IDB
Inter-American Development Bank

Gender and Energy:
the balance of power



















GENDER AND ENERGY

Inter-American Development Bank
Gender and Energy: the balance of power

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Specialist in Energy
Division at IDB

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100% Committed to Gender Equality.

Solar plant in Pokigron. Photo: Carlos Raymann

Foreword by **Ariel Yépez**

Chief of the Energy Division at the Inter-American Development Bank

The Inter-American Development Bank (IDB) is 100% committed to gender equality and improving the lives of women and men in Latin America and the Caribbean. In 2017, the IDB was the first regional development bank to receive EDGE certification; an international standard of institutional commitment to gender equality. The IDB's commitment is articulated in its institutional policies and strategies.

At the Energy Division of the IDB Infrastructure and Energy Sector, we strongly believe that the energy sector offers great opportunities to promote gender equality and women's empowerment. This can be achieved through the systematic implementation of a gender perspective in energy operations and in the activities we carry out with our counterparts.

The Latin American and Caribbean region is making progress in the advancement of gender equality, but there is still a long way to go. From education to employment, women in our region face barriers to reaching their potential simply as a result of their gender. Some, lack access to electricity while others cannot get jobs in the sector because they are not considered capable or because of cultural barriers. This leads to women be under-represented in the management processes of the energy sector and in economic and political decision-making. They are disadvantaged by their lack of opportunities in society, so they experience fewer benefits from economic growth, and more challenges in poverty.

The Energy Division has focused on operational work as a way of promoting economic opportunities for women, adapting infrastructure and services to meet gender-differentiated needs, and strengthening women's leadership and participation in the sector. This means that we are taking each operation as an opportunity to include concrete activities and actions to improve gender equality and women's empowerment. In recent years, gender has been a key area of our work. We have developed a strategy and a plan that consists of proactive actions, a wide integration of gender perspective, direct investment and dialogue with counterparts in the sector.

Our gender equality strategy focuses on transforming the sector and improving lives. In order to achieve this, the Gender Action Plan for the Energy Division focuses mainly on three strategic lines:

- **1. Access to energy: (a)** Adapt energy-access projects and projects related to the use of modern fuels for cooking, heating and others to meet gender-differentiated needs; and **(b)** Promote new habits/ behaviors and technologies that facilitate the adoption of sustainable energy.

- **2. Data and information:** collect sectoral data, broken down by gender, and generate knowledge products for the design of energy policies and projects.

- **3. Equal opportunities, labor market and gender in the energy sector:** encourage men and women to take advantage of the opportunities (mainly economic) generated by projects and encourage the incorporation of women into non-traditional jobs within the sector.

In addition, we are implementing this strategy alongside our partners, with countries in the region supporting governments and organizations to design programs that address gender equality and that take into account the major obstacles faced by women and girls.

Promoting gender equality and empowering women and girls is a priority for us. We are working to fight discrimination and expand access to electricity by supporting government agencies and electricity companies that want to diversify their workforce and incorporate more women, seeking to encourage women's economic and political leadership. It is important to ensure that women from diverse backgrounds participate in policy-making at all levels of the government in Latin America and the Caribbean and that their voices are heard.

The IDB will continue to work on promoting opportunities for women, adapting infrastructure and services to address gender-differentiated needs, and strengthening women's leadership and participation.

We are certain that gender equality will make a decisive contribution to improving lives

Ariel Yépez
Chief of the Energy Division
Inter-American Development Bank

Gender and Energy Forum

The revolution that we need in the energy sector

The Digital Revolution is expected to outperform all previous economic transformations in terms of scale, scope and complexity. Digital technologies are making electrical systems more connected, smart, efficient, reliable and sustainable. This represents a huge opportunity for our industry. We are experiencing a revolution in our sector as a result of these technologies, and we have already seen incredible results with the use of artificial intelligence, big data, and drone use, among others. However, despite this, we are still behind in one very humane and simple concept: diversity and gender equality. The reality of this gender gap might seem disheartening. Where is the energy sector going? What can be done to address this equality delay? Along with several other institutions that are driving forward the equality agenda, the Inter-American Development Bank (IDB) considers the gender gap to be a critical development problem.

We believe that, in making the transition to cleaner and more technologically-advanced energy systems, it is crucial to have diversity in our approaches; as, in doing so, we will encourage the innovative and inclusive solutions that we need to navigate change. If the public and private sectors are truly committed to economic and social transformation, they must ensure that women are equally represented throughout the sector's value chain.

Women represent substantially less than half of the workforce in the energy sector as a whole and they continue to be underrepresented in leadership positions both in the public and private sectors. And this is one of the key issues of Gender Equity in Latin America and the Caribbean. The benefits of gender inclusion and diversity are plain to see for many companies and organizations around the world; however, the energy industry remains one of the least gender-diverse sectors in the economy. Gender equality can drive investment in more effective clean energy. Women often play an important role in driving forward with innovative and inclusive solutions. As such, greater participation of women in the energy sector is needed for a successful transition to a more sustainable sector.

The other key issue of Gender Equity in Latin America and the Caribbean is that women are also negatively affected by the lack of access to energy. For both issues, what is the current outlook for gender equality in the region, and what actions, policies and programs can we implement to address the deficit?

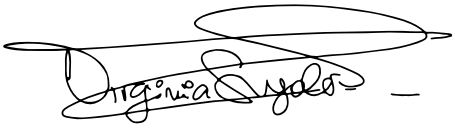
That is the reason that we are gathered here at the headquarters of the Inter-American Development Bank to launch the Gender and Energy Forum for Latin America and the Caribbean. With the Gender and Energy Forum we aim to bring about consensus and foster a sense of community; we also wish to highlight the importance of integrated efforts and accelerate a vital conversation on how to transform the energy sector and improve women's lives.

Objectives of the forum:

- **Share knowledge, experiences and stimulate innovative solutions to address the gender gap in the energy sector.**
- **Create an action-oriented community with like-minded leaders from across the region.**
- **Provide participants with tools and case studies to support change.**

This event will allow us to listen, learn and understand the experiences of different countries and companies in the sector; to discuss innovative solutions and then put all that we have learned into practice in the near future. We have convened leaders, both women and men, to explore the causes of the gender gap and assess what can be done to accelerate women's participation in this rapidly modernizing energy sector.

Thank you for coming. Welcome.



Virginia Snyder
IDB Energy Division Specialist

"There is no tool for development more effective than empowerment of women"

Kofi Annan
Seventh Secretary General of the United Nations

AGENDA

The Gender and Energy Forum for Latin America and the Caribbean

Washington, D.C. - 13 noviembre, 2018

08:45 OPENING REMARKS

Alexandre Meira da Rosa, Vice President for Countries, IDB

09:00 KEYNOTE

Jacqueline Mongrut, Executive Vice President, Business Development, Hydro-Québec International

09:30 GENDER EQUALITY: The Key to a Robust Energy Future

Increasingly, the role of energy in society is being re-evaluated under the lens of gender equality. However, women are still undervalued as a key resource across the energy value chain. In this session, panelists will discuss the shifting LAC energy market, the increasing roles and opportunities for women, and share examples of innovative programs and projects that bring more women into the energy industry.

Moderator:
Lisa Viscidi,
Director, Energy, Climate Change, and Extractive Industries, Inter-American Dialogue

Speakers:
Irene Cañas,
CEO, Costa Rican Institute of Electricity (ICE)

Stephanie Oueda,
Head of Gender, IDB-Invest

Tish Mendoza,
Senior Vice President, The AES Corporation

Meade Harris,
CEO, The Hawthorn Club

Gale Rigobert,
Minister of Education, Innovation, Gender Relations and Sustainable Development, Government of Saint Lucia

10:45 NETWORKING BREAK

11:15 LABOR MARKETS: Creating a Female Workforce and Female Leaders in the Power and Utilities Sector

Women are underrepresented in labor markets, and particularly in the power and utilities sector. Yet, research consistently demonstrates the benefits of gender diversity. What are these benefits and what are the obstacles to their realization? This session will examine the implications and challenges with panelists sharing their findings from the Women in Power and Utilities Index and other global research.

Moderator:
Andrew Morrison,
Gender and Diversity Chief, IDB

Speakers:
Agnes Aragão da Costa,
Director, Ministry of Mines and Energy, Brazil

Cyntressa Dickey,
Principal, Ernst & Young

Tanja Faller,
Regional Director, Program for the Promotion of Geothermal Energy in Central America, GIZ

Corinne Hart,
Senior Advisor, Gender and Environment, USAID

María Beatriz Orlando,
Lead Social Development Specialist, World Bank

12:30 LUNCH

13:45 IDB PRESENTATION

Ariel Yépez, Chief of Energy Division, IDB

14:00 ENERGY ACCESS AND THE GENDER PERSPECTIVE: GLOBAL EXPERIENCES

When energy access and gender inclusion are planned together, women are no longer left behind but instead become a catalyst for change. Which strategies have opened doors to gender inclusive approaches to energy access? Is more training needed? More funding? Are the appropriate stakeholders involved? Panelists share their experiences and discuss challenges that remain.

Moderator:
Caroline McGregor,
Lead Specialist for Energy Access and Gender, SE4ALL

Speakers:
Luz Amanda Pulido,
General Coordinator, Plan Todos Somos PAZcífico, Colombia

Esmeralda Tipán,
Commercial Manager, Electric Company Quito, Ecuador

Chiquita Resomardono,
Department Heath, Safety, Environment/Quality, EBS, Suriname

Francesco Tornieri,
Principal Social Development Specialist, Asian Development Bank

15:15 NETWORKING BREAK

15:30 INTEGRATING GENDER EQUALITY DURING ENERGY TRANSITIONS

As clean energy proliferates throughout the LAC region, there is an opportunity to promote gender equality across the energy delivery value chain. How can governments build gender integration into clean energy programs? What role should the private sector, i.e. developers and investors play in embedding gender perspective into clean energy projects?

Moderator:
Virginia Snyder,
Energy Specialist, Inter-American Development Bank

Speakers:
Ana Victoria Rojas,
Senior Energy Advisor, IUCN Global Gender Office

Luv Jhangimal,
Investment Officer, Oil and Gas, IFC

Mijal Brady
Coordinator Bilateral Affairs Ministry of Energy Chile

Melanie Nakagawa,
Lead Climate Initiatives, Princeville

Karla Hernández Sauceda,
Protempore-President Honduras Branch Manager and Regulatory Specialist of Ente Operador Regional (EOR)

Magalí Flores,
Deputy Director, Federal Energy Commission of Mexico

16:30 THE CHALLENGE OF GENDER AND ENERGY IN LAC: A Facilitated Discussion

Today, a number of organizations are involved in tackling the gender and energy challenge. Yet, there are still many unknowns, particularly in Latin America and the Caribbean where there is a lack of data on the subject. During this session, delegates will be led through a discussion to identify key issues in incorporating gender perspective in the energy sector - from energy policy to the energy workforce - and discuss potential paths forward, including the introduction of a Gender Toolkit.

Facilitator:
Natalia Martinez-Kalinina,
General Manager and Latin America Lead, Cambridge Innovation Center

17:15 CLOSING REMARKS

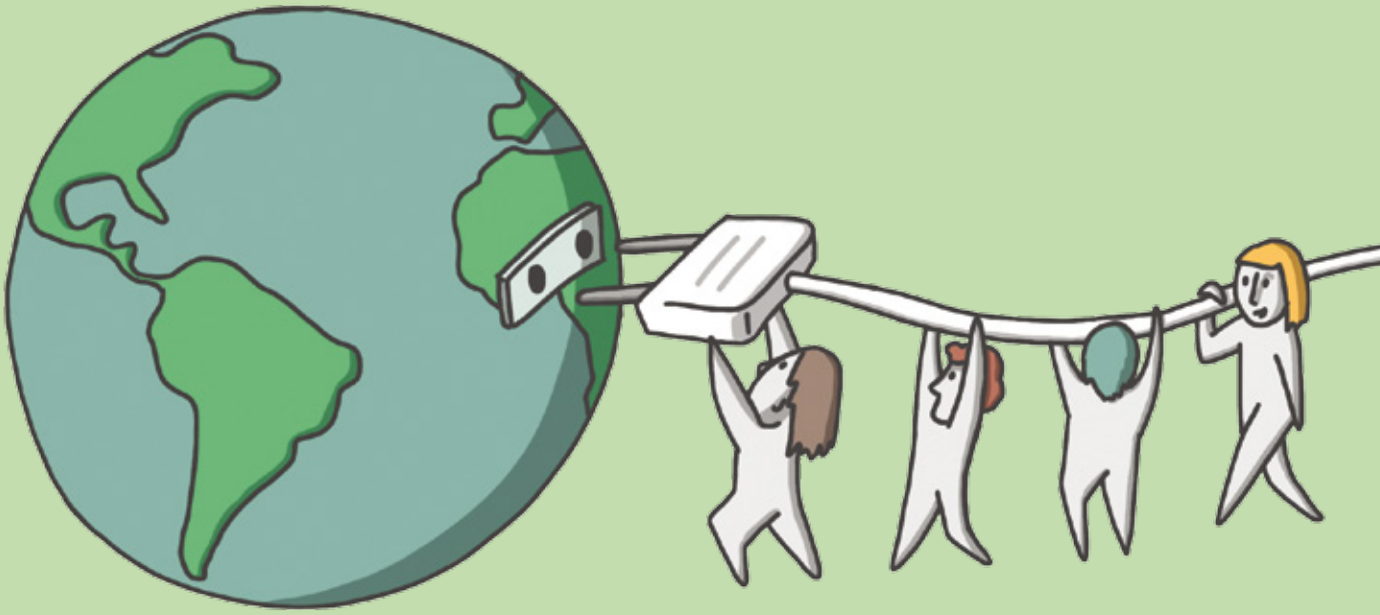
17:30 COCKTAIL RECEPTION

19:00 END OF PROGRAM

[01]

Gender, equality and equity

It is important to understand that inequalities between women and men are socially constructed and therefore can be and are modified over time. Gender equality is a priority for the IDB.



Why are we talking about gender and energy?

Energy is an essential component in our daily lives. We need it for almost all of our activities. As such, it is at the heart of development. Without energy, communities live in the dark, essential services such as health clinics and schools suffer; and businesses operate under crippling constraints. Energy makes investments, innovations and new industries possible; all of which generate jobs and economic growth.

The different roles society assigns to men and women mean that they also have different needs and uses of energy; there is also a disparity in their levels of access to it. Even when energy infrastructure is physically available, women often find themselves hindered when it comes to actual access. In addition, institutional structures often benefit men since they often have more decision-making power than women; even in terms of decisions on energy products and services that are primarily used by women.

If we are to guarantee equitable development outcomes in energy sector interventions, these needs and differences must be taken into account in the design and implementation of policies and programs.

Women are agents of change and should be included into the design of energy policies, programs and projects, so that significant, large-scale transformations can occur. Women should be offered incentives and the space necessary to play an active role in the energy chain.

Energy is a means of improving the standard of living of an individual and a community. It is a highly productive sector that can offer new job opportunities and other benefits. Between 2000 and 2010, the growth in women's incomes in Latin America and the Caribbean contributed to a 30% reduction in extreme poverty[1]. Having or not having energy can affect educational, social, cultural and economic changes.

Recognizing the participation of women as energy providers and users, without excluding men, means promoting gender equality in Latin America and the Caribbean

[1] Article "Women have a key role in economic advancement in Latin America and the Caribbean", published on the World Bank website, 29 August 2012.

What do we understand by “gender”?

Gender refers to the characteristics of women and men defined by society, such as the norms, roles and relationships that exist between them. What is expected of both genders varies from culture to culture and may change over time.[2]

Gender roles are social constructions that shape the behaviors, activities, expectations and opportunities that are considered appropriate for everyone in a given socio-cultural context. In addition, gender refers to the relationships between people and the distribution of power in those relationships.

[2] WHO definition.

What is gender "equality" and "equity"?

Gender equality concerns women and men, and involves working with women, men, girls and boys, to achieve changes in attitudes, behaviors, roles and responsibilities at home, in the workplace, and in communities.

It refers to rights, voices, responsibilities and opportunities, which should be equal for men and women in all areas of their lives.

Genuine equality, beyond parity in numbers or laws on the books, means expanding opportunities and freedoms as well as improving the overall quality of life for both women and men, without sacrificing anyone's gains.

Equality for men and women means that their rights, responsibilities and opportunities will not depend on whether or not they were born male or female. It implies equal treatment under the law and within public policies; that is to say, equivalence and non-discrimination or prohibition of discrimination based on sex. We must accept that in equality there is indeed room for differences.

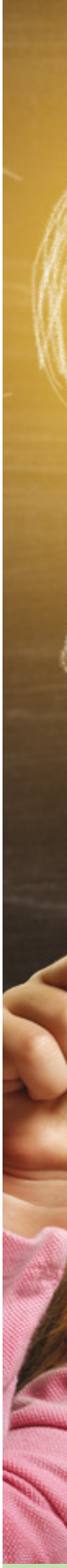
Gender equity refers to fairness of treatment for men and women according to their respective needs. It implies impartiality in terms of access to resources, including, assets and goods, remuneration and socially-valued opportunities.

To ensure equity, measures must be taken to compensate for cumulative economic, social and political disadvantages faced by women and men, girls and boys, in order to ensure a level playing field.

Equity recognizes that there are inequalities among people and these make it difficult for them to reach a state of equality.

The ultimate purpose of equity is to achieve equality, regardless of the differences that may exist and the nature of those differences.

Women and girls represent half of the world's population and therefore half of its potential. Evidence shows that gender inequality persists across Latin American and Caribbean countries, slowing their social and economic progress.



Why is the focus on gender important?

Differences between women and men are rarely documented in terms of their development impacts. These is growing evidence, however, that these impacts differ both with regards to their direct effects such as job opportunities, and indirect effects, such as access to land the financial credit.

Taking the example of jobs, men usually benefit more from large-scale energy infrastructure, as they are often employed within the construction workforce. Women, on the other hand, often engage in more informal, low-paid traditional jobs such as catering, laundry and office work.

Gender as a priority for the IDB

The IDB is committed to promoting gender equality because it helps to lessen overall social exclusion and inequality in LAC and because investing in women and girls brings great benefits to development processes. This commitment is articulated in the IDBs Operational Policy on Gender Equality in Development, which recognizes women's progress as a priority within development objectives.

The inclusion of a gender perspective in energy projects helps not only to promote women's economic and social empowerment and greater gender equality, but also to improve the sustainability of energy projects and the performance of sectoral agencies.[3]

Women have different management styles than men, as they tend to: (i) develop their colleagues' skills; (ii) implement more efficient forms of communication; and (iii) foster more participatory decision-making processes, among others. This suggests that mitigating gender disparities and improving women's participation in the labor market can increase operational efficiencies that will ultimately bring more value to utility companies.[4]

The Gender and Diversity Sectoral Framework Document guides the Bank's work on policies to increase gender equality and supports development within indigenous and Afro-descendant peoples. In Latin America and the Caribbean, race, ethnicity and gender are factors that generate additional obstacles to escaping poverty or achieving economic advancement. If there is equal access to opportunities for these groups, there is a positive impact on both economic growth and sustainable development.

The most relevant policy challenges to supporting gender equality are:

- Increasing the access and improving the quality of public services for women and children.
- Expanding women's economic opportunities.
- Expanding women's voice.[5]

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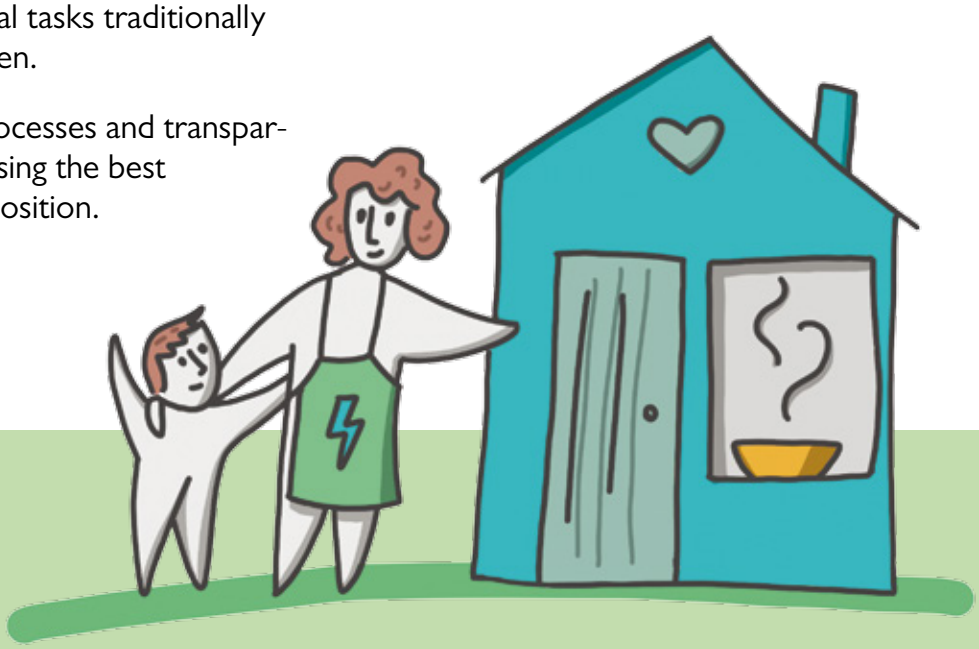
[3] See: Hunt, V. et al. (2015). Diversity Matters. McKinsey & Company; Ernst and Young (2016). Women in Power and Utilities; Catalyst (2013). Why Diversity Matter; Noland, M. et al. (2016). Is Gender Diversity Profitable? Evidence from a Global Survey. Peterson Institute for International Economics; Barkat, A. (2002). Economic and Social Impact Evaluation Study of the Rural Electrification Program in Bangladesh
[4] USAID (2016). Engendering Utilities: Improving Gender Diversity in Power Sector Utilities.
[5] Gender and Diversity Sectoral Framework Document. Final version, December 2017. IDB

ACTIONS

What can we do?

- Involve men, this is a societal issue.
- Integrate all sectors to maximize efforts and take advantage of the synergies that each sector has to offer.
- Establish objectives for the inclusion of women in all levels and fields of the workforce.
- Include gender indicators in the monitoring and evaluation of infrastructure projects.
- Increase women's participation in manual work and physical tasks traditionally dominated by men.
- Review hiring processes and transparency when choosing the best candidate for a position.
- Encourage women to remain in the workforce, which includes flexible work, sponsorship program, and training.
- Carry out campaigns in primary and secondary educational institutions and universities to encourage more women to pursue careers related to the sector.
- Promote employment and opportunities for women.



[02]

Views that confirm the impact

Blogs from IDB specialists: information, statistics and relevant data on what is currently happening in Latin America and the Caribbean on the issue of gender in the energy sector

Emerging Women Leaders Program

Executive directors in Latin America and the Caribbean:

9%

Michelle Hallack
& Juliana De Moraes*

Gender and the Energy Industry

The transformation of the relationship between energy and gender through incentives and the regulation of new renewable technologies

The relationship between energy and gender is associated with consumption (through the impact on domestic work, mainly done by women), and decision-making on energy production (through the relative participation of women in the energy industry). New renewable technologies, as distributed solar energy, impact this relationship both on consumption and decision-making, allowing access to communities without electricity and greater insertion of women in the industry. The generation of positive externalities *(see Key, page 27)* in this process and a reduction of gender gaps within the industry depends on non-conventional renewable energy policies and regulations.

Gender and energy demand

The transversality between energy and gender is very much associated with domestic work. Although this is conjunctural and a stereotypical problem, it is a reality in many places, especially in Latin America and the Caribbean (LAC). In terms of access to clean and efficient energy resources, women are the most affected in the household. For example: (i) they have to cook more and for longer periods as they may not have a refrigerator to preserve their food; (ii) they are more exposed to pollution as they use charcoal for cooking; (iii) if there is a shortage of water and energy (for pumping it), they have to go look for it somehow; and (iv) if there is energy shortage, it is often the women who have to look for turners or alternatives for house maintenance. In other words, the impact of the scarcity of clean energy is generally greater for women.

> "In other words, the impact of the scarcity of clean energy is generally greater for women"

When it comes to installing new energy sources such as solar PV or modern cooking systems, property rights become an important factor. Since women tend to have less property rights and, consequently, less decision-making power over their homes, they have less ability to change their energy reality, even though they are the most impacted by energy gaps.

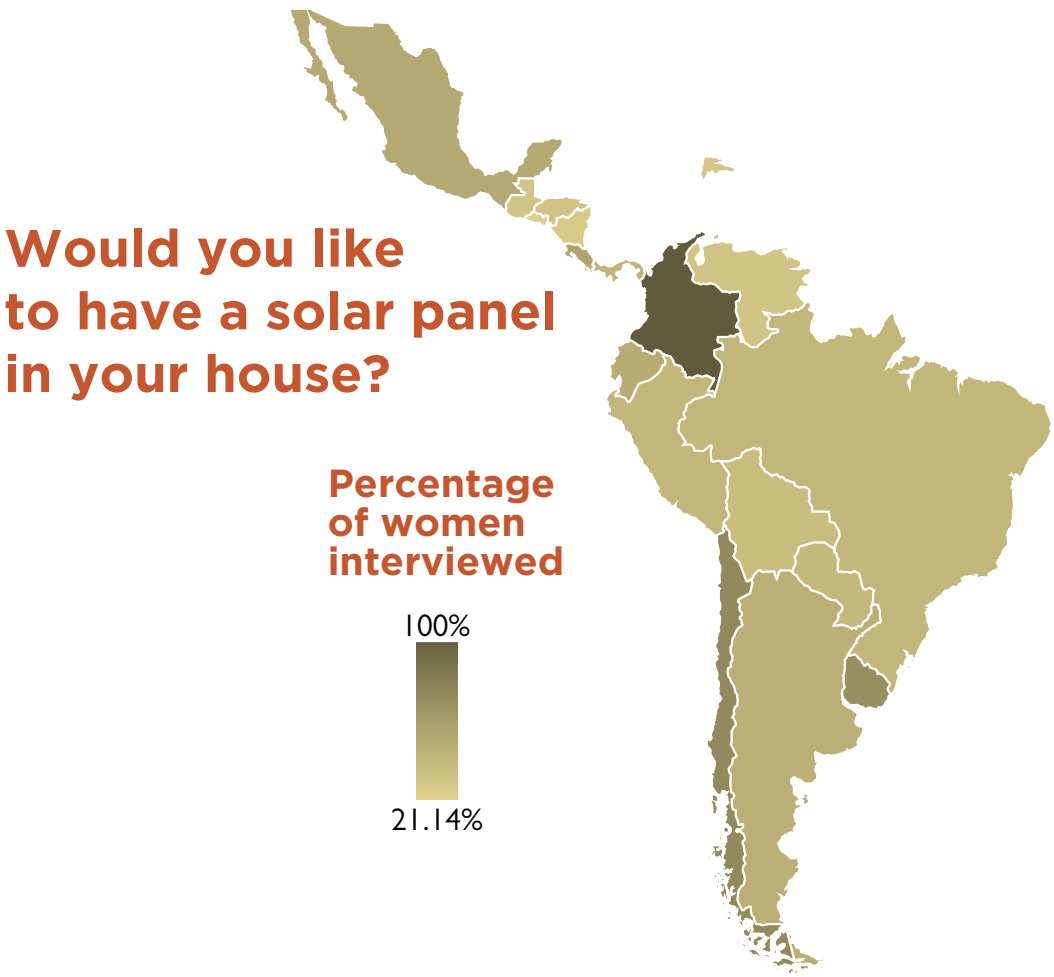
Gender and energy supply

For gender equality to advance, it is necessary to change the "woman and the housework" dynamic. In terms of providing opportunities for women outside their homes, for example, by employing women in the energy industry. With technological change and the need to train new workers, a gender policy could help change the face of the industry. We could, for example, create and carry out projects for the implementation and maintenance of solar panels installed by women. In the long term, this could generate a structural change in the industry's workforce.

Gender diversity in the energy industry is important to avoid negative effects associated with the largely male workforce, as is the case with the oil industry and the large construction of reservoirs for hydropower. These problems are not unique to the energy industry, but are found more frequently in the traditional energy industry.

Gender and technological and investment decisions

The empowerment of women can be facilitated within the process of implementing new technologies. This increases the possibility of access, along with providing training decision-making opportunities for the whole community. For this reason, the relationship between the different types of technologies and the impact of gender has to be analyzed carefully and be considered in public policies and regulation.



Source: Latinobarómetro, 2018 (preliminary results in process).

The empowerment of women can be facilitated within the process of implementing new technologies

Today, there is still no public perception of this relationship between technology and gender. A recent survey (2018, to be published soon) shows that there is no significant difference between men and women in relation to interest in new technologies. Nevertheless, there is a great difference when it comes to the countries of LAC. The figure on the previous page shows that in countries like Colombia, approximately 100% of the women interviewed responded that they would like to have a solar panel in their homes; while in El Salvador, Nicaragua and Venezuela we see that only 21%, 29% and 35% would choose the service.

Understanding and promoting new clean technologies involve understanding and promoting the positive gender externalities from a change in the technological matrix. Within its own policies, information and regulations, the energy industry needs to consider the relationships between technology and gender in order to obtain an optimized energy mix.

KEY TO UNDERSTAND THE GRAPHS

EXTERNALITY

It is a situation in which the costs or benefits of production and/or consumption of a good or service are not reflected in their market price. In other words, externalities are those activities that affect others without them paying or being compensated for it.

*

Michelle Hallack is an economist responsible for the Energy Division's knowledge area at the Inter-American Development Bank, where she coordinates the technical assistance group on regulation and energy policy. She is also an adjunct professor of Economics at Federal Fluminense University (Brazil) and an Energy Policy Advisor at the Florence School of Regulation (Italy). Michelle has more than 12 years of experience in research and consulting on regulatory economics for the public and private sector and non-governmental institutions. She has worked on projects for European, Latin American and Asian countries and has published several articles and book chapters. Michelle holds a PhD from the University of Paris Sud XI in Economics, a Master's in Industrial Economics from the Federal University of Rio de Janeiro, a Master's in Economics and Management of Network Industries from the Pontifical University of Comillas (Spain) and from the University of Paris Sud (France) (European Master Diploma - EMIN) and a Bachelor's in Economics from the State University of Campinas (Brazil).

Juliana de Moraes Pinheiro is a consultant for the Social Infrastructure Unit in the Infrastructure and Energy Sector of the Inter-American Development Bank. In this sector, Juliana has collaborated with project execution in Haiti and has worked as a Project Assistant in the Transportation Division. Previously, she was an intern at the Inter-American Commission on Human Rights (IACHR). Juliana holds a Bachelor of Arts in International Relations with an emphasis on Human Rights and International Development from American University. She has four years of experience working in multilateral organizations and about 8 years advocating for migration rights, social justice, and gender, race and social equality.


Jordi Abadal
& Chiquita Resomardono*

Women's leadership in rural electrification projects

Stories about women that, through their work and thanks to the provision of 24-hour electricity, contributed to the success of two projects in Suriname

One of Suriname's main objectives is to promote social and economic development in rural communities through the provision electricity 24 hours a day. Women have been, and will continue to be, a cornerstone in the implementation of such rural electrification projects. This blog shows how the leadership of several women was key to the success of two particular electrification projects in Suriname, carried out by EBS (Energie Bedrijven Suriname), the state-owned electricity company, and financed by the Inter-American Development Bank (IDB).

The first, completed in 2017, is the expansion of the main network to provide electricity to five communities located in the Powakka area (Klein Powakka, Groot Powakka, Redi Doti, Pierre Kondre Kumbasi, Cassipora). The second, completed in 2018, is a mini solar network of 500 kW to provide electricity to the communities of Pokigron and Atjoni. One of the main challenges of both projects is the villagers' ability and willingness to pay for electricity, especially the elderly and the poorest. These communities were used to receiving free electricity, generated by a diesel engine, for only four to six hours a day. However, with the 24-hour service, villagers will have to pay for the electricity they consume. In addition to this, each household must also make an initial investment to adapt its internal electrical systems according to the safety standards of the electricity company.

Mrs. Muriel Fernandes has been the chief ("captain") of Cassipora for the last seven years. She led all the discussions between EBS and the community, and ensured the empowerment of all those who live within the community. With her excellent communication and problem-solving skills, she was able to find solutions to help all villagers meet the requirements for electrical installations in their homes. Each villager paid 1,000 SRD (around 135 USD) and the remaining cost was paid from a village fund that is financed through economic activities, mainly tourism. In addition, the village committee decided to pay the full installation costs of the most vulnerable villagers. The captain also showed strong leadership, which lead Cassipora to be the first village in its area to have everything ready to receive 24-hour electricity. Ms. Yvonne Pinas is the Acting District Commisioner in Pokigron. Pokigron faced the same financial problems than Cassipora with some villagers not having the financial resources to upgrade their electrical installations. She was able to convince some of the logging companies, which are currently doing forestry activities in the area, to pay for the installation costs of some households. Pokigron has also a women organization which is involved several activities in the village, such as a guest house mainly for national tourism. Ms. Pinas also convinced this organization to use some of their savings to cover the remaining financial requirements. Thanks to all these women's each household in Pokigron receives 24 hours of electricity.

Roselien Lingara (Beneficiary of Pokigron). Source: Stas International

Caroline Herman - Sabajo (Beneficiary of Powakka) Source: Stas International

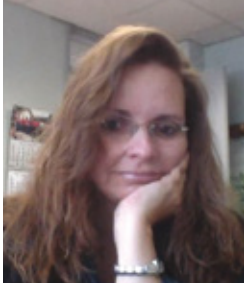
The implementation of a rural electrification project does not finish in the commissioning or inauguration phase. To have a productive use of the electricity is the fundamental for the long-term sustainability of electrification projects and for the development of rural communities. Again, women had a crucial role in using the electricity to promote local economic activities. Mrs. Roselien Linga lives in Pokigron. She has bought an electric oven to bake and sell bread to villagers and tourists. Mrs. Bionda Joop, also from Pokigron, now uses an electric mixer to make her cookies. Using this appliance increases both her order and her income. In the Powakka area, Mrs. Simone Biswane and Mrs. Marlene Makosi have increased their productivity, as they can now use an electric weaving machine and work longer hours after the sun goes down. Mrs. Caroline Herman-Sabajo can store and sell cold drinks, chicken and fish in her small shop, now that she has 24-hour electricity.

These are just a few of the life stories of women who, with their strong leadership, have contributed to the success of two rural electrification projects in Suriname. But there are many other success stories of women involved in the rural electrification projects that are also worth recording. With this blog, we strive to acknowledge the achievements of all these women; something which is sometimes not recognized enough.

*

Chiquita C. Resomardono obtained her master's degree with a specialization in Environmental Health and Safety Management. She is from Suriname and has spent the last twelve years working in environmental and social management for NGOs. She is currently the Head of the Health, Safety, Environment and Quality Department at the N.V. Energie Bedrijven Suriname (the state power company). In addition, she actively participates in communication management with indigenous communities and Maroons, where rural electrification projects have been implemented.

Jordi Abadal is from Barcelona, Spain. He is an Industrial Engineer specialized in environmental sciences. Abadal holds a master's degree in Energy Engineering and Renewable Energies. He worked in the Energy Department of a public planning agency in Barcelona for seven years, helping cities move towards a more sustainable model and offering solutions to issues such as mobility, energy, waste, urban planning, water, biodiversity and social cohesion. He currently resides in Suriname and works for the IDB's Energy Division supporting the implementation, supervision and preparation of energy projects.



Sisi Larrea*

Productive uses of energy

"Poles and cables should be followed by economic development for women"

I borrow these words from a very good friend to sum up the challenge we have been confronting this year in Energy division, along with the technical teams, specialists and the gender focal point.

The productive use of energy for the development of income-generating activities, especially aimed at women and/or young people, is being promoted as a way of allowing us to tackle this vital issue.

At the moment of writing these lines, there are five operations that have included actions of productive uses of energy involving the community, women's organizations, local governments and electricity companies

The companies' work will allow women and/or young people to have access to resources allowing them to purchase raw materials and productive resources. These may be: grain mills, collection centers, machinery for making clothes commercially, milk refrigeration tanks, internet service centers, mechanical milking machines, community tourism enterprises, handicrafts, refrigeration, food sales, among others. In addition to these activities, there will also be technical training available. This places us in a broader scenario of sustainable territorial processes.

Since the 1980s, when development projects began to incorporate the "Women in Development Approach" and later the "Gender in Development Approach", energy resources have been key to the success of productive national initiatives. However, not everyone can benefit from this, especially wo-

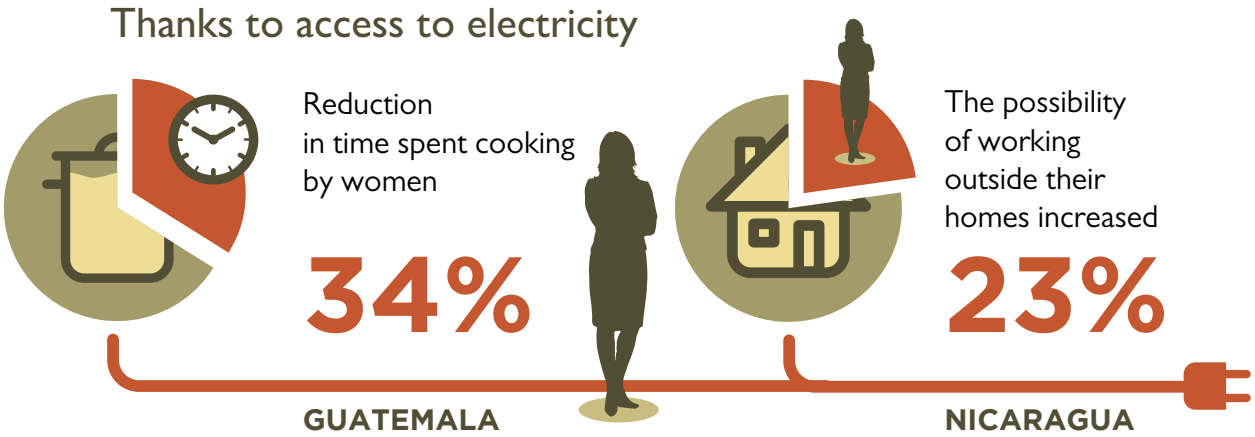
men in rural or peri-urban areas where electricity has not yet arrived.

Energy poverty affects women in a different way than men because of gender roles

Traditional gender roles have historically and culturally situated women mainly in the domestic sphere; in charge of tasks related to the home and family care. In this context, have electricity helps them to carry out these tasks, thereby giving them more time to rest, learn, inform themselves and carry out some training and business skills, inside or outside the home. When there are no safe or modern energy sources available, families are forced to stock up on biomass for heating or cooking. Women and children are then the ones in charge of collecting firewood. Just to give an example, taken from a World Bank report: in Guatemala, thanks to access to electricity, the time women invested in cooking was reduced by 34%; and for women in Nicaragua, the possibility of working outside their homes increased by 23%.

For this reason, policies designed at a national level must take into consideration the participation of women and provide a legal framework to resolve energy needs in a gender approach

In this struggle for gender equality we tend to meet men and women with true passion and conviction. Promoting gender mainstreaming is not easy and there is always resistance, ignorance and (sometimes hidden) barriers. Nevertheless, we are convinced that, using the Bank's operations as a springboard, this strategy will contribute to the leadership of women as agents of change.



Source: Energy, gender and development: What are the linkages? Where is the evidence? A background paper for the World Development Report 2012 on Gender Equality and Development Paper No. 125 / August 2011.

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Sisi Larrea Ecuadorian. Expert in gender. Sisi has a degree in Anthropology and a master's degree in Gender and Development. She is currently a gender consultant for the IDB's infrastructure sector, supporting the incorporation of a gender perspective in water, sanitation, transport and energy projects. Previously, she worked at OLADE as Gender Advisor and coordinator of the project "Gender Mainstreaming in the Energy Sector in Latin America and the Caribbean" with Canadian Cooperation Funds. Prior to this she spent several years at UN WOMEN as Coordinator of the Area of Economic, Social, Cultural and Environmental Rights of the Andean Region. She has more than 20 years of work experience in gender related to rural development, environment, climate change and public policy making, among others

Raúl Jiménez*

Do energy projects play a part in promoting gender equality?

The evidence seems to tell a consistent story in which access to modern sources of energy is a core theme

Imagine that clean, reliable and affordable energy sources are not available. Who would be the most affected? Vulnerable populations, with lower incomes and mainly those located in rural areas. And within these populations, women and children would be the most at-risk groups.

In fact, households without electricity, gas and heating have to resort to low-quality, expensive and polluting fuels. In El Salvador and Peru, for example, households without electricity spend more on energy; at least 50% more on candles, kerosene or battery charging [1,2]. This does not include the time invested in biomass collection, which can take an hour a day [3]. In other words, not only do people have to use means that provide low quality lighting and are pollutants; but they also have to devote their time to a low-productivity task which is physically damaging.

It is women and children who are most exposed to these conditions because they spend most of their day working inside the home. For example, in Nicaragua, productive activities within the home are carried out mainly by women who spend approximately 8 hours a day in the home, exposed to poor lighting conditions and high levels of intra-domestic pollution [3]. An estimated 3.8 million people, in the world, die each year from diseases attributable to household air pollution caused by the use of solid fuels and kerosene for cooking [4].

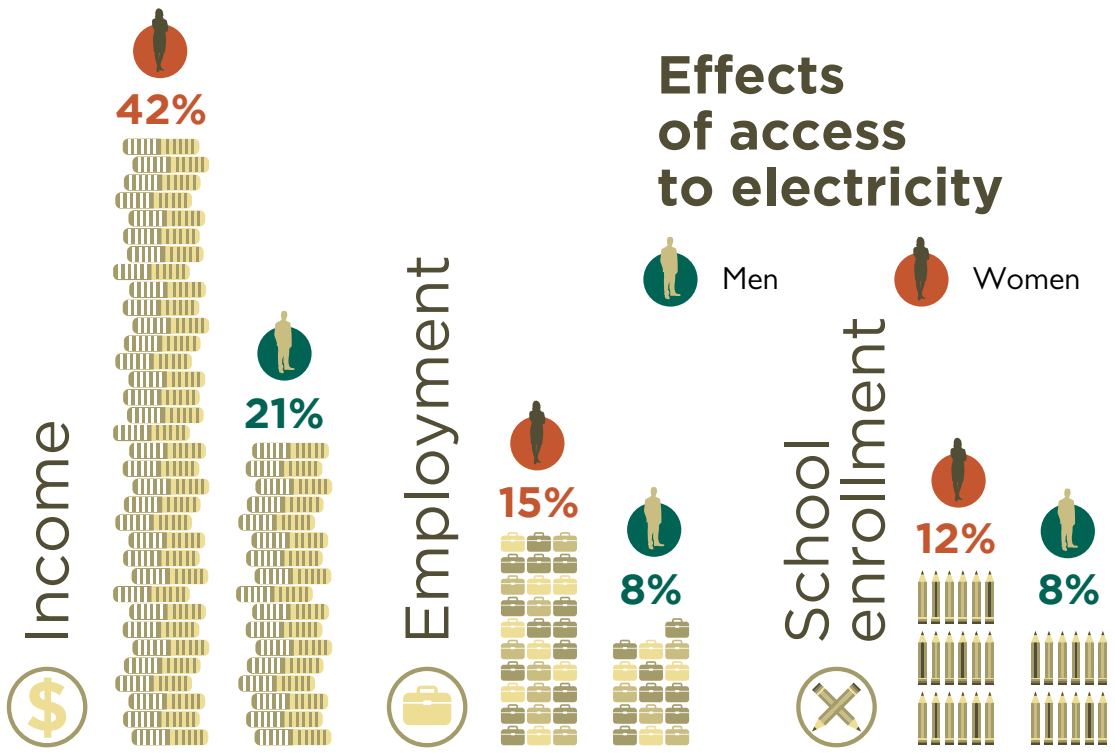
Let's imagine that we live there, in a far-flung, rural area of Latin America, and that we have to endure these conditions every day. Certainly, access to clean, affordable and reliable sources of energy would improve our lives. No, it's not everything and it's not enough, but it's a very important necessary component. We all remember the proverb "Give a man a fish and you feed him for a day; teach him how to fish and you feed him for life".

Making access to modern energy sources easier has proven to be a tool that women learn to use particularly well to improve their and their families' living conditions

And I emphasize, particularly well, because the interesting thing is that the benefits of access to modern energy sources not only include lower costs, better lighting, greater thermal comfort in homes or less intra-domestic pollution. The benefits go

further. With the new infrastructure available, women reallocate their use of time for better productivity gains. For example, in Guatemala, women with access to electricity were able to double the time spent on paid work [5]. In Peru, the time children spent reading increased by approximately 50% [6]. As a result, school enrollment, paid work and income increase substantially. To demonstrate this, the table shows the results found by a group of evaluations on impact of access to electricity.

But the story does not end there. New evidence is emerging, and it suggests the existence of important social effects in several other dimensions. For example, when women redistribute their use of time in response to new (or improved) electric



Calculated according to Jiménez (2017). Employment includes formal paid work and/or self-employment [7].

service, there appears to be a substantial effect on access to the media. In Ecuador, female heads of household and children spend more time watching television. In Brazil, increased exposure to television programs has been shown to increase the exposure of women and girls to positive role models, resulting in higher academic and work aspirations and reductions in teen pregnancy rates [8]. On the contrary, evidence from Guatemala and Colombia indicates that households without access to electrical service, or that suffer low reliability of electrical services, tend to have higher fertility rates affecting their economic situation in the long term, and often perpetuating their situation of poverty [5,9].

Of course, the results depend on the context and there is no silver bullet. Electricity needs to go hand in hand with other public services, such as water, roads and health and schools infrastructure, among others. At the same time energy, gas or electricity, needs to be affordable and of good quality. However, the evidence seems to tell a consistent story that access to modern energy sources is a core theme in helping to reduce gender inequalities at a structural level. It is true that there are still gaps in our knowledge that we need to rigorously address in order to design more effective and efficient interventions. At the IDB, we are working together with countries to help reduce these gaps and ensure that our projects have the greatest possible impact.

The answer to our question is yes. Access to energy sources does play a fundamental part in working towards greater equity in the role of women in society. The benefits of it are enormous, and they are necessary if we are to build a better Latin America; a Latin America where our daughters have all the tools they need to unleash their true potential.

3,8

MILLION

People die every year
in the world due to diseases
caused by air pollution in the home,
which is produced by the use
of solid fuels and kerosene
for cooking.

BENEFITS
OF ACCESS TO MODERN ENERGY SOURCES

- Lower cost
- Better lighting
- Warmer homes
- Less intra-domestic pollution

DOUBLE

In Guatemala, women with access to electricity were able to double the time spent on paid work

50%

In Peru, children with access to electricity increased their time spent reading by 50%

[1] Barron, Manuel, and Maximo Torero. 2014. "Electrification and Time Allocation: Experimental Evidence from Northern El Salvador."
[2] Groh, Sebastian. 2013. "The Role of Energy in Development Processes—The Energy Poverty Penalty: Case Study of Arequipa (Peru)." Energy for Sustainable Development 18 (2014): 83–99.
[3] Grogan, L. (2018) ``Time Use Impacts of Rural Electrification: Longitudinal Evidence from Guatemala'' Journal of Development Economics (forthcoming)
[4] http://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health
[5] Grogan, L. and Sadanand, A., 2009. Electrification and the Household. University of Guelph, Economics Department, Guelph, Ontario. Processed.
[6] Aguirre, Julio. 2014. "Impact of Rural Electrification on Education: A Case Study from Peru." Mimeo, Research Center, Universidad del Pacífico (Peru) and Department of Economics, Universidad de San Andres.
[7] Jimenez Mori, R.A., 2017. Development Effects of Rural Electrification. IADB.
[8] La Ferrara, E., Chong, A. and Duryea, S., 2012. Soap operas and fertility: Evidence from Brazil. American Economic Journal: Applied Economics, 4(4), pp.1-31.
[9] Fetzer, T., Pardo, O. and Shanghavi, A., 2018. More than an urban legend: the short-and long-run effects of unplanned fertility shocks. Journal of Population Economics, pp.1-52.

*

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Andrea Monje Silva*

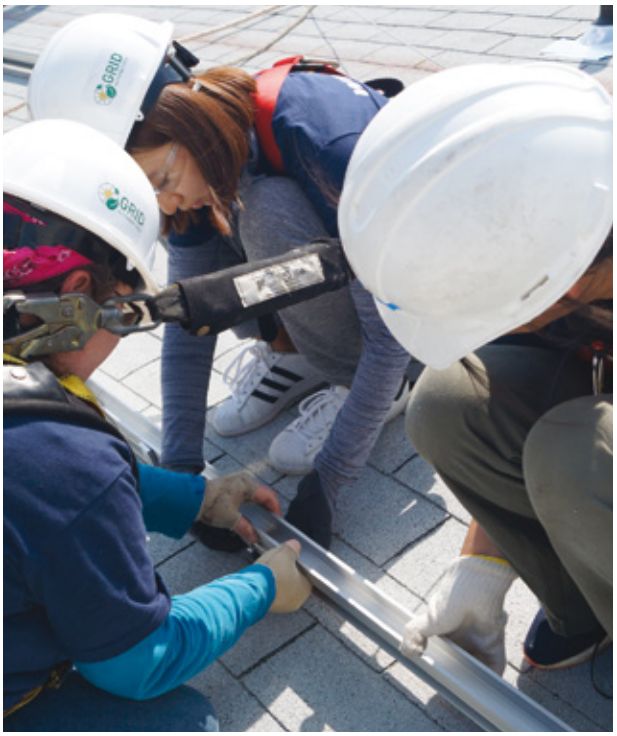
Towards greater gender equality

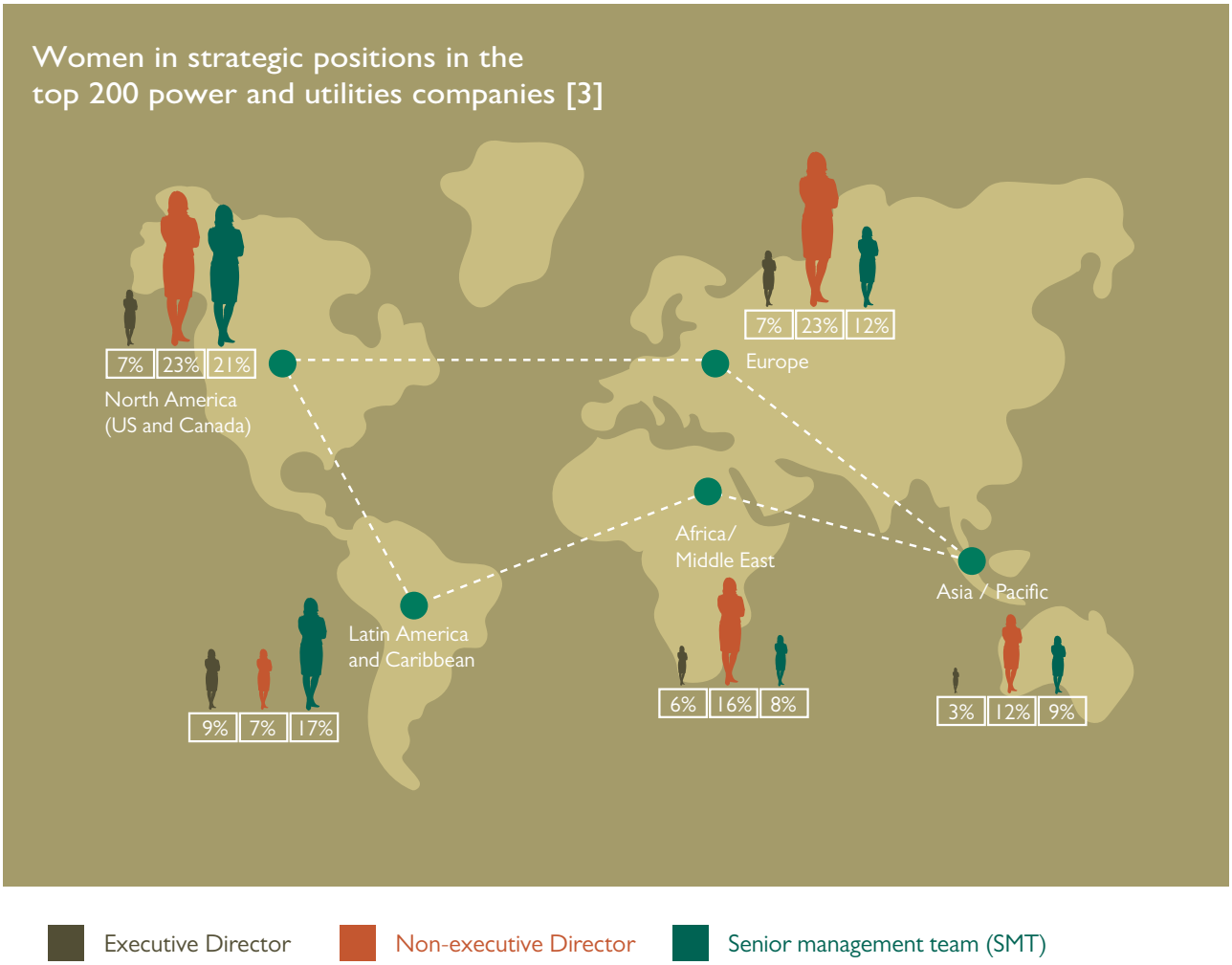
Female labor participation in the energy sector

Since 1980, more than 70 million women have entered the labor market in Latin America and the Caribbean (LAC). In fact, LAC is the only region in the world where this figure has continued to grow since 1990, rising from 47% to 58% in 2015.

However, despite this increase, women in the region still face many barriers to entering and remaining in the labor market. Consequently, there are still significant economic gender gaps. For example, the labor participation gap between men and women is still 26 percentage points and women earn up to 17% less than men. Moreover, although they have higher educational levels, women are underrepresented in high-productivity jobs.

The energy sector is one such sector where women are underrepresented. According to a study[1], in 2016 women made up 5% of executive directors worldwide, 19% of non-executive directors and 14% of managers in the top 200 power and utilities com-





panies (see graph). LAC has the highest percentage of female executive directors, yet they represent only 9% of all directors. In addition, only 7% of non-executive directors and 17% of managers are women. In total, women in the region represent 19.7% of total energy sector employees[2].

Addressing this occupational segregation is important as it can help promote greater gender equality and improve company productivity. Studies have shown that gender diversity is linked to "expected improvements in company performance [4]". This is because women have different management styles than men, as they tend to: (i) develop their colleagues' skills; (ii) implement more efficient forms of communication; and (iii) foster more participatory decision-making processes, among others.

[1] Ernst and Young (2016). Women in Power and Utilities: Index 2016.
[2] IDB (2015). Sistema de Información de Mercados Laborares y Seguridad Social.
[3] Ernst and Young (2016). Women in Power and Utilities: Index 2016
[4] Ver: Hunt, Vivian et al. (2015). Diversity Matters. McKinsey & Company; Ernst and Young (2016). Women in Power and Utilities; Catalyst (2013). Why Diversity Matter; and Noland, Marcus et al. (2016). Is Gender Diversity Profitable? Evidence from a Global Survey. Peterson Institute for International Economics.

But how can companies encourage greater female participation?

To begin with, it is important for each company to carry out a gender self-diagnosis. understanding the composition of their workforce in different areas (administrative, technical, managerial, etc.), broken down by gender, is key to determining whether women are in fact underrepresented in the company, as well as if women are concentrated in traditionally female jobs (human resources, administration, cleaning, among others). Likewise, identifying the company's gender policies (such as paternity/maternity leave, breastfeeding rooms and flexible working hours), makes it possible to understand whether the company provides benefits that are consistent with women's needs.

Based on this diagnosis, companies can develop strategies that include specific actions and goals to reduce identified gender gaps. For example, if a company finds that it has few female employees in technical positions, it can take steps such as partnerships with universities to attract more female engineers. These gender strategies are increasingly common in the energy sector and the IDB is working to support companies in the region to join this trend.

70

MILLION

Women entered the labor market since 1980 in LAC

Women earn UP to

17%

LESS

than men

GENDER DIVERSITY

IMPROVEMENTS IN COMPANY PERFORMANCE

WOMEN TEND TO:

- Develop their colleague's skills
- Implement more efficient forms of communication
- Foster more participatory decision-making processes

Andrea Monje Silva is a gender specialist with the IDB's Gender and Diversity Division (GDI) based in Argentina, where she implements and supervises programs aimed at promoting gender equality. Prior to this position, she worked as a consultant supporting the integration of gender issues in IDB infrastructure projects (water and sanitation, energy and transport). She also worked on issues of political participation and women's empowerment in the IDB's Program to Support Women's Leadership and Representation (PROLID), as well as the inclusion of gender issues in the World Bank's Transport Unit for Latin America and the Caribbean. She holds a bachelor's degree in Political Science and a master's degree in International Development from the Institute of Political Studies in Paris (Sciences Po), France, and a master's degree in Public Policy from the University of Maryland (U.S.A.). Follow her on Twitter @Andrea_Monje_.

María Eugenia Sanin*

Surprises at home

The positive effect on access to energy services of having a woman as head of household

We are currently putting together a book on the provision of infrastructure services, called Development in the Americas 2020. As part of our research, we conducted a study of the socioeconomic determinants of access to electricity and "clean cookstoves" (see key, page 41) in order to better understand why there are households that do not yet have these services in the region. We should underline that one of the principles of the 2030 Agenda of the United Nations Sustainable Development (UNSD) is "leaving no one behind". This sets the goal of universal access to affordable and clean energy by 2030 [1].

While the region has greatly improved in these terms, reaching 93% access to electricity [2] today, there is still some way to go. In 2016, we still had almost 22 million households without electricity and more than 80 million people without access to clean fuels and technologies for cooking[3] in the region. Previous studies point to the importance of determinants such as location (urban versus rural) or household income.

Using the latest household survey from 13 countries in the region we study households without access. We find that the effect of the household's head gender on access is counterintuitive: male-headed households are more likely to be in the group of households without access.

Given the well-known income gap between men and women, as well as the difficulty faced by women in getting a well-paid job due to their role as caregiver for household dependents, the result is surprising. This income gap that favors male-headed households appears in the data from our study in Figure 1, where we observe that there are more male-headed households among higher-income households than in lower-income households. However, Figure 2 shows that among households without access to energy, the influence of the household's head gender goes against the influence linked to income mentioned above: households without access are mostly headed by men. This astonishing difference also persists in both urban and rural environments, as shown in Figure 3. While this result occurs in the 13 countries considered, Figure 4 shows that this surprising result is much more pronounced in some countries in the region, such as the Dominican Republic (or Bolivia, in the case of access to electricity).

The analyses below allow us to identify the determinants of lack of access in order to design policies that have a greater impact.

22 MILLION

Homes have no electricity

82.9 MILLION

People have no access to clean fuels and technologies for cooking

KEYS TO UNDERSTAND THE GRAPHS

CLEAN FUELS AND TECHNOLOGIES FOR COOKING

In our study, we count households that use gas or electricity in this category.

INCOME DECILE

Households can be classified according to income. The first decile contains the 10% of households with the lowest income and the decile 10 contains the 10% of households with the highest income.

NUMBER OF HOUSEHOLDS WITH MALE HEAD / NUMBER OF HOUSEHOLDS WITH FEMALE HEAD

The number of this relationship allows us to see how many households with a male head there are for each household with a female head. If the value is greater than one it means that there are more households led by men and the further away from one the greater the gap.

HEAD OF HOUSEHOLD

The head of household is stated by the respondent and generally coincides with the person with the highest income among the members of the household, although for cultural reasons some women may not declare themselves head of household in spite of earning more than their partner.

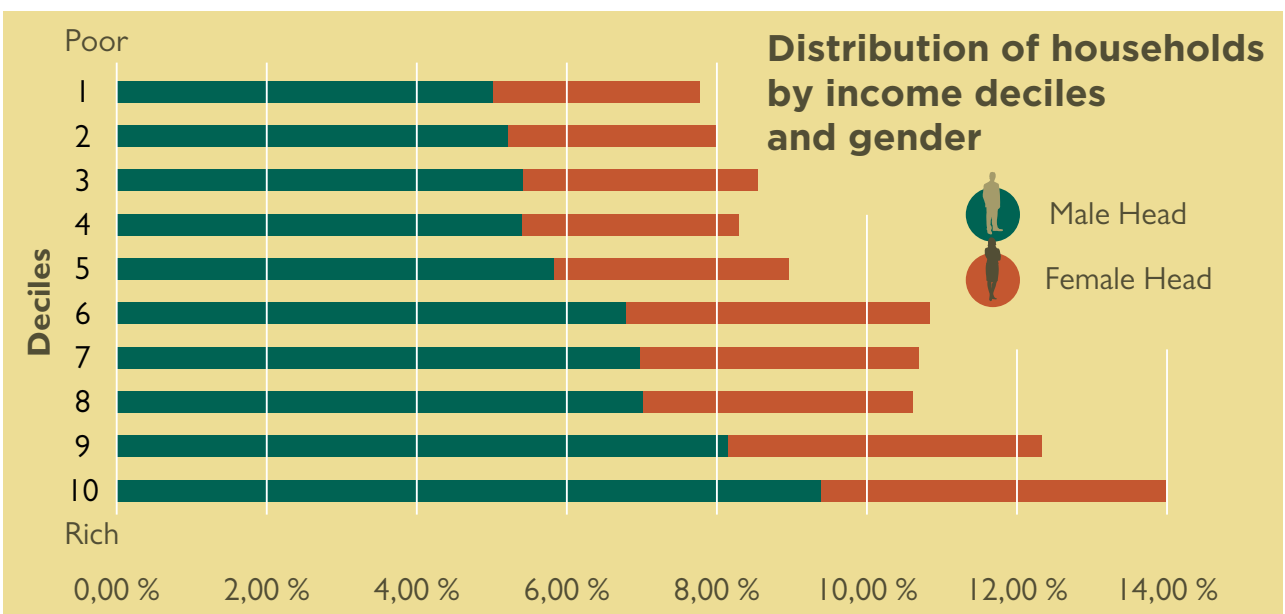


Figure 1: This figure shows the relationship between income and gender of the head of household. The majority of households in the region (65.28%) have a male head of household. This is why we see a bigger blue bar in all of the deciles. However, the difference between the blue and the orange bar is greater in the highest deciles. This means that there are more male headed households in the four highest deciles.

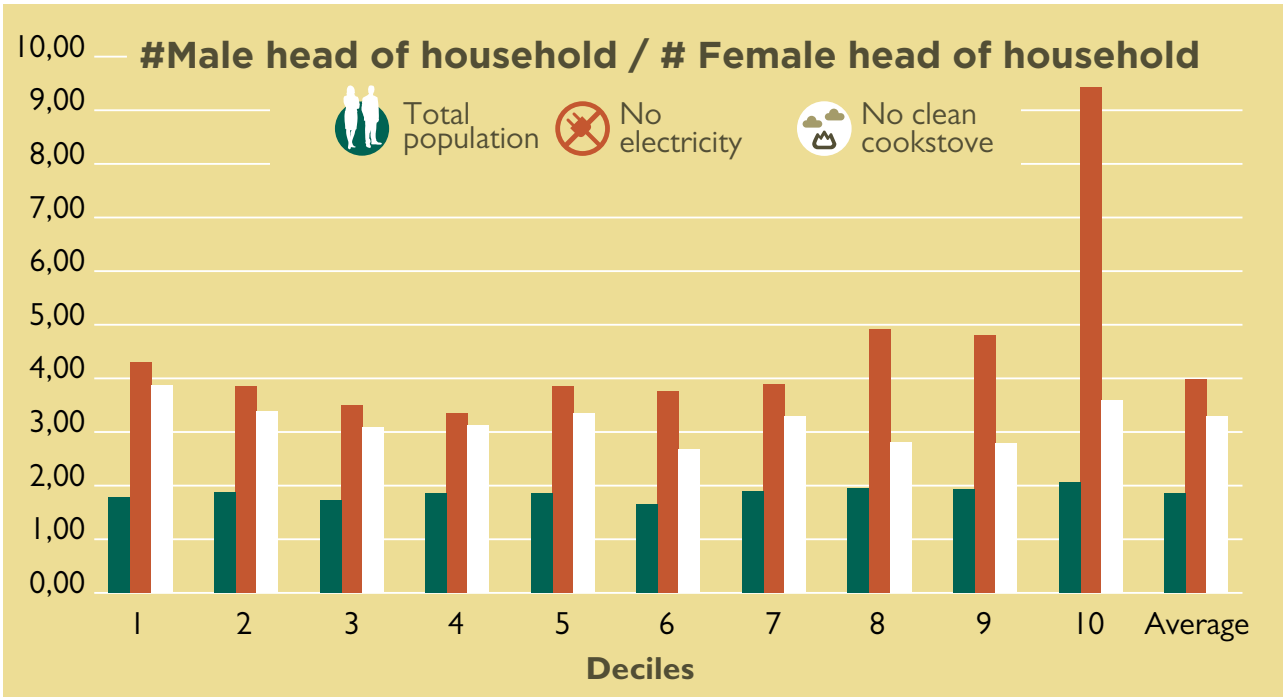


Figure 2: On average, the majority of households in the region are led by men, which explains the male to female ratio of 1.88. This ratio does not change much between income deciles. However, the ratio is much higher among households without access to electricity (3.98) or no clean fuels and technologies for cooking (3.29). In other words, households led by men are twice as likely to have no access to electricity (and almost twice as likely in the case of access to a clean cookstove).

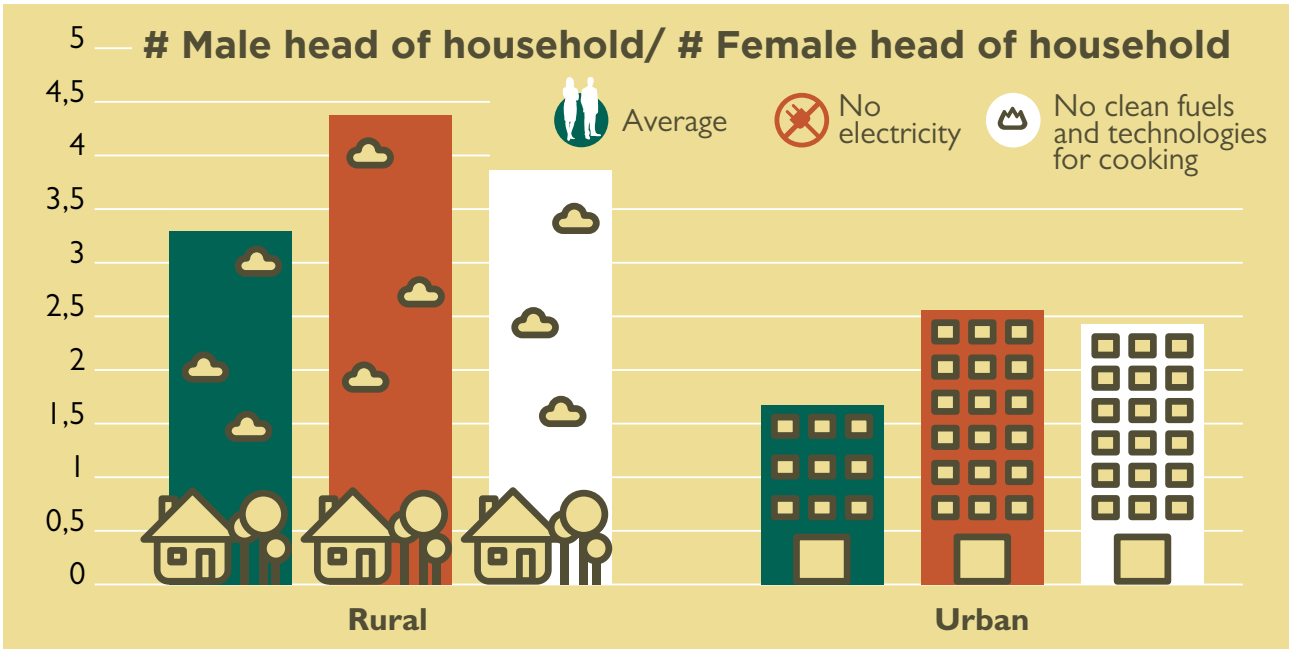


Figure 3: In both urban and rural households, we see that the ratio is higher among households without access than in the average.

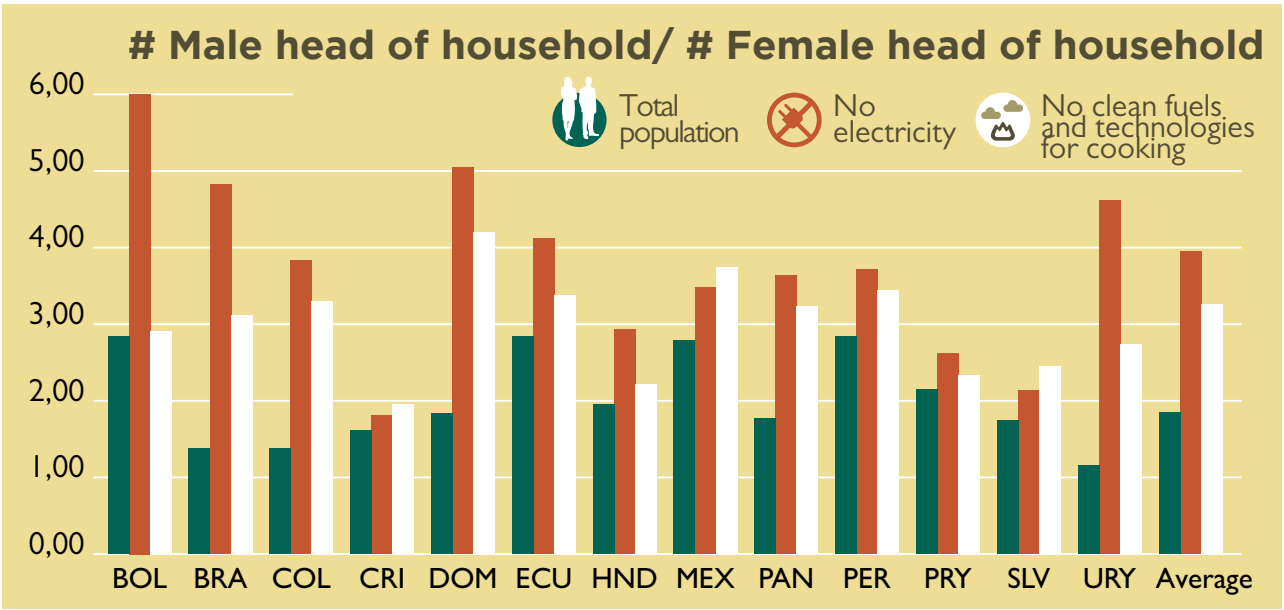


Figure 4: In some cases, the ratio is much higher than the average (Bolivia, Brazil, Dominican Republic and Ecuador, in the case of electricity), while in others the gender gap is less pronounced, as in the case of Costa Rica.

[1] https://unstats.un.org/sdgs/report/2016/goal-07/
[2] http://sier.olade.org/
[3] https://data.worldbank.org/indicator/EG.CFT.ACCS.ZS?locations=ZJ

*

María Eugenia Sanin is an economist at the Infrastructure Front Office and coordinates several research projects jointly with the Energy Division at the IDB. She is an Associate Professor in Economics at Evry, Paris-Saclay University and lead researcher at the Renewable Energy Initiative of the Energy & Prosperity Chair sponsored by the French Ecole Polytechnique. María Eugenia has 10 years of experience in academic research and the supervision of Master and PhD Thesis. She has published more than 15 scientific articles in high impact factor journals. She also has 14 years of experience as a consultant in energy and environmental issues for the private sector, governments and multilateral organizations in Latin-American, Europe and Africa. She holds a PhD from the Catholic University of Louvain and a Bachelor from the Uruguayan UdelaR.



Wilhelm Dalaison, Alison Elías and Leonardo Pinzón Enciso*

Energy and social infrastructure boost women's progress

The IDB is set to focus on incorporating public services into social infrastructure projects, placing emphasis on a comprehensive approach in order to improve quality of life

Social infrastructure projects are essential if communities are to have guaranteed access to education and healthcare; and access, therefore, to the tools necessary for community development. Schools and health centers must be planned, designed and built in such a way as to guarantee wide coverage and ensure necessary quality; so as to ensure they can continue to offer quality services over time. The provision of public services such as energy, water and sanitation, and connectivity, among others, is a necessary condition for this.

In school infrastructure, energy brings with it multiple benefits, among which we can find: a) widening access to education through the introduction of multiple shifts; b) enhancing the use of information and communication technologies in classrooms such as computers, television and the internet; c) providing adequate comfort conditions for student learning in places with extreme climates; d) food refrigeration and e) water-pumping systems for cleaning, particularly of sanitation facilities, or for water purification and treatment. Electrification in schools can also boost gender equity. According to international evidence, electrification has increased girls' school attendance levels, led to improvements in school performance, as well as substantial improvements in the boy-girl ratio. In addition, electrified communities and schools have lower dropout rates and a higher proportion of girls transitioning to secondary education.

In health infrastructure, energy guarantees access to necessary technologies, vaccines and medicines. This translates into positive effects on health throughout the life-cycle of the family and the community, such as: a) prenatal check-ups with appropriate technology; b) access to safe institutional childbirth; c) growth and development check-ups for children under five; and d) timely care for the elderly. In addition, having access to energy helps make facilities more comfortable and allows the incorporation of new ways of doing things. One example of this is telemedicine, which connects health centers with hospitals that are better able to deal with situations, thereby reducing hospitalizations that could otherwise have been avoided with adequate primary healthcare [1]. This is complemented by improved safety through street lighting; development of social capital in community spaces; greater dissemination of information on the benefits of access to timely health care; as well as improved economic opportunities.

In this way, access to energy in social infrastructure projects benefits women, since it contributes to greater information and availability of educational and health services to which they and their families can have access to. Better schools and health centers will result in a better quality of life and a better future.

Nevertheless, in Latin America and the Caribbean, there are still many schools and health centers that lack basic services such as energy. This is especially true in rural and remote areas, where if they do have it, often it´s insufficient or of poor quality

Despite enormous efforts to achieve electrification, the problem is often not limited to the school or health center but extends to the entire community.

The solution to this issue therefore requires broad, integrated, multidisciplinary and participatory approaches

The IDB is developing a guide to the inclusion of public services in social infrastructure projects [2], which places emphasis on a comprehensive approach to the problem. It also proposes looking at the issue from the point of view of gender; focusing on the participation of women at all stages of the project life-cycle, particularly in consultation and decision-making.

Energy provision is key to deliver better quality social infrastructure and achieving higher impact. If women, in addition to being benefited by this, can also be part of this process, we will be guaranteeing infrastructure that is increasingly accessible, of better quality and more sustainable

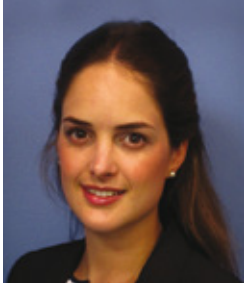
[1] https://publications.iadb.org/bitstream/handle/11319/9041/Desde-el-paciente-Experiencias-de-la-atencion-primaria-de-salud-en-America-Latina-y-el-Caribe.pdf?sequence=1&isAllowed=y
[2] Incorporación de servicios públicos en proyectos de infraestructura social. Una guía para su implementación.

*

Wilhelm Dalaison is a consultant in Social Infrastructure for the Infrastructure and Energy Sector of the Inter-American Development Bank (IDB), where he works in support of the preparation and execution of Social Sector programs. In addition, he has worked on the systematization of good practices in the execution of infrastructure projects through tools aimed at improving processes of land selection, design and provision of public services, especially in remote areas. Previously, he served as UNOPS technical coordinator for health infrastructure projects in Colombia and El Salvador. He also carried out teaching and research activities in physical health resource planning at the University of Buenos Aires. He has experience in health infrastructure projects in Uruguay, Argentina and Paraguay. Wilhelm is an Architect from the University of the Republic of Uruguay and a Health Facility Planning Specialist from the University of Buenos Aires.

Alison Elías is an Education Senior Associate at the Inter-American Development Bank (BID). She is currently working at the Bank´s Country Office in Haiti, where she co-leads the execution of education operations. Before joining the IDB, she worked in the Social Cabinet of the Office of the President of the Republic of Mexico in social and educational policy analysis. She has collaborated with organizations such as Pratham and ASER Centre in New Delhi, India; and with México Evalúa. Alison holds a Bachelor degree in Economics from the Autonomous Technological Institute of Mexico (ITAM) and a master's degree in Public Administration and International Development from the John F. Kennedy School of Government at Harvard University.

Leonardo Pinzón Enciso is a Colombian citizen and Senior Specialist in Social Protection and Health of the Social Protection and Health Division. He has worked in the Representations of Panama and Nicaragua as a sector specialist, leading the design and execution of operations in the area of public health and social protection systems. He joined the Bank in 2007, worked for five years at IDB headquarters and before that for more than 15 years in the government of Colombia with the National Planning Department and the Ministry of Health on investment projects and public health policy reforms. He has a postgraduate in Social Economy from the University of Los Andes, and in Government and International Relations from the Externado University of Colombia.



María Dolores Vallenilla*

Boosting gender equality in the mining and energy sector

Women's Leadership as a mean for public-private collaboration

The mining and hydrocarbon industries generate hundreds of thousands direct jobs in the region. Nevertheless, the majority of their employees are men. In Latin America and the Caribbean (LAC), women represent less than 10% of mining workers, and less than 15% in the hydrocarbons sector.

In order to change these trends and boost female talent, we must attack the issue on many fronts: (i) increasing female labor participation; (ii) eliminating gender wage gaps and ensuring good labor practices that make it possible to reconcile work, personal and family life; (iii) establishing equity measures that enable more women to obtain better jobs - identifying bottlenecks and establishing integration initiatives; and (iv) promoting the presence of women in decision-making positions, while at the same time making female leadership visible.

Making female leaders visible in middle management positions is key to tackling gender stereotypes; especially in male-dominated industries such as mining, oil and gas. This helps other women to identify with these leaderships and motivates them to start or continue advancing their career withing the sector.

With this objective in mind, the Inter-American Development Bank (IDB) has taken the "Emerging Women Leaders Program" to Peru for the first time.

In addition, this is the first time that the Program has been applied to a specific sector, combining women in middle management positions of the public spheres (Ministry of Mines and Energy and Regulatory Agencies) and private spheres (national and international companies), all of whom work in mining, gas and oil in the country.

This Program was designed to both support and make female leadership more visible within the IDB and it has been implemented successfully since 2013. However, now, we have found unique opportunities to build bridges in the public and private sector, thus helping the highest representatives of the sector to highlight the importance of increasing opportunities for collaboration and promoting gender equality jointly and as a common goal.

One of the most notable experiences of these first 30 women graduates, is the frequency with which they are the only women in attendance at decision-making meetings. As Tamiko Hasegawa, advisor to the Vice-Ministry of Mines and special guest of the Program, describes, they feel a "dual responsibility"

in having to represent their gender, where they are the exception, as well as representing their expertise. Women leaders in this sector are well aware that this is a heavy responsibility.

As several studies have already ratified, having more women in leadership positions not only open doors for future generations, but women leaders also broaden sectoral discussions with their own experiences, demand changes to ensure greater diversity and equality in the sector, and seek to build bridges for greater collaboration between their work teams, thus improving productivity

Making female leaders visible, supporting women in leadership positions and empowering them to keep moving forward and breaking down barriers in the mining and energy sector in the region is part of the IDB's development agenda and its commitment to gender equality. The "Emerging Women Leaders Program for the Extractive Sector" is just one of the tools we use to advance this commitment.

We hope to be able to repeat this experience in Peru, as well as in other countries of the region, as a vehicle for public-private collaboration to promote gender equality in the mining and hydrocarbon sector. Thereby contributing to increased female participation and the expansion of economic opportunities for women in countries where the extractive sector is one of the main drivers of the economy.

Through its Extractive Sector Initiative, the IDB aims to promote effective multi-stakeholder collaborative processes. By bringing together emerging women leaders from the private and public sectors of the extractive sector in Peru, the Program seeks to promote women in management positions and serve as a multi-stakeholder collaborative platform that can leverage existing national initiatives and promote gender equality.

The Inter-American Development Bank's Extractive Sector Initiative will continue to explore key issues such as multi-stakeholder dialogue, shared vision and collaboration between the public, private and civil society sectors. It will do this through its growing work to improve sector governance, promote greater equality and inclusion through best practices and social, environmental and economic policies related to the mining, gas and oil sectors in Latin America and the Caribbean.

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WHAT'S BEEN SAID...

"ACCESS TO ENERGY SOURCES
play a fundamental part in working towards
greater equity in the role of women in society"

"In this struggle for
GENDER EQUALITY
we tend to meet men and women
with true passion and conviction"

"The installation of public lighting
and wires must be followed by the
economic empowerment
of women"

"With the access to modern sources of energy,
women reallocate their use of time
for better productivity gains"

"THE EMPOWERMENT OF WOMEN
CAN BE FACILITATED WITHIN THE PROCESS OF IMPLEMENTING NEW TECHNOLOGIES"

"There are many
success stories
of women involved in the rural
electrification projects that
are also worth telling"

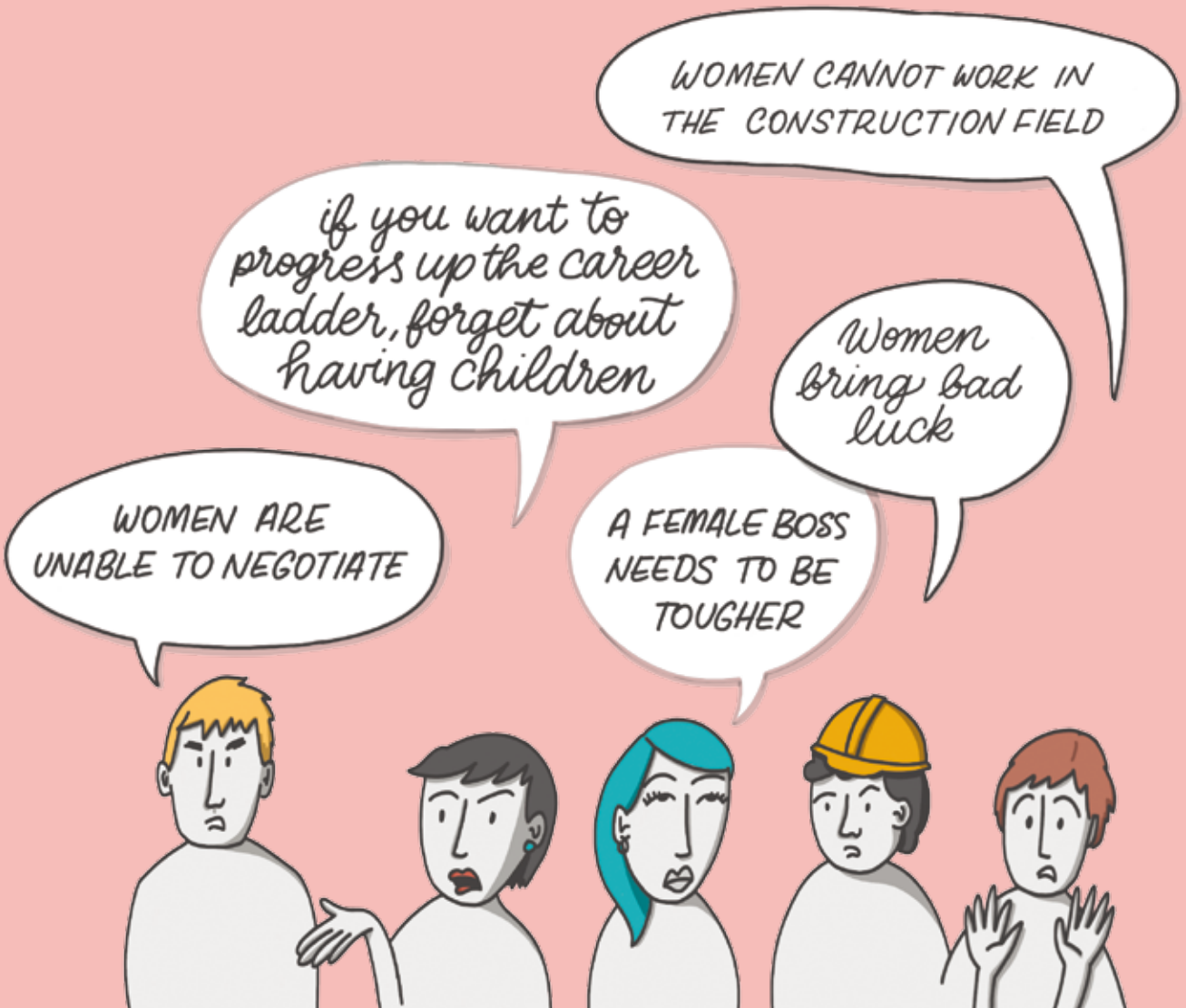
*"Male-headed households are more likely
to be in the group of households
without access than the ones
leaded by women"*

"BASED ON GENDER SELF-DIAGNOSIS,
COMPANIES CAN DEVELOP STRATEGIES THAT INCLUDE SPECIFIC ACTIONS AND GOALS TO
REDUCE GENDER GAPS"

[03]

An issue that concerns us all

Reflections from our experts showing how gender is a cross-cutting issue that has a significant impact in the workplace


WOMEN CANNOT WORK IN THE CONSTRUCTION FIELD
if you want to progress up the career ladder, forget about having children
Women bring bad luck
WOMEN ARE UNABLE TO NEGOTIATE
A FEMALE BOSS NEEDS TO BE TOUGHER

My two cents to women on their way up

Ideas on how to manage some of the challenges and obstacles women face on their way to leadership positions

BY JULIE T. KATZMAN*

A little experiment carried out by two coworkers in Philadelphia went viral and made headlines across the world. For two weeks, Martin R. Schneider, an American writer, switched emails with his female colleague, Nicole Pieri. Having his emails signed by a woman's name introduced him to a very different reality. His every suggestion began to be questioned. Clients were dismissive, rude and patronizing. One even asked him if he was single. Nicole, on the other hand, ended up having "the most productive week" of her career. His conclusion? "This f**** sucks". Her answer? "Welcome to the club." A place where women must strive to be treated equally.

This story is just one example of gender bias in the workplace, a reality that women across the world face at many levels, daily. When it comes to women occupying leadership positions, the stakes are even higher, and Latin America and the Caribbean maybe is no exception. According to a report from the International Labour Organization, out of 14,412 companies in the region, only 21.4% have a woman in high ranking positions. In the public sector, although over 50% of government employees are women, only 20% hold leadership positions.

"Evidence increasingly shows the benefits of diversity, particularly gender diversity, in corporate performance."

Evidence increasingly shows the benefits of diversity, particularly gender diversity, in corporate performance. It doesn't matter what measure you use — stock price, profitability, return on equity, decreased risk of bankruptcy— if a board or senior management has 30% or more women, the company's performance is better. In the public sector, when more women are decision makers it affects the assignment of resources and legislative priorities towards those that are more family focused and concern women's priorities. I could continue to cite numerous statistics, gaps, and programs to prove how important it is to have women in leadership. Instead, let me share some ideas on how to manage some of the pitfalls that affect women on their way up.

1. “She’s Too Bossy” and the other words that begin with “B”

There is no question that stereotypes and behavioral norms affect a woman’s journey in the workplace. Being successful requires that you to know this, own it, and find ways to make it work for you. Take warmth and strength —two traits that authors John Neffinger and Matthew Kohut say need to be in equilibrium to be admired. But the going in assumption of most colleagues or managers is that a woman will be warm. When she comes across as strong, here comes the “B” word again. So, what to do? Double up on warm so you can project strong and competent but don’t shock people. And there are many ways to do that. Use humor, compliment people (sincerely), use first names, share stories and experiences. Nothing you wouldn’t do normally but done a bit more consciously.

2. Networking matters

An article a few years ago shared that the most successful Fortune 500 CEOs spend 57% of their time building their networks. Women typically underinvest in networking – including me. Sure, we stay late to get the work done but all too often, we pass on the cocktails or coffee with clients, customers or co-workers. Wrong! Networks are critical. A recent poll showed that performance is only 10% of why someone gets promoted. Image is 30% and exposure is 60%. So, promotion is about who knows you (exposure), what they know about you, and what they say about you (image and performance). So, get out there and get networking — with a diverse group of people who are as motivated as you are.

3. "You're going to miss dinner again?"

Let's assume you're ambitious. Then that means you're going to need a partner who respects that, who believes in that, and who will co-invest in your success. Whether that means putting your career first some of the time or shouldering his/her portion of child-rearing and household responsibilities. And you might want to look for a partner whose mother worked. First of all, based on large studies in the U.S. and worldwide, the children of working moms have better outcomes – higher salaries, more likely to be employed and more likely to be supervisors. But also more likely to support their working spouses.

It is without a doubt that we need better policies to help advance the careers of women –childcare, eldercare, flexible work arrangements, gender-sensitive promotion and equal pay reviews, and others. Because advancing the careers of women is a win-win proposition for society. We know that economies grow faster, companies perform better, and innovation flourishes when there is more diversity, when more women are involved. And that is what Latin America and the Caribbean needs: a diversity of women and men working as equals in governments, companies, and civil society organizations to ignite growth, increase equity and improve lives. Until then, I hope these suggestions might make your path easier and successful.

*** Julie T. Katzman**

a U.S. citizen, is the Executive Vice-President and Chief Operating Officer of the Inter-American Development Bank. Ms. Katzman is responsible for managing the overall operations of the IDB.

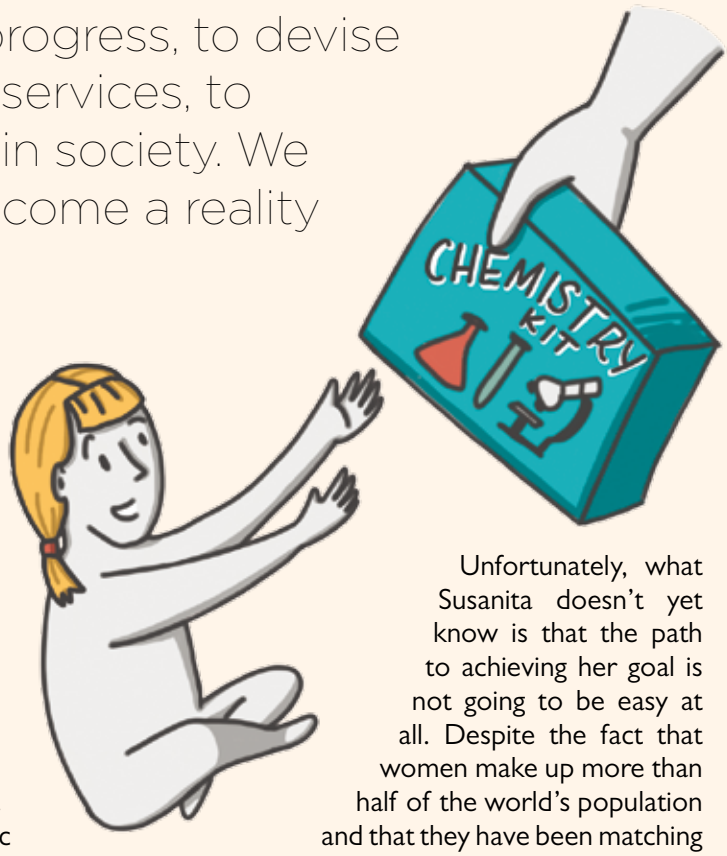
This article was published in the blog "¿Y si hablamos de igualdad?" ("What if we talk about equality?") of the Gender and Diversity Division of the IDB, a place to share ideas and solutions regarding development related to gender equality and diversity for Latin America and the Caribbean.

See more at blogs.iadb.org/y-si-hablamos-de-igualdad

The day that Susanita[1] decided to become an engineer

Women have the potential to contribute to scientific-technological progress, to devise innovative products and services, to generate visible impacts in society. We want that potential to become a reality

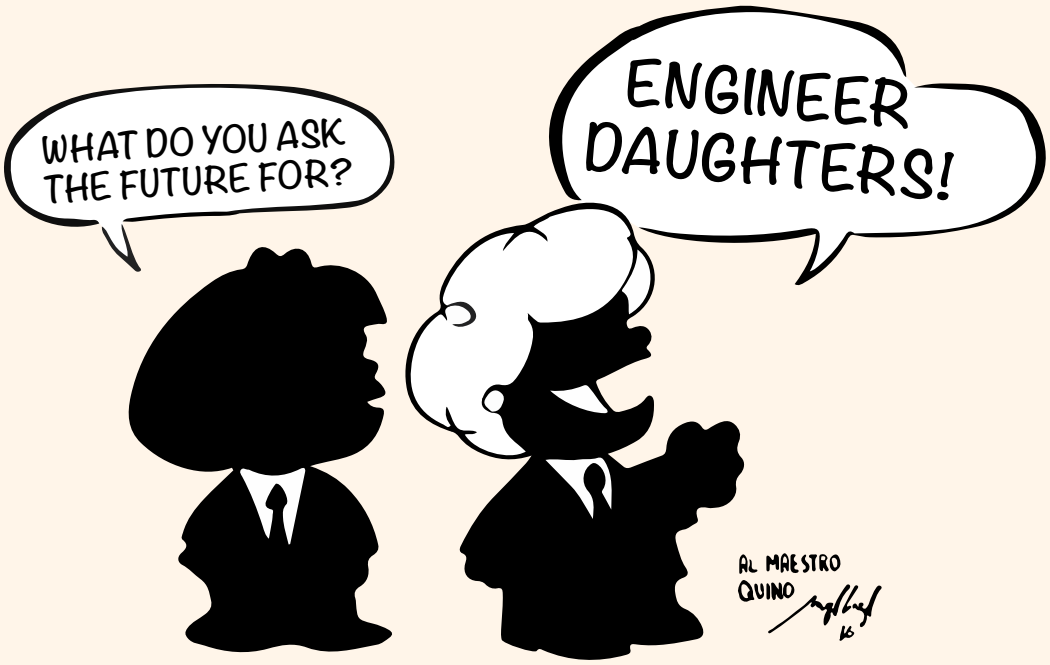
MATTEO GRAZZI Y JOCELYN OLIVARI*



Susanita was checking her Facebook page when some news her friend Mafalda shared, caught her attention. A granny had left a message on Mark Zuckerberg's wall saying that she always tells her granddaughters to look for a nerdy boyfriend as some day he might become as successful as Mark. Which would be like winning the lottery for them. Such good advice, Susanita thinks. As every fan of the famous Quino comic strip 'Mafalda' knows, Susanita has always wanted to marry a millionaire. As she sits there dreaming of her magical future, Mark responds to the granny's post by saying that it would be better if she encouraged her granddaughters to "be" the nerds so they themselves can become the next successful inventors. Pop! Against all odds, Susanita's dream bubble is burst and a new vision is born inside her… Susanita, the engineer.

Unfortunately, what Susanita doesn't yet know is that the path to achieving her goal is not going to be easy at all. Despite the fact that women make up more than half of the world's population and that they have been matching up to men at an educational level, the proportion of women who are scientists, innovators and leaders of high potential entrepreneurships remains very low, even in the most developed countries. In the United States, less than 20% of engineering students are women. This percentage is further reduced when taking into account the proportion of female engineers in the labor market (14%). And if Susanita wanted to apply for funding

"Despite the fact that women [...] have been matching up to men at an educational level, the proportion of women who are scientists, innovators and leaders of high potential entrepreneurships remains very low [...]"



to start a technology venture, such as Facebook, the probability of getting it would be even lower: less than 5% of companies that receive venture capital funding have women on their boards!

Women in the Science and Technology Field

Data for Latin America and the Caribbean, although scarce, confirms this international trend. For example, in Chile, the proportion of female researchers in the engineering and technology field is 21% and in Colombia it is only 19%.

The reasons behind this situation are manifold and suggest, for example, a lack of role models. They also indicate that there are certain stereotypes in our culture, such as the one portrayed by the granny at the beginning, that provoke an early self-selection in certain types of occupations. Not to mention problems of reconciling motherhood with work, and explicit and implicit biases that jeopardize greater participation of women in science.

Wasting women's talents and creativity in this way is not only unfair, but it also reduces the scientific and technological progress of society as a whole, which in turn is necessary for sustainable and equitable development. As Ban Ki-Moon said, "Equality for women is progress for all." There is no doubt that women have the potential to contribute to scientific-technological progress, to devise innovative products and services that address latent needs, and to put them into practice through the creation of new businesses that generate visible impacts on the market and society. We want that potential to become a reality. And we can see how lately, revolutionary companies like Google, under the principle of diversity, have been incorporating more women. Along these lines, recent studies have shown that diverse teams are more creative and improve the economic results of companies.

The evident gap in female participation in science, technology and innovation activities then constitutes a serious waste of creative intellectual resources and a needless loss of opportunities for society. This has caused a growing interest among academics and

[1] Beloved comic strip character.

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policymakers in measuring the economic costs that countries unknowingly incur by not having a critical mass of women in these types of activities. Although economic literature has, to some extent, addressed the sources and reasons behind these gaps, we know hardly anything about what, specifically, we are missing out on.

With this in mind, the Competitiveness and Innovation Division is conducting research on the economic costs of gender gaps in science, technology and innovation. Our objective is to build compelling evidence that will allow us to contribute to demonstrating that our countries are wasting valuable resources by not decisively attacking the gender imbalance in science, technology, innovation and high-potential entrepreneurship activities. We hope that the results of this research will help change the destiny of Susanita and many other women!

This article was published in "Puntos sobre la I", an IDB blog on innovation in Latin America and the Caribbean.

See more at blogs.iadb.org/puntossobrelai

The energy sector needs more girl power

The IDB has launched an international project competition to find the best case studies on gender inclusion in energy.

BY VIRGINIA SNYDER AND GADOR MANZANO*

Both men and women use energy. However, women are more likely than men to suffer energy poverty, according to a study by the European Commission. This means women struggle to have enough energy for proper heating, lighting, food preparation and the use of basic household appliances.

Older women in particular are more exposed to this risk, due to lower income. Single mothers are also vulnerable to energy poverty, as they struggle to provide for their families on reduced wages.

"Energy plays a fundamental role in the lives of men and women, yet it is not present to the same extent in the lives of both"

On the other hand, once energy reaches a home led by a woman, living conditions improve quickly. Women are more likely to engage in productive activities, such as selling grocery supplies. Cooking methods also become more environmentally- friendly, with less use of fossil fuels or firewood. Children are more likely to see improved educational outcomes, thanks to the availability of more light to do their homework.

Gender differences are seen not only in the purposes for which energy is used, but also in access to it. Infrastructure is the same for everyone, of course -- yet women often find it more difficult to access energy, mainly due to lack of funding, information or education.

Moreover, from an institutional point of view, men have greater decision-making power than women. A study carried out by the Gender and Environment Index (GEI) platform in 2015 highlighted that women hold only 10% of positions in ministries and national energy agencies worldwide, and 4% of senior positions in the World Energy Council.

"[...] there are grounds to maintain that once energy reaches a home led by women, living conditions instantly improve [...]"

Because of the need for action, the IDB's energy sector launched a competition to find the best gender inclusion projects in the world. We invited the international community, individuals, and NGOs to submit their proposals for innovative solutions, success stories, and projects they have carried out on gender equity in the energy sector.

What are we looking for? We want to promote more economic opportunities for women and adapt infrastructure and services to gender-specific needs. Women's participation and leadership in the energy sector needs to be bolstered. We seek to improve the women's access to non-traditional jobs in the infrastructure sectors, as well as incorporate a gender perspective in projects that promote access to energy. Women need a greater participation in decision-making in the energy sector. Better data collection on gender will translate into better programs and policy designs.

Bringing women into energy jobs and positions of responsibility will also contribute to more diverse and equitable decision-making.

Successful proposals and case studies may focus on one or more issues related to access to energy, the labor market, regulation, and other issues relevant to the Latin American and Caribbean region. This also includes issues applicable in this region, even though they may have been developed in other parts of the world.

"Applying a gender perspective in the energy field will need several improvements"

Integration of women at all levels of the energy value chain can lead to more effective and efficient clean energy. According to the European Institute for Gender Equality (EIGE), women tend to consume energy in a more sustainable way than men: they are more likely to buy environmentally-friendly products; they place more importance on energy sources and efficient transport; and they are more willing to change their behavior to achieve sustainability goals, including energy efficiency.

These are all tasks that must be undertaken without delay because, despite what the title says, there is currently no girl power in energy.

*** Virginia Snyder**

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*** Gador Manzano**

is a Lead Specialist at the Knowledge, Innovation and Communication Department at the IDB. She is a lawyer and communicator and has published extensively in the international media. Gador is the executive producer for the movie "The Empty Classroom". She has a LLM in law from Georgetown University, a Bachelor degree in Journalism from the Universidad Complutense and a Bachelor degree in Law from Madrid's Universidad Autónoma.

This article was published on the IDB's "Energy for the Future" blog, a place to exchange, learn and imagine a sustainable energy future in Latin America and the Caribbean. Its main objective is to provide examples and stories that help understand the essential role that energy has in securing the future of the region.

See more at blogs.iadb.org/energia

The women who are 'energizing' Development

The largest hydroelectric plant in Central America, located in Costa Rica, had women at its heart from the planning stage

POR VIRGINIA SNYDER*

Costa Rica is proud of its Reventazón dam. Not only because it will provide renewable energy to more than half a million homes with its 305 megawatts of power, but also because upon its completion, Costa Ricans marked a milestone in the construction of major infrastructure works for their energy independence and the reduction of greenhouse gases. However, that's not all: this construction is also unique in terms of the substantial role that women played in its creation.

Traditionally, the role of women in the construction of electricity generation projects of the Instituto Costarricense de Electricidad (ICE) had been limited to support areas. However, in mid-2013, the ICE decided to increase women's employment options by extending their recruitment to various jobs such as construction laborers in areas such as spillway, water intake, main tunnel, dam, waterproofing curtain and machine house, as well as in-river extraction and production of materials.

The reality was that practically 80% of the unemployed population in the project's area of influence were women, many of them heads of household. And so, the Reventazón project brought women into the construction of the hydroelectric plant. This was in part because of the need for an increased workforce and in part as a social initiative that addressed the characteristics of the area.

> "To incorporate women into the task of building the plant, certain typical paradigms and prejudices had to be eradicated first"

Building a hydroelectric plant is one of the most complex projects that can be undertaken in the electricity sector. In order to incorporate women into the task of building the plant, certain typical paradigms and prejudices had to be eradicated, such as: "women cannot work in construction"; "women are problematic"; and even "women bring bad luck". In addition to these cultural barriers, it was also necessary to make some adjustments to the typical infrastructure of the camps, such as preparing separate toilets and making mana-

gers and colleagues more aware of the presence of women in the execution of the work.

During the hiring process, all the workers were recruited as laborers, meaning there were no technical knowledge requirements. And that is was how Yirbeth Muñoz became a builder in the Reventazón project and more recently their Coordinator of Logistics and Contractor Safety. This turned out to be an important opportunity for her; it changed her life and made her realize that she wanted to be part of big constructions. Yirbeth worked hard, learned everything she could from the people around her and continued to show her teams and supervisors that she was up to the job. At the beginning of what is now her career, she faced significant challenges; she spent a lot of time trying to prove that she could perform as well as the men; but then she realized that it was in fact her differences as a woman that could be her greatest strengths.

More than 90 construction companies worked on Reventazón, which represents 4.5% of the labor force employed in this area. With their daily work, the women strengthened models of equality, ability and opportunity. The results exceeded expectations. Women were able to integrate without difficulty into activities such as placing concrete at heights, guiding heavy machinery and bending steel. The attitude of women and their performance resulted in the recognition of construction supervisors and their colleagues, who even ended up supporting and encouraging the inclusion of more women within their work teams.

For Yirbeth and many of the builders of Reventazón, being a woman, mother and construction worker are not mutually exclusive. She feels comfortable in her

"(Yirbeth) spent a lot of time trying to prove that she could perform as well as men, and then she realized that it was in fact her differences as a woman that could be her greatest strengths"

own skin and focuses less on her gender and more on being an effective leader and a qualified builder with extensive technical experience. Beyond producing electricity, incorporating more and more women into projects in the energy sector leads not only to better equal conditions for men and women, but also to better development.

*** Virginia Snyder**

is an Energy Specialist at the Inter-American Bank (IDB) in Washington, DC. She provides technical and operational support to the diverse portfolio of energy projects in Latin America and the Caribbean. Prior to her work at the IDB she worked for the California Center for Sustainable Energy, where she was the Associate Program Manager for the California Solar Initiative (the US's largest solar initiative) and also worked for the US Department of Energy (DOE). She collaborated with the team members of DOE's Solar Technologies Program working in the Solar America Cities program. Through this effort, 25 American cities have been working to accelerate the adoption of solar energy technologies for a cleaner and more secure energy future. Virginia earned an MBA from the University of San Diego, CA.

This piece is part of the 100% committed to gender equality campaign of the IDB Group #EquidadTotal.

[04]

Life Stories

Women who work. Women who learn.
Women who change their world.
Stories that inspire. Let’s work. Let’s learn. Let’s change

Protagonists of their own lives

A glimpse at some of the projects that have been provided with electricity and leaded by women in the province of Imbabura and Carchi, in northern Ecuador

LEADERSHIP

Women that inspire

At the heart of the mountainous region to the north of Ecuador, the development of projects for the extension of electrical infrastructure is transforming the lives of many families. Among these changes is Rosa Colimba's story; a woman who builds bridges and inspires many others to make progress, one step at a time

Rosa Colimba could be working in a multinational company in Quito, maybe as a financial engineer (the profession she studied at the Central University.) She could, but she is not. Something sets her apart from that world of business; from desks and white collars. Rosa Colimba rises above all of this. With her tireless work; standing up for what is right, and supporting other women and their families in the struggle to escape invisibility and poverty.

Rosa was born in the community of Zuleta and her story takes place in the province of Imbabura, in Ecuador (the canton of Ibarra and Parroquia[1] Rural Angochagua). This is the mountainous region of Ecuador, where locals live at around three thousand meters above sea level. The geographical conditions here are challenging, but that doesn't stop local families from carrying out their day-to-day agricultural and livestock tasks. This is an area populated both by indigenous people and half-breed "mestizos"; where Quechua and Spanish are spoken interchangeably.

Rosa has been the Government Representative of this territory since 2014, that is to say she is the political Lieutenant of the parish of Angochagua. She is also a 36 single mother to an 8-year-old girl. She presides over the Association of Women Artisan Embroiderers, a Sarumaki women's project; they use knowledge passed down through generations to make jackets, tablecloths, blouses, shirts, and other garments, all embroidered in a traditional way that is typical of the community. This entrepreneurial venture in the area for the micro-region of Angochagua would not have been possible without the development of electricity infrastructure *(see page 73)*.

Access to electricity collaborated in giving these women a voice, making them agents of change. They have been supported in their ventures by the government and the Inter-American Development Bank (IDB) through EMELNORTE. They have now been able to expand into the sale of hand-embroidered garments in a store in the city, which they acquired through a bank loan. Rosa explains: "The work I do is for the people, and above all, for the women of our region; so that with what little income we earn from agriculture, milk production and hand embroidery, we can form organized groups and start new projects (...). I would like us to continue getting help, so we can become even stronger. But I have told people that they can't just expect handouts; that we need to train and do our best. And in that sense the women have really got on board; we are the first to wake up and the last to go to bed. Our days start very early, shortly after 3 a.m., there are no holidays here. We have a lot of chores to do in our homes, such as looking after our children, dealing with school work, taking care of the vegetable garden, tending the animals. Then there are also those activities that are expected of us at community level; and on top of that we also have our training to do. But here we are:

[1] Parroquia: In Ecuador, Parishes are the lowest ranking political-territorial division (third level). Metropolitan cantons and districts are divided into parishes that are similar to municipalities or communities in many countries.

struggling on and putting plans in place so that our families can move forward".

> "We have a lot of chores in our homes and we're the first to wake up and the last to go to bed. But here we are: struggling on and training so that our families can move forward"

All of the hard work that Rosa puts in each day is witnessed by her daughter (who dreams of becoming a dentist and a painter). Similarly, Rosa was inspired by her own mother; she embroidered traditional Zuleta pieces, which are famous in Ecuador and worldwide, and then sold them to middlemen. Her mother's work, and that of her father who worked in a local hacienda, meant that Rosa had the opportunity to study. In order to do this, however, she had to move to the city of Ibarra since there was no secondary education in her community. When she had finished school, she then moved to Quito so she could complete her studies at university. It was a very difficult time, but one that today fills her and her family with pride. "The city was hard. Firstly, because I am a woman, but also as I'm an indigenous person and I never took off my traditional dress. I suffered discrimination but little by little I overcame it. I had to get up at dawn to travel to the University and get a place. At first, the classrooms were all full, but they started becoming emptier as the second year went on. But, I had my goals and I just made sure I achieved them. I lived with my uncle and aunt who had a restaurant, so when I finished my studies I went to wash dishes for them and help with their business." She relishes telling this story, grateful to have had this opportunity, and aware that it is not one afforded to many women, since they don't have the resources.

Rosa got into community work through her university

"As a woman and as an indigenous person, I never took off my traditional dress"

thesis which took the shape of a local development plan for small local communities; a management tool for local governments. Thanks to this, she obtained a position in the Municipality as a Community Development Technician for three parishes. She became skilled at managing relationships with government bodies, cooperatives and banks. She learned about electricity from the technicians of Empresa Eléctrica Norte (EMELNORTE), and this has helped her to support links between them and the local community. This has been especially useful when it comes to working out conflicts over issues like boundaries and supplies, among others.

"In her time working in the community, this woman, with her slow, imposing voice, started to realize the importance of electrification to the viability of these projects"

In her time working in the community, this woman, with her slow, imposing voice, started to realize the importance of electrification to the viability of these projects. "Electricity is needed everywhere," she says, "it's needed in a dairy farm, for a milk collection center. In our embroidery centers, we need the machines and access to electricity to assemble the garments... Electricity has helped us to empower the six small communities of the parish of Angochagua," she adds. She also reports that 90% of the area has electricity. Her dynamic management, together with that of the technicians, has allowed families to have access to better services. In this sense, Rosa praises the commitment shown by all parties to achieving progress. She also appreciates how the various actors have been so involved; they have not just stayed at their desks but have actually come here to witness these realities so that they could then take action which would meet real needs. "Along with the technicians (of the electric company), we go out to work with people, so we can see for ourselves what the needs are, what condition the poles are in... We go around the communities, we write reports (...). I must say, the IDB is always present in underprivileged provinces and that is a real help for us. Recently, IDB specialists and the electric company did a joint visit; they wanted to get a sense of what was needed in each area, because there are still some things we need if we are to move forward. It was very positive. Distance wasn't an issue for them; they went to the most remote areas and talked directly with the people. I really liked that."

Many different opportunities have been identified in this area; they range from support for family enterprises to help getting communal projects off the ground or growing those that are already operational. In the majority of cases, these projects do not require large amounts of money from a business point of view. However, for some families, it could mean the difference between living in extreme poverty or escaping it and learning how to live in less severe poverty. This is the reality for the poorer people of Imbabura; a region of Ecuador with poverty levels of over 50%.

Apart from presiding the Association of Women Handcrafted Embroiderers "Asociación Mujeres Bordadoras Artesanales", Rosa also heads up and supports other projects (see table "Projects promoted by Rosa"). They are all evidence of the fact that access to electric service in rural communities enables such endeavors as: grain milling; shearing, washing and drying of sheep wool; milk collection centers; workshops; and neighborhood businesses, among other initiatives. This translates into a reduction of poverty for families and therefore leads to real pro-

gress in the community.

The way to improve a family's economy using electricity is sometimes through simple initiatives such as introducing electric equipment for milking the family cow or cows, which then replaces manual milking or equipment that runs on diesel or is manual. A change like this also brings benefits in terms of hygiene, speed and even environmental impact, since there is less pollution of the environment.

> "Now, as we have our own initiatives, we have the certainty we are moving forward with our families. We are not going to live suffering"

Rosa embarks on the daily task of fostering such projects that improve quality of life in these communities. She keeps in constant contact with the assemblies that are organized to keep everyone informed about the projects. "The people who attend are always mostly women. The men are normally at work (the men of poorer families tend to work in more structured employment). As we are the most interested, we are the ones who get directly involved, because we want to work and we want these projects to succeed. We have seen a change in the mentality surrounding our commitment. It now goes beyond just a focus on the resources they give us, we also know we have to work hard so that these projects will live on, and not just survive when there is money. What the government, the IDB and other actors give us is a seed; but we are the ones who have to take that and nurture it. As women, we are aware that this can improve our quality of life. There has been a lot of violence against, and mistreatment of, women (especially indigenous women) and now with these opportunities and with the government laws that support us, the situation is changing." Rosa has also witnessed a change in the mentality of the women themselves, "we used to believe that our husbands were everything to us. We thought: 'How are we going to survive if our husband leaves us?' But today these women are grateful that there are leaders who put an end to such situations of mistreatment and who help women to go out on their own. Now that we have our own initiatives, we have the certainty we are moving forward with our families. Even if our husband leaves us, we are not going to live suffering."

Electricity Infrastructure Development, IDB Contribution and Impacts

The expansion of public service coverage in Ecuador has formed part of successive development plans for the country. In recent years, the energy sector has been a priority in the Inter-American Development Bank's national diverse strategies; specifically, supporting the financing of planned investments for the expansion and strengthening of electricity distribution systems in both urban and rural areas of the country. From 2010, the IDB has approved financing to the value of more than US$ 1 billion. This has funded multiple construction projects, for the development of the Ecuadorian electric sector, including projects in the transmission, distribution and rural electrification systems, among others. To date, this has meant completed electric works for around 2,500 rural communities.

The application of development policies promoted by the Government of Ecuador has brought the level of electricity service coverage in the country to 97.33%. This places Ecuador within the top third for electrical coverage in Latin America and the Caribbean. Likewise, and also as a result of the aforementioned works that were supported by the IDB, is the progress to face the challenges of the "Energetic Trilemma": security, energetic equity, and environmental sustainability; that according to the World Energy Council Ranking ranks Ecuador fifth regarding energy security in the world and fourth in Latin America and the Caribbean. However, it is the increase in the country's electricity coverage index that has had the most direct impact on improving quality of life within the population. The development of energy distribution networks in rural and marginal urban sectors has meant electricity service can reach even the poorest families; many of whom are located in the geographical areas where Rosa works. The electric service installed in these communities also includes street lighting in places where there is a concentration of housing and/or in strategic points, such as schools and other public services; something which is much appreciated by local families.

Other projects that Rosa follows up

Through Rosa's leadership, and together with the President of the Parish Council, various projects are fostered and driven forward. These include:

Grain mills. In Cochas, there is a grain mill business which was provided with a 220 volt electric connection, allowing it to serve the community. With a participative budget from the Municipality of Ibarra, the purchase of a grain toaster was requested (adding value to the product that was previously only ground). This allowed the flour to be further processed to sell other products. The communities always provide labor in the form of mingas, an ancestral custom of the Andean peoples. In the same place where the grain mill was installed, there is also a collection center and a dairy enterprise in operation.

Milk production. All the families in Cochas work in milk production, with each family owning at least one cow. Lack of water is a real risk in the area known to have droughts also to find water sources used for consumption and irrigation is difficult. This then makes it impossible to expand the cattle herd or incorporate other technologies such as automated mechanical milking. With this in mind, those participating in the project are considering starting up rainwater harvesting initiatives. The dairy project and the milk-cooling tank that has been installed in Cochas allow families, especially women, to deliver milk for purchase directly by a company; thus avoiding the intermediary which would charge a fee. What's more, the company they have an agreement with has stable prices, so the people don't incur any losses. In this community there is also a communal dining room, a real benefit for the women who cook for events. There is also telephone coverage thanks to the installation of an antenna powered by electricity.

Mobile brigade for the issuance of identity cards. The brigade is mainly aimed at the elderly, people with disabilities and other inhabitants of Angochagua. This brigade also works on issues related to gender-based violence. According to Rosa, this is still a real problem in the area, especially among indigenous populations, and there are still those who think: "even if your husband hits you or kills, he is still your husband." Rosa's participation instills confidence in the women, and that together with the advice of the Ministry of Health and the Ministry of Justice (which advises women to contact the political lieutenant as first port of call), allows them to accompany and welcome women who suffer gender violence. The Governor's Office has provided training as part of the National Plan against Violence. One of the common obstacles faced by women who want to file a complaint is language, as many of the public servants who deal with these cases do not speak Quechua.

Agents of change

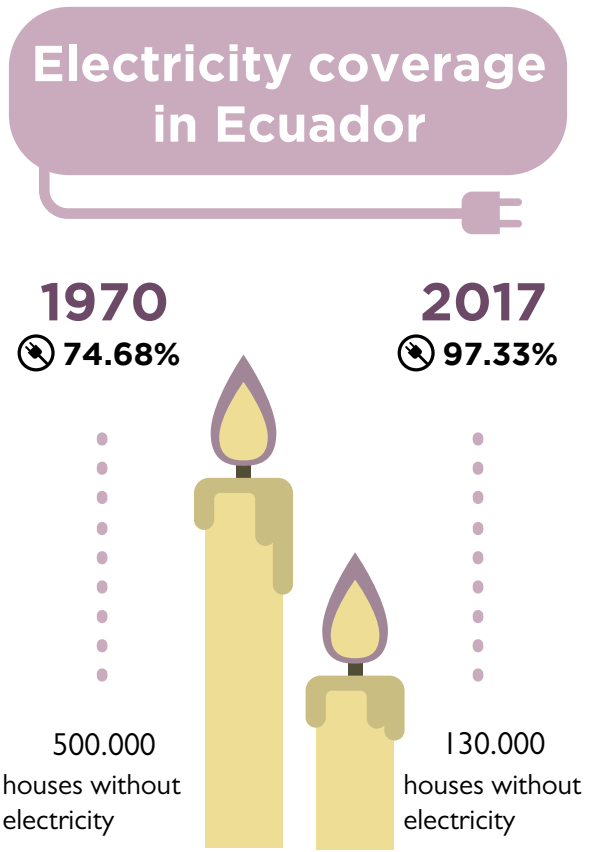
In the provinces of Imbabura and Carchi, in the north of Ecuador, women earn their living from projects that were made possible by the introduction of electricity. With their hard work, they have managed to change their destiny and that of their children, who can now dream of a better future

The arrival of electricity was a light in the dark for many families of Imbabura and Carchi. Wordplay aside, this is an important issue. The introduction of public electricity service into households illuminated the lives of these people in so many very real ways; mainly by allowing many women to undertake productive ventures and, in doing so, to improve their quality of life.

The majority of these initiatives are very simple and do not involve huge financial cost. So much that it might be difficult for a businessperson to see how they could ever have such a dramatic impact on people living in rural or areas on the outskirts of cities. But these are people with scarce resources; only their humble dreams and the desire to move forward.

The expansion of the electricity system is normally part of urban development. However, there are areas where housing development does not go hand in hand with the expansion of electricity grids; for example, in indigenous communities, which are mostly in rural areas or on the outskirts of cities.

This lack of electricity in rural areas and marginal sectors of the city is partly a result of the high cost of reaching remote areas and it is also, in part, due to the fact that housing growth in marginal urban sectors is mostly informal and in conditions that limit the expansion of the system. Whatever the reason, this makes it difficult to reach the 2.7% of the population who still does not have access to the service. (See infographics “Electrical coverage in Ecuador”).



Sources: OLADE (Latin American Energy Organization)/IDB. Ministry of Energy and Natural Resources

Did you know...

That, of the nearly **3,500 projects** in the IDB-supported Ecuadorian electricity system, **2,500** are in **rural communities**?

Cases

Some of the different productive initiatives run by women. Inspirational stories of overcoming the odds.

Entrepreneurialism within tourism "El Mariposario" (The Butterfly Park)

Some of those that have benefited from the expansion of the electricity network are families from the AWA Community, located in "El Baboso" sector of Carchi Province, near the border with Colombia (see map). The first concrete benefit seen here has been in healthcare, thanks to a health post which now allows locals to have permanent access to doctors and dentists, something which has mainly benefited women and children. In the future, they dream of doing training projects in the village, especially for young people, in handicrafts, carpentry and masonry.

The Awa Nationality is founded on principles of autonomy, culture, identity and territory. They also have women in several prominent positions; there is one woman in legal relations, several female community promoters and two women in the governing council of the community.

The AWA indigenous nationality live in the AWA forest reserve and their main means of subsistence and development are: agriculture (planting banana, naranjilla, corn, cane, yucca and pineapple); the breeding of domestic animals (mainly chickens, bred by women); and, to a lesser extent, hunting and fishing. Today, the community is in the process of developing a populated center near the tourist area; they already use this area as a second home, since their actual homes are some distance away. The time it takes them to walk between their farms and the populated area can be anything from 15 minutes to four hours. "Thanks to electricity we have been able

to bring lighting to this community area. Previously it was dark, people walked with their flashlights, but they didn't feel safe. Now there is street lighting, everyone, from the youngest to the oldest, can move around safely, without fear of falling or tripping," explains Manuel, one of the community leaders.

Today, the AWA community has a dream that unites everyone: a tourist project called "Mariposario Paraíso AWA" (Paradise Butterfly Park Project). Its main attraction is its enclosure where different species of butterflies are exhibited and bred; showing the biodiversity of the area. The project is self-sustaining, thanks to the entrance fees paid by visitors (they raise 250 USD per weekend). A percentage of the money generated is given to the community and the rest is for the people who work there. Inside the butterfly park, there is an area dedicated to the flight and reproductive cycle of the butterflies and also a greenhouse. The park is home to more than 260 species, 14 of which are grown in the center; right from their larval stage all the way to the butterfly phase (they even have the genus Caligo, otherwise known as owl butterflies).

However, the project is much more than this. The community is also creating recreational spaces for tourists next to a nearby river; as well as developing a tourist canteen, which would be staffed by the AWA women. There is a waterfall, local plant life, and even springs. Interns from nearby universities who come to do their thesis here want to build a hummingbird observatory as another tourist attraction. Moreover, in the future, locals plan to adapt some of their houses to host tourists who will wish to stay overnight. Those in charge say that it is women who participate most in all of these tourism projects; women also have a better understanding of the subject as a whole and the right manners to deal with customers. Their earnings are then invested in the education of their children, as well as their family's health.

In the words of Silvio, one of those in charge at the butterfly center: "We promote development through these tourist activities, and in doing so we show people that this is the best alternative for young people and women who have not yet had the opportunity to work in a business, as they are given the opportunity to work and thus provide for their family. This is what we are fighting for here today". Rosario, who works in the butterfly park and has learned a lot about the management of the center, for example. Her work helps her raise her son and family. In addition to working as a guide, she also helps by tending the surrounding planted areas. It was the natural attractions of the area which helped locals to view ecotourism as an opportunity.

Family Project Tauripamba Sector

In Ayora Cayambe parish, there is a project based around a Milk Extraction and Collection Center (which is still under development). The people behind this project are a married couple and it is the woman, Andrea del Rocío Peñafiel, who also tends the crops that she sells in the parish. Here is her testimony: "As a couple we earn our living from agriculture and livestock. Our dream is to be able to process milk. In order to do this, we have to be able to fulfill the entire production process, from the milking all the way to the finished product. At the moment, we are achieving one of our goals, which is to earn our living from livestock, milk production and to sell milk to the dairy processing plant. Besides, in order to obtain good pastures, we need potatoes to loosen and fertilize the soil first, so it is ready for sowing. Now, we have 20 head of cattle, and they give us an average of 350 liters a day. Recently the price of milk dropped, and from time to time we make curds, cheeses and yogurt by hand. We then sell them to friends and family. Our dream is to process our own milk and become a dairy processing company. Andrea says that they came to live in Cayambe seven years ago. She recalls the exact date the electric service arrived: it was March 5, 2015. "It came after a long struggle for this much-needed service. We lived for four years without light and we delivered our milk to the merchants who passed by the farm in their vans, they paid us the price that suited them," she says. Now, with electricity, "life has got better and we decided to fight for our dreams: we bought more land and introduced mechanical milking; we did well because the price of milk went up. Then they made us the plant proposal: if we bought a cooling tank we would achieve a much more profitable price". Andrea and her husband were both raised in the countryside and came from humble families in the province of Carchi. She appreciates this opportunity to dream of a better future. They explain they have no time off and never rest. However, despite this endless work, they are happy because they love what they do. "Our days start really early but that's just us striving to produce more. We love what we do but, that said, we don't get to have much of a social life."

When women make the difference

Rural electrification projects are an opportunity to empower the women of the Colombian Pacific Coast, which will lead to economic growth and the improvement of quality of life for its inhabitants

Energy for growth

Each step a woman takes in these projects, paves the way leading to transformation and development for their families

By Luz Amanda Pulido*

In 2015, the National Government of Colombia launched a proposal to reduce gaps in access to public services and electric energy on the Pacific Coast. This initiative was called Plan Todos Somos Pazcífico (We are all Peaceific). In order to provide resources for the initiative, two loans of US$ 358 million were signed with the Multilateral Bank; of which, US$ 92 million went to the rural electrification program in the departments of Chocó, Cauca, Nariño and the District of Buenaventura. These resources are being applied through the Fund for the Development of the Plan Todos Somos PAZcífico- FTSP.

Bringing electricity to rural sectors is opening up opportunities for those who live along the Pacific Coast. With the energy options appear, it is possible to see a different future. The benefits are there for everyone. The results of this electrification, however, have been shown to be differential; especially when it comes to gender. Numerous studies affirm that women are empowered by the arrival of electricity, and that electrification [1] has a positive effect on the lives of women and girls. Tanja Winther (2008) recorded the benefits of electrification [2] on the empowerment of women in rural Zanzibar, Tanzania. She concluded that the provision of energy had a direct relationship with the provision of mains water services there (with the subsequent positive effects on household health and well-being and reduction of hours spent obtaining water). She also found that access to energy facilitated the women's participation in productive household activities, improved the educational levels of children (particularly girls), and she also reported that resulting access to television programs changed the women's frame of reference regarding their role in society.

Rural electrification projects offer an opportunity to empower women in the Colombian Pacific Coast, which will in turn lead to economic growth and the improvement of quality of life for its inhabitants. The FTSP is committed to this goal and now has its first success story to show for it. The project in question is the construction of electricity distribution networks to link the veredas [3] of Barro Colorado, Guachire, Guabal and San Agustín; located within the Rio Gualajo Community Council, municipality of Tumaco - Department of Nariño.

[1] Electrification has a gender impact. http://sciencenordic.com/content/electrification-has-gender-impact (consultado: 16 de octubre de 2018)
[2] Empowering women through electrification: experiences from rural Zanzibar. http://www.environmentportal.in/files/Empowering%20women%20through%20electrification.pdf (consultado: 16 de octubre de 2018)

It is important to note that Colombia, according to the 2017 Global Gender Gap Report, is ranked 36th on inequality of women with an index of 0.731. This places them below Nicaragua, Bolivia, Barbados, Bahamas, Cuba and Argentina [4] in the ranking, countries that themselves have rates of electricity service in rural areas at over 56% (World Bank electricity access report). Colombia has coverage of less than 97.2% and expects to reach 100% by 2030, according to CONPES 3918, Strategy for Implementing Sustainable Development Objectives (SDO) in Colombia.

General characteristics of the territory

Tumaco is one of the 344 municipalities listed on the Zonas Más Afectadas por el Conflicto Armado (ZOMAC) (Areas Most Affected by the Armed Conflict). On average around 12,000 people were reported to have been displaced due to the armed conflict [5]; of whom 52% were women [6].

To reach the veredas of Barro Colorado, Guachire, Guabal and San Agustín you need to take a boat ride from the urban area of San Andrés de Tumaco. You then cross the Pacific Ocean for more than 30 minutes, go over the Rosario River, and finally arrive at the San Agustín trail, through the Gualajo River. The trip can take 2 to 6 hours, depending on the type of transportation available; anything from small craft like "chalupas" or "pangas" to 200 HP motor boats. These difficult access conditions have a sizeable impact on the work that needs to be carried out in the territories; and they clarify the need for decentralized, efficient and continuous services. While men go out to sow and carry out agricultural work, the women stay in the populated centers providing food and groceries services, educating children in schools and running the households.

"While men go out to sow and carry out agricultural work, women stay in the populated centers providing food and groceries services, educating children at schools and running the households"

The landscape over the Gualajo River is an example of the megadiversity of the Colombian Pacific. The presence of mangroves, rivers and the ocean means there is an exquisite and varied gastronomic offering here. The ecosystem of the region could be described as Tropical Forest and is home to many species of mammals, fish and birds that are of national significance.

Characteristics of the project

The project for the construction of electricity distribution networks to link the veredas of Barro Colorado, Guachire, Guabal and San Agustín, located within the Río Gualajo Community Council, municipality of Tumaco, in the department of Nariño, will provide electricity to 192 users. It will also give those families that were displaced, the chance to return to their territory with new opportunities already in sight.

"With the project, the community will go from having four hours a day of electricity service (not every day) to a 24-hour service which is reliable, continuous and of good quality"

At present, the veredas do not have mains water, sewerage or solid waste management services, and their electricity service is provided intermittently through a thermal generation system (Diesel Generation Plant). In 2018, infrastructure for the provision of energy service has been improved by connecting users in the veredas to the Sistema de Interconexión eléctrica Nacional (SIN) (National Electric Interconnection System) This has been put into operation by the company Centrales Eléctricas de Nariño (CEDENAR), through an axis project forming part of the Fund for the development of the Plan Todos Somos Pazcífico (FTSP), within the framework of IDB loan OC-3610.

Currently, 100% of the 192 users (which amounts to about 1000 people) have electricity service 24 hours a day, seven days a week. With the guarantee of continuity and coverage of electricity in rural areas, it will be possible to stimulate the industrial, tourism and agricultural enterprises of the inhabitants of the territory.

In Colombia, 70.2% of the electricity produced by the SIN is attributed to hydroelectric power plants and the remainder to thermal power plants.

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[3] http://reports.weforum.org/global-gender-gap-report-2017/results-and-analysis/
[4] Desplazamiento – Personas https://cifras.unidadvictimas.gov.co/Home/Desplazamiento
[5] Desplazamiento - Enfoque Diferencial https://cifras.unidadvictimas.gov.co/Home/Enfoque?vvg=1

Women's participation; the strategy

The Colombian Pacific is known for being a very male-dominated society, in which the participation of women is generally very limited. This was in evidence from the very first moment of the initial socialization meetings, when upon asking where the women were, the leaders stated "they have to be at home taking care of the children and making food". It became clear there was a need to integrate the women into this project. However, when they were invited to the massive socialization meetings, they said that their husbands should attend instead since they were the ones who would decide how the project was to be done.

Authorization was therefore sought from the leaders of the Council, to allow the creation of new spaces where women could participate. Their involvement was justified through a need to teach them about the rational use of energy; after all, they would be the ones at home all day and so they should be the ones to learn how to save energy. And so, approval was obtained and a space for dialogue was created; it was called " women taking care of the territory Committee". At the same time, spaces were also created to identify protection measures for their families during and after the work. In addition, these new energy opportunities encouraged them to come up with future life plans, and energy teaching strategies were made available to them, with tips on how to use energy efficiently.

"Energy has allowed them to have new dreams: to buy their appliances with the money from the harvest; especially a refrigerator, which will help preserve their products to be able to sell them in the market"

Participation was optional, and meetings were held in each vereda. In order to encourage a broad participation among women, meetings were scheduled at 2 p.m.; a time when they would usually finish their housework or finish their day's work on their farms and meet to play bingo. The space was also used in order to socialize with them.

As a result of the Committee's activities, a commitment was made that the women would support each other in paying the utility bills. It was decided one person would be chosen each month to go to Tumaco and pay all the bills of the users of the veredas; thus ensuring money would not be lost and service cuts would be avoided. The women have also taken part in the inspections carried out by technical personnel in their homes to make sure they have safe connections. In this way, the women have had the opportunity to identify and suggest locations for the most important electrical connection points in their home, making sure their needs and interests are met.

Today, in Tumaco and in the Rio Gualajo Community Council, women are integrated in the provision of electric energy services, whilst still showing respect for traditions that might appear 'slightly chauvinistic' to outsider eyes. The FTSP has provided women with tools which allow them to gradually continue leading transformation and development processes in their territory with the arrival of electric energy. This makes the women happy since it opens the doors to communication, dispersion and to thinking about other sources of employment. The below surveys show this to be true.

"Introverted women. They smile when questioned and with just a few words they confirm the fact that energy is a dream they had spent years waiting for, and today, it has finally come true"

Meet the beneficiaries

NAME
Alicia Arboleda Castro

AGE
48 years old

CIVIL STATUS
Cohabiting

NO. OF CHILDREN
Two

JOB
Sale of ice-cream and preserves (Tumaco)

LEVEL OF EDUCATION
Baccalaureate

EDUCATIONAL AMBITIONS
Take food handling courses

1/What changes do you think energy will bring to the Rio Gualajo community?

The service will open up lots of opportunities. We can make and sell products such as ice cream, popsicles and ice to our neighbors. Also, it will allow us to have more contact with the outside world, more communication.

2/Can women who are heads of families own land in Consejo Comunitario?

Yes, there are women who are heads of families and own their homes.

3/Is there any difference in the way girls and boys are taught in the Rio Gualajo Community Council?

Not at all

4/What job opportunities do you think will be opened up by the energy service?

We can set up small businesses (selling ice cream, offering hairdressing, beauty services), and can have better access to technology such as the Internet. In general, it improves the living conditions of the community of Rio Gualajo.

Meet the beneficiaries

NAME
Luz Aida Quiñones Cortez

AGE
53 years old. Has been living in Gualajo for 25 years

CIVIL STATUS
Cohabiting

NO. OF CHILDREN
Two, but they don't live with her anymore

JOB
Housewife

LEVEL OF EDUCATION
Did not study

1/What benefits will energy bring to the Rio Gualajo community?

Many. You can watch television at any time you want, listen to music, or entertain yourself.

2/How do the women here earn money?

Here, in any way they can, because the most common thing to do is scraping coke leaves. Now everyone is going to earn their daily wage.

3/And now with the arrival of energy will they be able to do different jobs?

Of course they will. Because the truth is that, here, you keep doing that kind of job because you don't have any another alternative. Even if you want to, for example, if you want to do something like sell, you can't. Energy is going to give us a great opportunity. Look at Tumaco that has a 24-hour energy service, there are better options than we have here.

"If you want to buy a refrigerator and make some popsicles, you make them and with the money you get, you buy sugar and coffee".

Meet the beneficiaries

NAME
Karen Ledesma

AGE
27 years old

CIVIL STATUS
Cohabiting

NO. OF CHILDREN
Two. She lives in her parent's house with her husband and children

JOB
Teacher

LEVEL OF EDUCATION
About to finish her "licenciatura" bachelor qualification in Early Childhood

1/What are the changes that you think might happen with the arrival of energy?

I believe that when energy arrives here, there will be many more work projects for both men and women. For example, we can arrange for there to be training courses; us women could use our free time for beauty; also we could make clothes using burlap.

2/Are there differences between the women of Rio Gualajo and other territories such as Tumaco?

The difference is that women from the countryside are more dedicated to their work. Because here many women go to their farms to bring bananas, coconut, guava arazá, lemons, and then take them to Tumaco to sell, and to bring back for their homes as well.

3/Did you take part in the women taking care of territory Committee?

I went to several meetings... We were taught to save energy by turning off the light bulbs, and if we are not using the cell phone charger it must be disconnected, because it could also consume more energy. The same with the television.

4/What dream would you like to fulfill once you have energy?

I would like to start some kind of business selling ice cream from my house and as I also like cooking, I'd like to make desserts. It could also be something related to hairdressing. In addition, as there is almost no signal here and you have to go up a mountain to be able to talk on the phone, it's going to be easier for me to communicate with my son, who is far away.

Meet the beneficiaries

NAME
Piedad Pinillo Basan

AGE
48 years old

CIVIL STATUS
Cohabiting

NO. OF CHILDREN
Five. All students.
One is in the army

JOB
Housewife

LEVEL OF EDUCATION
Did not study

1/What are the greatest difficulties you have had because of the lack of light?
The dark, to name one... Energy is very much needed.

2/Did you receive any training on how to save energy?
Yes, I can't remember much... But in the morning when it's light, you have to turn off the light bulb, and also at night when you go to sleep. The appliances that consume the most energy are the refrigerator, electric stoves, the iron and the hair straightener. We have to be very careful so as not to jeopardize our savings.

3/And now, with energy, what do you think is going to change in your family?
Well, maybe... A lot in terms of communications and chores. We're going to go to town, bring home the groceries. We can put them in the fridge and they're going to last a little longer.

*

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Pride that moves

Some scenes are so moving that it is almost impossible to put them into words. So, we chose some images that will speak for us about the world on which we want to shed light. We want to talk about education, gender equality and opportunities; about quality of life, integration and decent work for all. We want to share with you the effort and passion for self-improvement of women who raise their families in remote areas.

[05]

Key gender challenges in the energy sector

The energy sector is going through a period of transition and change; moving towards more sustainable energy. This gives us a great opportunity to readjust the gender balance. Promoting real change will mean that men and women of the region, think and work on how to do it, to understand and act together towards change

What are the key challenges surrounding gender equality in the energy sector?

We are working and supporting our counterparts to learn more on gender and energy issues; working closely with them because we understand that this is an important topic, not just for the sector but for the region as a whole.

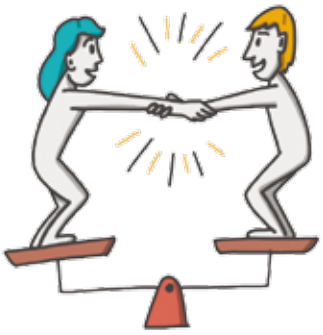
We have to strengthen the knowledge and understanding of gender equality and empowerment of women as a first step towards behavioral changes and understand that integration is a key part of a gender perspective in the daily work.

In addition to this, we need to work closely with other sectors, such as education, social services and the private sector.

"Both women and men are affected by the lack of access to energy sources for productive uses, in terms of transport, household activities and lighting. However, traditional gender roles mean that the responsibilities of finding alternative energy sources and tackling energy poverty, particularly in rural areas, fall mainly on women"

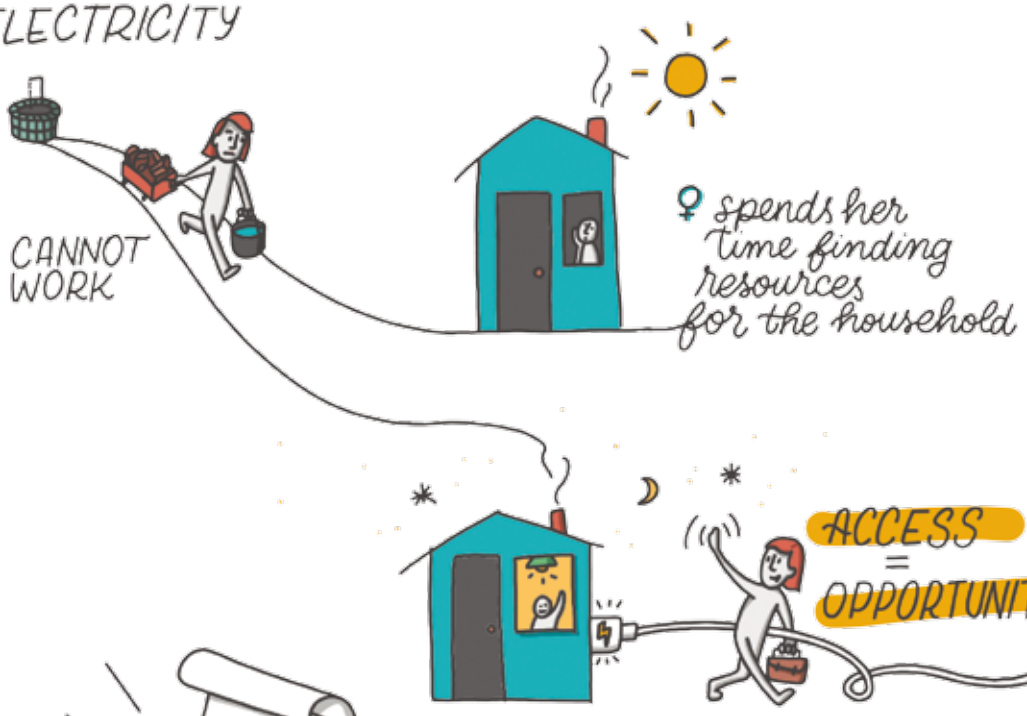
KEY CHALLENGES

GENDER EQUITY IN THE ENERGY SECTOR



FIRST STEP
FOR LABOR INTEGRATION

NO ACCESS TO ELECTRICITY



GENDER SENSITIVE *energy policies* **BENEFIT US ALL**

Energy poverty and gender

Women carry the greatest burden of energy poverty, as they are the ones who supply and use biomass energy for cooking. This situation is aggravated by fuel shortages and household pollution, not to mention their negative impact on health and safety. Women bear the invisible weight of the human energy crisis, as evidenced by the sheer time and effort they devote to collecting and transporting water and firewood. Women are in need of modern and efficient energy sources to improve their work and quality of life, both inside and outside the home.

This situation demonstrates that, historically, energy policies and projects have not been designed with due consideration of the gender perspective; the assumption being that men and women benefit from energy in the same way. Women have also historically not been included as key actors in the design, use, distribution and maintenance of energy technologies and services. Energy policies tend to be considered as gender-neutral, which implies that they are seen as beneficial to both women and men.

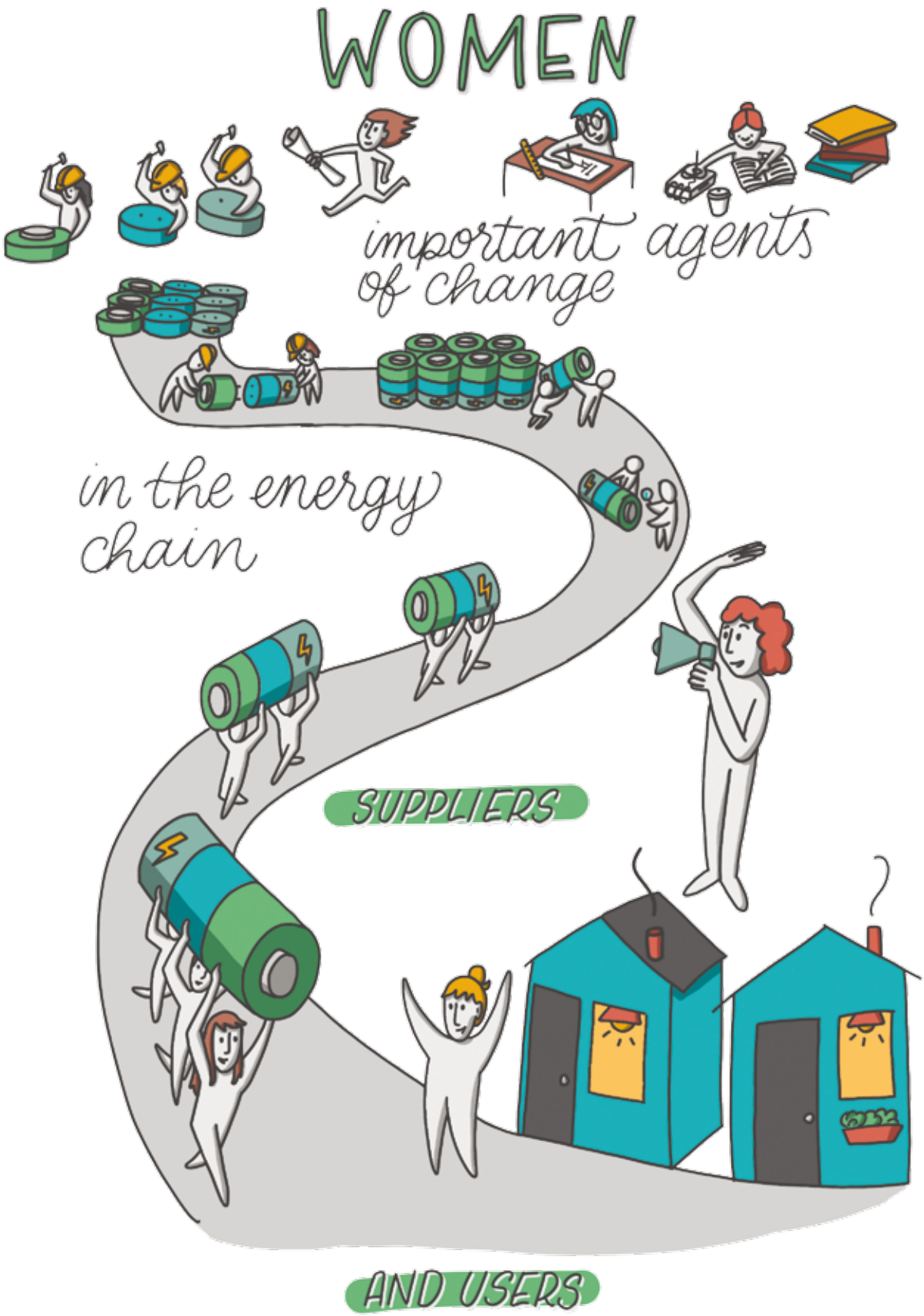
The direct consequence of implementing energy policies without proper integration of gender considerations is that important information can be missed in their design; meaning these policies discriminate women or other unprotected sectors of the population.

Access to electricity can lead to greater gender equality. It can also, among other things, make women's lives healthier; while providing job and development opportunities, not only for themselves, but for their families and communities.

Why is the IDB's energy sector working to improve women's labor markets?

Women are underrepresented in the energy workforce. Women make up less than 20% of the total number of employees in the LAC energy sector. The energy sector, in general, is an important source of employment and income across all countries. As such, expanding opportunities for women within companies in this sector represents a significant opportunity to promote gender equality and women's empowerment. At the same time, greater participation of women in decision-making and in the design of energy policies and projects, will help ensure they respond more effectively to the differentiated needs of men and women, and therefore are sustainable over time.

Women are important agents of change and taking them into account when designing energy policies, programs and projects can lead to substantial transformations. Women must be encouraged to play an active role in the energy chain, and necessary spaces should be opened to recognize their participation as providers and users of energy, without excluding men and, this way, promote gender equality in the region.


WOMEN
important agents of change
in the energy chain
SUPPLIERS
AND USERS

What is the IDB doing?

The IDB is 100% committed to gender equality and to improving the lives of women and men in LAC. This commitment is clearly articulated in key institutional policies and strategies. First, the IDB Operational Policy on Gender Equality in Development (Policy, GN-2531-10) seeks to improve the Bank's contribution to member countries' objectives and commitments on gender equality and women's empowerment. The Policy commits the Bank to: (i) the incorporation of a gender perspective, which proactively includes attention to gender equality in its development interventions, with special emphasis on lending operations, (ii) direct investment, support of financial operations with the main objectives of promoting gender equality or women's empowerment; and (iii) gender safeguards, avoiding unintended negative consequences for gender equality and women in their operations.

To further emphasize its commitment, the IDB named gender equality and diversity as one of the three cross-cutting themes of the institution in its Updated Institutional Strategy (UIS) 2016-2020 (AB-3008). This is complemented by the Corporate Results Framework (CRF) 2016-2019, which tracks a broad set of indicators to measure the Bank's contribution to gender equality.

Every three years, the IDB prepares a Gender Action Plan (GAP) to ensure the continued implementation of the Gender Policy. Gender mainstreaming in IDB operations is one of the highest priorities of the current GAP, 2017-2019. The integration of the gender perspective in operations is carried out from two perspectives: (i) thorough attention to equality in project design; and (ii) a continuous focus on gender-related actions and outcomes throughout project execution, monitoring and evaluation. The GAP brings together the strategic action lines of all IDB sectors. Through its Energy Division, the IDB Infrastructure and Energy Sector will continue to focus its operational work on promoting economic opportunities for women, adapting infrastructure and infrastructure services to meet gender-differentiated needs, and strengthening women's leadership and participation in the sector.

WHAT IS IDB DOING?

GENDER POLICY

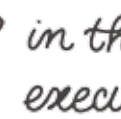
direct investment

gender perspective

gender safeguards

IMPLEMENTATION

in the project design



in the execution

EXPANSION + COUNTERPARTIES

education

socialization

awareness

OPPORTUNITY:

Build together EQUITABLE CULTURE

Teamwork

With the support of gender and energy specialists, IDB energy specialists tackle gender issues alongside governments and utility companies throughout Latin America and the Caribbean.

We need to see this as an opportunity and we firmly believe that these changes will make a difference in people's lives.

"We are educating, socializing and raising awareness among our partners about the importance of the issue, showing examples and experiences from this region and other parts of the world, as well as using empirical evidence, studies and reports"

Letter from **Agustín Aguerre***

Disruptive technologies revolutionize how infrastructure is perceived, designed, and operated , especially in the energy sector. To overcome economic and social challenges in Latin America and the Caribbean, it is essential that the entire population, and women in particular, have access to those technologies.

Advancements in the technology present great opportunity for women. New technologies pave the way to new industries, and new industries open opportunities for inclusion.

As described in this publication, efforts directed toward finding alternative energy sources and tackling energy poverty, particularly in rural areas, significantly impacts the lives of women and girls. We must strive to eradicate disparities in access to energy.

We must also work to encourage a greater diversity in the labor market and energy sector.

It is important to ensure that women's voices resonate through all levels of policy-making in Latin American and Caribbean governments, regardless of their origin or socio-economic status.

The IDB continues to dedicate significant financial and human resources to take action. We are working with others to guarantee women and girls in Latin America and the Caribbean have equal opportunities to participate in local economies and benefit from greater growth, development and prosperity."

Por Mandato y Por Convicción

Agustín Aguerre
Manager of the Infrastructure and Energy Sector at IDB

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José Agustín Aguerre currently serves as Manager of the IDB's Infrastructure and Energy Sector. Prior to his current appointment, he served as manager of the Haiti Country Department, as interim manager of the Infrastructure and Environment Sector and as chief of the Transport Division.A citizen of Uruguay, Aguerre joined the IDB in 2003 as a transportation and infrastructure specialist, focusing on Central America, the Dominican Republic and Haiti. Prior to his appointment at the IDB, he worked in both the private and public sectors in his native country, where he was chairman of the National Ports Administration, undersecretary of state in the Ministry of Transportation and Public Works, director of the National Roads Agency and chairman of the Institute of Transportation and Infrastructure Planning. Aguerre holds a civil engineering degree from Uruguay's Universidad de la República and a master of science in construction management, with honors, from the University of Reading, England.

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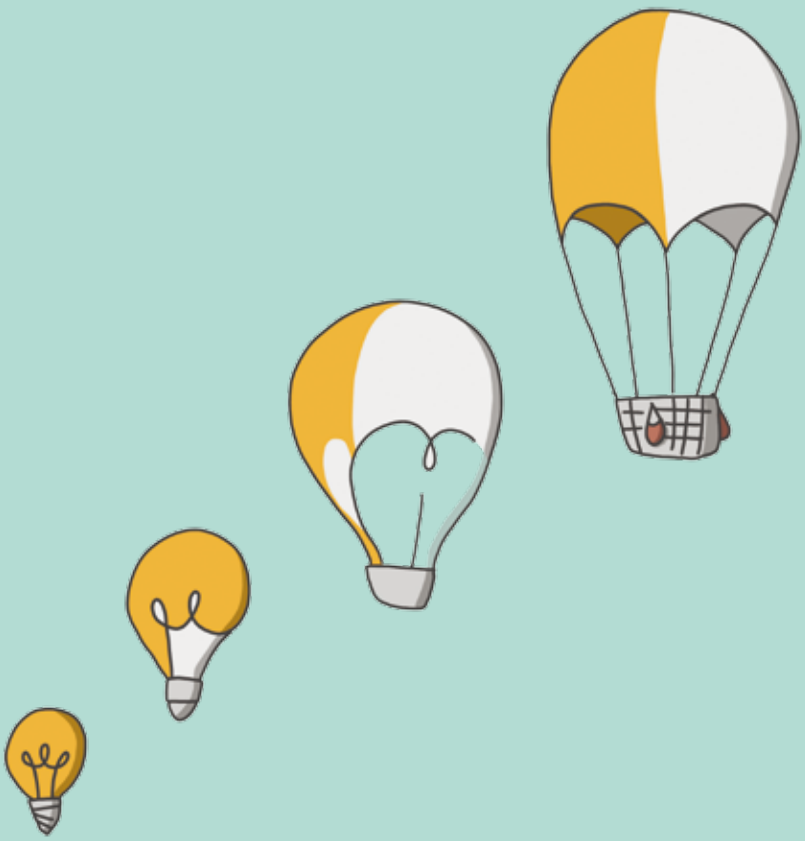

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