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Institutional Capacity Development in the Energy sector

Experiences from EU-supported projects in ACP countries 2007-2019

7 AFFORDABLE AND CLEAN ENERGY

17 PARTNERSHIPS FOR THE GOALS

ACP-EU Energy Facility *Monitoring*

European Commission

DANISH ENERGY MANAGEMENT DEM FOR SUSTAINABLE IMPACT

The ACP-EU Energy Facility (http://energyfacilitymonitoring.eu)

This discussion paper is one in a series of discussion papers based on experiences from the ACP-EU Energy Facility (EF).

The EF was established in 2005 to co-finance projects on increasing access to modern and sustainable energy services for the poor in African, Caribbean and Pacific (ACP) countries, especially in rural and peri-urban areas. 173 project proposals have been granted co-funding from the EU for a total of 0.4 billion euros; 50% of the total project-budgets of 0.8 billion euros.

The projects have been, and are being, implemented in the period 2007-2021 with 90% of projects completed in 2019. The projects cover a wide range of technologies:

Electricity grid-extensions in rural and peri-urban areas, hydro-powered mini-grids, solar and hybrid-solar mini-grids, stand-alone solar solutions for businesses, households and public institutions, portable solar equipment mainly used for lighting, clean energy solutions for cooking such as improved firewood and charcoal cook stoves as well as biogas, biofuels for electricity generation, and capacity development of public institutions in the energy sector.

The vast majority of the 173 Energy Facility projects have included capacity development activities. This discussion paper focusses on the 18 projects that focussed on institutional capacity development.

Danish Energy Management (DEM) has been granted the contract of providing technical assistance for the monitoring of the EF projects in the period 2011-2019. This discussion paper is based on information and data gathered during this period as well as current research and experience from other development interventions.

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Introduction

This paper discusses the Institutional Capacity Development (ICD) efforts of projects supported by the ACP-EU Energy Facility (hereafter EF), and identifies lessons learned and forward-looking recommendations. The experiences (positive or negative) from the EF supported projects can provide useful inputs for the further design of ICD programs targeting improved energy access to the poor urban and rural areas.

The paper is based on information and data from 2011- 2019, covering 18 EF supported projects addressing institutional capacity development, as well as information from current research and experience from other development interventions. As it can be seen in the table below, the 18 EF projects fall into different categories, according to their main focus and beneficiaries.

Table 1: Number of EF projects in different categories[1]

	Local government level	National Level	Multi-country level
Polices and frameworks	-	4	3
Knowledge development	-	-	6
Business/implementation	1	4	-
	18 projects in total		

After the introduction, chapter 2 provides a brief background on capacity development in development cooperation and introduces key themes that are important for assessing ICD efforts in EF projects. Chapters 3-6 cover the key themes and discuss experiences from selected EF projects. Conclusions are summarized at the end of each chapter. Finally, chapters 7 and 8 summarize lessons learned and presents a set of forward-looking recommendations, based on the experiences from the EF projects.

Links to the Sustainable Development Goals (SDGs)

Capacity is important prerequisite for developing countries to realize the Sustainable Development Goals (SDGs) and Capacity development can make significant contributions to the understanding how improved access to sustainable energy contributes to, and interlinks with other SDGs. In principle, ICD activities contribute to all SDGs. However, based on the projects providing the foundation for this paper, the primary SDGs identified are:

- **SDG7 (access to affordable, reliable, sustainable and modern energy for all)** on ensuring access to affordable, reliable, sustainable and modern energy for all, and
- **SDG 17 (Partnership for the Goals)** Revitalizing global partnership for sustainable development.

ICD activities can pave the way for energy partnerships between governments, the private sector and civil society, and can enable governments to facilitate the necessary finance and investments from public and private sources.

Background

What is Capacity and Capacity Development?

The Development Assistance Committee (DAC) of the OECD defines 'Capacity' as the ability of people, organisations, and society as a whole to manage their affairs successfully. 'Capacity Development' is understood as the process by which people, organisations and society as a whole create, strengthen and maintain their capacity over time[2].

The DAC definitions are generally endorsed by development partners, including the EU[3], and will be applied in this discussion paper.

Within this overall framework, several international institutions have added more detail regarding what capacity development means, and what should be achieved:

- CIDA[4] suggests that capacity development includes various approaches, strategies and methodologies which seek to improve performance at different social levels. In other words, there is no 'one size fits all' for capacity development

- In 2015 SIDA prepared an Evaluation Report for the Joint Scandinavian project for an "Evaluation of Support to Capacity development – Identifying Good Practice in Swedish Development Cooperation"[5]. It defines ICD as the improvement of the ability of people, organisations, institutions and society to manage their affairs successfully and defines this as improvements in one or more of the following domains: Individual knowledge and skills, Systems (methods, routines, procedures), Structures (authority, rights and duties, communication), Infrastructure and equipment (hard- and software), Work environment, and External factors.

- According to the EU[6], Capacity Development entails change of knowledge, skills, work processes, tools, systems, authority patterns, management style, etc. It takes place in people or organizations and cannot be forced upon them. People and organizations can have strong or weak incentives to change, develop and learn. It can come from the environment or from internal factors — but eventually the change is an internal process that must happen in the people or organizations changing. Consequently, Development Partners cannot design, manage and implement capacity development of others, but they can support capacity development processes or help create the right external incentives for them.

- Under the UN Climate Convention (UNFCCC), the Paris Agreement[7] stresses that capacity building should facilitate technology development, dissemination and deployment, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information. Capacity building should be country driven, based on and responsive to national needs, and foster country ownership including at the national, subnational and local levels.

- OECD-DAC[8] identifies three analytical levels on which capacity development objectives need to be pursued: the individual, the organizational and the enabling environment. The term "systemic" is used to refer to the interactions between the three levels.

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[2] The Challenge of Capacity Development. Working towards Good Practice. OECD DAC 2006

[3] ToolKit for Capacity Development. EU 2011

[4] Capacity Development: Why, What and How. CIDA, 2000

[5] https://www.oecd.org/derec/sweden/Support-to-capacity-development.pdf

[6] As ref.2

[7] Paris Agreement, art 11. 2015

[8] As ref. 1

Capacity Development is often among the primary objectives of development co-operation. As it can be seen above, it is a complex process, which combines a set of organizational, technical and practical elements within the wider context of a political economy, including political, social and market issues. There is no 'one size fits all' and consequently it is very important for beneficiaries and their development partners to define what capacity development implies in a specific regional, national or local setting, and how it can be successfully implemented.

Most EF supported projects include capacity development activities. This discussion paper mainly focuses on EF projects targeting institutional capacity development, i.e. the second analytical level suggested above by OECD-DAC. This comprises developing knowledge and organizational capacity in national and local government structures, as well as in public institutions, state owned enterprises (e.g. utilities) and regional organisations.

Institutional Capacity Development in EF projects

Securing access to modern and sustainable energy services for the poor requires enhanced capacity of governments and public institutions to manage a mix of political, organizational, technical and financial interventions, and to understand, plan and implement sustainable energy initiatives in partnerships with delivery focused actors, such as the private sector.

In line with the capacity development features outlined above, this paper looks at i) how the EF projects have worked with local ownership and participation, ii) how they have promoted technology dissemination and market development, iii) which learning approaches have been applied and been useful, and iv) to what extent ICD activities have contributed to lasting change in the targeted institutions.

Photo: Danish Energy Management (DEM)

The *ownership* by the country and the target beneficiaries to a given capacity development activity is key to its success and to the long-term impacts. Ensuring a strong ownership requires that the ICD activities are relevant to the overall objectives and the needs of the beneficiaries, and that the beneficiaries are fully involved in the planning and implementation. It also requires that the capacity developed are fully anchored and embedded in the institutional structures, with allocation of enough financial and human resources to ensure it remains an active part of those structures in the future.

The long-term impact of an energy access project can be secured if ICD efforts support institutions to facilitate *market-based solutions*, combining the service providers ability to deliver energy at an affordable cost with the end-user's ability to pay. Governments and public institutions can play an important role, e.g. in promoting business development and facilitating access to finance. In the context of the EF, ICD activities can for example enable the targeted institutions to develop a business-friendly legal framework, providing incentives, supporting SMEs and start-ups as energy service providers (ESCOs), including in marketing, financial management, administration, and in facilitating links to sources of finance/micro-finance.

The *approach to learning* is important for developing institutional capacity. Whether capacity building is done remotely (e.g. web-based), in classrooms, as peer-to-peer learning or as hands-on learning on the ground, the approaches must be carefully adapted to the institutional context and to the individual participants' background and skills level, as well as the context they will be working in when the training is completed. The quality of capacity building depends on the understanding of the experts on the local situation, including on cultural and social issues. This issue is particularly important to address in ICD project design if foreign experts are used in capacity development and may only be present for a limited amount of time.

A key to a successful ICD activity is the *sustainability* of the changes it facilitates in institutions, and the subsequent new approaches and action it leads to in the target groups and in the society. This can be achieved through new policies, new tools used for effective action and improved institutional frameworks, which guides development-oriented public actions[9]. Sometimes such institutional capacity changes can have an immediate effect, but most often the impact will only be felt after some years, depending on whether the capacity is maintained and further developed by the institution or in other ways. For Energy Facility supported ICD projects to create a long-term impact, it is important that they helped the host government and institutions create lasting structures and instruments. For public institutions, sustainability depends on the availability of continued support from the government and (possibly) development partners. For more business-oriented organizations there can be other ways of securing the long-term viability and impact, e.g. from incomes generated by the beneficiaries.

Political and institutional ownership and anchoring

National political leaders and governments have a key role to play in ensuring that ICD activities are designed and implemented according to overall political objectives and development plans, and in this way remain relevant. This includes e.g. the capacity to develop appropriate legislation, to do long term energy planning and strategy development, to design appropriate incentives and to build and monitor an efficient implementation system that is tailored to the specific context of the country[10].

Lessons learned from other service providing sectors can be useful to draw upon for energy access programs. For example, a World Bank Water and Sanitation Program[11] demonstrated the importance of including local government in ICD efforts, because the local government structure is country-wide, increasingly responsible for rural development and service delivery, and often has access to educated professionals (teachers, administrators, and other professionals) available for implementation.

In the context of the EF supported projects on strengthening local level energy access, local ownership is critical, and can be achieved by e.g. capacitating local governments to facilitate the participation of community groups and citizens in planning, management and implementation of local energy programs. However, it is often seen that local governments lack the processual and technical knowledge to facilitate capacity building[12], including on local energy issues.

Several of the EF supported ICD projects have delivered interesting experiences in their attempts to develop national and local level ownership to the energy access agenda: A national level ICD project in Chad *Etablissement d'un plan de développement du secteur de l'énergie* implemented by the Ministry of Mines and Energy, aiming at supporting the Ministry in preparing a Master Plan for the Energy Sector, was mainly led by external consultants who have strengthened the Ministry and other actors through training on different topics. However, this was found to be insufficient to ensure a lasting competence in energy planning. After the end of the project, the Ministry only maintained the work for one year and the reports were not updated. The project concluded that it remains very difficult to develop capacity in a Ministry if it does not have some capacity to build on in

[9] See e.g. 'The State of Capacity Building in Africa'. 2011

[10] Capacity building is key to delivering development in Africa. The Guardian. 2013

[11] Water and Sanitation Program Learning note. WSP 2010

[12] See e.g. Capacity building: Facilitating citizen participation in local governance. Australian Journal of Public Administration. 2005.

the first place. One of the reasons for this unsuccessful approach was that the project had limited national ownership and was not well embedded in the institutional structure of the Ministry.

One of the innovative multi-country policy projects Energy access for the poor: *improving energy governance by informing and engaging ACP legislators*, implemented by the international NGO E-Parliament, focused on informing, empowering and activating members of parliament in ACP countries to enable them to play a stronger role in policy development in their home country, to create change and to improve energy access. During the project, MPs from several ACP countries showed a strong ownership to this agenda and made several political commitments. This included launching new policy initiatives, such as increased allocations to renewable energy in national budgets in several countries, the creation of a renewable energy fund in Uganda, feed-in tariffs in South Africa and net metering in Cook Islands, adding renewable energy in the East African Energy Master Plan and creating a Ministry of Climate Change in Papua New Guinea. Whereas the project created increased motivation among the legislators and supported their launch of important initiatives, the institutional capacity to continue along these lines in the future without further support was not fully clear. The turnover of MPs (by not being re-elected) further exacerbated the continuity problem.

A change in institutional ownership was seen during the EF funded project *Renforcement du CLUB ER (2011-2013)*, implemented by the French consulting firm Innovation Energie Développement (IED). The projects focused on strengthening the multi-country 'Club of National Agencies and Structures in charge of Rural Electrification' (CLUB-ER). The CLUB-ER Secretariat was initially provided by the IED, but during the project the members decided to create a new secretariat in Cote d'Ivoire under the name 'African Association of Rural Electrification'. This change demonstrates that a strengthening of the institutional ownership happened during the project, at the initiative of the beneficiaries. The new name remains visible on the CLUB-ER web-site[13].

Photo: Danish Energy Management (DEM)

A delivery focused project *Conformación de Cooperativas electricas para la gestión de servicios en barrios pobres de la zona Este de la República Dominicana* in the Dominican Republic, implemented by the state-owned power distribution company EDE ESTE, supported the company in the facilitation and creation of community cooperatives to improve delivery and payment of electricity. Capacity development of community leaders and cooperatives was a key element in the project, on institutional, administrative and technical issues. The institutional anchoring of the project within EDE ESTE, who had a large interest in the successful operations of the cooperatives, made it likely that they would continue to supervise and provide technical assistance to the cooperatives in the future.

However, the projects also faced some institutional challenges, which delayed its implementation. EDE ESTE, which was a private company with a negative balance at the start of the project, was initially not able to obtain the necessary guarantees to receive the first payment from the European Commission. This changed after a year when it was nationalized but resulted in a delayed start- up of the project. To ensure additional institutional anchoring, the Dominican Institute of Cooperative

[13] http://www.club-er.org/home.html (accessed 02.07.19)

Development, who oversees legalization on cooperatives, was involved to ensure legalizing the cooperatives under the current legislation. This institutional link was established a bit late and led to delays in the project. This points to the need for discuss and clarify the institutional aspects and to involve the key partners in the early planning stages of ICD projects.

The project *Increasing the Sustainability of the Energy Sector in the Caribbean through Improved Governance and Management* (CSEP) provides an example of implementing ICD activities through regional institutions, involving the Organization of American States (OAS) as the main implementing body. The project aimed to improve energy sector governance, to develop institutional, technical and legal capacity and to address market barriers. The project supported the adoption of National Energy Plans (NEPs) and the implementation of Sustainable Energy Policies (SEP) in the seven participating countries[14] and managed to leverage over €73 million of investments in renewable energy and energy efficiency projects. Even though the project has contributed to institutional capacity development there seems to have been more attention to implementation and investment than to ensuring that the institutional capacity developed in the national sustainable energy offices and financial institutes is viable in the longer term. However, the institutional anchoring in OAS makes it likely that institutional capacity will continue to be developed at the regional and national level in the future.

Lack of basic capacity of the implementing government partner to manage an ICD project can severely affect performance. The project *Developing an Energy Services Company (ESCO) industry in Jamaica*, implemented by the Ministry of Labour & Social Security, focused on creating an enabling framework for ESCOs to meet the needs of both public and private sector organisations. However, the project performance was adversely affected from the high dependence on project staff and working group members, who had permanent jobs and were assigned to the project only on a part-time basis. This points to the need in the design of ICD projects to secure strong ownership and commitment by the implementing partners, to assess their capacity to manage the project properly, and their ability to provide the required amount and quality of staff inputs.

Conclusions:

- Strong institutional ownership by the beneficiaries, which is required for an ICD project to be successful, requires that they make qualified staff available for the implementation and management, also beyond the duration of the action.
- Capacity development in Institutions, which from the outset have no capacity in the focus area, is difficult. ICD projects in Institutions that have a basic capacity from the beginning stand a better chance of success.
- Projects that are primarily led by external consultants can have difficulties in developing the political and institutional ownership, and the institutional anchoring required to develop a lasting capacity in the beneficiary institution.
- Factors outside the control of the project remains important also for ICD projects. Political change can change the institutional status of an implementing organization and have a positive or negative impact.
- It is important to involve key institutions early in project planning and implementation, and not later in the project, to prevent institutional complication and delays.
- The development of Institutional capacity remains vulnerable to turnover among key staff in the participating institutions.

[14] Still available on http://www.oas.org/en/sedi/dsd/Energy/CSEP.asp (accessed 01.07.19)

Business and market-orientation

To reach the overall EF objectives on delivery of energy services to under-served areas, state-owned or private energy service providers are critical actors when it comes to reaching the bottom-of-the-pyramid market and provide affordable and sustainable energy services to the poor. They include e.g. distribution companies, energy service companies (ESCOs), small and medium sized enterprises (SMEs) and energy cooperatives.

Governments can play an important role in stimulating market development and promoting businesses, that operate in the field of energy access. For example, according to OECD[15], the contribution of SMEs depends on their access to strategic resources, such as skills, knowledge networks, and finance, and on public investments in areas such as education and training, innovation and infrastructure. Such strategic resources can be provided via ICD activities that enable the targeted institutions to strengthen the role of ESCOs/SMEs as service providers. This can include support to businesses and start-ups in marketing, financial management, administration and in facilitating links to sources of finance/micro-finance.

Experiences from a different sector, a sanitation program in Malawi[16], demonstrate that lack of capital for even locally available start-up business materials remains a challenge, even in this case with a latrine that is a low-cost design. Businesses in energy service delivery face similar challenges. This confirms that in the long term, training programmes cannot just train once and assume all is well; follow-up and continuing support are needed.

The EF supported projects have been implemented from 2007 to 2019 and a still are still ongoing inj time of writing. However, all of the 18 ICB projects analysed in this paper was implemented in the period 2007 – 2014 were a private sector or business approach in development cooperation was not as common as it is today. However, several of the EF projects did aim at strengthening business development.

Local business in Benin
Photo: Danish Energy Management (DEM)

A project in the Dominican Republic *Conformación de Cooperativas electricas para la gestión de servicios en barrios pobres de la zona Este de la República Dominicana* built the institutional capacity of a state-owned distribution company to facilitate the establishment and legalization of 15 local cooperatives to become power distribution businesses. Their financial viability was secured through long term contracts with the power distribution company. The cooperatives were established as businesses to ensure financial viability through payment of use of electricity. An important part of the project was the capacity building for cooperatives in management and administration. The staff was employed in different areas, e.g. technical, management and administration, and was trained in their areas of work. The business approach in this ICD project seems well designed, enabling the cooperatives to operate on their own on the incomes from end-user payment. The project demonstrated how ICD activities can help filling the institutional gap often seen in rural electrification projects, namely the link between the provider/distributor and the end-user.

[15] Enhancing the Contributions of SMEs in a Global and Digitalised Economy. OECD 2017.

[16] Enhancing sustainable sanitation through capacity building and rural sanitation marketing in Malawi. Environ Dev Sustain. 2018.

A project in Cameroon *Initiative de promotion des investissements privés dans le sous-secteur de l'électrification rurale Camerounais – Investelec* aimed at promoting private investment in renewable energies and rural electrification by strengthening SME capacity and promoting public-private partnerships. It was implemented by the Electricity Regulator ARSEL. 103 small and medium sized enterprises (SMEs) benefited from information seminars on energy investment opportunities, an international business meeting was held, and a guide to promote investment in renewable energy was produced and distributed. Whereas the project may have improved the institutional capacity of ARSEL and the capacity of the participating stakeholders, there was no sign by the end of the project of a direct impact on private investment. However, the action between public and private structures in the sector seem to have been strengthened, which may again have paved the way for future public-private partnerships.

The project *Frameworks, Policies and Instruments for Mobilising Renewable Energy in the Caribbean* aimed to facilitate access to valid and reliable information to stimulate private sector investment in renewable energy technologies. It was implemented by the Caribbean Policy Research Institute (CaPRI), and targeted governments, local private sector and NGOs in 7 Caribbean countries. The main outputs were databases, tools and manuals. Whereas some of the specific outputs were delivered and available, the capacity development elements seemed quite superficial, comprising mainly of a one-day workshops per beneficiary country, devoted to institutional speeches and presentation of the database. The project had no sustainability or continuation strategy, which could secure the maintenance of the database in the implementing organization in the national government structures or in private bodies such as industrial associations. However, some of the outputs can still be found on the CaPRI web-site[17].

Conclusions:

- ICD projects can make significant contributions to market development for renewable energy, in particular if the involved Ministries not only address more general policy frameworks, but also facilitate access to business skills, finance and investment for the service providers.

- ICD can play an important role in filling institutional gaps in the energy supply chain, e.g. between the energy service provider and the end-user.

- ICD projects should recognize that training, information and awareness activities are not enough. Further and continued support by the institutions to market actors is often required to ensure the viability of the businesses, and to ensure that the markets will develop successfully in the future.

Learning approach

The approach to learning is important for developing an institutional capacity that can increase energy access, and even more if this capacity becomes the basis for scaling-up at the national level. In this context a training of trainers (ToT) approach has proven to be effective, where trainers not only have (or will achieve) knowledge of the training content but also the skills to train others. A World Bank Water and Sanitation Program found a 'cascading' training model to be effective, where national or regional level trainers train local governments and they in turn train local communities[18].

Training workshop for solar power plant operators on management tools
Photo: Danish Energy Management (DEM)

[17] https://www.capricaribbean.org/ (accessed 01.07.19)

[18] Water and Sanitation Program Learning note. WSP 2010

The project *Conformación de Cooperativas electricas para la gestión de servicios en barrios pobres de la zona Este de la República Dominicana* combined theoretical lessons with an apprenticeship programme, which allowed most members of the cooperatives to apply in the field what has been learnt in the class-room. The combination of theoretical and practical training proved to be very efficient. In addition, manuals were developed in different areas, e.g. on accounting and tax issues, in order for the participants to have a reference document they could use post-training.

The project was met with a high level of interest by possible participants and potential cooperative members, which was large enough to allow a criterion for applicants be high school graduates and to allow a competitive selection process for staff be employed, including e.g. the holding of personal interviews. This increased the quality of trainees and employees. The positive experience from this approach to training will be very useful in the distribution company's planned expansion of the concept to its entire area of their concession, which includes 600 times more residents than covered by the EF supported project.

An EF multi-country project on strengthening the Club of National Agencies and Structures in charge of Rural Electrification (CLUB-ER) *Renforcement du CLUB ER (2011-2013)*, which comprises 40 member-institutions from 30 African countries, included capacity-strengthening activities such as training sessions and twinning activities. During the project, human resources were available and ready to transfer responsibilities to and among member institutions. According to an external evaluation of the project, there was an increase in the expertise of members and a rise in the technical level of the exchanges between members, which also led to hiring of fewer international consultants. The reduced use of foreign consultants indicated that the project was successful in developing local expertise on rural electrification.

The energy management and governance program involving Benin, Burkina Faso, Ghana and Mali Renforcement des capacités des collectivités, de la société civile, des secteurs privé et public dans les pays membres de la CEDEAO dans le domaine de l'énergie, implemented by the Burkina Faso-based Institut International d'Ingenierie de l'Eau et de l'Environnement, provided international level training (bachelor's and master's degrees in engineering) for West African energy professionals. It also included development of diploma courses and strengthening of the technical capacities of the teaching staff. The project considered developing the training further in partnership with existing national and regional engineering and higher technical schools, and energy companies, in West Africa, and to establish partnerships with foreign universities, and this provides an example of a strong and viable approach to disseminate the institutional capacity being built during the project.

Training
Photo: Programa Comunitário para Acesso a Energias Renováveis

Conclusions:

- Introducing a cascading training approach can ensure efficiency, wider dissemination and increased sustainability of institutional capacity development efforts. This can be done via a vertical approach from government to local governments and service providers, or via a horizontal approach, e.g. between technical institutions.

- To ensure wider impact and dissemination of the acquired institutional capacity, ICD projects should be designed with a training-of-trainers approach, where first level trainers are also equipped to train others.
- Class-room training combined with practical field work has shown to be efficient when its relevant for the target group
- A careful selection of participants for capacity development activities contributes to a higher quality in the capacity developed.

Change and sustainability

A key to a successful ICD activity is the impact and durability of the changes it facilitates in institutions, and the subsequent new approaches and action it leads to in the target groups and in the society. This can be through change in policies, tools used for effective action and the institutional framework which guides development-oriented public actions[19]. When it comes to improving energy access for the poor these institutional changes can be e.g. in the form of rural energy agencies or similar institutional structures, in the form of long-term policies and plans at national and sub-national level, through enabling instruments such as IPP agreements, feed-in tariffs and concessions, through public-private partnerships on energy service delivery, by providing support to energy business development and by facilitating access to investment.

Several EF supported projects have gained important experiences on sustaining changes and ensuring sustainability.

According to the external evaluation of the project *Energy access for the poor: improving energy governance by informing and engaging ACP legislators*, which targeted Members of Parliament in ACP countries, participating legislators contributed to several policy and institutional changes in their countries and became members of a web based Parliamentary Network on Energy. However, the institutional sustainability remained a challenge for the project. The turnover of MPs, which is a foreseeable feature in a democracy, can lead to loss of continuity and momentum in the follow-up on the specific actions and the networking. The website of the Parliamentary Network, which includes an idea's bank and a policy toolbox, was apparently maintained beyond the project period but is not active today, 5 years after the completion of the project[20]. A more sustainable approach could have involved an agreement with a regional or global capacity development organization, such as UNDP, to continue the support. If an organization like UNDP had been fully involved in the project from the beginning, this could have contributed to continued impact and sustainability of the outputs.

Two capacity development projects *Appui au Club des agences et structures nationales africaines en charge de l'électrification rurale (CLUB-ER)* and *Renforcement du CLUB ER (2011-2013)* note that the strong ownership of activities by the members and the good results obtained in capacity building have created a momentum to continue after the end of the project. Regarding financial viability, the project expected that continued support from donors was required, in combination with increasing the financial contribution by the member institutions to ensure that they give the membership importance and sustain their participation. The fact that the website of CLUB-ER and the 'African Association of Rural Electrification' is still active today[21] is a sign of a sustained impact of this project. The project illustrates two key elements of financial viability: whether development partners are ready to support continued ICD activities, and whether beneficiary institutions are ready and/or able to pay, e.g. through an increased membership fee.

The rural electrification project in the Dominican Republic *Conformación de Cooperativas electricas para la gestión de servicios en barrios pobres de la zona Este de la República Dominicana* includes several features that contributes to sustainability. The grant

[19] See e.g. 'The State of Capacity Building in Africa'. 2011

[20] http://www.e-parl.net/eparliament/general.do?action=news&id=114. Access attempted 13.06.19

[21] See http://www.club-er.org/ (accessed 02.07.19)

beneficiary EDE Este that now supplies electricity to the local distribution cooperatives under long-term contracts maintains a natural interest in the successful operations of the cooperatives and can be expected to continue supervising and providing technical assistance to them. The cooperatives rely on payment of electricity from the end-users, which have become more stable after the cooperative model was introduced. An additional sustainability feature of the project is the elaboration and use of tools, like manuals on administrative (e.g. accounting and taxes) and technical issues, that can be applied in future ICD programs, e.g. when they are expanded to other distribution areas.

The project *Renforcement des capacités des collectivités, de la société civile, des secteurs privé et public dans les pays membres de la CEDEAO dans le domaine de l'énergie*, illustrates the potential of involving research and technical institutions in ICD activities in order to build a more permanent capacity base that can be accessed in the future by governments, utilities and other institutions, and thus make ICD efforts less vulnerable towards changes in government priorities and staff turnover.

Political instability has been a challenge for the sustainability of EF projects in some countries. One example is the project *SIE-Afrique Phase VI, Appui à la mise en place de Systèmes d'Information Energétique (SIE) nationaux au Congo et en Centrafrique*, implemented by the Belgian company ECONOTEC and focusing on capacity building in Ministries for Energy on Energy Information Systems (EIS). While it had some success in the Congo on building human capacity and integrating an EIS team into the Ministry's organizational chart, it was not able to carry out many of the planned capacity building activities in the Central African Republic (CAR) due to a deteriorating security situation.

Conclusions:

- It is important to ensure that the capacity developed in ICD projects is also anchored in institutions outside the Government, such as universities and technical institutions. This will make the capacity developed less vulnerable to political changes, e.g. change of government.

- Continuation strategies addressing how the institutional capacity can be maintained and further developed after project termination should be mandatory in all ICD projects.

- Continued institutional support by Government organizations is often key to sustain the capacity build, including from public budgets and qualified staff.

- Payment of membership fees demonstrates good ownership by members, but can be difficult to maintain.

- Political stability is important for sustainability. If ICD activities are implemented in unstable countries, special measures should be taken to maintain sustainability. This can be by anchoring projects in a regional or international organization that can provide support as things are becoming more stable.

Lessons learned

This paper presented and discussed issues and lessons learned from EF projects with a focus on strengthening the institutional capacity in regional, national and local government agencies and institutions. Some projects made important contributions to institutional capacity development, others were less successful, but provided useful lessons to be learned.

The EF experiences confirm that to be successful capacity development requires a strong political and institutional ownership and leadership by the beneficiary. This was the case for several EF projects where the beneficiaries at the regional, national and local levels were implementing the projects and played a very active part. An EF project primarily led by external consultants

had difficulties in developing the desired political and institutional ownership and proved to be less successful. Experiences also show that the lack of a basic capacity of the implementing partner institution negatively affected the performance of the capacity development efforts of the EF projects.

A few of the projects contributed to market development for renewable energy. This was done by helping institutions to develop market stimulating policies, incentives and tools (e.g. databases), with a pro-active support to business development by facilitating access for the companies and other market players to business skills, finance and investment by, and by helping fill institutional gaps in the energy supply chain between energy service provider and end-user groups. Some of the projects were however not sufficiently aware of the need for a continued support to market actors beyond the project lifetime and did not address this in the project design, thus leading to a high risk for losing the achieved capacity.

The EF projects applied different learning approaches. A project targeting delivery of energy services successfully applied classroom training combined with practical field work, which showed to be an efficient approach. Manuals and other tools developed in the project potentially extended the impact beyond the duration or the project, e.g. when they are applied in other projects with similar target groups. Other projects successfully applied approaches such as peer-to-peer learning and exchange programs. In one project the learning was performed only by expatriate consultants, which significantly limited the local ownership and impacts.

Even though only few EF projects explicitly included long-term impact and sustainability in project design several of them addressed these issues in different ways. Some projects involved institutions outside the governments in capacity development, thus making the projects less vulnerable to future changes in government. Other projects based the sustainability of their efforts on an (expected) continued staff and budgetary support by the government, on membership fees by the participating institutions, or through end-user payment of electricity. Several projects were weak in addressing sustainability, which led to loss of capacity shortly after project termination. Factors outside the control of the project also affected ICD projects. This included staff turnover among key staff and sometimes political instability that made it impossible to carry out activities.

Recommendations

The experience and learning from the EF projects and other sources reviewed in this document can be translated into the following recommendations than can be useful for the design for future ICD interventions:

Secure institutional ownership and anchoring

- Ownership by the institutional beneficiaries must be ensured by demonstrating how the project in a clear and visible way contributes to the overall energy policies, strategies and work plans of the beneficiary institution.
- ICD activities and outputs should be institutionally anchored within the beneficiary's organizational structure in a way that ensures continuation after the project is terminated.
- Beneficiary institutions should commit to making enough, qualified staff and resources available for the implementation and management of the project.
- Key institutions and other parties that have a key role for the successful outcome in an ICD project should be involved in project planning.
- The capacity developed in ICD projects should attempt to be co-anchored in institutions outside the Government, such as universities and technical institutions. This will make the capacity developed more widely accessible and less vulnerable to changes, e.g. change of government and rotation of government staff.

Facilitate market and business development

- The potential for ICD projects to support sustainable energy market development should be mobilized. This can be done by supporting governments to create a stimulating framework for sustainable energy service providers and end-users, e.g. through enabling policies and regulation, tax exemptions, feed-in tariffs, power purchase agreements or energy concessions.

- Business focused ICD projects should create mechanisms that facilitate access for companies and other market players to business skills, finance and investment

- Where relevant, ICD projects should help fill institutional gaps in the energy supply chain between energy service provider and end-user groups as the above-mentioned project *Conformación de Cooperativas electricas…* is a good example of.

- In their design, market focused ICD projects should address the need for long term institutional support to market development. Formal agreements and Instruments such as PPAs and feed-in tariffs need to be valid for several years to be able to attract investment.

Select the appropriate learning approaches

- Learning approaches must be carefully adapted to the institutional context and to the individual participants' background and skills level, as well as the context they will be working in when the training is completed.

- ICD projects can include a training-of-trainers approach, where the first level of trainers is trained both in subject matters and in how to train others. This can enable dissemination capacity in other national or local institutions.

- ICD projects should consider Introducing a cascading training approach than can ensure efficiency, wider dissemination and increased sustainability of institutional capacity development efforts. This can be through a vertical approach from government to local governments and service providers, or via a horizontal approach, e.g. between technical institutions or local authorities.

- ICD projects should ensure that approaches, manuals and other tools developed in the project can be relevant outside the project borders, e.g. beyond the duration of the project or for use in projects with similar target groups.

Focus on sustainability

- ICD projects should give much more attention to how the capacity developed in the project can remain active and useful in the future. Continuation or similar strategies should be a mandatory part of ICD projects.

- During implementation ICD projects should develop mechanisms that can sustain and further develop the capacity achieved. This can be achieved through government budgets, end-user payments or membership fees.

- The sustainability of Institutional capacity remains vulnerable to turnover among key staff in the participating institutions. ICD project design should spread the risk by involving other institutions in implementation that are less subject to staff changes. This can be at a university, technology center or similar where the turnover of academic and expert staff is less.

- Political stability has shown to be important for sustainability but is beyond the control of an ICD project. However, If ICD activities are planned and implemented in currently unstable countries, special measures should be taken to ensure sustainability, e.g. anchoring the ICD activity in a regional organization.

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Annex: List of Energy facility projects focused on institutional capacity building

CRIS	Project Title	Country
2007/195-965	Conformación de Cooperativas electricas para la gestión de servicios en barrios pobres de la zona Este de la República Dominicana	Dominican Republic
2007/195-981	Appui au Club des agences et structures nationales afri-caines en charge de l'électrification rurale (CLUB-ER)	Regional: West and Central Africa (French speaking countries)
2007/195-983	Renforcement des capacités des collectivités, de la so-ciété civile, des secteurs privé et public dans les pays membres de la CEDEAO dans le domaine de l'énergie	Burkina Faso; Benin; Ghana; Mali
2007/195-989	Energy access for the poor: improving energy governance by informing and engaging ACP legislators	Regional: ACP region
2008/195-970	Increasing the Sustainability of the Energy Sector in the Caribbean through Improved Governance and Manage-ment	Regional: Caribbean
2008/20275	Etablissement d'un plan de développement du secteur de l'énergie	Chad
2008/20292	Preparation of Geothermal Based Crossborder Electrical Interconnection in the Caribbean	Dominica
2008/20642	Capacity building in energy planning and management	Mozambique
FED/2011/023-268	Developing an Energy Services Company (ESCO) industry in Jamaica	Jamaica
FED/2011/231-674	Supporting Energy Efficiency for Access in West Africa (SEEA-WA)	Regional: West Africa
FED/2011/231-815	Renforcement du CLUB ER (2011-2013)	Regional: West and Central Africa (French speaking countries)
FED/2011/232-566	Integrated Rural Electrification Planning in Tanzania (IREP TANZANIA)	Tanzania
FED/2011/262-486	Formation initiale et continue des opérateurs et acteurs de l'électrification rurale en Afrique de l'Ouest	Burkina Faso; Mali
FED/2011/265-078	Initiative de promotion des investissements privés dans le sous-secteur de l'électrification rurale Camerounais - Investelec	Cameroon
FED/2011/266-800	Frameworks, Policies and Instruments for Mobilising Renewable Energy in the Caribbean	Regional: Caribbean
FED/2011/274-962	Droit des femmes, politiques énergétiques et environ-nementales au Tchad	Chad
FED/2011/275-760	SIE-Afrique Phase VI, Appui à la mise en place de Sys-tèmes d'Information Energétique (SIE) nationaux au Con-go et en Centrafrique	Central African Republic; Republic of Congo
FED/2011/280-855	Improved quality of life of low-income groups within the OECS Region through promoting improved governance and institutional frameworks to support energy efficiency	Regional: Caribbean