

Addressing the Needs of Micro and Social Entrepreneurs in the Energy Field in Developing Countries

by Diane Le Goff and Mathilde Dupré

Executive summary

Entrepreneurship is a real opportunity to address the challenges of unemployment and access to energy worldwide to achieve the Sustainable Development Goals 4, 7 and 8 of the United Nations. With almost 1 billion people having no access to energy worldwide, electrification remains a major issue for emerging economies, but also a real opportunity for the creation of new qualified jobs. Therefore, supporting entrepreneurship is crucial. This white paper presents the current challenges and trends concerning entrepreneurship in developing countries and proposes a framework of actions to support entrepreneurship for energy-related careers, based on a case study of Schneider Electric.

Introduction

Entrepreneurship in the energy field can contribute to reaching the Sustainable Development Goals

Entrepreneurship can be a bridging answer to the challenges of the currently growing unemployment and need for access to energy worldwide and thus achieve the Goal 7 and 8 of the Sustainable Development Goals (SDGs) of the United Nations.

In Goal 7 of the SDGs, the international community committed to provide “access to affordable, reliable, sustainable, and modern energy for all.”¹ This goal includes three sub-goals to be achieved by 2030: ensuring universal access, doubling the share of renewables in the global energy mix, and doubling the global rate of energy efficiency. Access to energy is a basic human right and essential to economic growth. However, it remains a major challenge, especially for rural areas because of high logistical and distribution costs as well as a lower income level.²

Today, 1.06 billion people still live without access to energy.³ More than half of them are in Sub-Saharan Africa, where the number of people without access to electricity is rising, particularly in rural areas.⁴ With anticipated demographic growth, the energy demand is estimated to double.⁵ This will put the existing electric system under stress and require action to secure energy access even in remote areas.⁶ The energy demand rate growth is estimated to be 2.9% annually in non-OECD countries and 4% in Africa between 2013 and 2040.⁷

Access to energy is a complex and multidimensional issue. As such, it can't be restrained to a simple technical question, as it also depends on the creation and the promotion of adequate socioeconomic ecosystems. Development in energy is not only a technical challenge that requires substantial financial investments; it also necessitates the development of adequate skill sets and jobs within the communities to operate products and infrastructures correctly for the long run.

In consequence, action for access to reliable and clean energy worldwide can be an opportunity to address other SDGs, as the international community also committed to take action to address the crucial issue of unemployment. Nearly 767 million people live below the poverty line of 1.90 dollars per day today,⁸ a situation that will only be solved if they can gain access to stable and well-paid jobs.

To reach Goal 8, the international community notably committed to achieving full and productive employment as well as sustainable work for all women and men, including young people and persons with disabilities. A growing number of people will be looking for employment in the coming years. Global unemployment increased from 170 million in 2007 to nearly 202 million in 2012, of which about 75 million are young women and men. By 2019, 212 million people will be out of work.⁹ In addition, 470 million jobs are needed globally for new entrants to the labor

¹ United Nations, Sustainable Development Goal 7, Energy

² Pueyo Anna, *Training the next generation of electricity professional in order achieve sustainable Energy for All*, November 2016

³ S4ALL, Global Tracking Framework, 2017

⁴ IEA, *World Energy Outlook*, 2015

⁵ *Ibid*

⁶ *Ibid*

⁷ *Ibid*

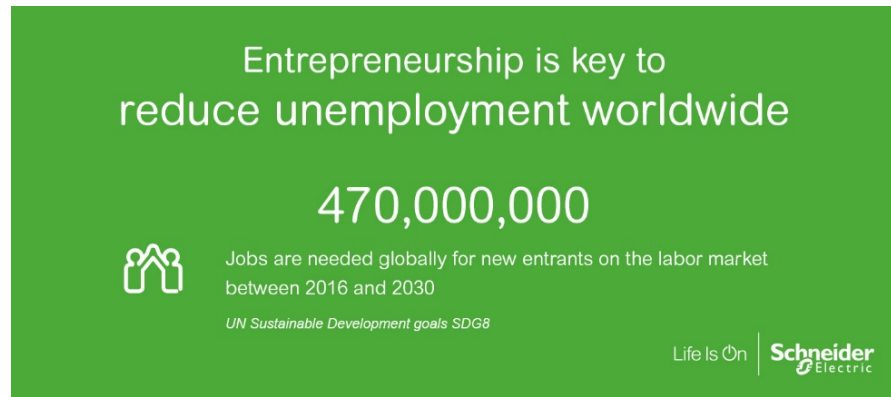
⁸ World Bank, 2013

⁹ ILO, *World Employment and Social Outlook, Trends*, 2015

market between 2016 and 2030. In Africa, for example, 25 million youths will enter the labor market every year starting in 2019.¹⁰

Figure 1

Number of jobs needed globally between 2016 and 2030



Entrepreneurship can help bridge gaps by providing a path toward access to reliable, affordable and clean energy, and by opening the door to employment and a step out of poverty for people earning 1 to 2 dollars per person per day. Furthermore, entrepreneurs are usually the most capable of deploying energy solutions in a specific area. They are the link with local customers, producers, and final distributors. This will empower local communities to acquire long-term competencies to maintain and develop access to energy solutions; it is a prerequisite to promoting long-term access to energy.

Supporting entrepreneurship as a leverage for lasting solutions

Entrepreneurship can offer a chance to stimulate local socioeconomic fabric, but it requires an important support to be able to grow. This can be defined as three main elements: developing skills, mentoring, and facilitating funding or access to funding. Therefore, actions need to be taken to support these elements, and must consider local specificities. Labor market features among emerging economic differ significantly, as the relationship to employment fluctuates depending on socioeconomic contexts. The informal sector, for instance, represents between 50 and 75% of the employment in developing countries.¹¹ Moreover, various strategies are developed by the population of poor areas to secure incomes such as cumulating jobs in both the formal and informal sector or having diversified activities. These strategies must be understood to provide emerging economies with answers adapted to their local needs.

This white paper presents the current challenges and trends concerning entrepreneurship in developing countries and proposes a framework of actions to support entrepreneurship for energy-related careers, based on a case study of Schneider Electric.

Entrepreneurship features in developing countries

Defining entrepreneurship

The lack of a common definition of entrepreneurship can make it problematic to determine qualification. The United Nations Conference on Trade and Development (UNCTAD) focuses on the development of domestic startup in its definition of entrepreneurship, whilst the Organization for Economic Co-operation and Development (OECD) defines entrepreneurship more broadly as “a phenomenon

¹⁰ Report Faber-Naidoo, *Innovator par la mobilization des acteurs : 10 propositions pour une nouvelle approche de l'aide au développement*, June 2014

¹¹ ILO, *Recommendation n°204 on the transition from informal economy toward formal economy*, 2015

associated with entrepreneurial activity as the enterprising human action in the pursuit of the generation of value through the creation or expansion of economic activity by identifying and exploited new products, processes or market.”

A relevant definition for the concept of entrepreneurship in the framework of this white paper was developed by Thomas Gries and Wim Naudé for The United Nations University World Institute for Development Economics Research (UNU-WIDER) of the United Nations University (UNU). They define entrepreneurship as “the resource, process and state of being through and in which individuals utilize positive opportunities in the market by creating and growing new business firms.”¹² Thus, entrepreneurship can be considered under various lights.¹³

It is simultaneously:

- **a set of values**, as the entrepreneurial spirit is characterized by innovation and risk taking. Entrepreneurs are agents of change, grabbing opportunities resulting from market disequilibria to turn it into value creation;
- **a process**, composed of the development, organization and management of a business venture along with any of its risks;
- **a resource for economic development policies**, especially in emerging economies.

Entrepreneurship as a significant driver for sustainable development

Thus, entrepreneurship is an essential tool to reach the SDGs. Entrepreneurship is becoming an important component of development policies worldwide, as it is considered by a wide range of actors as an “enabler, driver and empowering tool for sustainable development with far-reaching benefits,” according to the United Nations.¹⁴

Since 1990, growing attention has been paid to the links between entrepreneurship and sustainability. The research literature attests to the existence of strong links between the two areas.

In fact, entrepreneurial activities appear to be beneficial for economic growth and development. In countries that have achieved substantial poverty reduction over the past three decades, entrepreneurship has been significantly resurgent.¹⁵ China, for example, is one of these cases. It is acknowledged by researchers that such activities, particularly when taking place in developing countries, can enhance education, productivity, socioeconomic status, physical health, and self-reliance of individuals and societies.¹⁶

Entrepreneurship can also be key to shifting toward a more sustainable economic model.¹⁷ Research shows that entrepreneurship can help preserve ecosystems, counteract climate change, reduce environmental degradation and deforestation,

¹² Gries, Thomas and Naudé Wim, *Entrepreneurship and Structural Economic Transformation*, Research Paper 2008/062 Helsinki: UNU-WIDER, 2008.

¹³ *Ibid*

¹⁴ UNDESA

¹⁵ Naudé Wim, *Entrepreneurship and Economic Development: Theory, Evidence and Policy*, Discussion Paper Series n° 7508, Institute for the Study of Labour, July 2013

¹⁶ McKague Kevin and Wheeler David, *The Business of Development: Self-reliance through Sustainable Local Enterprise Network*, 2005

¹⁷ Cohen Boyd and Winn Monika, *Market imperfections, opportunity and sustainable entrepreneurship*, *Journal of Business Venturing*, n°22, 29-49, 2007

improve agricultural practices and freshwater supply, and maintain biodiversity, as it's based on tailored business models in adequacy with the local needs.¹⁸ Furthermore, sustainable development can also create new entrepreneurial opportunities, as it challenges the traditional business models of existing firms.

Thus, various actors of the international cooperation have developed significant framework for actions to support entrepreneurship. The UNCTAD, for example, has been active in the promotion of entrepreneurship and microenterprises support for development over the past decades. These actions take place in a wider movement of reconsideration of public aids schemes to improve their efficiency¹⁹ through the promotion of a multidimensional approach that requires more than just the eradication of income poverty in the short term.²⁰ The importance of entrepreneurship to tackle SDGs has been underlined in the resolution 67/202 on entrepreneurship for development of the General Assembly of the United Nations, which was adopted in 2012.

Entrepreneurial development represents an alternative to more traditional approaches.

Top-down development policies bringing exogenous human capital and investment have encountered difficulties in reaching their target and establishing themselves within communities. Entrepreneurial development corresponds to a more bottom-up logic, as it is based on the stimulation of local entrepreneurial talent and growth of indigenous companies in the formal economy.²¹ Increasing the number of entrepreneurs who create local value will accelerate economic development in rural areas.²² Therefore, support for entrepreneurship is a secure investment in empowering populations and in long-term well-being and prosperity, as well as in building resilience.²³

Challenges to addressing the development of entrepreneurship

Fostering tailored approach for diverse entrepreneur profiles: latest trends on entrepreneurship in developing countries

A one-size-fits-all developmental approach may apply to various forms of entrepreneurship in developing countries. As a matter of fact, there can be important discrepancies between the various forms of entrepreneurship that one can observe on the ground. New trends are also appearing for targeted support regarding youths, women and social entrepreneurship. These publics tend to create new or hybrid entrepreneurial models with specific needs.

The first important distinction to establish for addressing entrepreneurship issues in developing countries is differentiating *opportunity* entrepreneurship from *necessity* entrepreneurship. Whilst some entrepreneurs have identified market opportunities, others have entered entrepreneurship by default, as they couldn't find employment in the formal labor market. In this case, their entrepreneurial activity is often combined with other activities, which allows them to perceive revenues such as agricultural exploitations. Opportunity entrepreneurship and necessity

¹⁸ Dean Thomas, Mc Mullen Jeffery, *Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action*, Journal of Business Venturing 22(1):50-76, January 2007

¹⁹ Report Faber-Naidoo, *Innover par la mobilisation des acteurs : 10 propositions pour une nouvelle approche de l'aide au développement*, June 2014

²⁰ Naudé Wim, *Entrepreneurship and Economic Development: Theory, Evidence and Policy*, *op. cit.*

²¹ FAO, *Rural Development through Entrepreneurship*, 1997

²² *Ibid*

²³ *Ibid*

entrepreneurship rely on different features; the first is most likely to scale up and be innovative, whilst the second is often small and tends to have less growth.

Another important fact to note is that an important share of the entrepreneurs can be found within the informal sector. Entrepreneurial development is an opportunity for them to develop and structure activities, which are informal by lack of legal frames or because of the inability of the entrepreneurs to gain access to the formal market.

According to the ILO, the informal economy represents half to three-quarters of all nonagricultural employment in developing countries.²⁴ Often, these jobs are associated with poor employment conditions and increasing poverty. As stated by the ILO, “lack of protection, compulsory overtime or extra shifts, unsafe working conditions and the absence of social benefits such as pensions, sick pay and health insurance”²⁵ are common in the informal economy.

This is especially the case for vulnerable groups of workers who lack basic literacy skills due to a lack of education: this group tends to be excluded from other opportunities and has little choice but to take informal jobs. Accompanying these entrepreneurs in their path to structuring their activities and eventually accessing the formal economy is possible, if they are provided with the right skills and tools to grow. For entrepreneurs in energy such as electricians, accompanying their structuration also means ensuring the safety of their activities.

Another emerging trend is the development of social entrepreneurship, which proposes entrepreneurial models that differ from the conventional ones. Social entrepreneurship relies not only on profit, but also on social or/and environmental goals. Social entrepreneurs often serve as provider of goods and services to people who were excluded from them, such as access to energy, or act to protect the environment, as through the replacement of polluting equipment in households. Governance tends to be different from traditional entrepreneurial models, with more participation and redistribution of the benefits. However, as their objectives are primarily social and/or environmental, they also tend to face more difficulties in defining their business model and in their operational development. They offer less profitable business models for conventional investors, and sometimes find it difficult to set their position between conventional business and nonprofit. As such, they need dedicated support.

To foster social and economic inclusion, targeted entrepreneurial support has also been designed for more vulnerable part of the populations of developing countries. Two specific targets are youths and women, as they can be critical drivers for development if they're empowered.²⁶

- Women entrepreneurs: A growing number of actions are being developed to support women entrepreneurs, notably in energy. These programs are based on a dual observation: Women need dedicated economic empowerment support, as they tend to experience gender discrimination, and at the same time, they are key players in the socioeconomic development of their communities due to their unique role in the household. In addition, women are already contributing significantly to the economy, as they're largely represented within the informal sector as previously stated.²⁷ Thus, women entrepreneurs have enormous potential if they succeed in overcoming

²⁴ ILO, 2017

²⁵ *Ibid*

²⁶ UNACTD, *Promoting entrepreneurship for development*, Note by the UNACTD secretariat April 2015

²⁷ ILO, 2014

gender gaps in access to finance, information, technology, goods and services, and markets. Addressing these gender-differentiated risks and barriers has become a priority of the international community and of several NGOs.²⁸

Figure 2

Empowering women entrepreneurs in the energy field creates greater benefits for all.



- Youth entrepreneurs: Youths also tend to be a significant target for the development agenda of many countries, as unemployment will be growing in the coming years, and there is an urgent need to find alternatives to enable them to access sustainable jobs. This is crucial; youths represent 18% of the world population, and 85% of youths live in developing countries.²⁹ In Africa, for instance, youths will represent one-third of the population by 2050.³⁰ Youths are also likely to have good entrepreneurship potential, since they don't yet have responsibilities such as mortgages and families, which could make them risk-averse. To tap into this potential, several countries, development agencies, and NGOs have developed programs to raise youths' awareness around entrepreneurship during their educational years and to support them if they choose this path.

Building a socioeconomic ecosystem favorable to entrepreneurship

Entrepreneurship is far from being the lonely adventure of a single person. To the contrary, entrepreneurial growth requires a favorable ecosystem that facilitates venture creation and development. OECD lists five main determinants of entrepreneurship in its 2008 Entrepreneurship Indicators Program.³¹ Per this document, entrepreneurship depends on:

- **opportunities**, driven by various factors such as market conditions, shaped by public policies and openness to foreign markets;
- **skills**, both the individual capabilities of an entrepreneur and access to entrepreneurial structure;
- **resources**, such as capital or R&D during all phases of an entrepreneur's lifecycle from early seed funds to stock market;
- **the regulatory framework in place locally and nationally**. This encompasses all the taxes, regulations, and public rules or institutions affecting entrepreneurship such as business creation schemes;

²⁸ UN Women, Women Entrepreneurship in Energy

²⁹ Advocate for Youths, Factsheet Youth and the State of the World

³⁰ African Development Bank, 2015

³¹ OECD, *A Framework for Addressing and Measuring Entrepreneurship*, 2008

- the representation of the entrepreneurship value set within a specific culture, which can be seen through the perception and the learning of entrepreneurship.

As is widely recognized, entrepreneurs in developing countries face various hindrances. Although national policy schemes for entrepreneurship are starting to be developed by the governments of these countries, the need remains for improvements in administrative regulations and awareness.³² In the case of the energy field, entrepreneurs often report their need to have better knowledge of the legal and economic environment surrounding energy and the local plan for electrification to identify opportunities for business development.³³

Access to finance has also been identified as the key constraint to growth for the entrepreneurs by the World Bank. Only 30% of entrepreneurs in developing countries use external financing, and half of them are underfinanced.³⁴ The international Finance Corporation estimates that the collective unmet financing needs of these entrepreneurs is \$2 trillion,³⁵ while the World Bank estimates that the unmet credit needs of micro and small enterprises comprise between \$2.1 and \$2.5 trillion, approximately 14% of the growth domestic products in these countries.³⁶ Entrepreneurs in developing countries also tend to be less trained than in developed countries and to have lower capitalistic or technological activities, as the need to earn an immediate income is at the base of their entrepreneurship.

To foster entrepreneurship, a wide range of actions can thus be taken to improve the features of these determinants. The UNCTAD Entrepreneurship Policy Framework provides an approach and a methodology to support entrepreneurship and identifies several areas of actions to help entrepreneurs in developing countries:

- the formulation and development of national entrepreneurship strategies;
- the optimization of regulatory environments;
- the enhancement of education and skills development toward entrepreneurs;
- the facilitation of technology exchange and innovation;
- the improvement of entrepreneurs' access to finance by offering tailored solutions at any stage of the entrepreneurial activity for microentrepreneurs;
- the promotion of entrepreneurship through awareness raising;
- the development of networking actions to allow experience and knowledge sharing and to expand the entrepreneurs' opportunities.

Whilst some of these perspectives of actions are mostly in the hands of public Authorities – such as the evolution of the regulation and the development of national entrepreneurship strategies – non-state actors can also bring significant contributions to entrepreneurship support in the other areas identified by UNCTAD.

Partnership between the public and private sectors appears to be critical for providing efficient solutions for the success of entrepreneurship support initiatives. Furthermore, there is a need for large collaborations that include multidimensional

³² UNACTD, Promoting entrepreneurship for development, *op.cit.*

³³ World Resources Institute, Helping clean energy entrepreneurs turn lights poor countries, 2013

³⁴ World Bank, *Financing for Development post-2015*, 2013

³⁵ International Finance Corporate, *Access to credit among micro, small and medium enterprises*, 2014

³⁶ World Bank, *Doing Business 2015: Going Beyond Efficiency*, 2014

approaches in the various areas of action. As a matter of fact, if one area of action is developed independent of others, the concrete effects on entrepreneurship support and growth will be limited. Without access to funding, a network, and mentoring support, the ability of trained entrepreneurs to create or develop their businesses will be limited.³⁷

In this regard, skills development and funding facilitation are areas where public-private initiatives are particularly growing.

Regarding the enhancement of education and skills development, a various range of actors are starting to offer entrepreneurs support, as the role of self-employment and entrepreneurship in job creation has risen in developing countries, and these entrepreneurs often lack the necessary skills to develop their activities.³⁸ This takes the form of training programs for technical, managerial and financial literacy. In the energy sector, significant needs exist for enhancing such skills of independent electricians and resellers for solar products.

Despite a lack of wide assessment on this program, the existing data tend to show that these programs have positive impacts on labor markets and business outcomes when they're associated with other adequate instruments.³⁹ An analysis from the 2012 United Nations survey of entrepreneurs in Swaziland found that performance of firms run by young trained entrepreneurs exceeded that of firms operated by their less trained counterparts.⁴⁰

Public, private, and hybrid initiatives aimed at providing funding solutions for entrepreneurs are also growing. Public funding takes different forms, such as public credit guarantees schemes or capacity-building grants, whilst special private funding mechanisms have been designed to address issues such as impact investment, business angles, venture capital, crowdfunding, mobile money and capital markets. Among them, microfinance appears to be a key mechanism for tailored funding toward small-size ventures. Microcredit solutions are appropriate to kick-start activities with relatively modest financial needs such as the activities of electricians or solar products resellers. Microfinance can also be a solution for the early stages of social entrepreneurship projects.

Microfinance institutions (IMF) can take various forms, including NGOs, banks or mutual cooperatives. They can offer multiple forms of loans, such as modulable, low sums or short-term loans with fixed interest rates. However, their economic models can be unstable as they tend to support at-risk populations, which can lead to the distortion of their models. Abuses such as pressure and tendencies to indebtedness have been observed, building the case for stronger monitoring of IMFs.

Other innovative solutions can also exist. Group entrepreneurship programs are promising, as they allow entrepreneurs to share their experience and network. Building on the statement that entrepreneurship should be everything but not one's single adventure, they create strong connections that tend to foster entrepreneurial motivations and facilitate access to market. For example, groups of women entrepreneurs in energy tend to be effective in providing role models and stimulation with their peers.

³⁷ DIW, Skills training for entrepreneurs in developing countries, available online

³⁸ Brixiova Zuzana, Skills, training and youth entrepreneurship in Africa, December 2014

³⁹ Cho Yoonyoung and Honorati Maddalena, 'Entrepreneurship Programs in Developing Countries: A Meta Regression Analysis', *Labour Economics*, Vol. 28 (June), 110–130, 2014

⁴⁰ Brixiová, Zuzana. and Kangoye Thierry, 'Youth Employment in Africa: New Evidence and Policies from Swaziland', in *Disadvantaged Workers: Empirical Evidence and Labour Policies*, edited by M. A. Malo and D. Sciulli, AIEL Series in Labour Economics, Springer, 2014

Programs that provide entrepreneurs with adequate business models or help the entrepreneurs to adjust their business models to market needs during their development also tend to be more efficient. This is because reaching the end user can be complicated in developing countries due to poor purchasing power. Any actions taken to provide inclusive solutions reinforce the chances of entrepreneurs to be successful. This type of action is gaining momentum in the energy field, building on the experience in developing countries made by multiple businesses, NGOs and international organizations.

Schneider Electric case study

Schneider Electric's Access to Energy Program

Schneider Electric has been operating strongly for the development of emerging economies in the energy field with its Access to Energy Program since 2009, based on three pillars:

- **Offers & Business Models:** Schneider Electric designs and deploys adequate electrical distribution offers to enable access to energy for all.
- **Investment:** Two investment funds support mature and innovative energy entrepreneurship locally. Already, 14 ventures have benefited from these funds.
- **Training & Entrepreneurship:** Schneider Electric and its Foundation support the training of disadvantaged people and trainers in energy and automation and the design and implementation of inclusive solutions regarding training, mentoring, and funding for entrepreneurs wishing to launch their ventures at all the stages of the energy chain.

The perimeter of this third pillar has been redefined to integrate entrepreneurship, rather than supporting only training in energy in emerging countries.⁴¹ To achieve this, Schneider Electric supports energy-related training through a wide range of cooperation, for courses lasting from three months to three years that train participants to work as electrician and technicians.

Schneider Electric chose to develop training, because that approach is intrinsic to the company's philosophy. The company has incorporated Technical and Vocational Education and Training (TVET) into its culture from the beginning. In 1929, Schneider created its own school, Paul Louis Merlin, to improve workforce skills in the energy field. To achieve this, the school promotes vocational training and classroom practice, which arms youths with the knowledge and skills for energy-related jobs. The Access to Energy Training Program was set up in 2009, as the same problem was noted among developing countries.

However, it quickly became clear that this would be insufficient to create the right ecosystem for lasting and reliable access to energy. Trainees needed more support – although they gained skills, a lack of available employment still limited their ability to join the workforce, especially in rural regions. To address the challenge, a first module was created to raise awareness around entrepreneurship and to assist some of the trainees who had already launched entrepreneurial projects.

As the usefulness of this program was acknowledged, complementary courses were implemented with the support of the association Schneider Initiatives Entrepreneurs (S.I.E). S.I.E was created in 1994 and aims at developing the entrepreneurial spirit among Schneider's collaborators as well as helping employees develop and implement their own entrepreneurial projects. Dedicated

⁴¹ For more information, see the white paper, "[Developing the Skills in Energy for Emerging Economies through TVET](#)" by François Milioni and Mathilde Dupré, 2017

training modules were developed to fit with the needs of the trainees of the Access to Energy Training courses who wanted to launch their own ventures following their training in electrical installation.

In turn, Schneider expanded the Access to Energy Training pillar to become the Access to Energy Training & Entrepreneurship pillar with the development of new framework for actions matching the needs of entrepreneurs acting as electricians or resellers of products, since their activities are out of the scope of the initiatives supported by the Investment Pillar.

Figure 3

History of the Access to Energy Training & Entrepreneurship Program



Being attentive to the trends regarding entrepreneurship in developing countries and aware of the actions carried out by other actors on the ground, Schneider Electric makes a practice of finding ways to improve the Access to Energy Training & Entrepreneurship pillar. The company has diversified its actions to provide a wide range of support to various entrepreneurs.

Schneider Electric and the structures supporting entrepreneurs noticed important needs of informal entrepreneurs that required solutions. Informal entrepreneurs are persons who undertake entrepreneurial activities by necessity without any previous technical or managerial training and whose ventures are not registered. Thus, the company enlarged its actions on entrepreneurship to be able to help those who start their own ventures outside of regulatory frames to structure their activity. This will benefit communities as it will ensure the sustainability of the ventures and the creation of positive economic value chains in the country.

Moreover, Schneider Electric was contacted by a growing number of actors bearing social entrepreneurship initiatives in access to energy and decided to act on that matter. Social entrepreneurs have an original approach to energy access as they tend to offer new business models in accord with the local needs. However, they also face specific difficulties as their models differ substantially from conventional entrepreneurs. Therefore, Schneider Electric created new partnerships with structures providing tailored support to these new players of access to energy.

Women have enormous potential in entrepreneurship in developing countries. Being a recognized actor in the fight for gender equality, Schneider Electric is convinced that supporting women entrepreneurs in energy-related trades is a strategic leverage for lasting solutions among communities. Given their predominance in the informal sector and the key role that they play to secure resources for their households and communities, women are important players needing special attention through an effective gender lens and support for their entrepreneurial endeavors.

How it works

Principles, objectives and an action plan

Schneider Electric's ambition for 2025 through its Access to Energy Training & Entrepreneurship Program is to train 1 million people and 10,000 teachers and support 10,000 entrepreneurs in launching their ventures.

These commitments are measured within of the Planet & Society barometer of Schneider Electric. Since 2005, this barometer has highlighted every three years the advancement realized by the company on sustainable development. It is based

on three pillars: planet, profit and people. Within these three pillars, 16 indicators monitor the evolutions of Schneider Electric actions regarding five important trends impacting its activities: Climate, Circular Economy, Ethics, Health & Equity, and Development.

To achieve these goals, Schneider Electric has developed numerous partnerships with global and local participants all over the world. Altogether, Schneider Electric has trained more than 130,000 students, trainers and entrepreneurs worldwide.

Figure 4

Countries of action of the Access to Energy Training & Entrepreneurship Program since 2009



The Access to Energy Training & Entrepreneurship pillar relies on three strong principles:

- Offering equal opportunities for women and men through collaborations with key actors based on their expertise on gender actions.
- Contributing to linking schemes to create local ecosystem favorable for entrepreneurship through partnerships. Partnerships have always been part of the Schneider Electric's Access to Energy Program DNA. Schneider Electric works with nongovernmental organizations, other companies, states, development agencies and donors to implements its projects in adequacy with the local needs.
- Adapting to local specificities by providing training formats in adequacy with local lifestyles, analyzing the realities of local employment and regulation.

In this framework, Schneider Electric developed a wide range of actions to support entrepreneurs in energy, thanks to the commitment of its employees and of the Schneider Electric Foundation, which involve:

- raising awareness around entrepreneurship to incentivize the youths and provide them with knowledge about their professional opportunities;
- contributing to the equipment in didactic material for structures training entrepreneurs to enable them to reinforce their technical skills in the best conditions;
- providing the entrepreneurs with the managerial tools and skills needed to run their businesses;
- developing training content on entrepreneurship to equip aspiring entrepreneurs with the managerial skills required to run their business ventures;

- training trainers on entrepreneurship: Since 2012, current and retired employees from Schneider Electric volunteer through the NGO “Schneider Electric Teachers” to offer short sessions of training at the partners’ location, achieving over 1000 missions in 2017;
- supporting the entrepreneur on the path from idea to market through mentoring and knowledge exchange;
- acting as a facilitator to enable entrepreneurs to gain access to funding to enable them to kick-start their activities.

Figure 5

Schneider Electric runs a microfinance project in Cameroon together with energy entrepreneurs.



Profiling tailored support actions for different types of entrepreneurs

To better address the needs of all potential entrepreneurs, Schneider Electric addresses the needs of three profiles of entrepreneurs aspiring to develop their career in the energy field. They were identified in accordance with the evolutions of the realities on the ground and the actions of other actors at play in the international cooperation for capacity-building in energy.

1. Support underprivileged people from training to entrepreneurship

Training underprivileged people to equip them with adequate skills to work in the energy sector has been one of Schneider Electric’s first initiatives in the framework of its Access to Energy Program. The aim is to build a dedicated path for the trainee from the acquisition of skills in energy to occupying a sustainable job. This is achieved through a varied set of new actions, added to the equipment, training content and training initially provided to the education centers.

First, actions are undertaken to raise awareness around entrepreneurship among the youths. Second, training modules on entrepreneurship are also developed to teach the trainees how to run a business venture and to launch it given the regulatory framework and marketplace where they live. Then, support can also be offered to help the entrepreneurs at every step of the launch of their own ventures as electricians, notably through the facilitation of their access to funding.

A good example of this cooperation is the entrepreneurship program with a gender lens developed by Schneider Electric Brazil. After completing training that covers basic electricity and system photovoltaic operation, Schneider provides trainees with adequate tools to launch their own activities. This training is delivered by

educational institutions or NGOs. In addition to the course delivered, the trainees are given starter kits in sales, services and communication, which enable them to structure their ventures and help them undergo the last mile to their first opportunities. By providing women and men with equal and valuable professional opportunities, this program plays a double role of economic empowerment and advocacy for gender equality.

Figure 6

Schneider Electric supports women entrepreneurship in Brazil.



2. Support organizations providing informal entrepreneurs with the tools to structure their activities

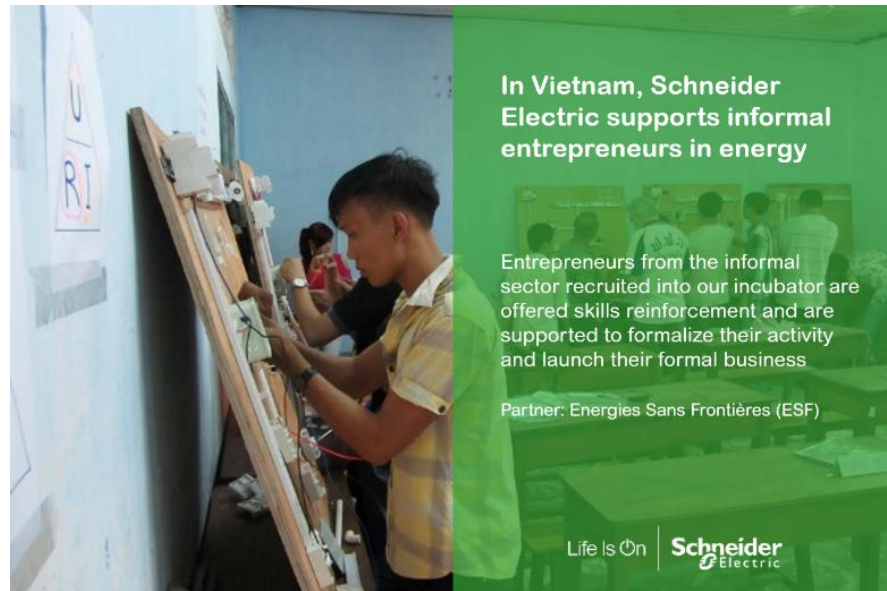
Schneider Electric supports the actions of organizations that help informal entrepreneurs professionalize their activity and launch regular business ventures. To do so, Schneider Electric provides the technical equipment and training required to reinforce the entrepreneurs' technical and managerial skills. Schneider Electric employees also commit to share their expertise by training the business incubator's trainers. The organizations then accompany the entrepreneurs in the launch of their ventures by advising them on their market potential and on the regulatory schemes at play at their location, supporting them in obtaining their first commands, and, when possible, providing them with the adequate tools to start their activities.

For instance, this was the case where Schneider Electric Egypt and the European Institute for Cooperation and Development (IECD) partnered in 2013. The project upgraded the Don Bosco Cairo electrical department and launched specific modules for entrepreneurs in energy who never had access to a formal technical training or proper support to strengthen entrepreneurial skills. Don Bosco Institute in Cairo was an excellent fit for such project. It was established in 1896 to deliver to young disadvantaged Egyptians vocational training in electricity and mechanics. The partners have developed short courses that deliver basic technical skills and general business knowledge. The aspiring entrepreneurs can also meet with peers and participate in networking to share their experience.

Schneider Electric also supported the launch of a business incubator and accelerator by Energies Sans Frontières, which was already providing local youths with vocational training in energy. In addition to the youths previously trained by the NGO, other entrepreneurs from the informal sector are recruited, offered skills reinforcement and supported through the launch of their activity, notably through lending managerial and technical material needed for their first endeavors through an average period of four months.

Figure 7

Schneider Electric helps informal entrepreneurs to formalize activity in Vietnam.



3. Target actions addressing social entrepreneurs' specific needs

Acknowledging the specific needs of social entrepreneurs, Schneider Electric supports partners developing dedicated actions to enable them to grow and find their markets. This support goes from the idea to the market, including actions such as reinforcing the entrepreneurs' managerial skills, and mentoring, which helps to identify the market potential and develop a business plan, along with experimentation and facilitating access to funding.

Energy Generation Togo in partnership with Schneider Electric, for example, empowers African social entrepreneurs to enable them to find their own solutions to Africa's challenges regarding energy. This is done through an "excellence training center" for social entrepreneurs, which provides them with all the support that they need to develop their projects.

Figure 8

Schneider Electric supports energy social entrepreneurs in Togo.



Conclusion

Entrepreneurship in energy-related careers can be key to addressing several of the challenges in the energy sector, embodied in the Sustainable Development Goals. It can notably be key to addressing Goals 7 and 8, as it can ensure sustainable employment and lasting energy solutions. Supporting multiple types of entrepreneurship also results in a renewed approach to development. This approach focuses more on stimulating the economy of local communities, empowering them with tailored and lasting energy solutions.

However, it remains very difficult to find local ecosystems that fulfill all entrepreneurs' needs for training, mentoring and funding. Those who aim to be key players in the energy development of their emerging economies will need further support to realize their potential.

With its activities supporting disadvantaged youths, informal entrepreneurs and social entrepreneurs, Schneider Electric commits to taking a leadership role in the social and economic development of local communities in developing countries, to ensure sustainable solutions for the energy needs of tomorrow.

For more information on access to energy, see the white paper, "[Providing Sustainable Access to Energy.](#)"

About the authors

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