

Advances in the Participation of Women in the Geothermal Industry of El Salvador

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ABSTRACT

The current advances in El Salvador concerning geothermal, range from the development of new fields in high enthalpy, pilot projects of low enthalpy, a Geothermal Center of Excellence that includes a diploma taught annually for Latin America, LaGEO Multilatina which supports other countries starting geothermal development in the region, as well as innovations and improvements during the periods of maintenance of the two existing geothermal power plants; in all these advances the participation of women is vital. The vision of the current administrations of LAGEO has allowed more women to work in occupations that were traditionally performed by men, such as the operative work in geothermal power plants; also, through productive projects with direct use of geothermal, many women from the communities surrounding the geothermal power plants have improved their quality of life; concerning gender equity, the participation of more professional women in the Geothermal Diploma Course is also observed; the incursion of more than 150 women in the WING project (Women In Geothermal) with enthusiasm and motivation; the teaching of workshops aimed exclusively at women workers in the geothermal sector with focus on leadership, equity and advancement of women. All this momentum and energy focused on the issue of gender equity in LAGEO have been supported with actions for the benefit of women workers, such as the creation of an Early Stimulation Center and task club for children, projects for the education of those female workers who have not finished high school and support for geothermal specializations; thus, concerning Gender Equality in the geothermal industry, the road is laid out, the momentum is great and the challenges will require the support of senior management, the awareness of male staff and innovative mechanisms to achieve more progress.

INTRODUCTION

The 2030 agenda and its 17 Sustainable Development Goals (SDGs) agreed at the ONU convention in 2015, are the result of the consensus of the international community, represented at the United Nations Organization, about the challenges facing the planet and the aspirations of people about a better future. El Salvador takes action and commitment to fulfill and support the 2030 Agenda and its 17 SDGs, while trying to contribute its own experiences to the debate on the way forward in this important direction.

Goal 5 EQUALITY OF GENDER and Empower all women and girls, is reviewed by the Government of the Republic of El Salvador, taking action in the realization of efforts on issues of national policies, laws of equality, equity and eradication of the discrimination against women, among others. It also generates statistics on the participation of women in public positions, in politics, local governments, among others.

LAGEO has been promoting a series of measures in favor of employees, to date, the momentum and growth that women have had in the electricity sector has been significant compared to previous years, where they have been able to develop different advances such as: empowerment of Women, equal opportunities between women and men to choose positions, actions routed at supporting women and the family in the care of their children. Recruitment policies where there is a greater participation rate for women in those jobs that are traditionally carried out by men. Spaces for organizations for the benefit of women's education, equity in the subject of training, additional LAGEO won a worldwide prize in the field of women's work and geothermal energy

1. DIAGNOSIS OF PARTICIPATION OF WOMEN IN LAGEO

At present, the female staff represents 31% in LaGeo (based on permanent positions), and additional women are hired in the San Vicente, Chinameca, Fundageo and Cooperativa Los Ausoles.

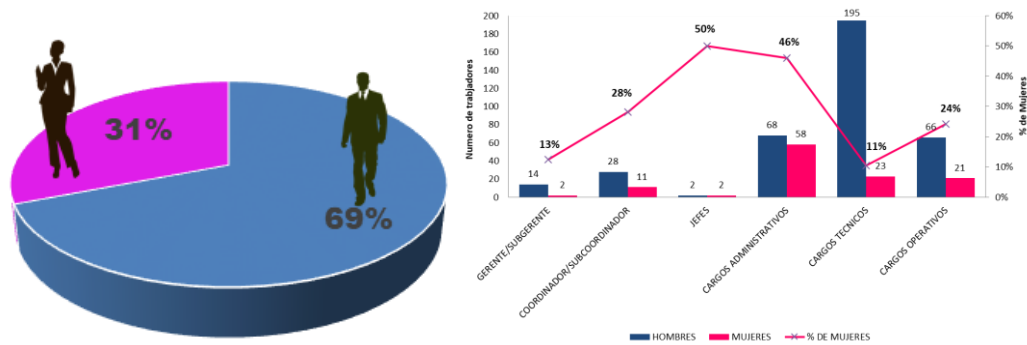


Figure 1: Comparison of the percentage of LAGEO women and men workers, percentage by hierarchy level

2. REALIZED PROJECT:

2.1 Early Stimulation Center:

It was developed with the focus of support to the family in the topic of care and educational stimulation of the children of the workers of LaGeo and subsidiaries.

The ESC serves a population of around 50 girls and boys from 3 months to 12 years. There are adequate facilities and spaces, separated by age and attended by specialized personnel, as well as a nurse and trained personnel to serve children with special abilities.



Figure 2: Interior of the center and children's Christmas presentation at the auditorium of LAGEO

2.2 Inclusion of women in major plant maintenance:

Every year the geothermal generation units are maintained in the Berlin and Ahuachapán plants. Traditionally for short time tasks were mostly male staff, who are entrusted with electrical, mechanical, order and cleaning tasks, among others. The growth in the participation of women in major maintenance has been significant, increasing by 30% in 2017.

2.3 Commemoration of International Women's Day (March 8)

Year after year LaGeo holds a special event on International Women's Day (March 8), with the theme 50-50 for 2030, all employees meet in a meeting to discuss gender equity from the perspective of the united nations, to speak about Women outstanding in the history of LaGeo, to get tribute to the coworkers who have said goodbye to the earthly life, to get tribute to the coworkers who have been working in the institution for more than 15 years. The activity ends with the holding of discussion circles, to contribute and share work and life experiences, as well as opportunities for improvement in all areas within the institution.

2.4 Participation in congresses and trainings

To date, the participation of women in international training and congresses has been increasing. In the United Nations Geothermal Training Program (UNU-GTP) the participation to date is 23%; in global geothermal congresses (GRC, Japan, New Zealand, etc.) there is a 30% participation, in 2015 a total of 8 women with 100% female participation were trained in the ADEN Women & Management program.



Figure 3: Women in the major maintenance of the Berlin geothermal plant, 2019



Figure 4: LAGEO women's convention for the commemoration of March 8, 2018

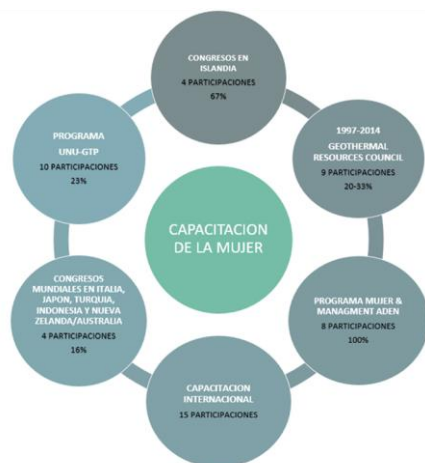


Figure 5: Description of international trainings and events for women from Lago

2.5 Gender Equality in events and trainings

The objective is to get equity in the participation of women in the diplomats, courses, among others, in Geothermal Energy, achieving this equity in 2017 and 2019 in the Geothermal Diploma taught with the support of Iceland, at the LAGEO facilities.

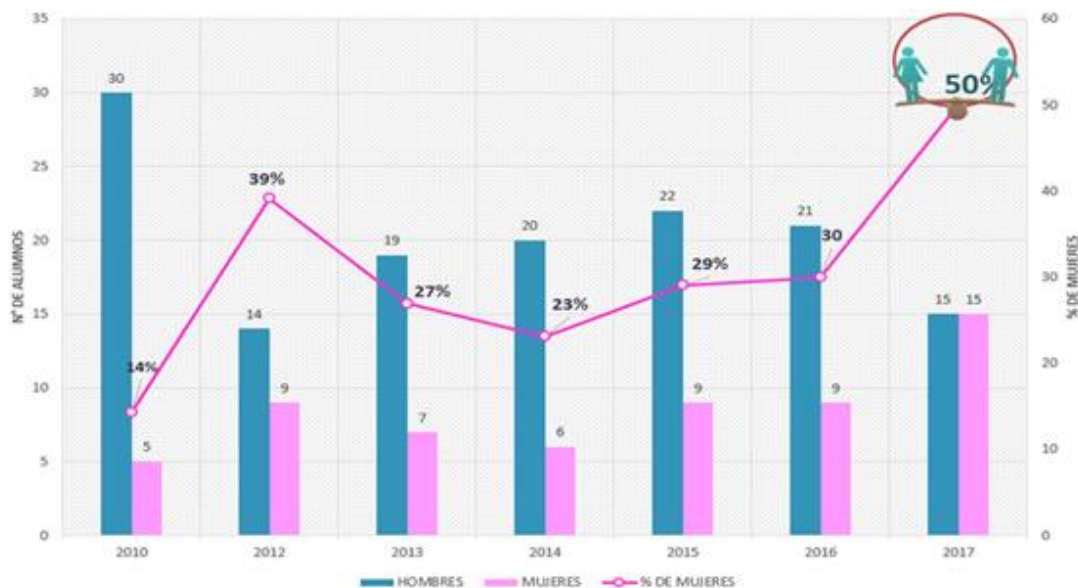


Figure 6: Graph showing the participation of women in the Geothermal Diploma Course

3. INTERNATIONAL RECOGNITIONS

LAGEO has won the United Nations global prize in 2015 in the category of "Moments of Change" in the UNFCCC climate framework convention. The reason and that is written on the UN website says: "The women of the rural communities of El Salvador are increasing their income and are facing climate change, through a unique project, which is to use heat waste and steam condensate at the Geothermal Power Plant Berlin. Said waste heat from geothermal steam is used to dehydrate the fruit for commercial sale. They also grow and sell plants watered with geothermal condensates. Four women are employed permanently as forest rangers in the wildlife protection park. Through these projects, women are able to run a productive business at the same time"

Three women who work in these activities traveled to Paris to receive the award, sending a message with facts to the world, that in El Salvador the Women of the field is able to get ahead with the help of companies that place social responsibility within their mission business.

Proyecto Ganador



capacidades y confianza para asumir roles de liderazgo en sus comunidades.

Las mujeres de las comunidades rurales de El Salvador están aumentando sus ingresos y están haciendo frente al cambio climático, a través de un proyecto único, el cual consiste en utilizar el calor residual y condensado de vapor de la central geotérmica de Berlín. Dicho calor residual del vapor geotérmico es utilizado para deshidratar la fruta para sí misma y para su venta comercial. También cultivan y venden plantas regadas con condensados geotérmicos. Cuatro mujeres se emplean de forma permanente como guardabosques en un parque de protección de la fauna, que se ha establecido en el campo geotérmico. A través de este proyecto, las mujeres son capaces de dirigir un negocio productivo al mismo tiempo ganar un ingreso sostenible. También por medio de FUNDAGEO se desarrolla un proyecto de inmensurable valor cultivo, vivero, sembrado, mantenimiento y recolección de frutales. La iniciativa está aumentando ingresos de las mujeres a través de actividades que reducen las emisiones de gases de efecto invernadero. Como resultado directo del proyecto, las mujeres tienen las habilidades,

Las mujeres que participan en las actividades de reforestación de LaGeo se verán reforzadas a través de un proyecto de Grupo CEL, cuyo objetivo es la siembra de 3 millones de árboles en tres años para reforestar las cuencas Lempa y Torala.

Para conocer más sobre el premio, entrar a la página WWW.unfccc.int
Proyecto ganador:
http://unfccc.int/secretariat/momentum_for_change/items/9259.php

Figure 7: Report on prize won by lageo in paris, 2015

4. WING: WOMEN IN GEOTHERMAL

The participation of women in the geothermal industry is growing more and more, and the importance of more women working in this industry is growing even faster. In El Salvador by tradition, women from university level studies are few who choose a career as engineering, geo-science, which would serve as an entrance to the geothermal industry, in rural areas, most women are dedicated to home care; this means that job opportunities in both geothermal offices and plants are always filled by men.

All this tradition is changing, and in LAGEO we are taking the first steps to break with the "Traditional" and provide opportunities to those women who want to grow in knowledge.

In 2017, the WING Group (Women in Geothermal Energy) was formed with the objective of: Promoting education, professional development and the advancement of women in the Geothermal Sector. WING El Salvador is part of WING Global that is present in 49 countries in the world and was created in 2013 at the Annual Meeting of the Geothermal Resources Council (GRC) and GEA Geothermal Energy Expo.



Figure 8: Founders WING El Salvador, 2017

The goals that WING Global has defined for 2020 have been partly our guide to start our work in LAGEO: Connect, Inform and Advance.

Route for Iceland 2020, main objectives of WING



Figure 9: Route for Iceland 2020, main objectives of WING

4.1 Connect:

To date we have the connection of 160 LAGEO workers, we visited the two geothermal plants and the LAGEO central office, explained what WING consisted of and proceeded to register the employees, know the academic level, study expectations, topics of interest, etc.



Figure 10: Visit to the three work sites in Lageo to connect the female employees, 2017-2018

4.2 Inform

In 2018 August WING Global President Andrea Blair was invited to participate in the official launch of WING at the national level, which was held at the Industrial Congress of El Salvador, and WING El Salvador's plans were announced. There was the participation of 100 Wings of LAGEO, guests of other companies and media.



Figure 11: Visit of Andy Blair, WING Global President, El Salvador 2018

4.3 Advance

To date, six workshops have been held in the central offices and geothermal plants from November 2018 to May 2019. The topics discussed were: Leadership, Labor Participation, Entrepreneurship, Empowerment, Sorority, Emotional Intelligence.



Figure 10: Training for LAGEO employees, six months of workshops

The closing ceremony was held at the end of May 2019, graduating the 160 participants.



Figure 11: Female worker graduated from the six-month course for LAGEO employees, thanks to WING El Salvador

4. CONCLUSIONS

The future route for the group:

Continuation of the trainings in the topics of Emotional Intelligence and Sorority (solidarity among women) in the geothermal power plants and in the central office. Financial Education Program for the central office. Training to be certified as a 4th category electrician for the partners of the geothermal power plants. Second Encounter of women in geothermal energy to discuss topics on: general knowledge in geothermal energy and to present the experiences of each one in their daily tasks to know each other as a group and seek continuous improvement.

The route is drawn and LAGEO has begun its participation to achieve gender equity, and this equity will take it beyond the borders of the company, transmitting in suppliers, neighboring communities, boards of directors, partners and customers, this issue, and that we all carry the WINGS to fly joined to 2030.

REFERENCE

Escobar, R., 2018: Geothermal development in El Salvador and the importance of the contribution of fellows of the UNU-GTP programme.