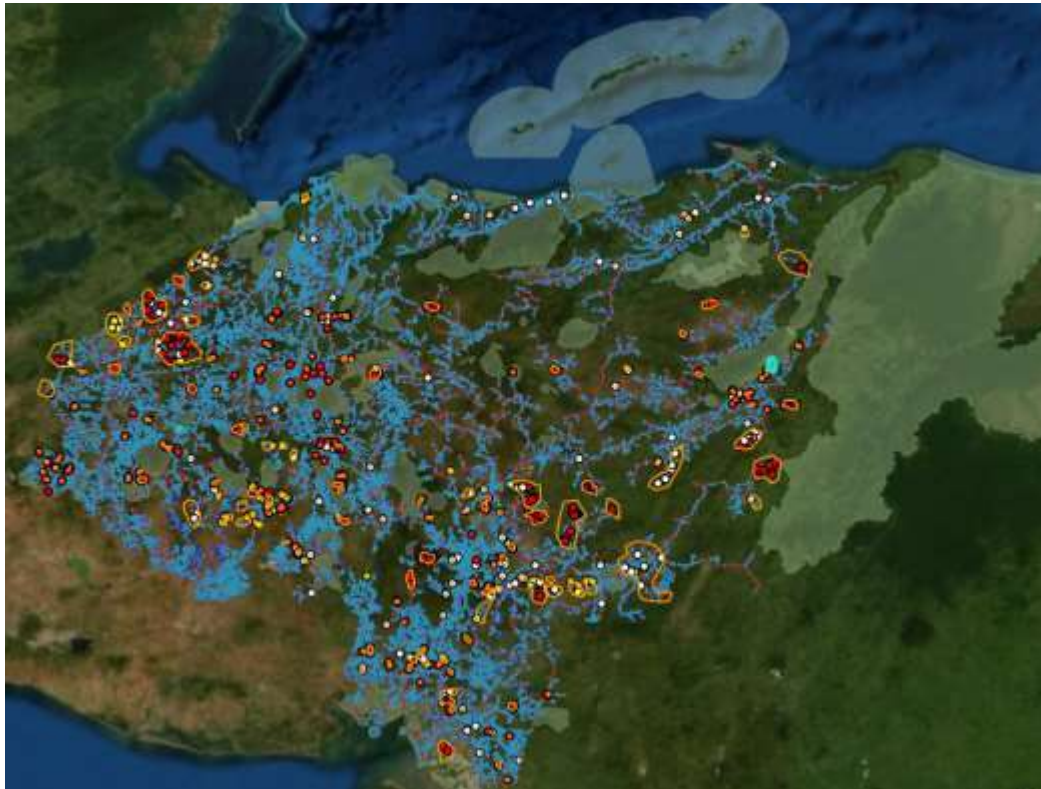
Chart 5. Average monthly consumption by electrified dwellings in kWh



4.4.7. Finding #7

3% of the electrified dwellings fall in protected areas. One of the electrified areas could have required the logging of a path through a water catchment.

Map 5. Protected areas, the power grid and electrified polygons



Map 5 shows in blue the protected areas and in yellow with red dots the electrified clusters. A total of 3% of the electrified dwellings fall within protected areas. Geospatial analysis of the areas shows that there is one area that could be worrying, but it was trenched by a previous project and expanded by this one. Map 6 shows an example of a community that although already electrified in a previous project, the current one under review expanded. As it can be appreciated, the electrification of the community required to cut down a line of trees through *El Coyolar* water catchment area. Given the number of houses to electrified, the total cost of doing so

with a grid extension and the environmental impact, it would have been far more effective, less costly and better from the environmental point of view to electrify those dwellings with a combination of stand-alone systems and mini-grids.

Map 6. Aerial picture of El Coyolar water catchment



4.5 Sustainability

4.5.1. Finding #1

The Project did not help the Government in securing the future sustainability of ENEE.

The sustainability of the ENEE is in serious doubt. The IMF has requested the Government to implement the following set of measures:

1. Revise PPA with IPPs and the contract with EEH.
2. Recover the USD 384 million in arrears.
3. Refinancing of the USD 2,305 million in debt to longer term and concessional terms.
4. Reduce financial losses at least a 17% as per contractual obligations with EEH
5. Improve the quality of the service by improving and extending the transmission and distribution networks.
6. Split the company into three different business units: generation, transmission and distribution.

At the same time the evaluation team was in Honduras, an IMF mission was also visiting the country and considered that Government is making progress in this set of ambitious reforms²¹.

Although the Project did not make the situation worse, it did not help to improve it either.

4.5.2. Finding #2

ENEE's supervision guaranteed that the Project followed the required technical requirements.

Honduras has regulations for the design and construction of network extension projects. Both the design and construction were required to be checked by the specialist supervisors of ENEE (see Annex 5).

²¹ <https://www.imf.org/en/News/Articles/2019/11/08/pr19405-imf-and-honduras-reach-staff-level-agree-1st-rev-economic-program-under-sba-cfa>

During the field visit, the quality of the installation was reviewed. The project was found to have been implemented in accordance with the established regulations, thanks to the supervision of ENEE. From the engineering point of view, the visited projects were constructed correctly. Inspection of a sample of structures fulfilled the standard.

During the interview stage with ENEE, it was mentioned that the transformers and protective equipment such as fuse holders and lightning rods were supplied directly by ABB. From this same source, it was confirmed that materials directly from ABB represented 28% of the value of the total materials. The rest of the materials and equipment included poles, cabling, guy ropes, and other hardware that was purchased in the local market and through the imports from different locations²².

4.5.3. Finding #3

EEH is having problems in fulfilling its contractual obligations, which affects the technical sustainability of the service.

ENEE has sub-contracted EEH for the operation and maintenance of the distribution systems. This means that the maintenance of all the project's constructed systems is the responsibility of EEH.

The evaluation found that the beneficiaries complain that EEH does not respond to the electrical service users, or does so very belatedly. The problem is worse in those locations furthest from the main cities. For example, during a visit to the community of Guayabillas, in Valle de Ángeles, a primary line was found with a serious problem in one of the spigot insulators. This failure must be repaired by EEH. However, the claims of the residents have not been addressed by the company, despite the fact that this report was made at the beginning of 2019²³.

In addition, in all the interviews the electrical service users mentioned that many claims to EEH are not addressed or take a long time to be corrected. The claims have to do with problems in the systems (see Figure 7, in Annex 5), and mainly with claims in the billing.

4.5.4. Finding #4

Supply is not always reliable because of the overloading of the grid in some sections, lack of maintenance and as a result of its radial topology.

The sustainability of the projects is related to the correct operation and maintenance of the systems, together with the quality and continuity of the electricity supply. With regard to these aspects, it should be mentioned that ENEE currently has a serious crisis in its ability to ensure energy supply in western, eastern and coastal areas of Honduras. Examples of this situation are the permanent supply cuts in cities such as: La Ceiba, Ocotepeque, Juticalpa, Catacamas. As stated by ENEE, they are trying to resolve these problems.

4.5.5. Finding #5

Many of the indoor installations were technically incorrect, which makes them unreliable, hazardous and less energy efficient.

Very often the internal wiring was installed by someone without the required certification and skills. This translated in the use of wiring of a lower amperage than what would be advisable from an energy efficiency and safety point of view, with dwellings interconnected using exposed wiring instead of using electrical conduit pipes, and most wire joints use insulating tape and leave the connections exposed, instead of using electric junction boxes.

4.6 Coordination, Complementarity, Coherence & Aid Effectiveness

4.6.1. Finding #1

With the creation of the Secretariat of Energy, the Honduran Government aims to increase coordination and avoid a situation in which there is duplicity of efforts and lack of knowledge on which communities are being electrified by other stakeholders.

By the time the concessional credit was finally approved in March 2012, 71% of the communities originally selected in 2008 were already electrified or at least this is what the Government of Honduras claimed at that

²² See Annex 5 for a detailed description of the technical inspection carried out by the evaluation team.

²³ The details can be consulted in Annex 5

point²⁴.

FOSODE was not aware of which communities were already electrified because there is no centralised point from where to share such data. The recently created Secretariat of Energy (SEN) aims at solving such problem by preparing:

1. A roadmap to achieve universal access to electricity.
2. A strategic plan for access to energy that includes a least-cost electrification plan.
3. A legal framework for socially-based electrification that includes the identification of potential resources.

4.6.2. Finding #2

The project did not take into account other programmes relevant to the project with the potential of creating synergies.

Since its inception, several development initiatives have been carried out by different stakeholders that could have greatly benefited the Project. By 2011, FOSODE was well established as a mechanism to extend the electricity grid to communities that lacked access to electricity. However, it lacked the capacity to reach the most isolated communities with off-grid solutions. This is the reason why different organisms that aim at assisting the populations who most need it, have been working independently, in areas and with technologies that are out of reach for ENEE.

A [list of 45 relevant initiatives](#) that have taken place since 2011 has been compiled, structured and analysed in terms of the cooperation that could have been sought.

Table 9. Programs and projects with potential synergies

Programs & Projects					
Type	Main & Secondary Areas			Status	
Projects	8	Electricity G & T	3	Approved	4
Grant	2	Sustainability	3	Closed	7
Loans	6	Energy Efficiency	10	Completed	10
Plans	1	Energy & Energy Capacity	5	Implementation	13
Programs	12	Rural Electrification	5	On-going	7
Aid	4	RE	12	Unknown	4
Cooperation	11	Finance	5		
Total	45				

Out of the shortlisted initiatives, almost 69% of them – 33 projects - belong to the BID, which is also the organisation with more active projects in electrification, energy efficiency and renewable energy in Honduras.

The evaluation team made an analysis and found 82 potential stakeholders that the project could have involved, yet it only involved a few.

²⁴ The only way to verify that this was the case would be to compare the original list with the current power grid. The evaluation team has a map in geospatial format with the current power grid, but it has been not possible to obtain the original shapefile used for creating the map that appears on page 52 of the original proposal

Table 10. Potential stakeholders that the Project could have involved

Stakeholders							
	Type		Role at Current Project		Scope		
Academia	3	Partnership	2	Partner	1	Local	14
Associations	3	Platform	1	Evaluation	4	National	32
Consultancy Firm	6	Private Sector	7	M&S	5	International	32
Development Organizations	6	Public Sector	3	Finance	6		
Embassy	2	Support Fund	3	Sub-Contractor	1		
Expert Group	1	Consultant	3	Owner	1		
Forum	1	Finance Institution	2	OMT	1		
Government	2	Government Unit	14				
Government Company	3	Unit	2				
Ministry	3	Community Village	14				
		Total	82				

4.6.3. Finding #3

The project had a mixed impact on ENEE’s debt sustainability.

With regard to aid effectiveness, when taken in isolation, the project’s impact on ENEE’s debt sustainability has been negative, even considering that the loan is interest free, because the investment is not generating sufficient net operating income to return the principal of the loan.

Taking this scenario into account, the project did not help ENEE to increase its net cash flow considering that only 35% of the electrified dwellings (Chart 6) are able to consume enough electricity to provide the necessary cash flow to pay for the debt. In Chart 6 (to the right), it is seen that only 17% of households are consuming 50-100% of the planned amount of electricity, while the remaining 47% consume only 1-50% of the amount planned).

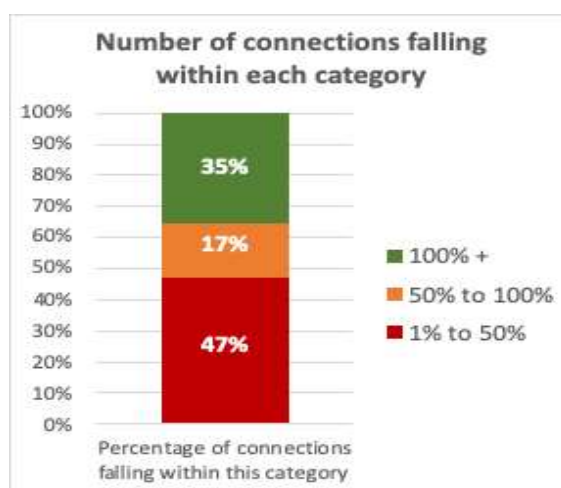
This calculation considers that ENEE destined 15% of the revenues from these customers to this purpose over the 10-year repayment period and 3-year grace period starting in January 2013. It also planned for an increase in electrified dwellings from the original 27,055 to 33,804 after 10 years.

Although it is true that the Project was never intended to be financially viable, these figures would be far better and even positive if, as expressed in [Finding #3](#) from Efficiency, the Project had used a combination of power grid extension, isolated mini-grids and stand-alone systems. However, it is understood that these were not products of ABB, and the project was tied to Finnish products.

As a result, the Government of Honduras, who is responsible for servicing the payments, will not be able to recover the amount from ENEE. This will put more pressure on an already limited budget. ENEE’s debt has reached 25% of the sovereign debt of the Government of Honduras²⁵ and Government has no more margin to keep on increasing it without affecting its ability to continue borrowing money and finance the so desired social programs to reduce the poverty gap.

Having said that, in relative terms the Project has had a positive side because it has helped ENEE reduce its Weighted Average Cost of Capital (WACC). ENEE is paying around USD 160 million a year in interests for

Chart 6. Project ability to improve ENEE’s cash flow



²⁵ <https://www.laprensa.hn/economia/1277077-410/enee-deuda-honduras-crisis-energetica-economistas->

servicing a debt estimated at USD 2.13 billion. This is around 7.60% a year average interest rate.²⁶ Adding an extra USD 34 at almost zero interest rate (0.14%) is slightly reducing the WACC, which is a positive outcome.

4.7 Other

4.7.1. Finding #1

Only 27.97% of the material was supplied by Finnish companies. The rest was supplied either locally or from the USA. No Finnish firm was involved in the direct management of the project.

Materials were supplied from Finland, Honduras, Brazil and USA. Finland mostly provided the cabling, Honduras the wooden poles, while all the rest of the material was supplied either from Brazil or USA due to the 120V and 60 Hz at which the power grid operates.

4.7.2. Finding #2

The project did not contribute significantly to broader cooperation and bilateral relations between Finland and Honduras.

For the period the project was implemented, there were no other similar projects where both countries joined efforts, and Finland does not seem to have used this project as an opportunity to increase mutual collaboration with the region. For example, Finland is, to the date, not part of SICA, Centro-American integration system, the institutional framework of eight Central American countries for development cooperation. Other than the consulate, only the 'Finnish Fund for Industrial Cooperation' (Finnfund) is mentioned in the latest 'Honduras Directory of international cooperation agencies'.²⁷

4.7.3. Finding #3

In CABEL's opinion, transparency should be increased.

The project aimed to electrify 744 new rural and peri-urban communities. According to the information provided by ENEE and the reports of CABEL (BCIE), by June 2017, schemes in 763 communities were operating, representing 102.69% of planned implementation. Of these, 688 were implemented by the contractor and 76 via a shared investment modality.

However, as mentioned in Finding#2 Effectiveness, the project electrified approximately 27,055 households, instead of the original 45,365 households planned in the original proposal from 2008.

In relation to the manner in which the project was implemented, in meetings with the evaluation team, CABEL expressed its interest in improving the transparency of processes in future projects. CABEL proposed the establishment of an external Implementation Unit, to assist the institution receiving the funding. At the same time, they proposed the hiring of an external supervisor to monitor the work and ensure that they are implemented in a timely manner and to the required quality.

With regard to the tendering processes, if CABEL is involved it should be mandatory that the procedures of the institution are followed. Similarly, when awarding the contracts, special emphasis should be placed on transparency and the compliance by the winning companies with the agreements in the contracts.

4.7.4. Finding #4

The Project had mixed contributions to Honduran national development plans.

The Project is framed within the Plan of the Nation 2010-2022 and Country Vision 2010-2038. The figure below (Figure 4) shows in green when there is perfect alignment, in yellow when it is mixed and in red when there is negative alignment.

²⁶ These figures were obtained from "[Honduras busca colocar deuda de 2.150 millones](#)". The article states that debt servicing is USD 160 million a month, which is not possible because it would be equivalent to a 140% a year interest rate

²⁷ <https://foprideh.org/wp-content/uploads/2018/09/Directorio-de-Organismos-de-Cooperaci%C3%B3n-Internacional-Edici%C3%B3n-2018.pdf>

Figure 4. Project alignment with the Plan of the nation 2010-2022

Plan of the Nation 2010-2022	Alignment 1: Sustainable development of the population	The approach taken for electricity provision is unsustainable. No steps were taken to encourage economic development.
	Alignment 3: Poverty reduction	Generating assets and equal opportunities can only reduce poverty by reducing expenses or increasing income, which has not always been the case.
	Alignment 4: Education and culture for social emancipation	Because of the ability of electricity to support both.
	Alignment 5: Health to improve the living conditions	Because of the ability of electricity to replace alternative solutions for lighting that are detrimental to health.
	Alignment 6: Safety of the population	Street lighting and better communication.
	Alignment 8: Productive infrastructure	Although electricity can be a motor for economic activity, this motor needs a spark - encouragement of economic activity - which has not happened.
	Alignment 9: Macroeconomic stability to encourage domestic savings	The project was funded by a loan that ENEE is not going to be able to repay, which is increasing the national debt burden, something that it does not help attain macroeconomic stability.

Figure 5. Project alignment with the Strategic Plan 2018-2022

Government Strategic Plan 2018-2022	Development Areas (pg. 23) Strategic Objectives (p. 24)	Inclusive and sustainable economic development	The approach to communities selection and engagement proved not inclusive. Unsustainable development is referred to in Alignment 1
		Infrastructure and Logistic Development	The program developed only the necessary infrastructure to grant the electricity lines.
		Governability & Democracy	The project has not promoted inclusiveness and ownership. Besides an application phase, communities were not involved in the process. Decisions were taking using a top-down approach.
		Improve the life condition of poorest populations	Some of the poorest populations couldn't access to the program because of the application & selection process and house conditions requirements
		Reinforce and modernize the productive infrastructure	No steps were taken to encourage productive infrastructure alongside with the provision of electricity
		Implement transversal programs and policies	No synergies were sought with other programs & projects

It is especially important to observe that:

- The Honduran National Plan 2010-2022 establishes that 60% of the electricity production must be based on renewable energy sources in 2022, and 80% in 2038.
- The National Strategy on Climate Change considers the integration of renewable energy into the national grid as a priority for infrastructure investment.
- The Strategic Government Plan aims at improving Honduras competitiveness through investments in clean energy and its integration in the MER.

The ESSE-FN-2008 is based on grid extension, which is not contributing to the renewable, clean energy established goals. Refer to finding #2 Efficiency for a detailed cost-benefit analyses on combining power grid extension, isolated mini-grids and stand-alone systems

4.7.5. Finding #5

The Project is not fully aligned with Finland's development policy and the Sustainable Development Goals (SDG).

To be fair, the Project was designed prior to the development of the SDGs. However, the Project has helped in SDG #3 because it has helped to ensure healthy lives and promote well-being for all at all ages. However, it has not helped in SDG #7 which aims at “Ensuring access to affordable, reliable, sustainable and modern energy for all.” In this regard, the electricity provided by the Project is affordable to the recipient population because it is subsidised, but it is not affordable to the ENEE who is buying electricity expensive and selling it cheap.²⁸ Neither it is reliable and sustainable, as pointed out in Findings #3 and #4 on sustainability, nor it is modern, considering that it is based on technologies that are over a century old. In turn, this does not help to make communities more resilient, as requested by goal #11, or build a resilient infrastructure that fosters innovation as required by goal #9.

Finland's development policy (2016) and development cooperation is: ²⁹

²⁸ This statement has appeared several times in the press such as in <https://www.elheraldo.hn/csp/mediapool/sites/ElHeraldo/Economia/story.csp?>

²⁹ Ministry of Foreign Affairs of Finland. (2016). *Finland's Development Policy* (Vol. 25).

1. "Guided by the 2030 Agenda for Sustainable Development, endorsed within the UN" (pp.8). In this sense, as shown before, the Project was partially aligned with the SDGs.
2. "Shall be based on the national development plans of the developing countries receiving support" (pp.13) As shown in [Finding #4](#), alignment is also partial.
3. "Instead of directing long-term support to the implementation of a specific activity on behalf of the government or authorities of a developing country, the goal must be to strengthen the ability of developing countries to move forward" (pp.14) It was aligned with this statement in the sense that the Project involved FOSODE, but it did not strengthen its ability to move forward.
4. "Finland pursues its development policy in the spirit of transparency" (pp.15). The Project suffered from lack of transparency considering that it mostly benefited a company (New Mark) which, according to FOSODE, was actively involved in the preparation of the proposal, after having already been benefited from previous concessional credits, and which obtained a 65% overhead on a USD 6 million budget without completing the job, and is part owned by the Honorary Consul of Finland in Tegucigalpa (Luis Kafie).^{30 31}
5. "One of its four goals is to increase investments in sustainable energy solutions and the share of renewable energies and decrease the use of fossil fuels" (pp.22). In this sense, almost 60% of the electricity in Honduras is sourced from renewable energy.
6. "Finnish companies are key partners in development cooperation, and they are encouraged to actively engage in the development programmes financed by Finland" (pp.40). ABB Oy was not actively engaged in the Project and far more engagement from Finnish companies would have been achieved had the Project been designed differently.
7. "Corporate social responsibility (CSR) is a Government requirement for all companies in receipt of development cooperation funding" (pp.41). The asymmetrical power relationship explained in [Finding #4](#) of Effectiveness and the request of community members to perform hazardous work without neither being insured nor paid and provide maintenance for free gives a poor standard of CSR.

5 CONCLUSIONS

The limitations of ENEE staff and technicians were obstacles for the optimal implementation of the project. Although there was an Implementation Unit with ENEE staff of adequate technical quality to carry out the work, they could not always attend to the project in the most appropriate way. ENEE staff have multiple tasks assigned and, not infrequently, emergencies to attend or policy directives that become the priority.

The communities received very limited, and in many cases non-existent, information regarding the project and the obligations of the contractor. This resulted in abuses by the contractors and people outside of the project who took advantage of the needs of the residents. They used them, for example as free labour, or requested financial contributions for the project design that in some cases were never implemented.

Participation and alliances with local partners, such as community organisations, local governments NGOs and other development cooperation projects, would have contributed to improving the information flow regarding the details of the project, and avoided the above-mentioned situations.

At present, ENEE has serious difficulties in ensuring reliable power supply, including in the important zones of the country such as the Atlantic Coast, the west and the east.

The activities of the company EEH in relation to the operation and maintenance of the systems is an important issue for improvement. The demands made by the beneficiaries of the project have not been attended with the alacrity that would have been hoped for, and there have been complaints that have taken months to be attended to.

The quality of the installed facilities is acceptable. ENEE has ensured compliance with the construction standards and this has become an important aspect, since this compliance with the standards has ensured the useful life of

³⁰ <https://www.embassypages.com/missions/embassy3876/>

³¹ It is also important to note that Mr Kafie also declined to meet the evaluation team, arguing that "they are not going to be able to continue collaborating with future developments of this type", as stated in an electronic message from Mr Kafie from November 22nd 2019.

the project equipment.

6 RECOMMENDATIONS & LESSONS LEARNT

Recommendation #1

To avoid the possibility of deviating the attention towards indicators that are neither relevant nor a good measure of efficiency and effectiveness, it is recommended to **clearly define indicators during the project appraisal and quantify both baseline and targeted values.**

This recommendation is connected with:

- Finding #2 - Efficiency
- Findings #1, #2, #3 & #5 - Effectiveness

Recommendation #2

To better understand how the project can help improve the set of chosen indicators and attain the targeted values, it is recommended to **prepare a clear hierarchy of objectives.** Again, this is to be done during the project appraisal, by following participatory methods that involve all the different stakeholders.

This recommendation is connected with:

- Finding #3 - Relevance
- Findings #5 & #6 – Impact
- Findings #4 & #5 - Other

Recommendation #3

To consider all the dimensions of sustainability with the aim of increasing aid effectiveness instead of just focusing on the social dimension, it is recommended to **design projects that are also financially and institutionally sustainable.** Technologies for the provision of electricity have advanced to the point that they are cheap enough to be able to accommodate any needs and budget. Limiting the Project to technologies that were invented more than a century ago (i.e. centralised AC power distribution) and supplying the service through existing institutions that have proven to be very inefficient, missed the opportunity to use the project as an opportunity for ENEE to stop doing business as usual and try something else. For example, ENEE could have set up an off-grid division to also provide tiers 2 (stand-alone) and 3 (mini-grids) in conjunction with tier 5 (grid extensions)

This recommendation is connected with:

- Finding #3 – Efficiency
- Finding #7 – Effectiveness
- Findings #6 & #7 – Impact
- Findings #1 & #4 – Sustainability
- Findings #1, #2 & #3 – Coordination, Complementarity, Coherence & Aid Effectiveness
- Findings #4 & #5 – Other

Recommendation #4

To optimise the project's relevance, efficiency and impact while at the same time isolate the project from political interference, it is recommended **ask the counterpart to provide a clear protocol for choosing the communities to be electrified.** The protocol shall be clear before the funding is approved and the need to follow it should be part of the financial agreement.

This recommendation is connected with:

- Finding #2, #3 & #4 - Relevance
- Finding #2 & #3 – Efficiency
- Finding #3 - Effectiveness
- Finding #6 – Impact
- Finding #1 - Coordination, Complementarity, Coherence & Aid Effectiveness

Recommendation #5

To optimise efficiency in the use of labour, avoid potential abuses and exert a greater degree of supervision on the project’s performance, it is recommended to **set up an implementation unit working within the institution receiving the funds (i.e. CABEL) but independently from it**. This unit would work in conjunction with the counterpart (FOSODE/ENEE) in the implementation of the project.

This recommendation is supported by CABEL and FOSODE.

- CABEL considered that this formula is that has worked best for them in other projects.
- FOSODE reckoned that the ideal approach would be a hybrid between the turnkey approach, in which an external contractor performs all the work, and the direct one they are using for installing the remaining USD 8 million in equipment. This is, an approach that involves them more than the turnkey one, while it still supports them through an external executing unit, instead of the direct approach in which they have to do everything.

The recommendation is connected with:

- Findings #1, #3, #4, #5 & #7 - Effectiveness

Recommendation #6

To avoid a situation in which the counterpart (i.e. ENEE) cannot be properly involved because of lack of resources, it is recommended that projects allocate some funding for the counterpart to finance travelling and accommodation.

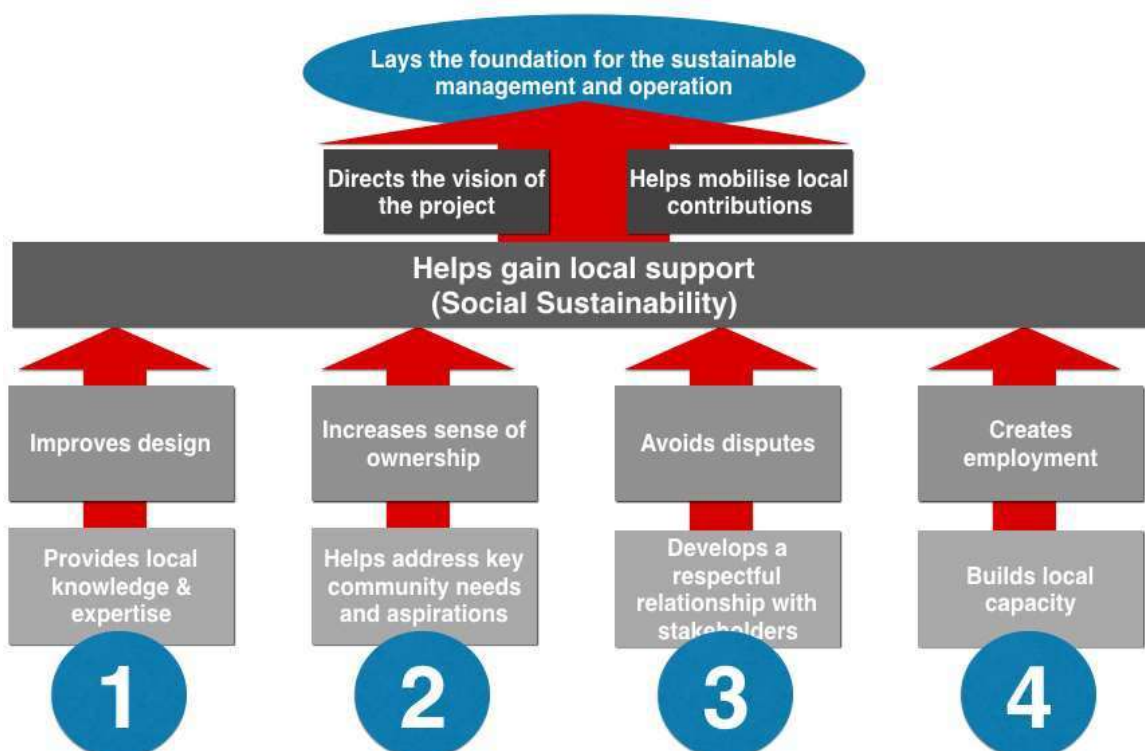
This recommendation is connected with:

- Finding #6 - Effectiveness

Recommendation #7

To better inform recipient communities on the project, help address their needs and aspirations, develop a respectful relationship with them and build the local capacity without profiteering from the villager’s eagerness to receive electricity, it is recommended to **increase their participation by involving communities right from the beginning**. This will also help to establish a direct line of communication between the community and those responsible for implementing the project.

Figure 6. The four benefits of using participatory methods in all the project cycle



Conceived by Marc Torra

For example, FOSODE could start visiting selected communities to provide them with the necessary information the moment the funds are awarded, and they have been selected for electrification. This would require a budget to be made available to finance such effort, as described in Recommendation #5. Once the implementation unit is put in place, they should also start visiting communities long before the installation starts, and be involved with them through the use of participatory methods.

This recommendation is connected with:

- Findings #4 & #5 - Effectiveness
- Finding #4 - Impact

Recommendation #8

The electrification process must comply with strict regulations. The correct supervision of the Project ensures that it will meet the expected quality and duration.

Prior to the completion of the project, it is recommended that the implementer, together with the beneficiaries, carry out the installation process of the electric power service. In this way, it is ensured that all the beneficiaries obtain the service and that all the procedures are carried out by trained personnel who then explain to the users, the rights and obligations when the electric power service is contracted.

The maintenance of the systems is the absolute responsibility of EEH. Unfortunately, this company has shown slowness in the response to user requests, so it is doubtful that in the future this service can improve.

This recommendation is connected with:

- Findings #2, #3, #4 & #5 - Sustainability

Recommendation #9

To optimise synergies with other projects, it is recommended not to implement projects in isolation but as part of a larger effort to electrify rural areas. This includes a need to know what other projects are doing and in particular to partner with livelihood programs that encourage a productive use of electricity that can increase net revenues.

This recommendation is connected with:

- Finding #7 - Effectiveness
- Finding #5 – Impact
- Findings #1 & #2 - Coordination, Complementarity, Coherence & Aid Effectiveness
- Findings #4 & #5 - Other

Recommendation #10

To make sure that projects translate in a broader cooperation between Finland and the recipient country, while also creating stronger synergies with the Finnish for-profit and non-profit sectors, it is recommended to **design projects that involve more Finnish companies and that put the emphasis on those areas in which Finland is a global leader.**

This recommendation is connected with:

- Findings #1, #2 & #3 – Other

ANNEXES

Annex 1: Terms of Reference

Annex 2: Field visits of the evaluation team

Annex 3: Persons - Institutions consulted

Annex 4: Project Analysis - PNES ESSE FN 2008 (MS EXCEL)

Annex 5: Project Quality

Annex 6: Documents consulted

Annex 7: Workplan

Annex 1: Terms of Reference

Terms of Reference

End of Project Evaluation of Concessional Credit Scheme Projects:

Rural Electrification Project II (ESSE-FN-2008) in Honduras.

1. OVERALL BACKGROUND TO THE EVALUATION

The Public Sector Investment Facility (PIF) is one of the Finnish government's financing instruments in the development policy field. Its purpose is to provide financial support to developing countries' public sector investments that are aligned with the UN sustainable development goals (SDGs) and that make use of Finnish technology and know-how. PIF financing is a form of concessional investment credit provided by a financial institution to the target country, which in addition to an interest subsidy element includes other support measures of the Finnish government's development cooperation.

The PIF was launched in December 2016. It was preceded by the Concessional Credit Scheme (CCS) that was discontinued in 2012. The CCS was based on the same legal framework as the PIF and it had similar objectives to the PIF in promoting economic and social development in developing countries by making use of the experience and technology of Finnish companies. However, the scheme was criticized for not focusing sufficiently on achieving development results, which contributed to the decision to discontinue the scheme.

As part of the decision to launch the PIF instruments, steps were taken to ensure a stronger focus on development results. One of these steps is to increase the number of end of project evaluations of PIF and CCS projects. The aim is to generate information on development results and lessons learned from the projects particularly to support programming and management of the PIF financial instrument.

2. BACKGROUND TO THE PROJECT TO BE EVALUATED

The Concessional Credit scheme projects: Rural Electrification Project II, also known as ESSE-FN-2008, was part of the National Social Electrification Programme of the Government of Honduras, aimed at rural and peri-urban and marginal areas. The program has been implemented in several phases, financed partly by national funds, such as the Social Fund of Electric Development (FOSEDE), and external funding.

Rural Electrification Project II was to incorporate 744 communities to the national interconnected system. These were located in 16 provinces in Honduras, and serve about 45.365 new consumers. According to the Project Owner, National Power Company (ENEE), close to 100% of these new consumers will be households. The total population served by the Project was estimated to be 226.825.

The commercial contract, subject to approval by the Finnish authorities, between ENEE and ABB (Finland) was signed 23.9.2010 and the funding decision by the Ministry for Foreign Affairs of Finland (MFA) was signed 28.2.2012. The contract price was 34 092 002 USD and the total Finnish subsidy element to the Project was 20 845 797 USD. The Financing plan indicated that the Nordea Bank (Finland) would formally advance loan of USD 34.092.119, 22 to the Government of Honduras via CABEL. CABEL

was necessary as an intermediary because Honduras is not eligible for concessional financing guarantees by Finnvera. Therefore, CABEL would assume the risk on behalf of the Government of Honduras. Before approving the Project, CABEL carried out a due diligence on the Project.

The project consists of the supply, erection and installation of materials for 34.5 kV and 13,8 kV medium voltage lines to a total length of 1103 km, 240/120 V low voltage lines to a total length of 797 km and the establishment of 1837 transformer stations. The supply or service connection materials, including the kWh-meters, are also included in the Contract with ABB/New Mark, but the installation works for these will be carried out by ENEE. Training to the personnel in charge for operations and maintenance was also included in the project.

Socio-economic benefits: at the time of the project, over half of the Honduran population (54%) lived in rural areas, yet only 45 % of them had access to electricity. According to FOSODE, the objective of the social electrification programme is to reduce rural poverty by improving the equitable, safe and sustainable access to electric energy. Furthermore, the programme aims to alleviate poverty in rural areas by reducing the cost for illumination, by facilitating the creation of jobs and the competitiveness of small enterprises, to increase production, and to improve social conditions. Rural electrification is also expected to contribute to one important objective of the Honduran Poverty Reduction Strategy – to reduce migration. Improving the living conditions through electrification is hoped to reduce immigration both to urban areas as well as to abroad.

3. OBJECTIVES OF THE EVALUATION

The overall objective of the end of project evaluation is to provide an external, independent and objective assessment of the project. The evaluation is expected to enable the MFA to evaluate whether the project was implemented in an appropriate and efficient way, how well it achieved the targets and goals laid out in the project plan, and particularly how sustainable the results of the project are, including any long-term development impacts of the project. The evaluation is expected to provide the MFA with lessons-learned that can be used in further development of the PIF funding instrument. Moreover, the evaluation should take into consideration the evaluation needs of CABEL for possible further financing of Honduran National Social Electrification Programme. The findings of the evaluation could also help in planning a possible future Project (PIF) in Rural Electrification in Honduras. Finally, the evaluation is expected to generate information for the MFA on the development impact of the CCS funded projects and the sustainability of these results.

4. SCOPE AND GENERAL APPROACH OF THE EVALUATION

The evaluation should focus on the project implemented in Honduras as specified in the project document. It should analyze the planning and implementation phases of the project as well as actions taken to ensure sustainability of results after the completion of the project. It should consider actions taken by the project owner and key stakeholders in Honduras, the private sector companies involved in implementing the project in Finland, Honduras and elsewhere and it should consider the support provided by key stakeholders facilitating the CCS-instrument including the MFA.

The project should be analyzed in the context of relevant development strategies of Honduras and the development policy of the Government of Finland particularly in the context of the CCS instrument at the time. Further, particular attention should be paid to gender and social equality, human rights including equal participation of marginalized groups and environmental sustainability. The evaluation should also provide information on outcomes of the project for the ultimate beneficiaries. This could require constructing a results framework ex-post and indicators as the project document does not explicitly provide these. The evaluation should also provide information on how the project contributed

to the longer-term operations of the Finnish company involved in the project in developing country markets.

5. ISSUES TO BE STUDIED

The main issues should be studied against the evaluation criteria below. The evaluation team may also take up other issues.

Relevance

- Was the project relevant to the rural populations that were to benefit from the project?
- Did the project contribute to Honduran development plans and sector strategies? Was the project in line with Finland's development policy objectives and global development goals?

Effectiveness

- To what extent did the project achieve its immediate objective of significantly increasing the number of rural households and communities to be electrified within a short period of time (three years). Was the quality and quantity in accordance with plans?
- What were the key success factors or bottle necks that contributed to the project either achieving or falling short of its objectives? What was the role/contribution of the different actors (project owner, contactor and other stakeholders including the MFA)?

Efficiency

- How efficiently were available resources transformed into intended results in terms of quantity, quality and time? Can the project be deemed to have been good *value for money*?
- What were the key success factors/bottle necks that contributed/constrained implementation (planning, procurement, implementation, risk management, monitoring, follow-up after close of project)? What was the role/contribution of the different actors?

Impact

- How well did the project succeed in achieving its overall objective to improve the quality of life of the beneficiary population, contribute to economic development and support the delivery of public services such as education and health.
- What other noticeable impact did the project have (intended/unintended, positive/negative), particular in terms of human rights, gender equality, inequalities and environmental sustainability?

Sustainability

- How sustainable are the results achieved in the project? Have stakeholders in Honduras taken steps to ensure sustainability e.g. in budgeting or other processes? Are the project results still relevant and are the systems installed/other outputs of the project still in efficient and effective use?

Coordination, complementarity, coherence, aid effectiveness

- How were other programmes and cooperation relevant to the project taken into account?
- How well did the project promote ownership, alignment, harmonization, management for development results and mutual accountability?
- Were there contradictions with other policy areas and how were they handled? How did the project impact debt sustainability in Honduras?

Other

- Did the project open up new business for the Finnish companies in Honduras/developing countries? Was the project part of a strategy by the companies to expand operations in developing countries?

- How did the project contribute more broadly to cooperation and relations between Finland and Honduras? Were there synergies with other Finnish cooperation in the region?
- How was the project viewed by CABEL and did it meet their objectives.

6. METHODOLOGY

The evaluation team is expected to determine the most appropriate methodology to use in the evaluation, particularly taking into account that ex-post there is limited availability of documentation. The team is expected to use multiple methods, both quantitative and qualitative, to ensure best outcome of the evaluation. The work should include a desk review of existing material, possible identification of further relevant material, data analysis of available statistics/indicators, interviews with relevant stakeholders and a field visit. The assignment includes an inception phase, field work and final analysis and reporting phase. The team is also expected to construct ex-post a results framework and to identify/construct indicators to evaluate results. Results should be validated using multiple sources.

The evaluation should be conducted in close cooperation with the MFA. At a minimum, the evaluation team is expected to hold (i) a kick-off meeting to discuss selection of evaluation methodology and detailed work plan; (ii) a meeting prior to the field mission that presents the Inception Report and outline detailed plans for the field visit; (iii) a meeting following the field visit that presents preliminary findings; and (iv) presentation of the final report and recommendations to the MFA. Further, the evaluation team is also expected to be available to participate in a public launch of the report.

7. WORK PLAN

The evaluation should be completed by mid-January 2020 with a public launch of the report tentatively during the last week of January 2020.

The evaluation is divided into three phases. The outputs of the assignment are as follows:

- An Inception Report will be produced within three weeks of the start of the assignment, and before the field visit.
- A first draft of the Final Report will be produced within two weeks of the field visit. The MFA and key stakeholders identified by the MFA will have two weeks in which to comment the draft report.
- The Final Report will be submitted within one week after receiving comments on the first draft by the MFA and other stakeholders. The Final Report will be commented and the final clearance will be provided by the MFA.

The evaluation team is also expected to propose and implement a quality assurance system for the evaluation. The proposal needs to specify the quality assurance process, methodology and tools.

8. EXPERTISE REQUIRED

The team should have expertise related to the substance of the project, including the technology provided; experience in development cooperation and development evaluations relevant to the region; knowledge of the CCS and PIF instrument; expertise in human rights based approach, gender, and environmental assessments.

The service provider is expected to nominate the team in accordance with the Framework Agreement on the supply of the provision of assessment, monitoring and evaluation of Public Sector Investment

Facility (PIF) and Concessional Credit projects financed by the Ministry for Foreign Affairs of Finland (*PIF Framework Agreement*). The team proposed is subject to approval by the Ministry.

9. REPORTING

The team is expected to provide an inception report, a draft final report and a final report as well as a presentation of preliminary findings and a presentation of evaluation findings. Each report is subjected to approval by the MFA. The final report should not exceed 50 pages (plus annexes) with clear findings and conclusions, as well as recommendations and any lessons learned following logically from the findings and conclusions. The Final Report should include an executive summary of two pages. All reports will be submitted to the MFA in English in electronic format.

10. TENTATIVE WORKPLAN

The company shall be responsible for the hiring of the personnel and financial management. The company shall also take the responsibility of adequate backup services to the evaluation team.

11. MANDATE

The evaluation team is expected to and entitled to discuss with relevant parties, government authorities, local authorities, civil society organizations, private sector and individuals relevant to the assignment.

The consultant is not, however, authorized to make any commitments on behalf of the Government of Finland or represent him or herself as representative of the Government of Finland.

The team shall share this TOR and/or the letter of introduction of the assignment with the stakeholders they work with.

The evaluation team is responsible for organizing the meetings and field visit related to the evaluation. The MFA will seek to provide support in arranging meetings particularly at the official level.

Annex 2: Field visits of the evaluation team

FIELD VISITS OF THE EVALUATION TEAM NOVEMBER 2019			
DATE	COMMUNITY	MUNICIPALITY	DEPARTMENT
13 Wed	Caragual, Aldea Marilica	Pespire	Choluteca
13 Wed	San Jorge	Pespire	Choluteca
14 Th	Guayabillas	Valle de Ángeles	Francisco Morazán
14 Th	Guayabillas Sector Jocomico Arrina	Valle de Ángeles	Francisco Morazán
15 Fri	Barrio Purán #3 (Ampliación)	Siguatepeque	Comayagua
15 Fri	San José de Potrerillos	Siguatepeque	Comayagua
16 Sat	Monquecagua Sector # 1	Intibucá	Intibucá
16 Sat	El Tablón	Santa Rosa de Copán	Copán
18 Mon	El Carrizalón	Copán Ruinas	Copán
19 Tue	Brisas del Valle	La Paz	La Paz
19 Tue	Indígena Nueva Generación	La Paz	La Paz
19 Tue	Quilaperque Sector I	La Paz	La Paz
20 Wed	Pepineros 2	Villa de San Antonio	Comayagua
20 Wed	Barrio Primavera, Botijas	Villa de San Antonio	Comayagua

Annex 3: Persons/Institutions consulted in Finland

Persons/Institutions consulted in Finland			
Institution	Name	Position	Date
MFA Finland Unit for Development Finance and Private Sector Cooperation (KEO- 50), Department for Development Policy	Antti Piispanen	Counsellor	11.10.2019
MFA Finland Unit for Development Finance and Private Sector Cooperation (KEO- 50), Department for Development Policy	Hannele Tikkanen	Counsellor	11.10.2019
MFA Finland Unit for Development Finance and Private Sector Cooperation (KEO- 50), Department for Development Policy	Henna-Riikka Pihlapuro	Desk Officer, Concessional Credits	11.10.2019
MFA Finland (KEO-20)	Outi Myatt-Hirvonen	Development Policy Advisor, Environment and Climate Change	31.10.2019
Grid Integration ABB Oy, Finland	Carola Örn	Quality and Continuous Improvement Manager	23.10.2019

Persons/Institutions consulted in Honduras

Persons/Institutions consulted in Honduras			
Institution	Name	Position	Contact
FOSODE	Mario Cardona	Director	mariocardona81@gmail.com
FOSODE	Carmen Rivera		criveram16@gmail.com
FOSODE	José R. Rodríguez	Supervisor	joserodriguezlopez@yahoo.com
ENEE/Transmisión	Fredy Montoya	Unidad Ejecutora	famp_28@hotmail.com
ENEE/Transmisión	Hugo Banegas	Supervisor	Cel. 98702093
ENEE	Milton Espinoza	Digitalization electrical Network	miles.espinoza@gmail.com
ENEE	Rufino Diaz	Digitalization electrical Network	rdiazc@enee.hn
ENEE	Osly Robles	Digitalization electrical Network	osrobles.udr@gmail.com
Secretaría Energía SEN	Sindy Salgado	Directora Nacional Planeamiento Energético	
Secretaría Energía SEN	Miguel Ángel Figueroa	Director General de Electricidad y Mercados	
BCIE/CABEI	Elán Tábora	Ejecutivo de proyectos	etabora@bcie.org
BCIE/CABEI	Gabriela Cerrato	Supervisora	
BID/IADB	Jorge Mercado	Especialista Energía	jorgem@iadb.org
Embajada Japón JICA	Mio Oizumi	Jefa Cooperación	mio.oizumi@mofa.go.jp
JICA	Sandra Rivera	Directora	RiveraSandra.HD@jica.go.jp
GIZ ENDEV	René Benítez	Coordinador Honduras	rene.benitez@giz.com
UNITEC	Hugo Noé Pino	Economista	
UNITEC	Emiliano Paz	Especialista Energía	

Annex 4: Project Analysis - PNES ESSE FN 2008 (MS EXCEL)

**NATIONAL PROGRAM FOR SOCIAL ELECTRIFICATION / PROGRAMA
NACIONAL DE ELECTRIFICACION SOCIAL PHASE ESSE-FN-2008**

COMMUNITIES ELECTRIFIED BY THE CONTRACTOR

Nº	Nombre de Comunidad	Municipio	Departamento	Posición Geográfica	Catalogada Como	Fecha de Recepción	No de Viviendas	Conectado a Circuito No
1	Bo. La Pedrera (Aldea La Union)	El Porvenir	Atlántida	N15° 43.124' W86° 58.059'	Contractual	24/2/2015	19	L-312
2	Bo. Nuevo	El Porvenir	Atlántida	N15° 44.972' W86° 53.610'	Contractual	24/2/2015	22	L-312
3	Col. Gonzalo Rivera S-2	La Ceiba	Atlántida	N15° 45.367' W86° 48.123'	Contractual	24/2/2015	30	L-313
4	Col. Las Palmas	Esparta	Atlántida	N15° 46' 20.46" W87° 15' 34.80"	Contractual	1/9/2014	81	L-312
5	Col. Monte Rico (Caserio Monte Pobre)	El Porvenir	Atlántida	N15° 43.507' W86° 58.083'	Contractual	24/2/2015	31	L-312
6	El Frisco	San Francisco	Atlántida	N15 41.816 W87 05.496	Contractual	27/5/2014	150	L-312
7	El Peru	La Ceiba	Atlántida	N15° 47.081' W86° 43.585'	Contractual	24/2/2015	12	L-330
8	El Verdun	Esparta	Atlántida	N15° 41' 17.34" W87° 11' 47.64"	Contractual	1/9/2014	35	L-312
9	Bo. Los Fuertes	Choluluta	Choluluta	16P 470126,1488697	Contractual	24/9/2014	20	L-366
10	Bo. Nueva Jerusalem	Choluluta	Choluluta	16P478905,1468436	Contractual	20/8/2014	62	L-320
11	Caragual, Aldea Marilica	Pespire	Choluluta	16P-456496;1505562	Contractual	6/8/2014	20	L-369
12	Col. Aldeas Unidas (Aldea El Trapiche)	Choluluta	Choluluta	16P 469006,1488036	Contractual	11/9/2014	105	L-366
13	Col. Telmo Ruiz	Choluluta	Choluluta	16P47912,1467875	Contractual	11/8/2014	89	L-320
14	Col. Villa Hermosa	Namasigue	Choluluta	16P485449,1456492	Contractual	17/10/2014	80	L-360
15	Condega, Aldea Marilica	Pespire	Choluluta	16P-456851;1503464	Contractual	6/8/2014	45	L-369
16	Cuatro Esquina	El Triunfo	Choluluta	16P 320800, 1632200	Contractual	9/12/2014	75	L-360
17	Cumbres De Chorotega	Choluluta	Choluluta	16P483254,1470334	Contractual	12/8/2014	150	L-318
18	El Capulin II	Choluluta	Choluluta	16P 470944,1488744	Contractual	11/9/2014	137	L-366
19	El Chaparral, Aldea Marilica	Pespire	Choluluta	16P-457418;1503048	Contractual	6/8/2014	36	L-369
20	El Hueco, Aldea Marilica	Pespire	Choluluta	16P-456851;1503464	Contractual	6/8/2014	11	L-369
21	El Rincon De La Castaña I	Choluluta	Choluluta	16P 467078,1484909	Contractual	11/9/2014	45	L-366
22	El Rincon De La Castaña II	Choluluta	Choluluta	16P 467018,1487914	Contractual	11/9/2014	25	L-366
23	El Tamarindo	San Isidro	Choluluta	16P-466098,1506413	Contractual	17/10/2014	25	L-369
24	La Fortuna	El Corpus	Choluluta	16P 491650,1466975	Contractual	8/6/2015	30	L-318
25	La Laguna, Aldea Marilica	Pespire	Choluluta	16P-456496;1505562	Contractual	6/8/2014	65	L-369
26	Las Uvas # 1, Aldea Marilica	Pespire	Choluluta	16P-459593;1502153	Contractual	6/8/2014	7	L-369
27	Las Uvas # 2, Aldea Marilica	Pespire	Choluluta	16P-458160;1502131	Contractual	6/8/2014	8	L-369
28	Las Uvas # 3, Aldea Marilica	Pespire	Choluluta	16P-457962;1502505	Contractual	6/8/2014	10	L-369
29	Los Hatillos I	Choluluta	Choluluta	16P 467078,1484909	Contractual	11/9/2014	0	L-366
30	Los Hatillos II	Choluluta	Choluluta	16P 466101,1482419	Contractual	11/9/2014	0	L-366
31	Los Plancitos, Aldea Marilica	Pespire	Choluluta	16P-458607;1504488	Contractual	6/8/2014	9	L-369
32	Trapiche Centro	Choluluta	Choluluta	16P 470126, 1488697	Contractual	11/9/2014	80	L-366
33	Zapote Centro (Amp.)	Choluluta	Choluluta	16P 476851, 1478890	Contractual	23/2/2015	13	L-366
34	Brasilar Concepción	Pespire	Choluluta	16P 456560, 1510373	Sustituta	18/2/2015	14	L-369
35	Carurin	San Marcos de Colon	Choluluta	16P 1485792,521100	Sustituta	4/11/2014	55	L-318
36	Centro, La Albarrada	El Corpus	Choluluta	16P 502174,1481012	Sustituta	5/8/2015	11	L-318
37	Dos Quebradas	El Triunfo	Choluluta	16P 499705, 1442766	Sustituta	9/12/2014	22	L-360
38	El Anillo	Choluluta	Choluluta	16P 466395,1459506	Sustituta	2/11/2015	14	L-358
39	El Cerro de San Martin	Choluluta	Choluluta	16P 470369,1481803	Sustituta	30/6/2015	46	L-366
40	El Chaguiton	San Marcos de Colon	Choluluta	16P 1485627,520374	Sustituta	4/11/2014	75	L-318
41	El Cimarro, Fray Lazaro	Choluluta	Choluluta	16P 1632200, 320800	Sustituta	23/2/2015	20	L-366
42	El Lajero, La Albarrada	El Corpus	Choluluta	16P 502613,1479130	Sustituta	5/8/2015	17	L-318
43	El Rodeo	Pespire	Choluluta	16P469210,1498623	Sustituta	17/3/2015	43	L-369
44	El Terrero, La Albarrada	El Corpus	Choluluta	16P 501503,1480391	Sustituta	5/8/2015	17	L-318
45	El Tulito	Choluluta	Choluluta	16P 469011, 1457556	Sustituta	11/2/2015	93	L-358
46	Guanacaste Abajo	Concepción de María	Choluluta	16P500831,1465327	Sustituta	22/9/2015	78	L-318
47	La Laguna, La Albarrada	El Corpus	Choluluta	16P 502671,1480381	Sustituta	5/8/2015	15	L-318
48	La Palmas	Pespire	Choluluta	16P46495,1501630	Sustituta	13/8/2015	113	L-369
49	La Peña, La Albarrada	El Corpus	Choluluta	16P 503034,1480831	Sustituta	5/8/2015	20	L-318
50	La Rinconada, Fray Lazaro	Choluluta	Choluluta	16P 1632200, 320800	Sustituta	20/2/2015	19	L-366
51	Los Chorros	El Triunfo	Choluluta	16P 494928, 1449424	Sustituta	18/2/2015	139	L-360
52	Los Mangos de San Martin	Choluluta	Choluluta	16P 467603,1483320	Sustituta	30/6/2015	62	L-366
53	Los Mangos, Fray Lazaro	Choluluta	Choluluta	16P 1478265, 470425	Sustituta	20/2/2015	23	L-366
54	Los Ranchos	Pespire	Choluluta	16P 470689, 1498336	Sustituta	17/6/2015	46	L-369
55	Nueva Esperanza, Tablones Abajo	Santa Ana de Yusguare	Choluluta	16P489686,1467457	Sustituta	31/8/2015	22	L-318
56	Papalon	Pespire	Choluluta	16 P470790, 1498021	Sustituta	17/6/2015	42	L-369
57	Planteles de San Martin	Choluluta	Choluluta	16P 469997,1483245	Sustituta	30/6/2015	100	L-366
58	Planteles de San Martin, Sector Las Guayabillas	Choluluta	Choluluta	16P 469562, 1484215	Sustituta	2/11/2015	12	L-366
59	Planteles de San Martin, Sector Los Ranchos	Choluluta	Choluluta	16P 470303,1483808	Sustituta	2/11/2015	13	L-366
60	Potrerrillo, La Albarrada	El Corpus	Choluluta	16P 502212,1480120	Sustituta	5/8/2015	18	L-318
61	San Jorge	Pespire	Choluluta	16P 467795,1504087	Sustituta	19/11/2014	68	L-369
62	San José de La Peña, La Albarrada	El Corpus	Choluluta	16P 503004,1481264	Sustituta	5/8/2015	41	L-318
63	San Martin Centro	Choluluta	Choluluta	16P-471038,1483233	Sustituta	30/6/2015	143	L-366
64	Tierra Colorada	El Triunfo	Choluluta	16P 494799,1450060	Sustituta	10/12/2014	69	L-360

65	Bo. La Perra (Aldea Isletas)	Sonaguera	Colón	N 15 36.223 W86 10.413	Contractual	4/5/2015	7	L-347
66	Bo. Las Champas	Bonito Oriental	Colón	16P 634687 1742816	Contractual	4/5/2015	20	L-350
67	Castaños Sector Solares Nuevos	Bonito Oriental	Colón	16P 629266 1744066	Contractual	8/6/2015	60	L-350
68	Col. 11 de Diciembre, ilanga	Trujillo	Colón	N 15 42.065 W 86 05.543	Contractual	6/8/2014	8	L-347
69	Col. El Castaño	Bonito Oriental	Colón	N 15 46.385 W 85 47.381	Contractual	4/5/2015	60	L-350
70	Col. La Nueva Santa Rosa de Aguan, + conversión de L. T. 1 a 3 fases y la SE 34,5 Kv a 1	Santa Rosa de Aguán	Colón	N 15°55.9' W 085°39.9'	Contractual	16/2/2016	627	L-350
71	El Chichiguite	Trujillo	Colón	N 15 41.733 W 86 08.823	Contractual	13/8/2014	200	L-347
72	El Cuarentacino (Aldea Abisinia)	Tocoa	Colón	N15° 37.483' W85° 51.591'	Contractual	27/3/2015	25	32L51
73	Punta De Rieles	Trujillo	Colón	N 15 40. 622 W 86 07.456	Contractual	6/8/2014	25	L-347
74	Barrio El Pedregal	Siguetepeque	Comayagua	N14 36.900 W87 49.180	Contractual	15/10/2015	42	L-706
75	Barrio Puran #3 (Ampliacion)	Siguetepeque	Comayagua	N 14 36,456 W 87 52.275	Contractual	27/10/2015	18	L-373
76	Bo. Plan Del Zapote	Siguetepeque	Comayagua	N14 36.463 W87 49.278	Contractual	15/10/2015	37	L-706
77	Col. Buenos Aires	Comayagua	Comayagua	16 P 428889 1604130	Contractual	4/11/2015	34	L-316
78	Pepineros 2	Villa de San Antonio	Comayagua	N 14° 15'53.79 W87°35'55.12	Contractual	15/10/2015	19	L-317
79	Terreritos De Tiniagua	La Libertad	Comayagua	N14 58.535 W87 38.194	Contractual	11/7/2016	87	L-316
80	Barrio Arriba de Taupaz	Siguetepeque	Comayagua	N14 40.800 W87 47.856	Sustituta	4/11/2015	17	L-326
81	Barrio Cabañas	Siguetepeque	Comayagua	N14 35.580 W87 49.159	Sustituta	16/2/2016	39	L-373
82	Barrio Guamilito, Botijas	Villa de San Antonio	Comayagua	N14 21.850 W87 24.761	Sustituta	12/5/2016	17	L-333
83	Barrio La Torre, Aguas del Padre	Siguetepeque	Comayagua	N14 37.862 W87 53.786	Sustituta	4/11/2015	32	L-326
84	Barrio Las Colinas	Siguetepeque	Comayagua	N14 36.815 W87 49.427	Sustituta	15/12/2015	45	L-373
85	Barrio Las Flores Sector Kinder	Siguetepeque	Comayagua	N14 37.474 W87 51.649	Sustituta	15/12/2015	19	L-373
86	Barrio Las Flores Sector Los Ramos, Aldea Las Crucitas	Siguetepeque	Comayagua	N14 37.831 W87 51.907	Sustituta	16/2/2016	25	L-373
87	Barrio Las Glorias	Siguetepeque	Comayagua	N14 35.791 W87 48.068	Sustituta	15/12/2015	34	L-373
88	Barrio Los 3 Pasos No 2 sector 1	Siguetepeque	Comayagua	N14 36.402 W87 48.861	Sustituta	4/12/2015	17	L-373
89	Barrio Los 3 Pasos No 2 Sector 2	Siguetepeque	Comayagua	N14 36.531 W87 49.498	Sustituta	4/12/2015	17	L-316
90	Barrio Los 3 Pasos No 2 Sector Las Casitas	Siguetepeque	Comayagua	N14 36.690 W87 48.797	Sustituta	4/12/2015	15	L-374
91	Barrio Primavera, Botijas	Villa de San Antonio	Comayagua	N14 21.252 W87 25.071	Sustituta	12/5/2016	32	L-333
92	Bº La Parcela, Cablotes	La Libertad	Comayagua	16 P 429103 1652443	Sustituta	6/7/2016	6	L-336
93	Bº Las Flores, Cablotes	La Libertad	Comayagua	16 P 429736 1652634	Sustituta	6/7/2016	12	L-316
94	Bº Los Cañones, Cablotes	La Libertad	Comayagua	16 P 429398 1651688	Sustituta	6/7/2016	16	L-316
95	Bº Los Oviedo, Cablotes	La Libertad	Comayagua	16 P 429162 1653247	Sustituta	6/7/2016	10	L-316
96	Bº Primavera Sector El Cementerio, Botijas	Villa de San Antonio	Comayagua	N14 21.632 W87 24.851	Sustituta	12/5/2016	24	L-333
97	Bº Quebrada Honda, San Miguel de Selguapa	Comayagua	Comayagua	16 P 411713 1594607	Sustituta	4/5/2016	13	L-316
98	Cablotes Centro	La Libertad	Comayagua	16 P 433398 1651988	Sustituta	6/7/2016	22	L-316
99	Casa de Piedra	La Libertad	Comayagua	16P 432354,1653299	Sustituta	17/11/2015	48	L-316
100	Chaguite	Siguetepeque	Comayagua	N14 37.683 W87 49.999	Sustituta	4/11/2015	9	L-326
101	Chaguiton	La Libertad	Comayagua	16 P 432701 1652070	Sustituta	6/7/2016	18	L-316
102	Colonia Altos de Fatima	Siguetepeque	Comayagua	N14 36.531 W87 49.498	Sustituta	15/12/2015	116	L-373
103	El Caliche	Siguetepeque	Comayagua	N14 43.428 W87 48.889	Sustituta	15/12/2015	34	L-373
104	El Injerto	Comayagua	Comayagua	16 P 414316 1593198	Sustituta	4/5/2016	67	L-316
105	El Injerto Arriba	Comayagua	Comayagua	16 P 414166 1592963	Sustituta	4/5/2016	16	L-316
106	El Turco	La Libertad	Comayagua	16P 432354,1653299	Sustituta	17/11/2015	16	L-316
107	La Union de Bella Vista	Siguetepeque	Comayagua	N14 45.200 W87 55.133	Sustituta	4/11/2015	19	L-326
108	Los Lirios	Comayagua	Comayagua	16 P 414561 1595569	Sustituta	4/5/2016	18	L-316
109	Montañuelas	Comayagua	Comayagua	16 P 412440 1599742	Sustituta	4/5/2016	17	L-316
110	Montañuelas Sector Brisas del Bosque	Comayagua	Comayagua	16 P 415026 1599725	Sustituta	4/5/2016	18	L-316
111	Monte Fresco, El Rincon	Siguetepeque	Comayagua	N14 33.943 W87 55.495	Sustituta	15/6/2016	6	L-374
112	Playitas	Comayagua	Comayagua	16 P 412868 1594800	Sustituta	4/5/2016	18	L-316
113	Playitas Sector Plan del Cerron	Comayagua	Comayagua	16 P 413490 1595408	Sustituta	4/5/2016	6	L-316
114	San Jose de Potrerillos	Siguetepeque	Comayagua	N14 32.473 W87 53.021	Sustituta	15/12/2015	26	L-374
115	San Juan, Terreritos De Tiniagua	La Libertad	Comayagua	N14 57.461 W87 37.211	Sustituta	6/7/2016	8	L-316
116	San Miguel de Selguapa No 1	Comayagua	Comayagua	16 P 410996 1594945	Sustituta	4/5/2016	12	L-316
117	San Miguel de Selguapa No 2	Comayagua	Comayagua	16 P 410697 1594806	Sustituta	4/5/2016	86	L-316
118	Vallecitos	La Libertad	Comayagua	16 P 431065 1651678	Sustituta	6/7/2016	22	L-316
119	Villa Alicia	Siguetepeque	Comayagua	N14 36.773 W87 54.239	Sustituta	15/12/2015	14	L-374
120	Col. Buenos Aires (Amp.)	Nueva Arcadia	Copán	16P 319026 1669435	Contractual	27/7/2015	40	L-357
121	El Amate	Copán Ruinas	Copán	16P 273759 1658400	Contractual	27/7/2015	44	L-357
122	Las Cruces	Nueva Arcadia	Copán	16P 319397 1664414	Contractual	27/7/2015	41	L-357
123	Agua Buena	Copán Ruinas	Copán	16P 269856 1660251	Sustituta	28/3/2016	19	L-357
124	Agua Buena Sector Las Brisas	Copán Ruinas	Copán	16P 266721 1660314	Sustituta	28/3/2016	50	L-357
125	Agua Buena, Sector El Pinalito	Copán Ruinas	Copán	16P 269856 1660251	Sustituta	28/3/2016	43	L-357
126	Barrio El Centro	San Jeronimo	Copán	16P 296604 1656564	Sustituta	4/5/2015	10	L-357
127	Barrio Los Cocos (Aldea El Tesoro)	Florida	Copán	16P 313004 1685172	Sustituta	4/5/2015	10	L-357
128	Barrio San Francisco, Mirasolito	Cabañas	Copán	16P 276275 1635733	Sustituta	14/12/2015	22	L-357
129	Barrio San Miguel, Mirasolito	Cabañas	Copán	16P 275705 1635793	Sustituta	14/12/2015	15	L-357
130	Corozal	Florida	Copán	16P 316073 1682917	Sustituta	4/5/2015	29	L-357
131	El Carrizal	Santa Rosa de Copán	Copán	16P 305928 1632425	Sustituta	9/3/2015	12	L32-337
132	El Carrizalon	Copán Ruinas	Copán	16P 263309 1641923	Sustituta	14/12/2015	136	L-357

133	El Coyal (Aldea El Tesoro)	Florida	Copán	16P 313199 1685505	Sustituta	4/5/2015	22	L-357
134	El Eden	Santa Rita	Copán	16P 279568 1653316	Sustituta	28/3/2016	23	L-357
135	El Jardín	Florida	Copán	16P 303663 1685487	Sustituta	4/5/2015	84	L-357
136	El Tablon	Santa Rosa de Copán	Copán	16P 314141 1628532	Sustituta	9/3/2015	50	L32-337
137	Guachipilín	Santa Rosa de Copán	Copán	16P 313289 1628958	Sustituta	9/3/2015	45	L32-337
138	La Sabaneta	San Jeronimo	Copán	16P 296588 1655631	Sustituta	4/5/2015	5	L-357
139	Las Brisas	Florida	Copán	16P 315279 1680195	Sustituta	4/5/2015	21	L-357
140	Las Cureñas Sector 2	Cucuyagua	Copán	16P 301650 1620291	Sustituta	9/3/2015	5	L32-339
141	Los Dubones	Florida	Copán	16P 309363 1679405	Sustituta	4/5/2015	27	L-357
142	Mirasolito	Cabañas	Copán	16P 276662 1635219	Sustituta	14/12/2015	20	L-357
143	Col. Callejas Maradiaga	Potreriillos	Cortés	N15° 14.234' W87° 57.910'	Contractual	23/6/2015	250	L-323
144	Col. Las Colinas (II Etapa)	Choloma	Cortés	N15° 34.550' W87° 56.235'	Contractual	27/3/2015	210	L-236
145	Col. Los Pinos Etapa I 1/2	San Pedro Sula	Cortés	N15° 35.048' W87° 59.505'	Contractual	23/6/2015	95	L-281
146	Col. San Pablo II Etapa	Potreriillos	Cortés	N15° 14.030' W87° 58.087'	Contractual	23/6/2015	174	L-323
147	Col. Villas De Cofradia (Sector San Jorge Banco No II)	San Pedro Sula	Cortés	N15 24.612 W88 06.484	Contractual	4/12/2015	102	L-365
148	Bº El Campo, Aldea Subirana del Olivar	Santa Cruz de Yojoa	Cortés	N15° 9' 29.8569" W87° 52' 7.73712"	Sustituta	26/2/2015	14	L-319
149	Bº La Victoria, Cerro Bonito	Santa Cruz de Yojoa	Cortés	87°51' 54.7006" W 14°54' 57.0273"N	Sustituta	23/10/2014	27	L-389
150	Cooperativa Las Cabañas San Isidro	Santa Cruz de Yojoa	Cortés	N14° 56.857' W87° 53.785'	Sustituta	26/2/2015	25	L-389
151	El Campanario	Santa Cruz de Yojoa	Cortés	N14° 55.904' W87° 58.627'	Sustituta	21/11/2014	35	L-301
152	El Ocotal	Santa Cruz de Yojoa	Cortés	87°45.388' W 15°01.243' N	Sustituta	17/3/2015	40	L-370
153	La Fe	Santa Cruz de Yojoa	Cortés	88°2' 59.2712" W 14°59' 26.6025"N	Sustituta	23/6/2015	12	L-301
154	La Peñita, Monte Verde	Santa Cruz de Yojoa	Cortés	N14° 51.417' W87° 56.965'	Sustituta	21/11/2014	6	L-301
155	La Unión, Caserío La Sabillon	San Francisco De Yojoa	Cortés	15°1'48.0875"N 87°56'36.1911"W	Sustituta	21/11/2014	35	L-303
156	Las Lomitas	Santa Cruz de Yojoa	Cortés	87°57' 59.2112" W 14°58' 14.1529"N	Sustituta	23/10/2014	66	L-301
157	Los Planes	Santa Cruz de Yojoa	Cortés	87° 47' 51.7013"W 15° 0' 54.3463"N	Sustituta	18/12/2014	28	L-370
158	Pueblo Quemado	Santa Cruz de Yojoa	Cortés	87°54' 24.9663"W 14°59' 2.58009"N	Sustituta	23/10/2014	65	L-389
159	San José de Balincito	Santa Cruz de Yojoa	Cortés	87°56' 15.8599"W 14°57' 2.40102"N	Sustituta	23/10/2014	10	L-389
160	Agua Viva, El Teñidero	Yuscarán	El Paraiso	16P 579463, 1557627	Contractual	13/8/2015	58	L-389
161	Bo Las Brisas (Aldea El Zapotillo)	Danlí	El Paraiso	16P 570681, 1551670	Contractual	18/12/2014	11	L-388
162	Bo Nuevo Porvenir (Aldea El Zapotillo)	Danlí	El Paraiso	16P 570525, 1552893	Contractual	18/12/2014	12	L-388
163	Bo. Altamira	Danlí	El Paraiso	16P 548129, 1533498	Contractual	11/2/2015	20	L-389
164	Bo. El Divisadero Norte (Aldea Ojo De Agua)	Yuscarán	El Paraiso	16P 513929, 1553733	Contractual	24/8/2015	71	L-385
165	Bo. Villa Adela (Aldea El Benque)	Danlí	El Paraiso	N 14º, 02.662', W86º 26.117"	Contractual	26/6/2014	12	L-363
166	Campamento	Danlí	El Paraiso	16P 579213, 1557540	Contractual	11/3/2015	15	L-388
167	Col. Cesar Carcamo	Danlí	El Paraiso	16P 567083, 1558945	Contractual	11/2/2015	40	L-388
168	Col. Chirinas	Danlí	El Paraiso	16P 565326, 1550394	Contractual	11/2/2015	28	L-388
169	Col. Las Acacias (3ra Etapa)	Danlí	El Paraiso	16P 547808, 1553848	Contractual	11/2/2015	66	L-388
170	El Cordoncillo	Yuscarán	El Paraiso	N 13º 58,929 W 086, 52.707	Contractual	22/12/2014	175	L-384
171	El Guanacaste (Aldea San Diego)(Benque)	Danlí	El Paraiso	16P 560674, 1552584	Contractual	26/6/2014	12	L-363
172	El Ocotal	Yuscarán	El Paraiso	16P 512634, 1544040	Contractual	20/3/2015	174	L-385
173	Guanacastito, El Teñidero	Yuscarán	El Paraiso	16P 579463, 1557627	Contractual	13/8/2015	10	L-389
174	Las Crucitas	Yuscarán	El Paraiso	16P 526765, 1540734	Contractual	24/8/2015	184	L-389
175	Las Crucitas sector Los Planes	Yuscarán	El Paraiso	16P 525170, 1539856	Contractual	24/8/2015	16	L-389
176	Las Lomitas	Danlí	El Paraiso	16P 568857, 1543045	Contractual	11/2/2015	21	L-388
177	Rio de Casas, El Teñidero	Yuscarán	El Paraiso	16P 579463, 1557627	Contractual	13/8/2015	34	L-389
178	Sarzales	Yuscarán	El Paraiso	N 13 58,271, W 86,014	Contractual	20/3/2015	94	L-385
179	Siaguapate	Danlí	El Paraiso	N14° 01,234' W86° 24,610'	Contractual	9/6/2014	26	L-363
180	Teñideros	Yuscarán	El Paraiso	16P 579463, 1557627	Contractual	13/8/2015	65	L-389
181	El Zapote	Teupasenti	El Paraiso	16P 529518 1567026	Sustituta	25/11/2015	32	L-387
182	Agua Bendita, La Cienega	Yuscarán	El Paraiso	16P 516437, 1540260	Sustituta	17/7/2015	16	L-385
183	Carrizal	Teupasenti	El Paraiso	16P 530402 1567199	Sustituta	25/11/2015	34	L-387
184	El Aceituno, La Cienega	Yuscarán	El Paraiso	16P 516955, 1540039	Sustituta	17/7/2015	20	L-385
185	El Carrizo, Valparaiso	Teupasenti	El Paraiso	16P 552785 1582044	Sustituta	10/12/2015	47	L-387
186	El Chaguite de Oriente	Yuscarán	El Paraiso	16P 521572, 1546347	Sustituta	21/7/2015	67	L-389
187	El Chaguite de Oriente Sector La Rinconada	Yuscarán	El Paraiso	16P 521572, 1546347	Sustituta	21/7/2015	12	L-389
188	El Panal	Teupasenti	El Paraiso	16P 529138, 1566629	Sustituta	25/11/2015	24	L-387
189	El Pericon, La Cienega	Yuscarán	El Paraiso	16P 516484, 1526963	Sustituta	17/7/2015	39	L-385
190	Escobas Amarillas	Teupasenti	El Paraiso	16P 532495 1571471	Sustituta	26/11/2015	67	L-387
191	Guanijiquil, La Cienega	Yuscarán	El Paraiso	16P 517527, 1537085	Sustituta	21/7/2015	9	L-385
192	La Cienega	Yuscarán	El Paraiso	16 P 515711 1535076	Sustituta	21/7/2015	148	L-385
193	La Estancia	Teupasenti	El Paraiso	16P 532588 1571441	Sustituta	26/11/2015	18	L-387
194	La Toyosa (San Isidro)	Teupasenti	El Paraiso	16P 533677 1580870	Sustituta	3/12/2015	21	L-387
195	La Union	Teupasenti	El Paraiso	16P 533413 1583282	Sustituta	3/12/2015	82	L-387
196	Las Cortinas	Teupasenti	El Paraiso	16P 534671, 1579593	Sustituta	26/11/2015	37	L-387
197	Las Cortinas Sector El Roble	Teupasenti	El Paraiso	16P 536303, 1580215	Sustituta	26/11/2015	14	L-387
198	Las Cortinas Sector Los Salgado	Teupasenti	El Paraiso	16P 535185, 1580102	Sustituta	26/11/2015	8	L-387
199	Las Cortinas Sector San Rafael	Teupasenti	El Paraiso	16P 535272, 1579705	Sustituta	26/11/2015	34	L-387
200	Los Arenales, El Zapote	Teupasenti	El Paraiso	16P 529995 1567420	Sustituta	25/11/2015	22	L-387

201	Los Vallecillos, El Panal	Teupasenti	El Paraiso	16P 529526 1566524	Sustituta	25/11/2015	11	L-387
202	Sabana Redonda, La Cienega	Yuscarán	El Paraiso	556177, 1537341	Sustituta	21/7/2015	11	L-385
203	San Isidro	Teupasenti	El Paraiso	16P 534531, 1579387	Sustituta	3/12/2015	78	L-387
204	Valparaiso	Teupasenti	El Paraiso	16P 553742 1582153	Sustituta	10/12/2015	44	L-387
205	Agua Blanca, II Etapa	Talanga	Francisco Morazán	16P 487858, 1592670	Contractual	4/5/2016	11	L-306
206	Chinacla	Valle de Angeles	Francisco Morazán	16P 496988, 1567857	Contractual	23/6/2015	21	L-258
207	Chirinos	Cedros	Francisco Morazán	16P 470176, 1702477	Contractual	26/6/2014	56	L-378
208	Colonia Brisas del Mogote	Distrito Central	Francisco Morazán	16P 472646, 1556428	Contractual	17/6/2015	45	L-227
209	Colonia Villanueva sector 7B	Distrito Central	Francisco Morazán	16P 483314, 1553731	Contractual	26/6/2015	37	L-251
210	Corralitos	Talanga	Francisco Morazán	16P-510093, 1593617	Contractual	6/7/2015	134	L-378
211	El Achioté	Maraita	Francisco Morazán	16P 493987, 1540349	Contractual	10/12/2014	59	L-383
212	El Achioté (Sector Agua Tibia)	Maraita	Francisco Morazán	16P 494384, 1541228	Contractual	10/12/2014	6	L-383
213	El Carbonal	Ojojona	Francisco Morazán	19P467999,1539052	Contractual	17/4/2015	33	L-307
214	El Guayabo	Valle de Angeles	Francisco Morazán	N14°09.028' W86° 59.663'	Contractual	7/4/2016	32	L-306
215	El Hato Viejo	Talanga	Francisco Morazán	16P 500891, 1595550	Contractual	4/5/2016	8	L-306
216	El Limon	San Antonio de Oriente	Francisco Morazán	16P 507060, 1546459	Contractual	18/12/2015	53	L-385
217	El Limon Sector Agua Zarca	San Antonio de Oriente	Francisco Morazán	16P 507106, 1546755	Contractual	18/12/2015	18	L-385
218	El Limon Sector El Horno	San Antonio de Oriente	Francisco Morazán	16P 506754, 1546459	Contractual	18/12/2015	18	L-385
219	El Matasano	Ojojona	Francisco Morazán	19P467537,1538636	Contractual	17/4/2015	34	L-307
220	El Rodeo Grande	Maraita	Francisco Morazán	16P 492057, 1538570	Contractual	1/12/2014	16	L-383
221	Extension Circuito L-383 a Casco Urbano de Nueva Armenia	Nueva Armenia	Francisco Morazán	N13°48.150' W87° 08.857"	Contractual	22/7/2016	0	L-383
222	Guayabillas	Valle de Angeles	Francisco Morazán	N14°08.709' W86° 58.794'	Contractual	7/4/2016	26	L-306
223	Guayabillas Sector Guanacaste Abajo	Valle de Angeles	Francisco Morazán	N14°08.020' W86° 58.790'	Contractual	7/4/2016	20	L-306
224	Guayabillas Sector Guanacaste Arriba	Valle de Angeles	Francisco Morazán	N14°07.803' W86° 58.605'	Contractual	7/4/2016	21	L-306
225	Jicaro de Oregano	Sabanagrande	Francisco Morazán	16P466166,1527580	Contractual	4/5/2015	22	L-307
226	Jicaro Grande	Maraita	Francisco Morazán	N 13,54,46.1" W 87,05,16.8"	Contractual	6/11/2014	62	L-383
227	Jinguare	Ojojona	Francisco Morazán	16P470908,1544468	Contractual	17/4/2015	30	L-307
228	La Cañada	Talanga	Francisco Morazán	16P 477580, 1581672	Contractual	17/4/2015	24	L-378
229	La Cañada (Km 32)	Talanga	Francisco Morazán	N 14 18,611, W 87 11.845	Contractual	17/4/2015	28	L-378
230	La Cienega	San Antonio de Oriente	Francisco Morazán	16P 496795, 1556260	Contractual	14/4/2015	98	L-383
231	La Cienega Sector La Gruta	San Antonio de Oriente	Francisco Morazán	N 14 03.649, W 87 01.195	Contractual	14/4/2015	10	L-383
232	La Cienega Sector Las Mesas	San Antonio de Oriente	Francisco Morazán	N 14 03.886, W 87 01,967	Contractual	14/4/2015	18	L-383
233	La Cienega Sector Los Potreros	San Antonio de Oriente	Francisco Morazán	N14 04.805, W87 00.686	Contractual	14/4/2015	62	L-383
234	La Cienega, Sector Agua Blanca	San Antonio de Oriente	Francisco Morazán	N 03.598, W 87 00.793	Contractual	14/4/2015	22	L-383
235	La Cienega, Sector El Tablon	San Antonio de Oriente	Francisco Morazán	N 14 00.072, W 87 01,744	Contractual	14/4/2015	41	L-383
236	La Cuesta y La Chorrera	Talanga	Francisco Morazán	16P 481013, 1590527	Contractual	11/8/2014	105	L-378
237	La Fuente II Etapa	Distrito Central	Francisco Morazán	16P 473665, 1557224	Contractual	13/8/2015	248	L-227
238	Las Agujas	San Antonio de Oriente	Francisco Morazán	16P 501163, 1543099	Contractual	17/4/2015	62	L-384
239	Los Izotes II Sector La Calabacera (Aldea La Esperanza)	Talanga	Francisco Morazán	16P 507633, 1594067	Contractual	29/5/2015	12	L-378
240	Los Izotes Sector I (Aldea La Esperanza)	Talanga	Francisco Morazán	16P 505470, 1593461	Contractual	29/5/2015	14	L-378
241	Los Izotes Sector II (Aldea La Esperanza)	Talanga	Francisco Morazán	16P 507633, 1594067	Contractual	29/5/2015	48	L-378
242	Nueva Aldea Sector 2	Distrito Central	Francisco Morazán	16P 471075, 1556102	Contractual	17/3/2016	19	L-298
243	San Lorenzo Arriba	Maraita	Francisco Morazán	16P 491396, 1536198	Contractual	12/11/2014	8	L-383
244	San Marcos	Curaren	Francisco Morazán	16P-0436515, 1522181	Contractual	16/6/2014	110	L-368
245	San Rafael y Las Colmenas	Maraita	Francisco Morazán	N 13°54'13.1" W087°05'16.8"	Contractual	23/10/2014	35	L-385
246	Santa Ines	San Antonio de Oriente	Francisco Morazán	N 13º 58 7.33 W 86 58 2.08	Contractual	17/4/2015	29	L-384
247	Santa Ines Sector Santa Rosa	San Antonio de Oriente	Francisco Morazán	N 13º 58 7.33 W 86 58 2.08	Contractual	17/4/2015	24	L-384
248	Tabla Grande	San Antonio de Oriente	Francisco Morazán	16P 507827, 1547262	Contractual	18/12/2015	27	L-385
249	Tabla Grande Sector El Calvario	San Antonio de Oriente	Francisco Morazán	16P 507687, 1547569	Contractual	18/12/2015	19	L-385
250	Tabla Grande Sector El Cipres	San Antonio de Oriente	Francisco Morazán	16P 508114, 1546993	Contractual	18/12/2015	13	L-385
251	Tabla Grande Sector La Lajita	San Antonio de Oriente	Francisco Morazán	16P 507388, 1547657	Contractual	18/12/2015	27	L-385
252	Tabla Grande Sector La Montañita	San Antonio de Oriente	Francisco Morazán	16P 508438, 1547053	Contractual	18/12/2015	38	L-385
253	Tabla Grande Sector Monte Oscuro	San Antonio de Oriente	Francisco Morazán	16P 507176, 1547475	Contractual	18/12/2015	12	L-385
254	Terrero Blanco	Maraita	Francisco Morazán	16P 492159, 1540251	Contractual	17/11/2014	117	L-383
255	Agua Fria Sector 1	San Juan de Flores	Francisco Morazán	16P 513350, 1588558	Sustituta	25/9/2015	19	L-306
256	Agua Fria Sector 2	San Juan de Flores	Francisco Morazán	16P 511303, 1589108	Sustituta	25/9/2015	14	L306
257	Bañaderos, Agua Fria	San Juan de Flores	Francisco Morazán	16P 513237, 1587776	Sustituta	25/9/2015	41	L-306
258	Cabos de Hacha Sector Las Arenas	Lepaterique	Francisco Morazán	16P 458076, 1558040	Sustituta	17/3/2016	9	L-298
259	Cabos de Hacha Sector Las Flores	Lepaterique	Francisco Morazán	16P 458158, 1558513	Sustituta	17/3/2016	8	L-298
260	Cabos de Hacha Sector Los Limones	Lepaterique	Francisco Morazán	16P 457888, 1557679	Sustituta	17/3/2016	5	L-298
261	Casa Quemada	Distrito Central	Francisco Morazán	16P 480987, 1569570	Sustituta	17/3/2016	15	L-306
262	Chapulín Sector II, Aldea Sacahuato	Sabanagrande	Francisco Morazán	N13° 42.424502' W87° 11.816812'	Sustituta	7/4/2016	16	L-307
263	Chapulín Sector III, Aldea Sacahuato	Sabanagrande	Francisco Morazán	N13° 42.91623' W87° 12.20121333'	Sustituta	7/4/2016	17	L-307
264	Colonia Berlin	Distrito Central	Francisco Morazán	16P 471840, 1557454	Sustituta	5/1/2016	732	L-227
265	Corralitos Sector El Portillo	Talanga	Francisco Morazán	16P-510093, 1593617	Sustituta	6/7/2015	13	L-378
266	Corralitos Sector Las Cruces	Talanga	Francisco Morazán	16P-510093, 1593617	Sustituta	6/7/2015	12	L-378
267	El Carrizal	Distrito Central	Francisco Morazán	16P 489122, 1541586	Sustituta	17/3/2016	32	L-383
268	El Carrizal, Sector Motuaz	Distrito Central	Francisco Morazán	16P 489517, 1542296	Sustituta	17/3/2016	37	L-383

269	El Carrizal, Sector Yerba Buena	Distrito Central	Francisco Morazán	16P 489740, 1543077	Sustituta	17/3/2016	8	L-383
270	El Chapulin Sector I, Aldea Sacahuato	Sabanagrande	Francisco Morazán	N13° 42.12467' W87° 11.58796'	Sustituta	7/4/2016	11	L-307
271	El Cobre	San Antonio de Oriente	Francisco Morazán	16P 496766, 1558182	Sustituta	10/6/2015	62	L-383
272	El Empedrado Sector El Cipres	Distrito Central	Francisco Morazán	16P 461750, 1557213	Sustituta	19/5/2016	20	L-298
273	El Empedrado Sector El Platano	Distrito Central	Francisco Morazán	16P 463512, 1557194	Sustituta	19/5/2016	6	L-298
274	El Empedrado Sector Flores de Mayo	Distrito Central	Francisco Morazán	16P 461411, 1557590	Sustituta	19/5/2016	39	L-298
275	El Empedrado Sector La Cañada	Distrito Central	Francisco Morazán	16P 459725, 1558318	Sustituta	19/5/2016	9	L-298
276	El Empedrado Sector La Cienega	Distrito Central	Francisco Morazán	16P 460905, 1557474	Sustituta	19/5/2016	18	L-298
277	El Empedrado Sector La Colonia	Distrito Central	Francisco Morazán	16P 461237, 1558479	Sustituta	19/5/2016	5	L-298
278	El Empedrado Sector La Cruz	Distrito Central	Francisco Morazán	16P 461119, 1557343	Sustituta	19/5/2016	18	L-298
279	El Empedrado Sector Las Pilas	Distrito Central	Francisco Morazán	16P 461208, 1557005	Sustituta	19/5/2016	25	L-298
280	El Empedrado Sector Los Mangos	Distrito Central	Francisco Morazán	16P 461213, 1556770	Sustituta	19/5/2016	5	L-298
281	El Encinal, Agua Fria	San Juan de Flores	Francisco Morazán	16P 512455, 1586864	Sustituta	25/9/2015	9	L-306
282	El Encino (El Escarbadero)	Lepaterique	Francisco Morazán	16P 456798, 1559178	Sustituta	7/4/2016	13	L-298
283	El Encino Sector La Quebrada	Lepaterique	Francisco Morazán	16P 456355, 1559011	Sustituta	7/4/2016	25	L-298
284	El Escarbadero	Lepaterique	Francisco Morazán	16P 456688, 1558573	Sustituta	28/3/2016	65	L-298
285	El Escarbadero Sector La Balastrea	Lepaterique	Francisco Morazán	16P 457541, 1559077	Sustituta	28/3/2016	12	L-298
286	El Escarbadero Sector La Cienega	Lepaterique	Francisco Morazán	16P 455716, 1558345	Sustituta	28/3/2016	5	L-298
287	El Escarbadero Sector La Motuaza	Lepaterique	Francisco Morazán	16P 457161, 1558942	Sustituta	28/3/2016	18	L-298
288	El Escarbadero Sector Las Gemelas	Lepaterique	Francisco Morazán	16P 456582, 1558026	Sustituta	28/3/2016	4	L-298
289	El Escarbadero Sector Las Tejas	Lepaterique	Francisco Morazán	16P 456141, 1558105	Sustituta	28/3/2016	16	L-298
290	El Escarbadero Sector Mi Esperanza	Lepaterique	Francisco Morazán	16P 456773, 1557490	Sustituta	28/3/2016	13	L-298
291	El Escarbadero Sector Nuevo Paraiso	Lepaterique	Francisco Morazán	16P 457294, 1556979	Sustituta	28/3/2016	30	L-298
292	El Escarbadero Sector Ordoñez	Lepaterique	Francisco Morazán	16P 457087, 1557901	Sustituta	25/5/2016	4	L-298
293	El Estero	Distrito Central	Francisco Morazán	16 P 488816 1541113	Sustituta	17/3/2016	8	L-383
294	El Pederal, Las Trancas (Montaña de Azacualpa)	Distrito Central	Francisco Morazán	16P 487002, 1539207	Sustituta	11/2/2015	4	L-307
295	El Portillo de la Cueva, San Antonio	Alubaren	Francisco Morazán	N13 47.245 W87 29.657	Sustituta	16/2/2016	31	L-368
296	Guajire (El Escarbadero)	Lepaterique	Francisco Morazán	16P 458935, 1555754	Sustituta	7/4/2016	23	L-298
297	Guajire Sector El Campo	Lepaterique	Francisco Morazán	16P 458959, 1555127	Sustituta	7/4/2016	12	L-298
298	Guajire Sector Los Mangos	Lepaterique	Francisco Morazán	16P 458854, 1554761	Sustituta	7/4/2016	11	L-298
299	Guayabillas Sector Jocomico Abajo	Valle de Angeles	Francisco Morazán	N14°08.378' W86° 58.817'	Sustituta	7/4/2016	14	L-306
300	Guayabillas Sector Jocomico Arrina	Valle de Angeles	Francisco Morazán	N14°08.308' W86° 59.022'	Sustituta	7/4/2016	23	L-306
301	Joyas del Carballo	San Juan de Flores	Francisco Morazán	16P 510200, 1585577	Sustituta	26/8/2015	9	L-306
302	Joyas del Carballo Sector El Encinal	San Juan de Flores	Francisco Morazán	16P 511936, 1586225	Sustituta	26/8/2015	44	L-306
303	Joyas del Carballo Sector El Junco	San Juan de Flores	Francisco Morazán	16P 509807, 1585766	Sustituta	26/8/2015	35	L-306
304	Joyas del Carballo Sector El Suyatal	San Juan de Flores	Francisco Morazán	16P 510606, 1584394	Sustituta	26/8/2015	11	L-306
305	Joyas del Carballo Sector El Techon	San Juan de Flores	Francisco Morazán	16P 509936, 1584158	Sustituta	26/8/2015	21	L-306
306	Joyas del Carballo Sector La Esperanza	San Juan de Flores	Francisco Morazán	16P 510450, 1587331	Sustituta	26/8/2015	27	L-306
307	Junacate (El Escarbadero)	Lepaterique	Francisco Morazán	16P 457596, 1556695	Sustituta	7/4/2016	15	L-298
308	La Ceiba (Tribu Xicaque)	Orica	Francisco Morazán	16 P 502790 1653341	Sustituta	7/9/2015	40	L-378
309	La Union	San Juan de Flores	Francisco Morazán	16P 515321, 1576764	Sustituta	26/11/2015	52	L-306
310	La Union, Agua Fria	San Juan de Flores	Francisco Morazán	16P-514012, 1588233	Sustituta	25/9/2015	26	L-306
311	Las Crucitas, Comayaguela	Distrito Central	Francisco Morazán	481757, 1545442	Sustituta	17/3/2015	62	L-307
312	Las Crucitas, Sector La laguna	Distrito Central	Francisco Morazán	481757, 1545442	Sustituta	17/3/2015	18	L-307
313	Las Delicias	San Juan de Flores	Francisco Morazán	16P 512341, 1578010	Sustituta	5/1/2016	32	L-306
314	Las Delicias Sector El Sarcerio	San Juan de Flores	Francisco Morazán	16P 513146, 1577923	Sustituta	5/1/2016	8	L-306
315	Las Delicias Sector Los Copetes	San Juan de Flores	Francisco Morazán	16P 512722, 1579361	Sustituta	5/1/2016	10	L-306
316	Las Delicias Sector Nueva Esperanza	San Juan de Flores	Francisco Morazán	16P513954, 1579847	Sustituta	5/1/2016	45	L-306
317	Las Delicias Sector Plan Grande	San Juan de Flores	Francisco Morazán	16P 512860, 1577640	Sustituta	5/1/2016	8	L-306
318	Las Gradadas Sector Altos de La Torre	Lepaterique	Francisco Morazán	16P 459185, 1557332	Sustituta	25/5/2016	14	L-298
319	Las Gradadas Sector El Centro, El Escarbadero	Lepaterique	Francisco Morazán	16P 459321, 1557979	Sustituta	4/5/2016	11	L-298
320	Las Gradadas Sector I, El Escarbadero	Lepaterique	Francisco Morazán	16P 459649, 1557883	Sustituta	4/5/2016	10	L-298
321	Las Gradadas Sector La Angostura, El Escarbadero	Lepaterique	Francisco Morazán	16P 460091, 1557657	Sustituta	4/5/2016	8	L-298
322	Las Gradadas Sector Los Juanes	Lepaterique	Francisco Morazán	459688, 1557395	Sustituta	25/5/2016	14	L-298
323	Las Gradadas Sector Los Pinos, El Escarbadero	Lepaterique	Francisco Morazán	16P 458863, 1557605	Sustituta	4/5/2016	6	L-298
324	Las Gradadas Sector Los Planes, El Escarbadero	Lepaterique	Francisco Morazán	16P 458766, 1558618	Sustituta	4/5/2016	9	L-298
325	Las Playas	San Antonio de Oriente	Francisco Morazán	16P 496766, 1558182	Sustituta	10/6/2015	48	L-383
326	Majada Verde Centro	Talanga	Francisco Morazán	16P 488379 1584826	Sustituta	17/3/2016	70	L-306
327	Majada Verde, Sector 1	Talanga	Francisco Morazán	16P 488406 158404049	Sustituta	17/3/2016	32	L-306
328	Majada Verde, Sector 2	Talanga	Francisco Morazán	16P 488406 1584049	Sustituta	17/3/2016	46	L-306
329	Majada Verde, Sector La Gregoria	Talanga	Francisco Morazán	16P 488629 1582292	Sustituta	17/3/2016	14	L-306
330	Majada Verde, Sector Monte Crudo	Talanga	Francisco Morazán	16P 488417 1584693	Sustituta	17/3/2016	6	L-306
331	Montañita	Talanga	Francisco Morazán	16P 489969 1588089	Sustituta	17/3/2016	36	L-306
332	Mulhuaca Sector El Comun	Lepaterique	Francisco Morazán	16P 449673, 1545534	Sustituta	4/5/2016	58	L-298
333	Mulhuaca Sector El Llanos	Lepaterique	Francisco Morazán	16P 449745, 1544776	Sustituta	4/5/2016	29	L-298
334	Mulhuaca Sector El Suyate	Lepaterique	Francisco Morazán	16P 449596, 1550299	Sustituta	4/5/2016	9	L-298
335	Mulhuaca Sector El Terreron	Lepaterique	Francisco Morazán	16P 449545, 1547744	Sustituta	4/5/2016	39	L-298
336	Mulhuaca Sector La Pita	Lepaterique	Francisco Morazán	16P 449879, 1543773	Sustituta	4/5/2016	8	L-298

337	Palo Encebado, Agua Fria	San Juan de Flores	Francisco Morazán	16P 512752, 1588042	Sustituta	25/9/2015	7	L-306
338	Palo Verde	San Juan de Flores	Francisco Morazán	16P 515328, 1577342	Sustituta	26/11/2015	35	L-306
339	Potocolo Sector Granadia	Lepaterique	Francisco Morazán	16P 439399, 1556413	Sustituta	7/4/2016	5	L-298
340	Potocolo Sector Los Funez	Lepaterique	Francisco Morazán	16P 460470, 1556625	Sustituta	7/4/2016	6	L-298
341	Potocolo Sector Verde	Lepaterique	Francisco Morazán	16P 458814, 1556246	Sustituta	7/4/2016	14	L-298
342	Quebrada Arriba	San Juan de Flores	Francisco Morazán	16P 517129, 1579146	Sustituta	10/12/2015	11	L-306
343	Quebrada Arriba Sector Bella Vista	San Juan de Flores	Francisco Morazán	16P 517051, 1578754	Sustituta	10/12/2015	21	L-306
344	Quebrada Arriba Sector El Campo	San Juan de Flores	Francisco Morazán	16P 516606, 1579002	Sustituta	10/12/2015	9	L-306
345	Quebrada Arriba Sector El Naranjo	San Juan de Flores	Francisco Morazán	16P 516033, 1579420	Sustituta	10/12/2015	8	L-306
346	Quebrada Arriba Sector Las Labranzas	San Juan de Flores	Francisco Morazán	16P 516967, 1578762	Sustituta	10/12/2015	20	L-306
347	Quebrada Arriba Sector Monte de Sion	San Juan de Flores	Francisco Morazán	16P 517590, 1579449	Sustituta	10/12/2015	21	L-306
348	Sabacuante, Montaña de Azacualpa	Distrito Central	Francisco Morazán	N 13 57 54.1, W87 09 40.2	Sustituta	17/3/2015	17	L-383
349	Suyapa, Los Olivos (Sector Las Colinas)	Distrito Central	Francisco Morazán	16P-484064, 1556536	Sustituta	26/5/2015	25	L-258
350	Suyapa, Sector Las Colinas	Distrito Central	Francisco Morazán	16P-484064, 1556536	Sustituta	26/5/2015	22	L-258
351	Tablon de Zelaya	Distrito Central	Francisco Morazán	16 P 459682 1577532	Sustituta	3/12/2015	26	L-305
352	Tablon de Zelaya Sector Los Zarciles	Distrito Central	Francisco Morazán	16 P 459142, 1577660	Sustituta	3/12/2015	9	L-305
353	Tablon de Zelaya Sector Quebrada de La Cruz	Distrito Central	Francisco Morazán	16 P 458274, 1578348	Sustituta	3/12/2015	37	L-305
354	Tapope Sector Abajo, aldea San Juan Bosco	Curaren	Francisco Morazán	N13 52.727 W87 32.006	Sustituta	24/2/2016	25	L-368
355	Tapope Sector Arriba, aldea San Juan Bosco	Curaren	Francisco Morazán	N13 56.145 W87 32.015	Sustituta	24/2/2016	9	L-368
356	Tapope Sector El Medio, aldea San Juan Bosco	Curaren	Francisco Morazán	N13 52.957 W87 31.985	Sustituta	24/2/2016	7	L-368
357	Tapope Sector La Entrada, aldea San Juan Bosco	Curaren	Francisco Morazán	N13 52.852 W87 31.679	Sustituta	24/2/2016	3	L-368
358	Tierra Colorada Sector Agua Escondida	Lepaterique	Francisco Morazán	16P 456137, 1557451	Sustituta	25/5/2016	6	L-298
359	Tierra Colorada Sector Guamilito	Lepaterique	Francisco Morazán	16P 454811, 1556217	Sustituta	25/5/2016	7	L-298
360	Tierra Colorada Sector Los Ramos	Lepaterique	Francisco Morazán	16P 454909, 1556793	Sustituta	25/5/2016	10	L-298
361	Tierra Colorada Sector Los Robles	Lepaterique	Francisco Morazán	16P 455225, 1556055	Sustituta	25/5/2016	6	L-298
362	Tierra Colorada Sector Montañita	Lepaterique	Francisco Morazán	16P 455334, 1557129	Sustituta	25/5/2016	18	L-298
363	Tierra Hueca, San Juan del Rancho	Distrito Central	Francisco Morazán	16P 492657, 1554199	Sustituta	16/6/2015	59	L-383
364	Villa Cardenal Oscar Andres Rodríguez	San Juan de Flores	Francisco Morazán	16P 495760, 1580920	Sustituta	17/4/2015	64	L-306
365	Agua Caliente Sur	San Juan	Intibucá	N 14 22.750 W 88 23.321	Contractual	29/9/2014	18	L-334
366	Bo. Bella Vista	San Juan	Intibucá	N 14°22.750" W 88 23.321"	Contractual	29/9/2014	18	L-334
367	Col. El Periodista	Intibucá	Intibucá	N 14° 18' 57.2" W 88° 09' 31.7"	Contractual	6/6/2014	51	L-306
368	Col. Los Mangos	Jesus De Otoro	Intibucá	N 14°33'08.6" W 88°01'31.8"	Contractual	29/9/2014	38	L-373
369	Crucitas Norte	Jesus De Otoro	Intibucá	N 14°33'08.6" W 88°01'31.8"	Contractual	29/9/2014	69	L-373
370	El Pahisla	Intibucá	Intibucá	N 14° 21.572 W088° 10.998'	Contractual	6/6/2014	6	L-326
371	El Porvenir	Jesus De Otoro	Intibucá	N 14°33'08.6" W 88°01'31.8"	Contractual	29/9/2014	62	L-373
372	El Sarzal	San Juan	Intibucá	N 14° 24.331 W 88° 24.487	Contractual	29/9/2014	32	L-334
373	Monquecagua Sector # 1	Intibucá	Intibucá	N 14° 24' 44.7" W88 13' 37.8"	Contractual	6/6/2014	15	L-306
374	Monquecagua Sector # 4	Intibucá	Intibucá	N 14° 24' 54.9" W 88° 13' 35.7"	Contractual	6/6/2014	22	L-306
375	Barrio El Centro, Duraznito, San Pedro	Intibucá	Intibucá	N14 19.265 W88 05.212	Sustituta	6/11/2015	59	L-326
376	Barrio Las Lomas, Duraznito, San Pedro	Intibucá	Intibucá	N14 18.827 W88 05.530	Sustituta	6/11/2015	11	L-326
377	Barrio Los Dominguez, Duraznito, San Pedro	Intibucá	Intibucá	N14 19.274 W88 05.043	Sustituta	6/11/2015	28	L-326
378	Centro Nostico	San Juan	Intibucá	16 P 348076 1596165	Sustituta	6/6/2016	1	L-334
379	Duraznito, San Pedro	Intibucá	Intibucá	N14 19.122 W88 05.869	Sustituta	6/11/2015	59	L-326
380	El Cipres, Chilligatoro	Intibucá	Intibucá	16 P 371876 1592101	Sustituta	6/11/2015	15	L-326
381	El Pinal, Chilligatoro	Intibucá	Intibucá	N14° 39.323"W88°17.366"	Sustituta	21/9/2015	17	L-306
382	El Portillo	San Juan	Intibucá	16 P 348702 1596771	Sustituta	6/6/2016	29	L-334
383	Las Arenas	Yamaranguila	Intibucá	N14 18.565 W88 16.243	Sustituta	6/11/2015	18	L-306
384	Malguara	Intibucá	Intibucá	N 14 23.774 W88 08.665	Sustituta	10/12/2014	101	L-326
385	Malguarita	Intibucá	Intibucá	N 14 22.742 88 09.341	Sustituta	10/12/2014	38	L-326
386	Malutena Sector I	San Juan	Intibucá	N14 26.074 W88 25.027	Sustituta	6/6/2016	11	L-334
387	Malutena Sector II	San Juan	Intibucá	N14 25.844 W88 25.030	Sustituta	6/6/2016	13	L-334
388	Pueblo Viejo	Intibucá	Intibucá	N 14°20.475 W88° 09.480	Sustituta	10/12/2014	106	L-326
389	Santa Cruz, Azacualpa	Intibucá	Intibucá	N14.38215 W88.21364	Sustituta	21/9/2015	27	L-326
390	Santa Cruz, Chilligatoro	Intibucá	Intibucá	N 14°39'134 W88°19'953	Sustituta	21/9/2015	21	L-326
391	Terrero Chogola Sector No 2	La Esperanza	Intibucá	N14 17.636 W88 09.252	Sustituta	6/11/2015	29	L-326
392	Barrio El Uvito	Santiago de Puringla	La Paz	16P 402267 1586912	Contractual	27/2/2015	19	L-326
393	Bo. Las Trancas	Santa Ana	La Paz	16 P 395330 1555270	Contractual	30/6/2015	45	L-364
394	Bo. Los Prados	La Paz	La Paz	16 P 426282 1582404	Contractual	16/6/2015	182	L-326
395	Brisas Del Valle	La Paz	La Paz	N 14 18.553 W 87 40.428	Contractual	11/2/2015	22	L-326
396	Col. Omar Zelaya	Santiago de Puringla	La Paz	16 P 402267, 1586912	Contractual	27/2/2015	58	L-326
397	Indigena Nueva Generación	La Paz	La Paz	N 14 16.913 W 87 48.890	Contractual	11/2/2015	47	L-326
398	Morazan (Amp.)	Marcala	La Paz	N 14 06.699 W 88 00.305	Contractual	11/2/2015	32	L-326
399	San Migueilito Centro	Santa Ana	La Paz	16 P 394184 1555604	Contractual	30/6/2015	37	L-364
400	Santa Lucia o El Potrero (Aldea Estancia)	Santa Ana	La Paz	16 P 398395 1539089	Contractual	16/6/2015	46	L-326
401	Santiago	Santa Ana	La Paz	16P 397592 1559113	Contractual	30/6/2015	17	L-316
402	Barrio Musula Sector I	Marcala	La Paz	N14 15.607 W88 05.601	Sustituta	16/2/2016	6	L-326
403	Barrio Musula Sector II	Marcala	La Paz	N14 15.607 W88 05.601	Sustituta	16/2/2016	12	L-326
404	Barrio San Francisco Sector I	Marcala	La Paz	N14 07.877 W88 01.545	Sustituta	16/2/2016	31	L-326

405	Barrio San Francisco Sector II	Marcala	La Paz	N14 07.877 W88 01.545	Sustituta	16/2/2016	9	L-326
406	Barrio San Francisco Sector III	Marcala	La Paz	N14 07.877 W88 01.545	Sustituta	16/2/2016	4	L-326
407	Barrio San Francisco Sector IV	Marcala	La Paz	N14 07.877 W88 01.545	Sustituta	16/2/2016	5	L-326
408	Barrio San Francisco Sector Las Tranquitas	Marcala	La Paz	16P 389957 1563355	Sustituta	16/2/2016	2	L-326
409	Las Crucitas Sector El Campo	Marcala	La Paz	N14 10164 W88 00139	Sustituta	16/2/2016	21	L-326
410	Las Crucitas Sector El Llano	Marcala	La Paz	N14 10144 W88 00512	Sustituta	16/2/2016	4	L-326
411	Las Crucitas Sector I	Marcala	La Paz	N14 11019 W8800630	Sustituta	16/2/2016	2	L-326
412	Las Crucitas Sector La Hermita	Marcala	La Paz	N14 10144 W88 00512	Sustituta	16/2/2016	5	L-326
413	Las Crucitas Sector Las Fuentes	Marcala	La Paz	N14 10668 W88 00773	Sustituta	16/2/2016	7	L-326
414	Quilaperque Sector I	La Paz	La Paz	16 P 414181 1576275	Sustituta	4/5/2016	36	L-326
415	Quilaperque Sector II	La Paz	La Paz	16 P 414089 1576305	Sustituta	4/5/2016	36	L-326
416	Quilaperque Sector Los Avila	La Paz	La Paz	16 P 415351 1576556	Sustituta	4/5/2016	12	L-326
417	Quilaperque Sector Santa Cruz	La Paz	La Paz	16 P 412580 1576872	Sustituta	4/5/2016	36	L-326
418	Azacualpa Montaña	Erandique	Lempira	N°14 14.018 W° 88 30.208	Contractual	17/10/2014	33	L-334
419	B° Las Colinas	Gracias	Lempira	N 14 34.941 W88 34.405	Contractual	6/6/2014	42	L-334
420	Bo. Las Delicias	Gracias	Lempira	N 14°34.959' W 88° 35.396'	Contractual	6/6/2014	42	L-334
421	Corral Falso	Erandique	Lempira	N 14 17.653 W 88 29.442	Contractual	11/9/2014	47	L-334
422	Los Ciles Sector 1	Belen	Lempira	N 14° 32.823' W 88° 31.370'	Contractual	6/6/2014	56	L-334
423	Matazano	Erandique	Lempira	N 14 15.184 W 88 30.184	Contractual	11/9/2014	81	L-334
424	Tierra Colorada	Erandique	Lempira	N 14 15.958 W 88 30.427	Contractual	11/9/2014	43	L-334
425	Barrio La Vuelta de los Robles	Gracias	Lempira	N 14° 41.240 W 88° 34.902	Sustituta	23/6/2015	9	L-334
426	Cedros Mejicapa	Gracias	Lempira	N 14° 37.064' W 88° 39.227'	Sustituta	12/8/2014	86	L-334
427	Col Borjas	Gracias	Lempira	N 14° 35.701' W 88°35.306'	Sustituta	17/6/2014	42	L-334
428	Colonia Las Palmas	Gracias	Lempira	N 14° 34.490' W 88° 35.226'	Sustituta	6/6/2014	42	L-334
429	El Pinal San Antonio	Gracias	Lempira	N 14° 35' 7.44" W 88°37' 2.12"	Sustituta	6/6/2014	124	L-334
430	El Pinal San José	Gracias	Lempira	N 14° 35' 7.44" W88° 37' 21.23"	Sustituta	6/6/2014	86	L-334
431	El Sarzal	Gracias	Lempira	N14 36.098 W88 38.654	Sustituta	6/6/2014	96	L-334
432	Agua Caliente	Concepción	Ocotepeque	16P 265223 1604465	Sustituta	9/7/2015	3	L-339
433	Cacalhuapa	Sinuapa	Ocotepeque	16P 268914 1597036	Sustituta	15/10/2015	14	L-339
434	Cacalhuapa Sector El Ocotillo	Sinuapa	Ocotepeque	16P 268914 1597036	Sustituta	15/10/2015	3	L-339
435	Corralitos	Belen Gualcho	Ocotepeque	16P 310614 1598070	Sustituta	29/5/2015	23	L-339
436	El Cerron	Concepción	Ocotepeque	16P 259632 1601481	Sustituta	9/7/2015	12	L-339
437	El Espinal	Ocotepeque	Ocotepeque	16P 261175 1598010	Sustituta	29/9/2015	24	L-339
438	El Hornito	Concepción	Ocotepeque	16P 268032 1609087	Sustituta	9/7/2015	32	L-339
439	El Mestizo Sector El Cutal	Sinuapa	Ocotepeque	16P 271317 1602183	Sustituta	15/10/2015	5	L-339
440	El Mestizo Sector La Dantas	Sinuapa	Ocotepeque	16P 272715 1603061	Sustituta	15/10/2015	6	L-339
441	El Mestizo Sector Los Limos 1	Sinuapa	Ocotepeque	16P 272657 1603676	Sustituta	15/10/2015	4	L-339
442	El Mestizo Sector Los Limos 2	Sinuapa	Ocotepeque	16P 273011 1603915	Sustituta	15/10/2015	6	L-339
443	El Mestizo Sector Los Limos 3	Sinuapa	Ocotepeque	16P 272986 1604442	Sustituta	15/10/2015	12	L-339
444	El Mestizo Sector Sector I	Sinuapa	Ocotepeque	16P 272165 1602721	Sustituta	15/10/2015	7	L-339
445	El Mestizo Sector Sector II	Sinuapa	Ocotepeque	16P 272464 1602806	Sustituta	15/10/2015	9	L-339
446	El Pinal	Concepción	Ocotepeque	16P 268060 1609639	Sustituta	9/7/2015	47	L-339
447	El Rion	Belen Gualcho	Ocotepeque	16P 303251 1598160	Sustituta	9/3/2015	24	L-32-339
448	Johalaca	Belen Gualcho	Ocotepeque	16P 310460 1597311	Sustituta	23/12/2014	70	L-339
449	La Brea	Concepción	Ocotepeque	11P 287691 161203	Sustituta	9/7/2015	10	L-339
450	La Colmenas	Concepción	Ocotepeque	16P 266589 1604282	Sustituta	9/7/2015	10	L-339
451	La Puerta	Belen Gualcho	Ocotepeque	16P 308597 1598024	Sustituta	23/12/2014	11	L-339
452	Las Colmenas	Ocotepeque	Ocotepeque	N14.44677 W89.22236	Sustituta	29/9/2015	18	L-339
453	Limoncito	Belen Gualcho	Ocotepeque	16P 312084 1598505	Sustituta	29/5/2015	40	L-339
454	Llano Largo	Belen Gualcho	Ocotepeque	16P 309371 1597535	Sustituta	23/12/2014	28	L-339
455	Los Arcos	Belen Gualcho	Ocotepeque	16P 303345 1599528	Sustituta	29/5/2015	54	L-339
456	Los Cañales	Concepción	Ocotepeque	N1439843 W8920916	Sustituta	29/9/2015	18	L-339
457	Los Tablones	Concepción	Ocotepeque	16P 0261364 1606703	Sustituta	9/7/2015	5	L-339
458	Nuevas Tejeras	Belen Gualcho	Ocotepeque	16P 308879 1601516	Sustituta	9/3/2015	33	L-32-339
459	Polcho	Ocotepeque	Ocotepeque	N14,38843 W,8920916	Sustituta	29/5/2015	16	L-339
460	Quequesque	Concepción	Ocotepeque	N1429693 W8910318	Sustituta	9/7/2015	9	L-339
461	Agua Caliente	Manto	Olancho	N 14 53.441 W 86 28.881	Contractual	15/7/2014	24	L-379
462	Ampliación Barrio Abajo, San Nicolas	Juticalpa	Olancho	N 14 32.639 W 86 16.886	Contractual	5/8/2015	5	L-381
463	Arena Blanca	Patuca	Olancho	N 4 21.612 W85 50.126	Contractual	8/4/2015	110	L-388
464	Barrio Arriba (Aldea San Nicolas)	Juticalpa	Olancho	N 14 32.010 W 86 16.686	Contractual	5/8/2015	12	L-381
465	Barrio Chilapa	Catacamas	Olancho	N 14 50.301 W 85 55.122	Contractual	8/4/2015	13	L-381
466	Barrio El Campo	Catacamas	Olancho	N14 50.684 W85 53.385	Contractual	5/8/2015	87	L-381
467	Barrio San Francisco	Catacamas	Olancho	N 14 50.917 W 85 52.660	Contractual	5/8/2015	23	L-381
468	Bo. El Pino #2	Campamento	Olancho		Contractual	5/8/2015	10	L-377
469	Bo. San Jose	Catacamas	Olancho	N 14 51.082 W 85 53.204	Contractual	5/8/2015	94	L-381
470	Boca Del Monte	Manto	Olancho	N 14 58.030 W86 25.176	Contractual	15/7/2014	130	L-379
471	Calpules	Juticalpa	Olancho	N 14° 30.115' W 86° 12.713'	Contractual	23/6/2014	112	L-381
472	Col. Nazareth	Juticalpa	Olancho	N 14 39.088 W 86 12.806	Contractual	9/6/2015	34	L-380

473	Col. Tulio Moya	Catacamas	Olancho	N 14 49.551 W 85 53.942	Contractual	17/11/2014	70	L-381
474	Col. Villa Verde	Catacamas	Olancho	N 14 57.910 W 85 45.228	Contractual	17/11/2014	30	L-381
475	Columbia	Juticalpa	Olancho	N 14° 34.558' W 86° 11.768'	Contractual	23/6/2014	31	L-381
476	El Alto	Juticalpa	Olancho	N14° 31.174' W 86° 12.793'	Contractual	23/6/2014	37	L-381
477	El Cacao	Catacamas	Olancho	N14 38.153 W85 51.305	Contractual	5/8/2015	16	L-381
478	El Encino (Caserio el Encinal)	Catacamas	Olancho	N14 42.782 W85 50.755	Contractual	5/8/2015	9	L-381
479	El Suyatal	Catacamas	Olancho	N 14 39.650 W 85 47.869	Contractual	17/11/2014	30	L-381
480	Gonzalez	Catacamas	Olancho	N 14 40.496 W 85 48.834	Contractual	17/11/2014	20	L-381
481	La Cruz	Catacamas	Olancho	N 14 38.956 W 85 49.478	Contractual	17/11/2014	90	L-381
482	Las Marias	Catacamas	Olancho	N 14 39.081 W85 50.393	Contractual	9/6/2015	12	L-381
483	Las Marias Del Cacao	Catacamas	Olancho	N14 38.689 W85 50.755	Contractual	9/6/2015	11	L-381
484	Plan De Turcios	Juticalpa	Olancho	N 14° 27.354' W 86° 14.579'	Contractual	23/6/2014	115	L-381
485	Sabana Del Pueblo	Catacamas	Olancho	N14 37.971 W85 51.842	Contractual	9/6/2015	23	L-381
486	San Antonio De Sahara	Juticalpa	Olancho	N 14° 26.116' W 86° 16.775'	Contractual	23/6/2014	198	L-381
487	Bº Abajo, San Antonio de Las Cabas	Catacamas	Olancho	N 14 47.994 W 85 36.551	Sustituta	2/11/2015	3	L-381
488	Bo Boca de Hule, Santa María del Carbon (Comunidad PECH)	San Esteban	Olancho	N15 26.990 W85 35.016	Sustituta	4/5/2016	67	L-380
489	Bo El Aguacate Santa María del Carbon (Comunidad PECH)	San Esteban	Olancho	N15 26.619 W85 34.694	Sustituta	4/5/2016	28	L-380
490	Bº El Campo, Las Cabas	Catacamas	Olancho	N14 47.909 W85 36.793	Sustituta	2/11/2015	15	L-381
491	Bº El Centro, San Antonio de Las Cabas	Catacamas	Olancho	N14 47.896 W85 36.640	Sustituta	2/11/2015	10	L-381
492	Bo El Chaparral, Santa María del Carbon (Comunidad PECH)	San Esteban	Olancho	N15 26.796 W85 34.839	Sustituta	4/5/2016	55	L-380
493	Bo El Tanque Santa María del Carbon (Comunidad PECH)	San Esteban	Olancho	N15 26.562 W85 35.804	Sustituta	4/5/2016	31	L-380
494	Bo Esc Amparo Catalan, Santa María del Carbon (Comunidad PECH)	San Esteban	Olancho	N15 26.951 W85 34.783	Sustituta	4/5/2016	22	L-380
495	Bo Las Islas, Santa María del Carbon (Comunidad PECH)	San Esteban	Olancho	N15 26.653 W85 34.885	Sustituta	4/5/2016	20	L-380
496	Bº San Antonio, San Antonio de Cabas	Catacamas	Olancho	N14 48.049 W85 36.827	Sustituta	2/11/2015	24	L-381
497	Buena Vista	Catacamas	Olancho	N 14 52.007 W 85 55.127	Sustituta	27/10/2015	10	L-381
498	Campamento Nuevo	Catacamas	Olancho	N 14 28.994 W 85 43.978	Sustituta	8/4/2015	77	L-388
499	Campamento Viejo	Catacamas	Olancho	N 14 31.175 W85 43.197	Sustituta	8/4/2015	228	L-388
500	Carrizales Sector Centro	Catacamas	Olancho	N 14 48.005 W 85 39.045	Sustituta	27/10/2015	9	L-381
501	Carrizales Sector Centro Básico	Catacamas	Olancho	N 14 47.952 W 85 39.344	Sustituta	27/10/2015	10	L-381
502	Carrizales Sector El Cerron	Catacamas	Olancho	N 14 47.899 W 85 38.215	Sustituta	27/10/2015	3	L-381
503	Carrizales Sector El Mono	Catacamas	Olancho	N 14 47.905 W 85 37.800	Sustituta	27/10/2015	13	L-381
504	Carrizales Sector Las Ovejas	Catacamas	Olancho	N 14 47.965 W 85 38.717	Sustituta	27/10/2015	10	L-381
505	Carrizales Sector Piñuelas	Catacamas	Olancho	N 14 46.740 W 85 45.119	Sustituta	26/11/2015	10	L-381
506	Carrizales Sector Santiago Pagoada	Catacamas	Olancho	N 14 47.877 W 85 39.602	Sustituta	27/10/2015	14	L-381
507	Carrizales Sector Santos Soto	Catacamas	Olancho	N 14 47.982 W 85 40.459	Sustituta	27/10/2015	2	L-381
508	Colonia Sinai	Catacamas	Olancho	N14 49.408 W 85 54.289	Sustituta	24/8/2015	46	L-381
509	El Naranja	Catacamas	Olancho	N 14 56.668 W85 45. 164	Sustituta	8/4/2015	55	L-381
510	El Rodeo	Gualaco	Olancho	N15 16.403 W86 02.111	Sustituta	16/2/2016	14	L-380
511	El Urracal	Catacamas	Olancho	N 14 55.301 W 85 46.661	Sustituta	8/4/2015	15	L-381
512	El Zopilote Sector Norte	Dulce Nombre de Culmí	Olancho	N15 04.521 W85 35.849	Sustituta	26/11/2015	17	L-381
513	El Zopilote Sector Sur	Dulce Nombre de Culmí	Olancho	N15 04.342 W85 35.796	Sustituta	26/11/2015	16	L-381
514	La Ceibita Sector I	Campamento	Olancho	N 14 26.461 W 86 37.041	Sustituta	26/11/2015	12	L-377
515	La Ceibita Sector II	Campamento	Olancho	N 14 25.995 W 86 37.445	Sustituta	26/11/2015	9	L-377
516	La Corriente Sector El Centro	Catacamas	Olancho	N 14 36. 252 W 85 53. 149	Sustituta	27/10/2015	28	L-381
517	La Corriente Sector El Portillo	Catacamas	Olancho	N 14 36.650 W 85 52.612	Sustituta	27/10/2015	3	L-381
518	La Cuchilla	Yocon	Olancho	N14 57.585 W 86 46.146	Sustituta	24/8/2015	9	L-380
519	La Esperanza Sector I	Campamento	Olancho	N14 26.023 W86 36.928	Sustituta	26/11/2015	22	L-377
520	La Esperanza Sector II	Campamento	Olancho	N 14 25.304 W 86 36.522	Sustituta	26/11/2015	5	L-377
521	La Esperanza Sector III	Campamento	Olancho	N14 24.752 W86 36.685	Sustituta	26/11/2015	15	L-377
522	La Esperanza Sector IV	Campamento	Olancho	N 14 25.111 W86 37.125	Sustituta	26/11/2015	4	L-377
523	La Fuente, Sector El Cacao	Gualaco	Olancho	N15 08.083 W86 09.322	Sustituta	4/12/2015	6	L-379
524	La Fuente, Sector Eulalio Meza	Gualaco	Olancho	N15 07.487 W86 09.125	Sustituta	4/12/2015	4	L-379
525	La Fuente, Sector La Fuente Centro	Gualaco	Olancho	N15 07.833 W86 09.140	Sustituta	4/12/2015	8	L-379
526	La Fuente, Sector La Sabana	Gualaco	Olancho	N15 08.083 W86 09.322	Sustituta	4/12/2015	9	L-379
527	La Fuente, Sector Los Duarte	Gualaco	Olancho	N15 07.553 W86 09.374	Sustituta	4/12/2015	16	L-379
528	La Fuente, Sector Los García	Gualaco	Olancho	N15 07.680 W86 09.253	Sustituta	4/12/2015	9	L-379
529	La Marias (Sector Río Blanco)	Catacamas	Olancho	N 14 31.027 W 85 44.665	Sustituta	8/4/2015	24	L-388
530	La Pita	Santa María del Real	Olancho	N 14 48.361 W 85 55.308	Sustituta	17/11/2015	5	L-381
531	La Union	Catacamas	Olancho	N 14 28.832 W 85 47.710	Sustituta	8/4/2015	21	L-388
532	Lagunitas	Catacamas	Olancho	N 14 28.299 W85 43.763	Sustituta	8/4/2015	24	L-388
533	Las Cabas Sector La Cruz centro	Catacamas	Olancho	N14 48.019 W85 37.277	Sustituta	29/10/2015	8	L-381
534	Las Cabas Sector La Cruz Norte	Catacamas	Olancho	N14 48.289 W85 37.272	Sustituta	2/11/2015	13	L-381
535	Las Cabas Sector La Cruz Sur	Catacamas	Olancho	N14 47.896 W85 36.640	Sustituta	2/11/2015	7	L-381
536	Las Lajitas	Yocon	Olancho	N 14 57.626 W 86 46.390	Sustituta	24/8/2015	31	L-380
537	Las Quebradas	Yocon	Olancho	N 14 57.966 W 86 45.703	Sustituta	24/8/2015	34	L-380
538	Las Quebradas Sector La Guama	Yocon	Olancho	N14 58.626 W86 46.724	Sustituta	24/8/2015	32	L-380
539	Los Cerritos	Catacamas	Olancho	N 14 48.202 W 85 49.098	Sustituta	24/8/2015	10	L-381
540	Los Lirios	Catacamas	Olancho	N 14 27.601 W85 48.215	Sustituta	8/4/2015	16	L-388

541	Minas de Oro	Catacamas	Olancho	N 14 29.533 W 85 46.404	Sustituta	8/4/2015	25	L-388
542	Miras de Hombre	Catacamas	Olancho	N 14 37.382 W 8550.241	Sustituta	9/6/2015	33	L-381
543	Nueva Esperanza, Río Tinto	Catacamas	Olancho	N 14 57.882 W 85 45.210	Sustituta	9/6/2015	66	L-381
544	Pastoreo	Gualaco	Olancho	N15 16.691 W85 59.795	Sustituta	16/2/2016	5	L-380
545	Rancho Quemado	Catacamas	Olancho	N 14 32.103 W 85 42.896	Sustituta	8/4/2015	22	L-388
546	Rio Blanco Sector I	Campamento	Olancho	N14 24.910 W86 36.053	Sustituta	26/11/2015	5	L-377
547	Rio Blanco Sector II	Campamento	Olancho	N14 24.821 W86 35.593	Sustituta	26/11/2015	7	L-377
548	Rio Blanco Sector III	Campamento	Olancho	N14 25.051 W86 35.175	Sustituta	26/11/2015	13	L-377
549	Santa Rita	Catacamas	Olancho	N14 51.760 W85 54.776	Sustituta	24/8/2015	72	L-381
550	Susmay	Gualaco	Olancho	N14 57.216 W86 05.089	Sustituta	16/2/2016	26	L-380
551	Talgua En medio Sector Las Vegas	Catacamas	Olancho	N14 50.939 W85 51.079	Sustituta	17/11/2015	3	L-381
552	Talgua En medio Sector Nelson Salgado	Catacamas	Olancho	N14 51.140 W85 50.808	Sustituta	17/11/2015	6	L-381
553	Talgua En medio Sector Nueva Esperanza	Catacamas	Olancho	N 14 51.447 W 85 49.999	Sustituta	17/11/2015	22	L-381
554	Talgua En medio Sector Rene Hernandez	Catacamas	Olancho	N14 51.144 W85 51.099	Sustituta	17/11/2015	4	L-381
555	Talgua En medio Sector San Sebastian	Catacamas	Olancho	N 14 50.097 W 85 50.531	Sustituta	17/11/2015	9	L-381
556	Tasajeras	Gualaco	Olancho	N15 16.403 W86 02.111	Sustituta	16/2/2016	33	L-380
557	Vallecito Sector El Caracol, Río Tinto	Catacamas	Olancho	N14 59.683 W 85 43.948	Sustituta	26/11/2015	21	L-381
558	Vallecito Sector El Carao, Río Tinto	Catacamas	Olancho	N14 59.874 W85 43.763	Sustituta	26/11/2015	7	L-381
559	Vallecito Sector El Guancaste, Río Tinto	Catacamas	Olancho	N14 59.618 W85 43.703	Sustituta	26/11/2015	69	L-381
560	Vallecito Sector El Zapote, Río Tinto	Catacamas	Olancho	N14 58.833 W85 43.687	Sustituta	26/11/2015	5	L-381
561	Vallecito Sector La Hacienda, Río Tinto	Catacamas	Olancho	N14 59.902 W85 43.525	Sustituta	26/11/2015	8	L-381
562	Vallecito Sector Las Flores, Río Tinto	Catacamas	Olancho	N14 59.902 W85 43.525	Sustituta	26/11/2015	18	L-381
563	Vallecito Sector Las Montoya, Río Tinto	Catacamas	Olancho	N14 57.575 W85 43.555	Sustituta	26/11/2015	4	L-381
564	Vallecito Sector Los Funez, Río Tinto	Catacamas	Olancho	N15 00.135 W85 43.738	Sustituta	26/11/2015	4	L-381
565	Vallecito Sector Pablo Reyes, Río Tinto	Catacamas	Olancho	N14 59.753 W85 43.813	Sustituta	26/11/2015	18	L-381
566	Vargas	Gualaco	Olancho	N15 16.377 W86 01.017	Sustituta	16/2/2016	24	L-380
567	Zapote Verde	Catacamas	Olancho	N 14 30.236 W 85 48.592	Sustituta	8/4/2015	35	L-388
568	Aldea Nueva	Macuelizo	Santa Bárbara	N 15° 11.803' W 88° 33.186'	Contractual	26/3/2015	70	L-357
569	Arena Blanca I	Quimistan	Santa Bárbara	N 15° 27.435' W 88° 29.735'	Contractual	16/10/2014	15	L-364
570	Arena Blanca II	Quimistan	Santa Bárbara	16P340424 1709242	Contractual	16/10/2014	22	L-364
571	Arena Blanca III	Quimistan	Santa Bárbara	16P 340499 1709761	Contractual	16/10/2014	10	L-364
572	Barrio El Zapote (Amp)	Macuelizo	Santa Bárbara	N 15° 10.795' W 88° 37.369'	Contractual	4/6/2015	27	L-357
573	Bº El Campo, San Pablo De La Cruz	San Pedro Zacapa	Santa Bárbara	N 14° 46.732' W 88° 07.024'	Contractual	10/10/2015	9	L-332
574	Bo. Brisas Del Campo (Aldea La Arada)	Azucualpa	Santa Bárbara	N 15° 26.412' W 88° 31.018'	Contractual	24/9/2014	60	L-364
575	Bo. El Tanque (La Laguna)	Quimistan	Santa Bárbara	N 15° 28.737' W 88° 24.816'	Contractual	26/5/2015	95	L-364
576	Bo. Piedras Negras	Nueva Frontera	Santa Bárbara	N15 13.748 W88 41.063	Contractual	25/5/2016	25	L-364
577	Buena Vista (Bº Los Vasquez)	Nueva Frontera	Santa Bárbara	N15°16.958' W088°43.461'	Contractual	25/5/2016	11	L-364
578	Buenos Aires	Quimistan	Santa Bárbara	N 15° 26.973' W 88° 25.288'	Contractual	26/5/2015	20	L-364
579	Colonia San Pablo De La Cruz	San Pedro Zacapa	Santa Bárbara	N 14° 46.768' W 88° 07.121'	Contractual	27/10/2015	24	L-332
580	Comunidad De Cunta	Macuelizo	Santa Bárbara	N 15° 16.846' W 88° 33.178'	Contractual	4/6/2015	30	L-364
581	El Pinal	Quimistan	Santa Bárbara	N 15° 21.343' W 88° 26.462'	Contractual	4/6/2015	50	L-364
582	El Venado	Quimistan	Santa Bárbara	N15° 28.563' W88° 29.841'	Contractual	9/3/2015	17	L-364
583	La Cumbre De Las Flores	Nueva Frontera	Santa Bárbara	N15 16.786 W88 44.588	Contractual	25/5/2016	10	L-364
584	La Libertad	Protección	Santa Bárbara	16P 330200 166309	Contractual	23/12/2014	50	L-357
585	La Sierra	Macuelizo	Santa Bárbara	N 15° 13.085' W 88° 39.298'	Contractual	26/3/2015	22	L-357
586	Las Crucitas	Quimistan	Santa Bárbara	16P 340996 1711162	Contractual	12/12/2014	88	L-364
587	Nueva Victoria	Protección	Santa Bárbara	16P 329909 1662932	Contractual	23/12/2014	48	L-357
588	Quebrada Grande	Quimistan	Santa Bárbara	16P343157 1709877	Contractual	11/12/2014	20	L-364
589	Teohsintales	Azucualpa-Quimistan	Santa Bárbara	N 15° 27.547' W 88° 31.050'	Contractual	24/9/2014	145	L-364
590	Vista Hermosa	Quimistan	Santa Bárbara	N 15.49349° W 88.46240°	Contractual	26/5/2015	79	L-364
591	Agua Fria	Santa Rita	Santa Bárbara	N 14° 42.535' W 88° 16.645'	Sustituta	7/4/2016	19	L-332
592	Agua Zarca	Ilama	Santa Bárbara	N 15° 05.286' W 88° 10.010'	Sustituta	16/2/2016	20	L-332
593	Aldea Nueva	Protección	Santa Bárbara	16P 325067 1668576	Sustituta	3/10/2014	17	L-357
594	Anises, Sector Río Chiquito	Santa Bárbara	Santa Bárbara	16P 370906 1652911	Sustituta	12/11/2014	10	L-332
595	Barrio Abajo San Antonio	Azucualpa	Santa Bárbara	N 15° 22.170' W 88° 35.081'	Sustituta	25/5/2016	19	L-364
596	Barrio Abajo, Buena Vista	Concepción Norte	Santa Bárbara	N 15° 14.017' W 88° 06.363'	Sustituta	17/11/2015	3	L-323
597	Barrio Arriba San Antonio	Azucualpa	Santa Bárbara	N 15° 22.043' W 88° 35.073'	Sustituta	25/5/2016	14	L-364
598	Barrio Arriba Santo Domingo	Quimistan	Santa Bárbara	N 15° 29.880' W 88° 28.755'	Sustituta	25/5/2016	8	L-364
599	Barrio Arriba, Buena Vista	Concepción Norte	Santa Bárbara	N 15° 14.278' W 88° 06.873'	Sustituta	17/11/2015	27	L-323
600	Barrio El Centro Santo Domingo	Quimistan	Santa Bárbara	N 15° 29.417' W 88° 29.224'	Sustituta	25/5/2016	27	L-364
601	Barrio Los Larios Santo Domingo	Quimistan	Santa Bárbara	N 15° 29.404' W 88° 29.511'	Sustituta	25/5/2016	12	L-364
602	Bº Abajo El Jilote	Concepción Norte	Santa Bárbara	N 15° 12.011' W 88° 08.372'	Sustituta	27/10/2015	9	L-323
603	Bº Arriba El Jilote	Concepción Norte	Santa Bárbara	N 15° 12.345' W 88° 08.449'	Sustituta	27/10/2015	14	L-323
604	Bo El Sanjon, La Cuesta	Santa Bárbara	Santa Bárbara	N 14° 55.006' W 88° 11.397'	Sustituta	7/6/2016	11	L-332
605	Brisas de San Miguel	Atima	Santa Bárbara	16 P 337115 1645513	Sustituta	4/11/2014	70	L-332
606	Brisas del Manzano	San Nicolás	Santa Bárbara	N 14° 56.237' W 88° 19.001'	Sustituta	13/8/2015	30	L-332
607	Buena Vista	Atima	Santa Bárbara	N 14° 51.540' W 88° 30.825'	Sustituta	26/12/2014	78	L-334
608	Buenos Aires	Nueva Frontera	Santa Bárbara	N15 18,756 W88 43,454	Sustituta	8/9/2015	24	L-364

609	Buenos Aires de Villanueva	San Francisco de Ojuera	Santa Bárbara	N 14° 41.916' W 88° 18.430'	Sustituta	17/8/2015	15	L-332
610	Cedrales	San Francisco de Ojuera	Santa Bárbara	N 14° 40.740' W 88° 18.935'	Sustituta	17/8/2015	61	L-332
611	Cerro del Toro	Santa Bárbara	Santa Bárbara	16P 371066 1653591	Sustituta	4/11/2014	31	L-304
612	Cerro Grande	Azacualpa	Santa Bárbara	N 15° 23.509' W 88° 35.245'	Sustituta	31/8/2015	15	L-364
613	Copo Helado	Protección	Santa Bárbara	16P 332556 1663482	Sustituta	23/12/2014	46	L-357
614	El Aníllal	Protección	Santa Bárbara	16P 321087 1659490	Sustituta	3/10/2014	38	L-357
615	El Barranco	Nueva Frontera	Santa Bárbara	N15 15,801 W88 39,989	Sustituta	8/9/2015	42	L-364
616	El Bordo	San Francisco de Ojuera	Santa Bárbara	N 14° 41.677' W 88° 17.862'	Sustituta	17/8/2015	23	L-332
617	El Diviso	San Francisco de Ojuera	Santa Bárbara	N 14° 43.666' W 88° 11.340'	Sustituta	7/4/2016	57	L-332
618	El Emanal Sector 1 y 2	Atima	Santa Bárbara	16 P 335469 1643848	Sustituta	4/11/2014	41	L-332
619	El Frijolillo	Protección	Santa Bárbara	16P 326089 1667384	Sustituta	23/12/2014	36	L-357
620	El Guanal	Nueva Frontera	Santa Bárbara	N15 17.519 W88 43.885	Sustituta	8/9/2015	27	L-364
621	El Ocote	Protección	Santa Bárbara	16P 328004 1672276	Sustituta	24/9/2014	70	L-357
622	Emanal Abajo	Atima	Santa Bárbara	N 14° 52.486' W 88° 31.781'	Sustituta	4/11/2014	28	L-332
623	Jimilile	Naranjito	Santa Bárbara	N1459520 W8838185	Sustituta	3/10/2014	25	L-357
624	Juniapa	Naranjito	Santa Bárbara	N1500479 W8800479	Sustituta	3/10/2014	29	L-357
625	La Cuchilla	Ilama	Santa Bárbara	N 15° 04.851' W 88° 09.199'	Sustituta	16/2/2016	46	L-332
626	La Presa	Protección	Santa Bárbara	16P 329561 1671007	Sustituta	24/9/2014	26	L-357
627	La Reina	Nueva Frontera	Santa Bárbara	N15 17.389 W88 44.220	Sustituta	8/9/2015	21	L-364
628	La Ruidosa	Protección	Santa Bárbara	16P 329651 1672671	Sustituta	24/9/2014	85	L-357
629	La Virtud	Protección	Santa Bárbara	16P 322876 1672269	Sustituta	3/10/2014	25	L-357
630	Las Brisas	Nueva Frontera	Santa Bárbara	N15 18.079 W88 44.077	Sustituta	8/9/2015	25	L-364
631	Las Mesas	Naranjito	Santa Bárbara	N1459977 W8837998	Sustituta	3/10/2014	33	L-357
632	Las Palmas	San Marcos	Santa Bárbara	N 15° 11.550' W 88° 30.069'	Sustituta	16/2/2016	50	L-364
633	Las Peñas	Las Vegas	Santa Bárbara	N 14° 54.250' W 88° 02.793'	Sustituta	7/6/2016	14	L-302
634	Los Amates	Azacualpa	Santa Bárbara	N 15° 26.099' W 88° 31.538'	Sustituta	24/9/2014	98	L-364
635	Los Sagastumes Reyes, Plan del Higo	San Nicolás	Santa Bárbara	N 14° 52.213' W 88° 24.051'	Sustituta	13/8/2015	35	L-332
636	Montañitas	Santa Bárbara	Santa Bárbara	16P 371549 1655252	Sustituta	4/11/2014	48	L-304
637	Nueva Angostura	Protección	Santa Bárbara	16P 321384 1663039	Sustituta	23/12/2014	25	L-357
638	Nueva Joconal (Puerta del Naranjo)	San Luis	Santa Bárbara	N15°02.909' W 88° 28.936'	Sustituta	9/3/2015	55	L-304
639	Nueva Yamala	San Luis	Santa Bárbara	N 15° 01.239' W 88° 25.202'	Sustituta	6/7/2015	45	L-304
640	Portillo del Jarro	Santa Bárbara	Santa Bárbara	16P 372764 1655878	Sustituta	4/11/2014	20	L-304
641	Pueblo Nuevo	San Francisco De Ojuera	Santa Bárbara	N 14° 40.269' W 88° 17.462'	Sustituta	17/8/2015	43	L-332
642	Quebrada de Minas	San Luis	Santa Bárbara	N15 04.995 W88 32.289	Sustituta	14/4/2015	44	L-357
643	Santa Cruz Yamala	San Luis	Santa Bárbara	N 15° 01.239' W 88° 25.202'	Sustituta	6/7/2015	35	L-304
644	Santa Elena	San Luis	Santa Bárbara	N 15° 07.389' W 88° 32.813'	Sustituta	14/4/2015	61	L-357
645	Viejo Porvenir	Protección	Santa Bárbara	16P 332556 1663482	Sustituta	23/12/2014	42	L-357
646	Zambrano	Protección	Santa Bárbara	16P 323026 1671377	Sustituta	3/10/2014	57	L-357
647	El Jicaro	Nacaome	Valle	N13 36.482 W87 26.684	Contractual	18/12/2014	33	L-369
648	Las Mesas	San Francisco De Coray	Valle	16P 444285, 1507903	Contractual	8/5/2015	33	L-368
649	Llano Grande	Goascoran	Valle	16P424808,1500481	Contractual	13/8/2015	102	L-368
650	Mapachin	Nacaome	Valle	16P451119,1506190	Contractual	17/10/2014	120	L-369
651	Ocotillos	Nacaome	Valle	16P-320800,1632200	Contractual	17/11/2014	63	L-369
652	Zuniga Arriba	Nacaome	Valle	16P448994,1506011	Contractual	17/11/2014	37	L-369
653	Caragual, Moropocay	Nacaome	Valle	16P 449531, 1501633	Sustituta	23/6/2015	40	L-368
654	El Mogote	Langue	Valle	16P 428809,1510880	Sustituta	4/5/2015	55	L-367
655	Guanacastal 1	San Lorenzo	Valle	16P 454485,1492826	Sustituta	24/2/2015	12	L-368
656	Guanacastal 2	San Lorenzo	Valle	16P 454439, 1492958	Sustituta	24/2/2015	12	L-368
657	Jocotal	Nacaome	Valle	16P 438551,1502584	Sustituta	6/11/2015	35	L-368
658	Jocotal Sector Guanacastillo	Nacaome	Valle	16P 437987,1503404	Sustituta	6/11/2015	22	L-368
659	Limonar, Moropocay	Nacaome	Valle	16P 448526, 1499306	Sustituta	23/6/2015	24	L-368
660	Quebrachal	Nacaome	Valle	16P 438716,1501352	Sustituta	6/11/2015	11	L-368
661	Sabana Redonda	Goascoran	Valle	16P 424780,1508802	Sustituta	23/6/2015	12	L-368
662	Sabana Redonda Sector Los Achiotos I	Goascoran	Valle	16P 425297,1509017	Sustituta	23/6/2015	6	L-368
663	Sabana Redonda Sector Los Achiotos II	Goascoran	Valle	16P 425505,1508591	Sustituta	23/6/2015	5	L-368
664	Tempisque	Langue	Valle	16P320800,1632200	Sustituta	4/5/2015	74	L-367
665	Bo. Nuevo Amanecer	Santa Rita	Yoro	N15° 12.726' W87° 52.306'	Contractual	21/11/2014	21	L-323
666	Bo. San Miguel	Victoria	Yoro	N14° 56.006' W87° 23.326'	Contractual	24/2/2015	8	L-399
667	Col. 12 De Noviembre	Santa Rita	Yoro	N15° 11.763' W87° 52.386'	Contractual	21/11/2014	34	L-323
668	Col. Silvia Robleda	El Progreso	Yoro	N15° 18.181' W87° 50.829'	Contractual	21/7/2015	60	L-319
669	Col. Subirana No. 2	Santa Rita	Yoro	N15° 12.056' W87° 53.709'	Contractual	17/6/2015	11	L-319
670	El Barranco	Olanchito	Yoro	N15° 27.323' W86° 28.959'	Contractual	26/3/2015	72	32140
671	Valle Fresco	Olanchito	Yoro	N15° 28.637' W86° 33.629'	Contractual	26/3/2015	9	32140
672	Colonia Cecilio Caballero	Santa Rita	Yoro	N15° 12.837' W87° 53.605'	Sustituta	17/6/2015	15	L-319
673	Corral Falso	Yoro	Yoro	N15° 15' 55.5422" W87° 20' 36.2799"	Sustituta	31/7/2014	48	L-399
674	Cuchillas	Yoro	Yoro	N15° 14' 47.5446" W87° 21' 22.7998"	Sustituta	31/7/2014	26	L-399
675	Guanchias Creek Sector Arriba	Santa Rita	Yoro	N15°13.306' W87° 48.515'	Sustituta	31/8/2015	5	L-319
676	Guanchias Creek Sector El Centro	Santa Rita	Yoro	N15°13.197' W87° 49.825'	Sustituta	31/8/2015	103	L-319

677	Guanchías Creek Sector La Entrada	Santa Rita	Yoro	N15°13.003' W87° 49.984'	Sustituta	31/8/2015	6	L-319
678	La Cumbre	Yoro	Yoro	N15° 16' 29.0317" W87° 22' 57.4843"	Sustituta	31/7/2014	17	L-399
679	La Joya	Yoro	Yoro	N15° 15' 58.9448" W87° 22' 46.5339"	Sustituta	31/7/2014	22	L-399
680	Lagunitas	Yoro	Yoro	N15° 15' 8.11459" W87° 22' 2.86178"	Sustituta	31/7/2014	45	L-399
681	Loma Chata	Yoro	Yoro	N15° 16' 3.42624" W87° 20' 9.67289"	Sustituta	31/7/2014	32	L-399
682	Ojo de Agua	Yoro	Yoro	N15° 15' 51.0665" W87° 23' 25.6105"	Sustituta	31/7/2014	30	L-399
683	Placido, Barrio Desvio a Regadillo	Santa Rita	Yoro	N15° 12.465' W87° 46.490'	Sustituta	31/8/2015	5	L-395
684	Placido, Barrio El Centro	Santa Rita	Yoro	N15° 12.754' W87° 46.537'	Sustituta	31/8/2015	39	L-395
685	Placido, Barrio El Espinal	Santa Rita	Yoro	N15° 12.876' W87° 46.483'	Sustituta	31/8/2015	10	L-395
686	Placido, Barrio La Cuchilla	Santa Rita	Yoro	N15° 13.414' W87° 46.748'	Sustituta	31/8/2015	5	L-395
687	Placido, Barrio La Iglesia	Santa Rita	Yoro	N15° 13.160' W87° 46.920'	Sustituta	31/8/2015	10	L-395
688	Placido, Barrio Los Melendez	Santa Rita	Yoro	N15° 13.135' W87° 47.075'	Sustituta	31/8/2015	5	L-395

PROGRAMA NACIONAL DE ELECTRIFICACION SOCIAL ETAPA ESSE-FN-2008

COMMUNITIES ELECTRIFIED JOINTLY WITH THE COMMUNITY

Id de Comunidad	Nombre de Comunidad	Municipio	Departamento	Posición Geográfica	Catalogada Como	Fecha de Recepción	No de Viviendas	Conectado a Circuito No
Nº	Nombre de Comunidad	Municipio	Departamento	Posición Geográfica	Catalogada Como	Fecha de Recepción	No de Viviendas	Conectado a Circuito No
689	Barrio El Carmen Mejoras	Siguatepeque	Comayagua	16 P 409417 1614027	Sust-Compartida	23/3/2017	16	L-374
690	El Amate	Florida	Copán	16P 295986 1680083	Sust-Compartida	26/4/2017	26	L-357
691	El Calichon	Florida	Copán	16P 296842 1676858	Sust-Compartida	26/4/2017	56	L-357
692	El Zapote	Florida	Copán	16P 266477 1677512	Sust-Compartida	26/4/2017	11	L-357
693	La Brisas del Caribe	Florida	Copán	16P 298578 1680283	Sust-Compartida	26/4/2017	44	L-357
694	La Vegona	Florida	Copán	16P 295052 1676781	Sust-Compartida	26/4/2017	12	L-357
695	La Virtud	Florida	Copán	16P 296084 1677892	Sust-Compartida	26/4/2017	18	L-357
696	Las Cañas	Florida	Copán	16P 301866 1668696	Sust-Compartida	26/4/2017	26	L-357
697	Las Juniapa	Florida	Copán	16P 300436 1667931	Sust-Compartida	26/4/2017	14	L-357
698	Nueva Esperanza	Florida	Copán	16P 296248 1679813	Sust-Compartida	26/4/2017	29	L-357
699	Nueva Proteccion	Florida	Copán	16P 298552 1676311	Sust-Compartida	26/4/2017	21	L-357
700	San Jose de La Frontera	Florida	Copán	16P 295052 1676781	Sust-Compartida	26/4/2017	24	L-357
701	Barbacheles Sector Los Alfaro Abajo	Omoa	Cortés	N15 46.285 W87 58.939	Sust-Compartida	25/11/2016	29	L-353
702	Barbacheles Sector Los Alfaro Arriba	Omoa	Cortés	N15 45.966 W87 58.963	Sust-Compartida	25/11/2016	37	L-353
703	Barbacheles Sector Los Limoncitos	Omoa	Cortés	N15 46.998 W87 58.292	Sust-Compartida	25/11/2016	50	L-353
704	La Estrella	Omoa	Cortés	N15 32.824 W88 20.644	Sust-Compartida	25/11/2016	30	L-353
705	Las Lajitas	Omoa	Cortés	N15 46.626 W87 59.306	Sust-Compartida	25/11/2016	9	L-353
706	San Rafael Abajo	Omoa	Cortés	N15 45.909 W87 58.324	Sust-Compartida	25/11/2016	29	L-353
707	San Rafael Arriba	Omoa	Cortés	N15 45.425 W87 59.013	Sust-Compartida	25/11/2016	37	L-353
708	Barrio Los Zelaya, La Estancia	San Matias	El Paraiso	16 P 535445 1539747	Sust-Compartida	30/8/2016	9	L-389
709	Chaguite Sur	Yuscarán	El Paraiso	16P 515904, 1539588	Sust-Compartida	23/3/2017	52	L-385
710	Col Monte Tabor	San Matias	El Paraiso	16P 540185 1545126	Sust-Compartida	23/3/2017	31	L-389
711	Concepción (Bomba)	San Matias	El Paraiso	16P 532612 1545545	Sust-Compartida	23/3/2017	1	L-389
712	Corral Falso	San Matias	El Paraiso	16P 543852 1545204	Sust-Compartida	23/3/2017	8	L-389
713	El Chaguite	Moroceli	El Paraiso	16 P 515918, 1576783	Sust-Compartida	30/9/2016	71	L-306
714	El Espinito Ampliación	San Matias	El Paraiso	16P 537002 1543172	Sust-Compartida	23/3/2017	1	L-389
715	El Salto	San Matias	El Paraiso	16 P 536886 1543303	Sust-Compartida	30/8/2016	6	L-389
716	Estancia	San Matias	El Paraiso	16 P 536886 1543303	Sust-Compartida	30/8/2016	20	L-389
717	Fatima, Aldea Cordoncillo	Yuscarán	El Paraiso	16P 513435, 1546037	Sust-Compartida	23/3/2017	5	L-385
718	Guanacatio Ampliación	Yuscarán	El Paraiso	16 P 520998 1539009	Sust-Compartida	23/3/2017	26	L-385
719	Río Namales	San Matias	El Paraiso	16P 535561 1539598	Sust-Compartida	30/8/2016	6	L-389
720	Río Namales Sector 2	San Matias	El Paraiso	16P 536689 1539316	Sust-Compartida	30/8/2016	6	L-389
721	Río Namales, Sector 1	San Matias	El Paraiso	16P 536236 1539574	Sust-Compartida	30/8/2016	5	L-389
722	Aldea Centro, Los patios	Dolores	Intibucá	16 P 352105 1575832	Sust-Compartida	21/6/2017	12	L-326
723	Barrio El Patio Arriba	Dolores	Intibucá	16 P 352548 1575656	Sust-Compartida	21/6/2017	41	L-326
724	Barrio Lodo Negro	Dolores	Intibucá	16 P 352105 1575832	Sust-Compartida	21/6/2017	12	L-326
725	Barrio San José	Dolores	Intibucá	16 P 354102 1578830	Sust-Compartida	21/6/2017	26	L-326
726	Bº El Centro Monquecagua Sector 2	Intibucá	Intibucá	16 P 368258 1593654	Sust-Compartida	20/3/2017	20	L-306
727	Bº El Centro, Monquecagua Sector 1	Intibucá	Intibucá	16 P 368368 1593310	Sust-Compartida	23/3/2017	20	L-306
728	Bº El Llano Redondo, Monquecagua	Intibucá	Intibucá	16 P 367947 1594226	Sust-Compartida	20/3/2017	20	L-306
729	Candelaria Togopala Centro	Intibucá	Intibucá	N14 25.763 W88 13.564	Sust-Compartida	21/6/2017	56	L-326
730	Casas Viejas	Intibucá	Intibucá	N14 22.386 W88 04.864	Sust-Compartida	21/6/2017	33	L-326
731	Cofradia	Intibucá	Intibucá	16 P 378343 1582382	Sust-Compartida	23/3/2017	17	L-306
732	El Cerron	Yamaranguila	Intibucá	N14 14.945 W88 12.651	Sust-Compartida	21/6/2017	76	L-326
733	El Mirador y Fuente Divina	San Isidro	Intibucá	N14 36.481 W88 07.783	Sust-Compartida	21/6/2017	22	L-373
734	La Misión	Intibucá	Intibucá	N14 23.336 W88 13.290	Sust-Compartida	21/6/2017	56	L-326
735	La Sorto Sector Beneficio Ecológico	Intibucá	Intibucá	N14 22.321 W88 04.017	Sust-Compartida	23/3/2017	28	L-373
736	La Sorto Sector El Pito	Intibucá	Intibucá	N14 21.941 W88 03.967	Sust-Compartida	20/3/2017	28	L-373
737	La Sorto Sector La Pavimentada	Intibucá	Intibucá	N14 22.920 W88 05.153	Sust-Compartida	20/3/2017	30	L-373
738	La Sorto Sector Los Gutierrez	Intibucá	Intibucá	N14 21.941 W88 03.967	Sust-Compartida	20/3/2017	34	L-373

739	La Sorto Sector Quebrada Honda Abajo	Intibucá	Intibucá	N14 22.780 W88 04.973	Sust-Compartida	20/3/2017	30	L-373
740	La Unión, Monquecagua	Intibucá	Intibucá	N14 25.011 W88 13.644	Sust-Compartida	21/6/2017	21	L-326
741	Laguna Centro	Dolores	Intibucá	16 P 353231 1578463	Sust-Compartida	21/6/2017	19	L-326
742	Llanos de La Cruz	Jesus De Otoro	Intibucá	N14 36.251 W88 05.397	Sust-Compartida	21/6/2017	76	L-373
743	Pelon Sirati	Intibucá	Intibucá	16 P 377163 1584849	Sust-Compartida	21/6/2017	304	L-326
744	Quebrada de Lajas	Yamaranguila	Intibucá	16 P 365100 1578550	Sust-Compartida	21/6/2017	56	L-326
745	San Antonio, Quebrada de Vueltas	Intibucá	Intibucá	16 P 385862 1587925	Sust-Compartida	20/3/2017	20	L-306
746	San Francisco	Yamaranguila	Intibucá	N14 17.286 W88 13.411	Sust-Compartida	21/6/2017	31	L-326
747	San Isidro	Yamaranguila	Intibucá	16 P 370657 1574540	Sust-Compartida	21/6/2017	11	L-326
748	San José	Intibucá	Intibucá	N14 21.762 W88 03.399	Sust-Compartida	21/6/2017	81	L-326
749	San Marcos	San Isidro	Intibucá	16 P 382925 1590250	Sust-Compartida	21/6/2017	36	L-373
750	San Miguel, Quebrada de Vueltas	Intibucá	Intibucá	16 P 385886 1587738	Sust-Compartida	20/3/2017	20	L-306
751	Santa catarina Sector La Posta	Intibucá	Intibucá	16 P 375659 1583882	Sust-Compartida	23/3/2017	25	L-306
752	Santa Cruz	Intibucá	Intibucá	16 P 371406 1588815	Sust-Compartida	20/3/2017	11	L-306
753	Santa Lucía, Quebrada de Vueltas	Intibucá	Intibucá	16 P 385399 1588109	Sust-Compartida	20/3/2017	20	L-306
754	Valle Toco, Aldea Toco	Dolores	Intibucá	16 P 354035 1577977	Sust-Compartida	21/6/2017	9	L-326
755	Vista Hermosa	San Isidro	Intibucá	N14 36.481 W88 07.783	Sust-Compartida	21/6/2017	31	L-373
756	Llanos de Candelaria	Aguanqueterique	La Paz	N14 00.237 W87 40.566	Sust-Compartida	21/6/2017	97	L-326
757	Barrio El Cojudo, Camacal	Naranjito	Santa Bárbara	N 15° 00.817' W 88° 34.418'	Sust-Compartida	31/10/2016	40	L-357
758	Barrio Las Polainas, Camacal	Naranjito	Santa Bárbara	N 15° 00.901' W 88° 34.154'	Sust-Compartida	31/10/2016	37	L-357
759	Colonia Ebenezer, Camacal	Naranjito	Santa Bárbara	N 15° 00.946' W 88° 34.122'	Sust-Compartida	31/10/2016	25	L-357
760	Copantio Centro	Naranjito	Santa Bárbara	N 15° 00.141' W 88° 34.790'	Sust-Compartida	31/10/2016	26	L-357
761	El Aguacate, Aldea Copantio	Naranjito	Santa Bárbara	N 14° 59.983' W 88° 34.972'	Sust-Compartida	31/10/2016	10	L-357
762	La Lima, Aldea Copantio	Naranjito	Santa Bárbara	N 15° 00.501' W 88° 34.839'	Sust-Compartida	31/10/2016	14	L-357
763	Quiscamote, Aldea Copantio	Naranjito	Santa Bárbara	N 15° 00.354' W 88° 34.743'	Sust-Compartida	31/10/2016	10	L-357

Annex 5: Quality and Maintenance of Projects

Project Quality

Honduras has regulations for the design and construction of network extension projects. Both the design and construction were required to be checked by the specialist supervisors of ENEE.

A summary of the construction by the project is shown below. A total of 763 communities benefited from the installation of:

- 1256 kilometres of primary line.
- 879 kilometres of secondary line.
- 1 transformer of 5 kVA.
- 7 transformers of 10 kVA.
- 1004 transformers of 15 kVA.
- 505 transformers of 25 kVA.
- 159 transformers of 37.5 kVA.
- 26 transformers of 50 kVA.

During the field visit, the quality of the installation was reviewed. The project was found to have been implemented in accordance with the established regulations, thanks to the supervision of ENEE. From the engineering point of view, the visited projects were constructed correctly. Inspection of a sample of structures fulfilled the standard, and the respective field photographs are included below.

During the interview stage with ENEE, it was mentioned that the transformers and protective equipment such as fuse holders and lightning rods were supplied directly by ABB. It can be seen in one of the figures that indeed, the transformer installed is from ABB.

From this same source, it was confirmed that materials directly from ABB represented 28% of the value of the total materials. The rest of the materials and equipment included poles, cabling, guy ropes, and other hardware that was purchased in the local market and through the imports from different locations.

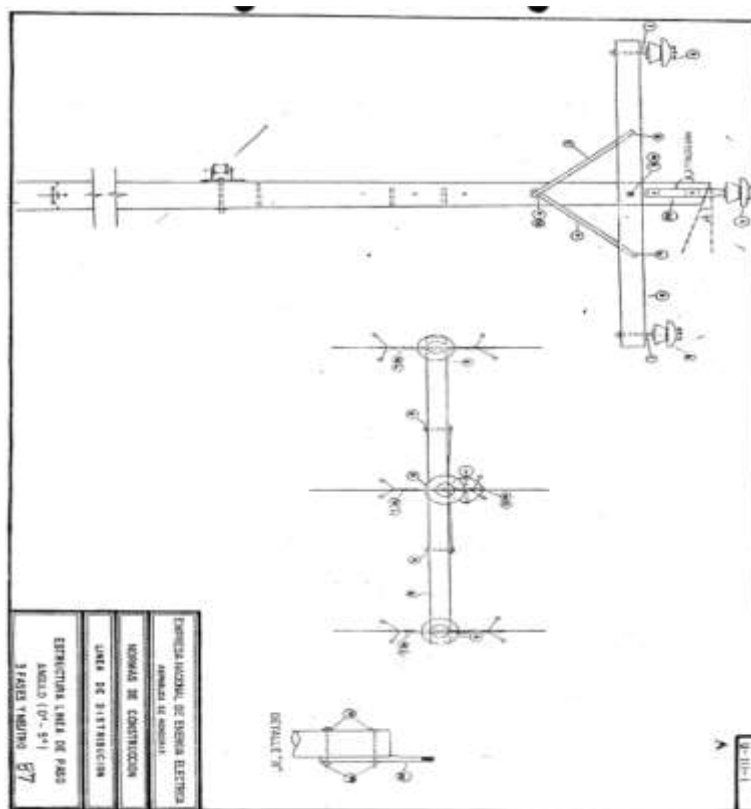
a. Primary line structure, three phases.

Figure 1: Primary structure, 3 phases, 34.5 kV.



Source: Field visit, November 2019

Figure 2: Construction standards for primary structure, 3 phases, 34.5 kV.



Source: ENEE

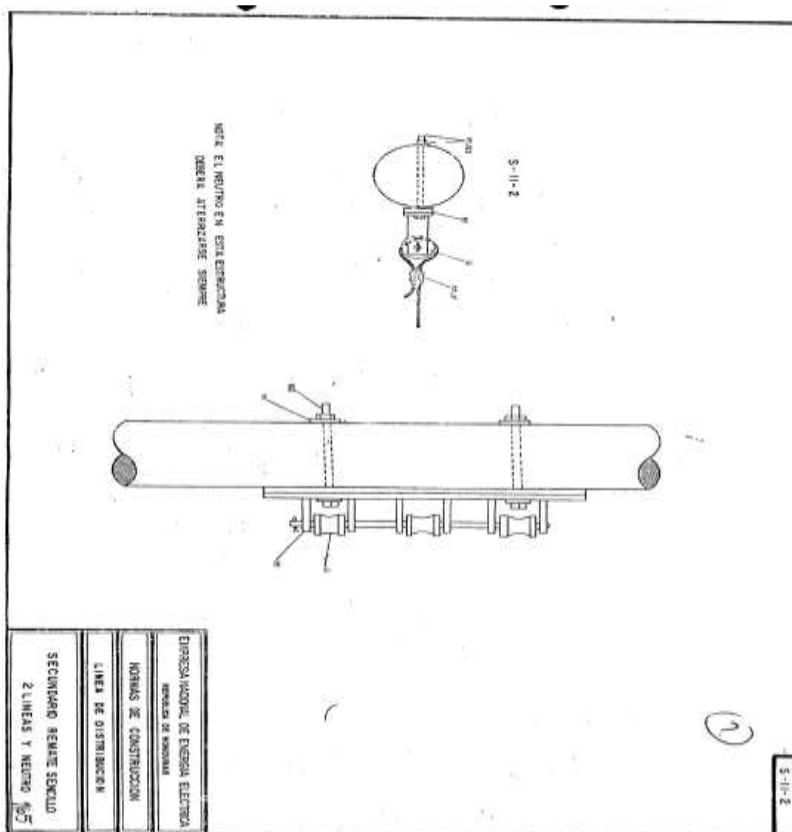
b. Secondary terminal structure, 240V, 3 wires.

Figure 3: Secondary structure, 3 wires, 240 V.



Source: Field visit, November 2019

Figure 4: Construction standards for secondary structures, 3 wires, 240 V.



Source: ENEE

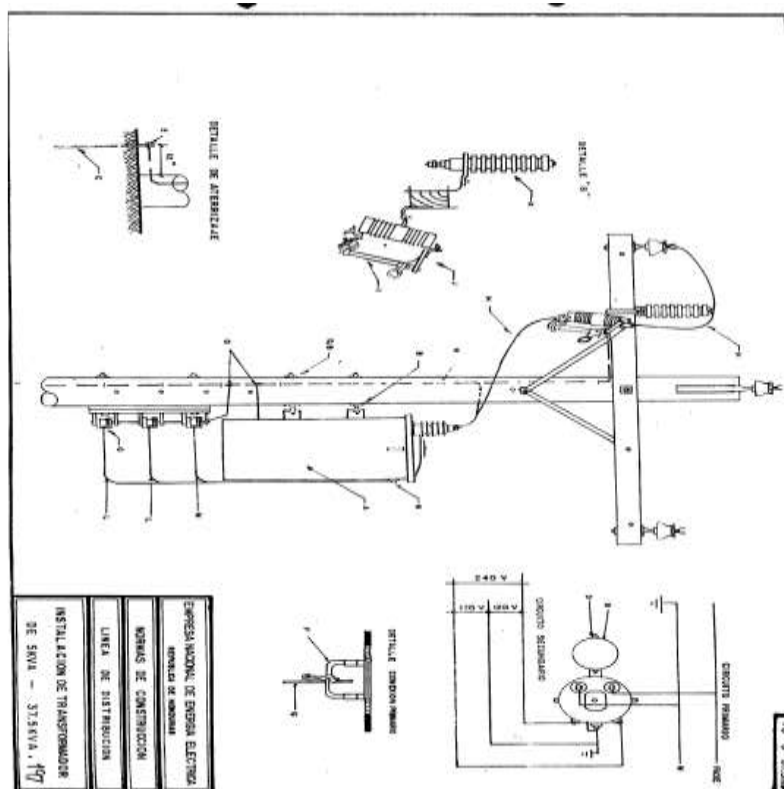
c. Installation of the transformer, 25 kVA, 34.5 kV.

Figure 5: Transformer, 25 kVA, 120/240 V.



Source: Field visit, November 2019

Figure 6: Installation standard for the transformer, 25 kVA, 120/240 V.



Source: ENEE

Operation and Maintenance

As mentioned in the report in Chapter 3.1, in the description of the context, ENEE has sub-contracted EEH for the operation and maintenance of the distribution systems. This means that the maintenance of all the project's constructed systems is the responsibility of EEH.

On this issue, the evaluation found that the beneficiaries complain that EEH does not respond to the electrical service users, or does so very belatedly. The problem is worse in those locations furthest from the main cities.

For example, during a visit to the community of Guayabillas, in Valle de Ángeles, a primary line was found with a serious problem in one of the spigot insulators (see Figure 7 below). This failure must be repaired by EEH. However, the claims of the residents have not been addressed by the company, despite the fact that this report was made at the beginning of 2019.

Figure 7: Spigot insulator failure



Source: Field visit, November 2019

Annex 6 Documents consulted

1. Agreement between Government of Finland, Honduras and CABEL on cooperation in the rural electrification concessional credit project in Honduras.
2. Anonymous (2010). Supplementary Report - Rural Electrification Project II.
3. BCIE, & ENEE (2016). Programa Nacional de Electrificación Social - Etapa ESSE-FN 2008. Tegucigalpa.
4. BCIE (2017). INFORME No. 32 AVANCE DEL PRESTAMO No. 2038.
5. BCIE (2017). INFORME No. 33 AVANCE DEL PRESTAMO No. 2038.
6. BID (2015). Evaluación del Programa de País 2015-2018.
7. COMUNIDADES_FINLANDIA sent from EEH_28 mayo 2019. (n.d.).
8. Contrato de préstamo directo No. 2038. Programa Nacional de Electrificación Social Etapa ESSE-FN 2008.
9. Decreto No. 158-94. Ley marco del subsector eléctrico. La Gaceta No. 27511 de 26 de noviembre de 1994.
10. Decreto No 404-2014. Ley general de la industria eléctrica. La Gaceta No. 33431 de 20 de mayo de 2014.
11. ENEE Project Advancement Final Report Sept 2016 (2). (n.d.).
12. ENEE Unidad Ejecutora (2017). Informe Avance, Periodo: II trimestre 2017.
13. ENEE (2017). Informe Ultimo de Avance, Segundo Trimestre 2017.
14. FCG (2019). Appraisal of Public Sector Investment Facility (PIF) project proposal: "Rural Electrification Project in Honduras" Final report.
15. Finnconsult. (2003). Appraisal of the First Concessional Credit Proposal.
16. Flores, H. F. V., Furubayashi, T., & Nakata, T. (2016). Decentralised electricity generation system based on local renewable energy sources in the Honduran rural residential sector. Clean Technologies and Environmental Policy.
17. Flores, W. C., Ojeda, O. A., Flores, M. A., & Rivas, F. R. (2011). Sustainable energy policy in Honduras: Diagnosis and challenges. Energy Policy, 39(2), 551–562.
18. Honduran Power Sector report 2010.pdf. (n.d.).
19. IADB (2017). Programa de Electrificación Rural en Lugares Aislados.
20. IADB (2018). Programa de Electrificación Rural en Lugares Aislados. Propuesta de financiamiento no reembolsable.
21. IADB (2018). Resolución DE-108/18 Convenio de financiamiento no reembolsable para inversión.
22. IADB (2019). Support for the preparation of the Comprehensive Poverty Reduction and Productivity Program in Rural Areas.
23. Instituto Nacional de Estadística (2017). LV Encuesta Permanente de Hogares de Propósitos Múltiples, Junio 2017.
24. KPMG. (2011). KPMG Draft review report of the tendering process for the second Concessional Credit.
25. Licencia_Ambiental_RECATAM.pdf. (n.d.).
26. Ministry of Foreign Affairs of Finland (2007). Development policy programme 2007: Towards a Sustainable and Just World Community: Government Decision-in-Principle: 2007.

27. Ministry of Foreign Affairs of Finland (2007). Evaluation Guidelines between Past and Future. Developments in Economic Geology.
28. Ministry of Foreign Affairs of Finland (2012). Finland's Development Policy.
29. Ministry of Foreign Affairs of Finland (2013). Evaluation Manual.
30. Ministry of Foreign Affairs of Finland (2015). Human Rights Based Approach in Finland's Development Cooperation.
31. Ministry of Foreign Affairs of Finland (2015). Results Based Management (RBM) in Finland's Development Cooperation - Concepts and Guiding Principles.
32. Ministry of Foreign Affairs of Finland (2016). Finland's Development Policy.
33. NIRAS (2011). Appraisal of the Second Concessional Credit.
34. NIRAS (2011). The appraisal of rural electrification project in 16 provinces in Honduras.
35. Nyholm, Glenn Manager, B. D. (2017). EXTENSION OF RURAL ELECTRIFICATION PROJECT IN HONDURAS.
36. PNUD 2014-2017. (n.d.). Planes Estratégicos.
37. Programa Nacional de Electrificación Social Etapa ESSE-FN-2008. (2010).
38. Project Advancement Final Report Sept2016 (2). (n.d.).
39. Project Advancement Report Nov 2014. (n.d.).
40. Project proposal 7.2008 concessional credit.pdf. (n.d.).
41. Report P. A. (2016). Contrato No. 099-2010, Programa Nacional de Electrificación Social Etapa ESSE-FN-2008. (099), 1-2.
42. República de Honduras. (2010). Visión de País 2010-2038-Plan de Nación 2010-2022.
43. Revised Preliminary Assessment of a Concessional Credit Application. (2011).

Annex 7 Work Plan End of Project Evaluation of Concessional Credit Scheme Projects: Rural Electrification Project II (ESSE-FN-2008) in Honduras

Activity	Anticipated date	Location					Team invoiceable working days						
							MHu	MTo	MZe	PWh	JPe		
							TL/ Developm ent expert	Energy Sector expert	Local expert	Social / PIF&CC support	Service Supervisor		
				Oct	Nov	Dec	Jan						
Stage 1. Inception phase / Desk study													
Contract signing and kick-off meeting	14.10.2019	Helsinki										0.25	0.25
Briefing of team on documents & history	14-18.10	Home based										1	1
Desk Review, Interviews in Finland (project contractor)	14-18.10	Home based										1	0.25
Identification of stakeholders in Honduras, developing data collection instruments	14-18.10	Home based										1	1
Meeting and logistics preparations	21-25.10	Home based										1	1
Drafting the inception report, submitting for QA	21-23.10	Home based										1	0.5
Quality assurance, submission of the inception report	23.10.19	Home based											1
Briefing with MFA, presentation & discussion on Inception report findings	30.10.19	Helsinki										0.5	0.25
Mission Inception Period Work Total							5.5	5.5	4	3.25	1.5		
Stage 2. Field data collection and consultations													
Travel to Honduras	10.11.19	travel											
Meetings with Gov stakeholders in Honduras	11-12.11	Tegucigalpa										2	2
Visits to the field to view a sample of field sites	13-23.11	field sites										10	10
Meetings in Tegucigalpa	25-27.11	Tegucigalpa										4	4
Team evaluation meeting + Travel to home base from Honduras	27.11	travel											
Field Mission Total							16	16	16	0	0		
Stage 3. Analysis and Reporting													
Analysis of the field findings, incl. review of technical documents (continued); preparing the draft report	2-13.12	Home based										6	3
Quality assurance, submission of draft appraisal report*	20.12	Home based											1
MFA commenting on the draft report													
Finalization Final Appraisal Report & QA**	6-10.1	Home based										1	0.5
Submission of Final Appraisal Report	10.1.2020	Helsinki											
Presentation of Final Report to the MFA		Helsinki										0.5	0.25
Post-Mission Desk Work Total							7.5	4.5	1	1.75	1.5		
TOTAL							29.00	26.00	21.00	5.00	3.00		

★ = Report submission
 ★ = Meeting with MFA

* Date slightly delayed

** Date will depend on availability of MFA staff to comment

29 26 21 5 3